

Understanding the Nature and Impact of Middle-Aged Women's
Alcohol Culture

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Abstract

Although there has been a growing interest in women's drinking, most studies that have been conducted in this area have focused on adolescent and young women. Yet, survey data from several countries show that total consumption levels among women increases with age, which may result in negative health outcomes. As such, a better understanding of the factors that influence risky alcohol consumption among middle-aged women is needed. In the current program of research, alcohol beliefs that are commonly shared among middle-aged women (45–59 years) were identified and the link between these beliefs and risky alcohol consumption was assessed. To determine if alcohol beliefs that are common among middle-aged women are part of a larger cross-national alcohol culture specific to this group, data was collected from two Western countries (Sweden and Australia).

Four broad categories of alcohol beliefs that tend to vary across different groups of drinkers and that have been linked to alcohol use in other populations were the focus of the investigation; alcohol's use-value, the symbolic value of alcohol, alcohol expectancies, and alcohol norms. In total, the program comprised of two qualitative studies that were conducted in each country, which was followed by a quantitative survey study among Australian women. The first of the qualitative studies (Study 1) consisted of 11 unobtrusive observations of middle-aged women's alcohol consumption in public venues (six in Sweden and five in Australia) and the second study (Study 2) consisted of semistructured interviews with 19 Swedish women aged 45–58 years ($M = 52.21$, $SD = 4.80$) and 17 Australian women aged 45–57 years ($M = 52.06$, $SD = 3.86$). The primary aim of these studies was to describe the nature of the four categories of alcohol beliefs among middle-aged women.

The results of the qualitative studies indicated that middle-aged women in both countries understood alcohol as a sociable and deeply enjoyable experience, ascribing a number of positive symbolic and use-values to alcohol. Specifically, the women viewed

alcohol as a means to increase sociability and interpersonal closeness, as a taste and food product, and as a pleasurable, relaxing, and indulgent activity. The Australian women also understood alcohol as a symbol of friendship and appreciation, as a delineator against responsibilities and work, and as a means to reduce negative emotions (i.e., to self-medicate). A de-emphasis of intoxication was central to these symbolic and use-values: Although some instances of heavy episodic drinking (HED) were reported in both samples, purposeful intoxication did not play a functional or meaningful role in the lives of the participants. In addition to these positive symbolic and use-values associated with alcohol, the women also understood alcohol as a potentially dangerous drug. Moreover, the findings indicated that alcohol was symbolically embedded both in the expression of gender and age. The women agreed that societal disapproval of alcohol use was stronger for women than for men their age, with some of the participants having internalised these views and others perceiving them as unfair. In terms of age, heavy consumption was understood as emblematic of youth, but in middle age it was seen as a failure to establish an identity as a responsible and mature adult. Mirroring the uncovered symbolic and use-values, non-permissive norms around alcohol use were discovered; women in both countries disapproved of HED among women their age and believed that this view was shared by society at large. Moreover, the Swedish but not the Australian women described personal and perceived societal disapproval against moderate but frequent drinking (MFD). Abusive or dependent alcohol use was associated with high levels of stigma in both samples.

The alcohol beliefs identified in the qualitative studies were operationalised and measured in Study 3. As many of these beliefs had not previously been measured, several scales had to be purpose-developed for the final study. Specifically, a new scale titled the Role and Meaning of Alcohol Questionnaire–Mature-aged Women (RMAQ–MW) that measured the various symbolic and use-values uncovered in the qualitative studies (e.g., interpersonal closeness, social enhancement, self-indulgence, and self-medication) was developed and include in the final study. In addition to this purpose-developed scale, actual

and perceived traditional female gender roles were measured by the Social Roles Questionnaire (SRQ), alcohol abuse self-stigma by the Perceptions of Problems in Living Questionnaire (PPLQ) and items measuring perceived drinking frequency and frequency of HED among same-aged women (i.e., descriptive norms), as well as actual and perceived disapproval toward HED and MFD among same-aged women (i.e., injunctive norms) were adapted from the existing literature. Risky alcohol consumption was measured using the Alcohol Use Disorder Identification Test (AUDIT).

A total of 1,035 Australian women aged 45–59 years ($M = 51.46$, $SD = 4.28$) were recruited for Study 3. To determine the prevalence of the measured alcohol belief among Australian women the proportion of participants who agreed with each of the measured alcohol beliefs (scoring > 3 on scales ranging 1–5) was calculated. Results showed that most of the beliefs that were identified in the qualitative studies were endorsed by a majority of participants in Study 3. Specifically, majority agreement was found for the RMAQ–MW subscales measuring the idea of alcohol as a taste product and as a means to enhance social situations, to express appreciation for friends, to experience relaxation and pleasure, to self-indulge, to distinguish between work and leisure, and to self-medicate. The women also agreed with a subscale tapping the dangerous nature of alcohol and one of two subscales measuring the symbolic link between alcohol and age. The participants did not, however, agree with a RMAQ–MW subscale measuring interpersonal closeness. Moreover the women agreed with one SRQ subscale measuring perceived traditional gender roles attitudes of others, but not with a subscale measuring personally held traditional gender role attitudes. Last, the participants endorsed items and scales that measured personal and perceived disapproval of HED among same-aged women, but rejected items that measured personal and perceived disapproval of MFD. Analysis of descriptive norms showed that around 50% of the participants correctly estimated the most common drinking frequency among same-aged women while a quarter of the sample overestimated it. HED frequency was overestimated by 96.42% of the sample.

After assessing the shared nature of the measured alcohol beliefs, risky drinking was modelled using binomial logistic regression analysis. It was found that personally held disapproval of HED and MFD among same-aged women (i.e., actual injunctive norms for HED and MFD), higher perceived prevalence of HED among same-aged women, and the RMAQ-MW subscales Self-medication, Social Enhancement, and Work and Leisure was associated with an increase in the likelihood of risky drinking. The RMAQ-MW subscale Interpersonal Closeness was associated with a reduced likelihood of risky drinking, however, an unexplained suppression effect was present for this variable, making interpretations difficult. Unexpectedly, perceived societal disapproval of HED and MFD drinking patterns (i.e., perceived injunctive norms) among same-aged women was also found to significantly predict risky drinking. Several possible reasons for the relationships between the predictor variables and the dependent variable can be proposed. For instance, it is likely that the understanding of alcohol as form of escapism (self-medication) is associated with heavier and more persistent alcohol consumption and that the use of alcohol to enhance social situations is linked to risky short-term drinking. The subscale Work and Leisure measured the use of alcohol to mark the end of the work day and as a means to temporarily escape the responsibilities and boredom of everyday life. As such, this understanding of alcohol could mean that it had become a frequent and integrated part of life. The unexpected findings pertaining to perceived disapproval of HED and MFD indicate the presence of reversed causality, whereby risky drinkers are sensitised to the real and imagined disapproval of others. Overall, the model accounted for 44.0% of the variance in dependent variable.

Taken together, the results of this research program indicate that although several alcohol beliefs are shared by middle-aged women in both Sweden and Australia, some notable differences exist between the two countries. Thus, it can be concluded that although there is support for the existence of a cross-national alcohol culture among middle-aged women in Western countries, the national context is also influential in shaping alcohol

beliefs. Moreover, the findings of the present research indicated that several of the beliefs that are shared by a majority of Australian middle-aged women are either risk or protective factors against risky alcohol consumption. An understanding of these shared risk and protective factors could be useful in the design of interventions targeted specifically at harmful alcohol use among mature-aged women. Moreover, the perceived societal disapproval toward mature-aged women's alcohol use and the high level of self-stigma associated with abusive alcohol use must be taken into consideration as this could have implications for mature-aged women's willingness to seek help for alcohol problems.

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List of Abbreviations and Acronyms

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ATSSH	Attitudes Toward Seeking Professional Psychological Help
AUDIT	Alcohol Use Disorders Identification Test
DV	Dependent variable
EFA	Exploratory factor analysis
EPQR-S	Eysenck Personality Questionnaire Revised-Short-form
GBMI	Gender-Based Motivational Interviewing
HAD	Hospital Anxiety and Depression
HAD-A scale	Hospital Anxiety and Depression-Anxiety scale
HAD-D scale	Hospital Anxiety and Depression-Depression scale
HED	Heavy episodic drinking
MFD	Moderate and frequent drinking
NHMRC	National Health and Medical Research Council
OECD	Organisation for Economic Co-operation and Development
OU	Observational units
PPLQ	Perceptions of Problems in Living Questionnaire
QUT	Queensland University of Technology
SES	Socio-economic status
SoRAD	Centrum för socialvetenskaplig alkohol- och drogforskning [Social Research on Alcohol and Drugs]
SRQ	Social Roles Questionnaire
VIF	Variance Inflation Factor

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made.

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CHAPTER 1 Introduction and Research Overview

Alcohol consumption is a leading causes of death, being responsible for the loss of around 3.3 million lives globally every year (World Health Organization [WHO], 2014). Among women, alcohol has been identified as the eighth leading cause of mortality and disability (Lim et al., 2013); in 2012 alcohol accounted 2.3% of all disability adjusted life years lost among women (WHO, 2014). The impact that alcohol is having on women, in tandem with the increase in women's consumption that has been observed over the past decades, has resulted in a growing interest in women's alcohol issues. In particular, the importance of targeting personal alcohol use through tailored harm reduction is being recognised. Although this new focus has resulted in a number of research studies aimed at identifying the underlying causes of women's alcohol use, this body of work has been heavily biased towards younger cohorts. This focus is perhaps not surprising; young women constitute the largest proportion of women who engage in heavy episodic drinking (HED) and they are overrepresented in the alcohol injury and violence statistics (Australian Institute of Health and Welfare [AIHW], 2014; WHO, 2007). Problems associated with harmful alcohol use are not as readily visible in older cohorts of women, particularly among those who are middle-aged. For women in this age group, the impact of current drinking patterns is often adding to the cumulative effects of alcohol use over a lifetime (Socialstyrelsen [The National Board of Health and Welfare], 2014b), which can result in a number of health problems. This is evident in less scrutinised statistics; data from some countries indicates that more women suffer or die from alcohol-induced disease in middle age than during any other time in their lives (Chikritzhs et al., 2003; Johansson et al., 2006). The importance of targeting women in this age group to change their drinking patterns cannot be overemphasised.

To address the limited knowledge of middle-aged women's alcohol use, this dissertation examined the alcohol culture of middle-aged women in two countries. The

alcohol culture of different groups contains important information that may be of relevance to effective and targeted interventions. Different groups attach different meanings to alcohol, expect different outcomes when they drink, and have different ideas regarding what constitutes appropriate use. For instance, the literature shows that “harmful” alcohol use is a culturally variant concept (Etter & Gmel, 2011; Kerr, Greenfield, & Midanik, 2006; Kuendig, Plant, Plant, Miller, et al., 2008) more closely related to shared perceptions of normality than objective measures of harm. In cultures where alcohol is understood as a weekend activity, drinking moderately during the week can be perceived as more problematic than extreme weekend drunkenness (Törnqvist, 1999). Similarly, studies have shown that for some groups, harmful alcohol use has become synonymous with young people's drunkenness in public places, resulting in a failure to recognise the health implications of routine domestic alcohol consumption, even if such consumption exceeds recommended guidelines (Aitken, 2015; Green, Polen, Janoff, Castleton, & Perrin, 2007; Grønkjær, Curtis, Crespigny, & Delmar, 2011; Holloway, Jayne, & Valentine, 2008). Previous research on young people's alcohol consumption has highlighted the importance of understanding the meaning and role that alcohol hold in people's lives, and has used this knowledge as a departure point for harm minimisation efforts (Petrilli, Beccaria, Prina, & Rolando, 2014; Sheehan & Ridge, 2001). By focusing on the alcohol culture of middle-aged women, the present work aimed to identify alcohol beliefs that are common among middle-aged women and that may increase their risk of harmful alcohol use.

1.1 Defining and Measuring Alcohol Culture

Culture is often described a group's shared values, beliefs, norms, behaviours, customs, and produced artefacts; different definitions include all of these aspects or focus on a few of them (Faulkner, Baldwin, Lindsay, & Hecht, 2005). Regardless of how the content of culture is delineated, definitions generally imply that it is a construct that is, to some degree, shared by a definable group of people and distinguishes it from other groups (Lehman, Chi-

yue, & Schaller, 2004), and that it is socially transmitted rather than biologically inherited (Goodenough, 2003). The above is an omnibus definition of culture whereby it is seen to encompass “everything that people collectively do, think, make, and say” (Baldwin, Faulkner, & Hecht, 2005, p. 14). Although demonstrating the pervasive nature of culture in human society, such definitions have limited use for empirical investigations (Spradley & McCurdy, 1972). A more pragmatic approach may lie in the distinction between the subjective and objective aspects of culture that has been advocated by several noted authors (e.g., Geertz, 1973; Triandis, 1972). While subjective culture denotes the ideational or cognitive aspects of culture (e.g., meaning, beliefs, attitudes, or rules), objective culture comprises the manifestations of these ideas and beliefs in actions and artefacts (Spradley & McCurdy, 1972). Fundamental to this understanding of culture is that observed variations in human behaviours (and the production and use of artefacts) can be attributed to differences in peoples' subjective culture (Chi-Yue & Hong, 2007; MacAndrew & Edgerton, 1969; Spradley, 1980).

Culture in its broadest incarnation exists at the national or pan-national level; examples of the latter can be found in Hofstede's (1980) distinction between individualistic and collectivist national cultures. However, cultural systems can also exist on the subnational level as manifested by subcultural groups who hold values, norms, and customs that distinguish them from the dominant culture. Traditionally, subcultures are defined as groups of interacting people with common interests, perspectives, or lifestyles. In previous work, subcultures around graffiti vandalism, rock climbing, alternative music, and computing (“geek” subculture) have been identified and described (Ferrell, 1998; Kruse, 1993; McArthur, 2008; Rickly-Boyd, 2012). Although these and other subcultures can be distinguished from the broader cultural context, it should be noted that they do not exist in a social vacuum: Subcultures often share many characteristics with broader culture, both influencing and being influenced by it (Clinard & Meier, 2015; Gelder, 2005).

In accordance with the above definition, the majority of subcultural research has focused on groups of interacting people. However, subcultures can also be defined as a set of topic-specific cultural codes that transcend individuals or groups. For instance, researchers examining the culture around cannabis use have argued that this practice is too widespread and the people who use it too diverse to constitute a coherent subcultural *group*. Instead, subculture defined as a distinct set of cultural codes, specific to cannabis, that smokers use to navigate and make sense of their consumption (Sandberg, 2012). A similar conceptualisation has been made in terms of alcohol consumption, where alcohol is defined as the focal point for a set of tightly organised cultural codes that dictate (in detail) where, when, with whom, and how much different people should drink (Heath, 1995b). Given the widespread use of alcohol, these codes do, however, vary. The traditional distinction between dry and wet drinking cultures is one example of this. Dry drinking cultures have traditionally dominated the northern part of Europe and are characterised by an ambivalent and intoxication-focused approach to alcohol and drinking (Peele, 2010). These cultures record a greater proportion of abstainers; however, among drinkers, HED is common (Allamani, Voller, Kubicka, & Bloomfield, 2000). This has been contrasted against the wet drinking cultures of southern Europe, where alcohol has to a greater degree, been viewed as a morally neutral aspect of everyday life (Allamani et al., 2000; Gamella, 1995). Rather than being specific to clearly demarcated, cohesive, and interacting groups, the alcohol-specific codes of dry and wet drinking cultures are accessed and used by large and diverse groups of drinkers.

It was from the above definition that the current research took its departure point: Alcohol culture was seen as a cohesive set of cultural codes, essential to the way in which people understand and make sense of their consumption. Drawing on the recognition that these cultural codes differ across groups of drinkers, one of the key aims was to investigate if middle-aged women constitute a group that share cultural codes around alcohol. Additionally, this research drew on the above mentioned distinction between objective and

subjective culture. The objective manifestations of alcohol culture (e.g., consumption patterns, beverage choice, and alcohol-related behaviour) have been reliably documented for different groups using representative and large-scale surveys. What remains less understood is the underlying beliefs that are thought to predict these objective manifestations, particularly among middle-aged women. As such, the focus was placed on identifying and measuring middle-aged women's subjective alcohol culture and on quantifying the relationship between this subjective culture and harmful drinking.

1.2 Study Approach and Research Questions

Culture is a collective construct. As such, to understand the subjective alcohol culture of middle-aged women, the "sharedness" of their alcohol beliefs must be assessed (R. Fischer, 2009). Sharedness can, for instance, be measured by the way middle-aged women answer questionnaire items that tap into different alcohol beliefs. If the majority of women endorse these items, it can be claimed that they are sufficiently shared and that middle-aged women have a common cultural belief system around alcohol. To help answer the question of the sharedness, the current program of research included a cross-national comparison. Specifically, data from two Western countries, Sweden and Australia, was collected. The inclusion of these two countries offered an opportunity to identify which core beliefs, if any, are shared by middle-aged women in Western countries and which beliefs are influenced by the national context.

From a global perspective, Sweden and Australia may be more similar than they are different; both are, for instance, Western secular countries with a population that, per capita, consume approximately equal amounts of alcohol. Some notable differences do, however, exist. Alcohol policies in Sweden are somewhat stricter than in Australia, and Sweden has been hailed as a prototype of the ambivalent intoxication-focused spirit-drinking culture that traditionally dominates the northern parts of Europe. Although the Australian drinking culture is a bit more difficult to pinpoint on the dry/wet gradient, alcohol is seen by

many Australians as an integral part the social world (Advocat & Lindsay, 2013; Allan, Clifford, Ball, Alston, & Meister, 2012). Moreover, although gender equality (an important determinant of alcohol use) is high in both countries, it is exceptionally so in Sweden. Among 142 countries reviewed for the Global Gender Gap Index, Australia was ranked as the 24th most egalitarian country, while Sweden was ranked as the fourth (World Economic Forum, 2014). As alcohol consumption is a lens through which the broader values of society (e.g., ideas about gender) can be viewed, some differences may be expected in the alcohol beliefs of women in each of the two countries. However, if middle-aged women share an underlying alcohol culture, several core beliefs would be found in both countries.

In summary, the aim for this program of research was to address the gap that exists in the understanding of middle-aged women's alcohol culture. Specifically, this dissertation sought to identify what alcohol beliefs (if any) are sufficiently shared by middle-aged women, and the extent to which these beliefs influence harmful alcohol consumption. To achieve this goal, three central research questions were posed:

RQ1: *What alcohol beliefs do middle-aged women in each country share?*

RQ2: *Are alcohol beliefs shared across the two countries?*

RQ3: *Do middle-aged women's alcohol beliefs predict increased likelihood risky drinking?*

1.3 Research Overview

To address the three research questions, this PhD project employed a mixed-methods approach whereby three studies were planned in each country (totalling six studies overall). The first two studies were qualitative in nature; Study 1 (conducted first) consisted of unobtrusive observations of women in public drinking settings, and Study 2 consisted of a series of semistructured interviews. The use of qualitative studies was deemed necessary as little was known regarding the alcohol culture of middle-aged women. As such, the initial two studies were conducted to investigate the mechanisms linking alcohol beliefs to

consumption patterns and to formulate hypotheses to be tested in Study 3. Specifically, Study 1 and 2 were aimed at exploring and describing the alcohol beliefs that were commonly held among middle-aged women in each country (RQ1), to make initial comparisons between the Swedish and Australian samples (RQ2), and to formulate tentative conclusions regarding the likely impact of the identified alcohol beliefs on risky alcohol use (RQ3). In Study 3, the alcohol beliefs identified in Studies 1 and 2 were operationalised and included in a cross-sectional survey, with the aim to verify or refute the hypotheses made based on the Study 1 and 2 findings. Originally it was planned to use this survey to collect data in both Sweden and Australia. However, as will be discussed in later sections, an adequate sample size of middle-aged Swedish women could not be obtained. As such, the analyses conducted as part of Study 3 were only possible among Australian participants. Specifically, the survey data obtained from Australia was used to determine the prevalence of identified alcohol beliefs in a larger population sample (RQ1) and to investigate the link between these beliefs and risky drinking (RQ3). However, the formal tests of differences in alcohol beliefs between Swedish and Australian middle-aged women (RQ2), was not possible. For this research question, only the tentative conclusions made based on the qualitative data could be made.

Prior to the initiation of the three research studies, a literature review was conducted to identify alcohol beliefs that are thought to explain differences in alcohol consumption across cultural and subcultural groups. Four broad set of beliefs were identified; *alcohol's use-value*, the *symbolic value of alcohol*, *alcohol expectancies*, and *alcohol norms*. These alcohol beliefs constituted the framework for this research, guiding the qualitative investigations and to some extent the design of the final questionnaire (Figure 1.1). That is, the observation schedule and the interview script were developed to capture the nature of four alcohol beliefs among middle-aged women, and some of the beliefs that were identified in the literature review (in addition to those identified Studies 1 and 2) were included in the final questionnaire.

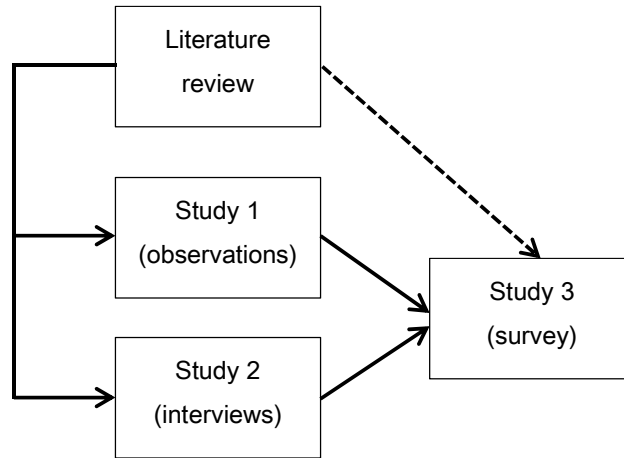


Figure 1.1. Overview of the research program structure.

This dissertation comprises 11 chapters. In this first chapter, the background, rationale, and structure of the project are presented. A description of the target group and the setting in which the research was conducted is also given. In Chapter 2, an overview the prevalence of alcohol consumption and its associated harm among middle-aged women is presented, followed by a review of the alcohol beliefs that are the focus of this research in Chapter 3. Chapter 4 describes the methodology for the two qualitative studies (Study 1 and 2) and Chapter 5 and 6 describes the method and results of these two studies. In Chapter 7, the findings of the qualitative studies are summarised and discussed and implications for Study 3 are highlighted. Chapter 8 outlines the methods for Study 3. As will be seen, many of the alcohol beliefs that were identified in the qualitative studies had not previously been measured in the literature. As a consequence, a new scale had to be developed for the purpose of this research. To ensure the reliability of this scale, an exploratory factor analysis (EFA) was conducted, which is described in Chapter 9. As the EFA produced the final study variables that were included in Study 3, Chapter 9 also contains the formal hypotheses for this study. Finally, Chapter 10 contains the results of Study 3 and Chapter 11 provides a discussion of the overall findings of the project, the implications of these findings, and the strengths and limitations of the research.

1.4 Research Scope

The current research measured the level of sharedness of identified alcohol beliefs among middle-aged women. However, as outlined in Section 1.1, for beliefs to be considered cultural in nature they should not only be shared by the members of a culture, but also distinguish groups from one another. The natural comparison groups that would be used to identify the uniqueness of middle-aged women's alcohol beliefs are men in general, and younger and older women. Although of theoretical interest, the decision to investigate middle-aged women in two countries meant a practical trade-off whereby comparison groups were excluded. Moreover, and perhaps more importantly, men and younger women's alcohol cultures have been meticulously documented in the literature and thus provide a rich source of information against which the findings of this research can be compared and understood.

This project focused on describing the alcohol culture of middle-aged women who are current drinkers only. It has been recognised that beliefs around alcohol and its role can be found among those that do not drink (Johnson, Gurin, & Rodriguez, 1996) and that these beliefs may help explain the choice to abstain from alcohol (Rinker & Neighbors, 2013). However, non-drinkers were excluded from the research program as one of the aims of the research was to investigate the link between commonly shared alcohol beliefs and risky consumption patterns specifically. In addition to the exclusion of non-drinkers, it should be noted that the literature review of alcohol prevalence and harm (Chapter 2) and alcohol beliefs (Chapter 3) is largely focused on alcohol use in Western countries. Taking this narrower approach to alcohol consumption and beliefs is an explicit attempt to describe, in detail, the position and use of alcohol in culturally similar settings, rather than to give a more superficial but global overview.

Last, it is recognised that the aetiology of harmful alcohol use is multi-factorial (American Psychiatric Association, 2013); that is, harmful use is influenced by a complex

and ongoing interaction between risk factors that are either biological or psychological in nature or that originate in the social environment of the individual. The focus on alcohol culture in this study is not made based on an assumption that no other age-related social structures or risk factors are influencing alcohol use in middle age. However, these risk factors lie beyond the focus of the present investigation. To provide an example: rather than identifying and measuring individual or social stressors that impact on alcohol use among middle-aged women, the present research sought to identify whether alcohol is understood as a stress reducing agent by this group.

1.4.1 Design considerations

For practical purposes, a representative sample of middle-aged women for Study 3 was not recruited, as this would have required a commitment of time and/or resources that are beyond a PhD project. However, the impact of using a non-representative sample is important to consider, particularly in relation to RQ1 which aimed to determine the prevalence (sharedness) of the identified alcohol beliefs. With non-representative samples, cautions must thus be made regarding the generalisability of these findings to the populations of interest. In Chapter 8, an overview of the sample obtained for Study 3 is given and comparisons to the general population are made. A discussion of the implication of the sample composition is also given in the last chapter of this thesis.

1.5 Contribution to Knowledge

The overall aim of the program of research presented in this dissertation was to add to the currently limited understanding of the alcohol culture of middle-aged women. By focusing on alcohol culture specifically, the aim of the research was not only to identify alcohol beliefs that are linked to harmful alcohol use but also to identify beliefs that are commonly held by middle-aged women. An understanding of both the spread and influence of risk factors (e.g., alcohol beliefs) for harmful alcohol consumption must underlie efficient

harm reduction efforts designed at the population level. To be effective, such initiatives should not only be focused on harmful beliefs, but also give specific consideration to those harmful beliefs that are commonly held in a target population. Examining the meaning and role of alcohol also carries the potential for an increased understanding of the barriers against behaviour change or treatment-seeking that may exist among middle-aged women. As outlined previously, the shared ideas of what constitute harmful alcohol use can normalise and justify drinking patterns that exceed objective measures of harm (Aitken, 2015; Green et al., 2007; Grønkjær et al., 2011; Holloway et al., 2008). Moreover, belief around normal and appropriate alcohol use can impact on the willingness of individuals to seek treatment for consumption patterns that are deemed shameful or deviant. In addition to contributing to the understanding of middle-aged women's alcohol use, this research also adds to the understanding of alcohol culture more broadly. Research on alcohol culture is often afflicted by what has been referred to as the *cultural attribution fallacy*, the tendency to attribute observed behavioural differences to underlying cultural belief systems without empirically testing this link (Matsumoto & Yoo, 2006). Much of the research on alcohol culture either compares drinking patterns as measured in survey studies across countries or investigates alcohol beliefs among specific groups using qualitative methods. In the former example, observable outcomes are measured and in the latter, underlying beliefs are identified; however, in neither instance is the association between the two formally tested.

1.6 Epistemological Position

The focus of this thesis was on identifying shared alcohol beliefs. Like all socially shared beliefs, alcohol beliefs are constructs that are created in interactions between people. Thus, it was recognised that the constructs under investigation are socially negotiated and as such can vary between social interactions and situations. Moreover, it was recognised that individuals interpret and make sense their social world in different ways. However, the position taken in this work was not that all meaning is inseparable from social

interactions. Neither was the focus placed on describing the complexity of the different views that people hold or the process through which they make sense of their experiences. Rather, this work was led by the assumption that although situational and individual variations exist, groups of drinkers attach a set of common and stable beliefs to alcohol that can be measured with a degree of reliability. Thus, this thesis was fundamentally aligned with the postpositivistic assumption regarding the existence of a patterned reality that can be accessed and (imperfectly) known (Daly, 2007).

Given the assumptions underpinning this work, the literature review was conducted with the specific aim to identify alcohol beliefs that appeared to represent salient, durable, and socially shared ways in which people think about alcohol. For those beliefs that seemed to be emergent and inseparable from social interactions, efforts were nonetheless made to identify these transcending beliefs. For instance, the way that status and identity is negotiated through alcohol use among young people (see Section 3.2.2) may not be immediately recognisable by older people. However, the notion that alcohol plays a role in the expression of identity and status has been identified in several studies and can be understood as a durable way in which people understand alcohol. Other beliefs identified in the literature were more easily aligned with the epistemological position of this thesis. Gender roles and alcohol norms (Sections 3.2.4.1 and 3.3.3), for example, are often treated as fundamental and stable aspects of the social world that can be defined, measured, and linked to behavioural outcomes. Moreover, the distinction between dry and wet drinking cultures (Section 3.1.1) subsumes the idea that certain use-values are attributed to alcohol with sufficient degree of consistency to be recognised across social situations. This notion is also present in research that has demonstrated the shared nature of alcohol expectancies both within national context and within sub-cultural groups (Section 3.3.1).

The studies included in this thesis were designed to discover durable patterns in the way that alcohol is understood, if such patterns exist. In the observational study, drinking events were observed with the explicit goal to identify characteristics that were present

across these events. The assumption was that these reoccurring characteristics stemmed from shared and consistent ways of thinking about alcohol use in social situations. Similarly, in the interview study, the analysis was focused toward the identification of patterns (or themes) present across individual interviews. The common characteristics and patterns identified in the qualitative studies were then operationalised and measured in a larger sample of middle-aged women in the final quantitative study. Fundamentally, the search for patterned alcohol beliefs across the studies of this research answered questions around whether alcohol beliefs indeed represent a set of organised constructs that transcend the particularities of social locations and interactions.

1.7 The Target Group

1.7.1 Defining middle age

The most meaningful way to classify any life stage may be by identifying the approximate age-range during which people are unified by a particular stage of development or a specific life-focus. According to the researchers who study development beyond childhood and teenage years, middle age (as a distinct developmental stage) can be defined as occurring approximate between 40–65 years of age (for an overview, see Peterson, 2013). However, for the purpose of this research, the age-range was narrowed to 45–59 years. This was done for two reasons. First, as this research was focused on shared alcohol beliefs, a narrower age-range, drawn from within the same developmental stage, would further increase the likelihood of group homogeneity. Second, the majority of pregnancies that take among both Sweden and Australia women occur prior to this age (Z. Li, Zeki, Hilder, & Sullivan, 2012; Socialstyrelsen [The National Board of Health and Welfare], 2014a) and the average income is typically higher in this age group than in any other cohort (Australian Bureau of Statistics [ABS], 2013; Statistiska centralbyrån [Statistics Sweden], 2015). Thus, the age-range chosen for the current research represents a time during

women's lives where the opportunity to consume alcohol is again increasing. As will be seen in Chapter 2 (Figure 2.2 and 2.5) a second but small peak for some consumption patterns is indeed recorded during this age.

1.7.2 Middle-aged women as a coherent cohort

The current research program is based on the assumption that middle-aged women are a coherent cohort, similar enough to generate a shared alcohol culture. There is some support for this notion: For instance, middle age is understood as a distinct developmental stage (described above), which suggests that women of a certain age share many characteristics. In addition to this, birth cohorts experience their formative years under different social, political, and economic conditions. As a result of these generational-specific exposures, values, norms, and behaviour often differ between different generations (Cennamo & Gardner, 2011; Twenge & Campbell, 2011). Generational effects are expressed in alcohol attitudes and behaviour. For example, analysis of Swedish data from 1968–2002 has shown that the abstinence rates among those who were young during the 1970s (born 1945–1955) were one tenth of the abstinence rates among those who were young during the Depression (born 1895–1904) (Ahacic, Kennison, & Kåreholt, 2012). Recent survey data from Australia shows that Generation Y (aged 18–34 years in 2014) believe that alcohol is less harmful than Baby Boomers do (aged 50–64 years in 2014) (Foundation for Alcohol Research and Education, 2014), and recent birth cohorts in the United States of America have been found to initiate alcohol use at an earlier age and to reduce intake at a later age (A. A. Moore et al., 2005).

In addition to these generational effects, people of the same age are often seen by others, as possessing similar characteristics and are often subject to similar societal expectations. Pervious research has identified and described the existence of age norms (Neugarten, Moore, & Lowe, 1965), which are shared perceptions about age-appropriate behaviours (Roberts, Wood, & Smith, 2005) and the age during which certain life events and

transitions ought to occur (Janssen & Rubin, 2011). Some research suggests that the norms that surround drinking (at least among women) becomes less permissible when middle age is reached (e.g., Allamani et al., 2000; Van Wersch & Walker, 2009). Taken together, it is argued that people of similar ages are can be understood as coherent cohorts based on their current life-stage, past sociopolitical exposure, and the expectations and treatment they receive from others.

There is also strong evidence to suggest that middle-aged women's perspectives, values, and experiences have been shaped by their gender. Certainly, gender is one of the most pervasive social roles that is ascribed to individuals. Gender roles are stereotypical beliefs regarding the inherent nature of men and women and expectations regarding their respective behaviour (Eagly, Wood, & Diekman, 2000). As will be seen later in this thesis (Section 3.2.4), the ideas about women's characteristics and roles are strongly related to alcohol use. Given the influence of both generational and gender effects, it is therefore expected that middle-aged women share many values and beliefs, including those that pertain to alcohol.

1.8 The Setting: Sweden and Australia

1.8.1 Contemporary alcohol history in Sweden and Australia

Although several similarities exist between Sweden and Australia in terms of the cultural position and use of alcohol, differences between the two countries are also evident. Sweden has traditionally belonged to the vodka belt, a string of Northern European countries where drinking is characterised by infrequent but heavy alcohol use. Often referred to as dry drinking cultures (see Section 3.1.1), these countries have a history of high levels of alcohol-related social harm, strong temperance movements, and an uneasy and morally fraught relationship with alcohol (Blocker, Fahey, & Tyrrell, 2003). The temperance movement in Sweden in particular has been described as radical, propagating the abolishment rather than

restriction of alcohol consumption (Lenke & Olsson, 2002). The view of alcohol is not, however, entirely negative; alcohol is also ascribed a number of positive use-values in Sweden and other dry drinking cultures. However, the influence of temperance movements can still be traced in current population attitudes toward alcohol as well as in government alcohol policies (Eriksen, 1990; Levine, 1993). In Sweden, the social and legal regulation of alcohol is one such outcome. Normative drinking has, for instance, traditionally been limited to the weekends with weekday or frequent drinking being considered an indicator of problematic alcohol use (Törnqvist, 1999). Restrictive alcohol policies have also been implemented to control the access to alcohol. Although these policies have been liberalised as a response to European free-trade agreements when Sweden joined the European Union in the mid-90s, they remain restrictive by international comparison. For instance, high taxes are in place with the aim of restricting drinking in public locations, and all sales of alcohol in Sweden are controlled through a state monopoly. The state monopoly system restricts the physical availability of alcohol by limiting trade hours¹ and setting the legal purchase age at 20 rather than 18 years. By and large, these policies have received, and continue to receive, public support (Hübner, 2012).

In Australia, the view of alcohol has similarly been characterised by a degree of ambivalence and unease (Social Issues Research Centre, 1998). However, heavy alcohol use is also intertwined with a romanticised view of what it means to be Australian: Although current or historical alcohol consumption levels in Australia may not have been particularly high or remarkable by international standards, heavy drinking has long been seen as a part of the Australian identity (Kirkby, 2003; Room, 2010). Early twentieth century writers, for instance,

¹ The state monopoly alcohol outlet stores are typically open between 10 a.m. and 7 or 8 p.m. on weekdays and from 10:00 a.m. to 3:00 p.m. on Saturdays. Alcohol is not sold on Sundays or on public holidays.

celebrated heavy alcohol consumption as a symbolic expression of male friendships (mateship) that were characterised by mutual support and egalitarianism (Hall & Hunter, 1995). According to Room (2010), alcohol has further been intertwined with the idea of a laborious but simple and satisfying life in the bush, where it is used as a hedonistic reward for a hard day's work. In current Australia, alcohol continue to play a role in the national identity, and a choice to not drink is often met with suspicion and can be seen as a rejection of sociability (Advocat & Lindsay, 2013; Allan et al., 2012). The cultural position of alcohol in Australia has, as in Sweden, been influenced by the temperance movement of the late 19th and early 20th centuries but also by the reaction against this movement. Although successful in introducing a number of restrictions on alcohol, the temperance movement inspired the notion of alcohol use as a sign of the rejection of puritanism (Room, 2010). Thus, although temperance movements have been likewise active in Australia, its influence has been different. In Australia, alcohol has remained integrated in to the Australian (male) identity as an expression of the convivial and egalitarian relationship between working men.

1.8.2 Women and alcohol

In both Australia and Sweden, alcohol has traditionally been seen as a male domain and prerogative. Physical exclusion of women from drinking situations as well as formal regulation of women's access to alcohol has been in place in both countries. In Australia, the public house has been a strong patriarchal symbol as a space where male drinking was been celebrated publically (Kirby & Luckins, 2006; Wright, 2003). Women's drinking, in contrast, was thought of as morally deviant and remained hidden. In the second half of the 20th century, some public houses started to accommodate women's drinking, but this was done in segregated areas, so-called ladies lounges. Many of these lounges were still in use during the 1970s (Summers, 1975; Wright, 2003). In Sweden, an alcohol rationing system was implemented between 1920 and 1955, which restricted alcohol allowances to 1–4 litres of spirits per person per month (depending on income and perceived social stability).

However, under this system, alcohol sales were not granted to married women, and single women had to apply for the right to buy alcohol, including an explanation for why they needed it (Norström & Ramstedt, 2006). The social acceptance of women's drinking has since increased in both countries, as has women's participation in drinking occasions and overall consumption levels (ABS, 2014b; Centralförbundet för alkohol- och narkotikaupplysning [Swedish Council for Information on Alcohol and Other Drugs], 2012; McLennan & Podger, 1997). Despite these changes, gendered norms and double standards around alcohol use continue to be documented (Bernhardsson, 2014).

1.8.3 Current consumption patterns

Relatively recent changes in population consumption patterns and to the cultural position of alcohol have been noted in Sweden. These national changes are part of a broader homogenisation of drinking patterns and outcomes that has taken place between the traditional dry and wet drinking cultures of Europe during the past decades. In Sweden, sales of wine have steadily increased during the past 50 years, surpassing the sale of spirits in the early 1990s (WHO, 2014). Rising living standards that make wine drinking affordable have been suggested as a cause of this change; however, increased travelling and influences from the wine producing countries of southern Europe are also thought to have impacted on the drinking culture of Sweden and the other Nordic countries (Anderson, 2004). In addition to changing alcohol preferences, a recent increase in total alcohol consumption in the population aged 15 years and older was recorded in Sweden following its entry into the European Union. From 1996 to 2004, per capita consumption increased from 8.0 to 10.5 litres of ethanol, an increase of over 30%. Alcohol consumption has since reduced; but at 9.9 litres in 2013, it is still substantially higher than before the entry into the European Union (Leifman & Trollidal, 2014; Ramstedt, Lindell, & Raninen, 2013). In Australia, changes in alcohol use have been less rapid. Per capita consumption (15 years and older) has increased steadily from 1960s, peaking at 13.1 litres in 1974–75. From this

point a gradual decrease was recorded until the early 1990s. Since then, alcohol consumption has been relatively stable at around 10 litres per capita (ABS, 2012a). In 2013–14, total consumption per person was recorded at 9.7 litres (ABS, 2014a).

Although current per capita consumption levels are similar in Sweden and Australia, consumption patterns differ. Perhaps a reflection of its dry drinking culture, Sweden records a higher prevalence of both HED among drinkers as well as greater proportion abstainers; when surveyed in 2010, 23.8% of the population aged 15 years or older had engaged in HED (≥ 60 g) in the last 30 days, while the equivalent proportion was 10.9% in Australia. Lifetime and 12-month abstinence is further found among 31.2 and 12.1% of the Swedish population and 16.0 and 10.0% of the Australian population (WHO, 2014). Although less pronounced among middle-aged women, the same national differences can be found (Table 1.1); HED is more common among Swedish women, while drinking frequency is higher among Australian women. It should, however, be noted that comparisons of alcohol consumption of specific age and sex groups between the two countries are more difficult to make. The Swedish and Australian surveys that report this information use different response alternatives and different definitions of HED and use different age group clustering when reporting their findings (e.g., Table 1.1).

Table 1.1. *Consumption Patterns of Middle-aged Women in Sweden and Australia*

Australian women, 50–59 years ¹		Sweden women, 45–64 years ²	
Drinking frequency (12-month)	%	Drinking frequency (12-month)	%
Never	18.8	Never	15.7
Less than weekly	32.9	Up to 4 times/month	55.4
Weekly	41.9	2–3 times/week	23.9
Daily	6.8	4 times/week or more	4.9
HED, ≥ 50 g ethanol	%	HED, ≥ 72 g ethanol	%
Never	77.6	Never	70.2
Yearly	9.1	Less than monthly	23.9
Monthly	5.5	Monthly	3.5
Weekly	4.6	Weekly	2.2
Every day/most days	3.2	Daily/almost daily	0.3

Note. The two population surveys are not directly comparable in terms of response alternatives and definitions of HED that are used, and in terms of the age-grouping of respondents.

¹2013 National Drug Strategy Household Survey (AIHW, 2014).

²Calculations based on data from the 2013 Nationella folkhälsoenkäten (National health survey) accessed from Folkhälsomyndigheten (Public Health Agency of Sweden) in 2014.

CHAPTER 2 Alcohol Consumption: Prevalence and Harm

Middle-aged women's consumption patterns are unique, neither aligning with that of men or with that of young women. Moreover, as a consequence of a number of physiological, hormonal and metabolic differences women and older people have a reduced tolerance for alcohol (Baraona et al., 2001; B. T. Davies & Bowen, 1999; Pozzato et al., 1995), which has implications for a range of alcohol-related outcomes. To understand the distinctive nature of alcohol consumption and related outcomes among middle-aged women, this chapter will provide an overview of the key differences between male and female, and young and middle-aged drinkers. In the first part of the chapter, consumption patterns for each group will be described, followed by changes in the relationships between these groups over time. In the second part of the chapter, an overview of the harm associated with alcohol use will be given. Following this, sex and age-related differences in the sensitivity to alcohol are outlined and the consequences of these differences are discussed. First, however, definitions and explanation of common concepts used to measure alcohol harmful consumption in the literature are given.

2.1 Definitions and Measurement of Harmful Alcohol Use

To identify and measure alcohol harm, a distinction between risks associated with a single occasion of drinking and lifetime exposure to alcohol use is often made (Chikritzhs et al., 2003; WHO, 2014). Single occasion risky consumption, or short-term risky drinking, is defined as exceeding a set number of drinks in one session and is associated with the injury risks that follow from acute intoxication. Lifetime risk or long-term risky consumption is measured as the total volume of consumption over time, often expressed as a person's average daily or weekly consumption. Total consumption volume is linked to a number of chronic conditions (Section 2.5.2) but has also been linked to an overall increase in lifetime risk of injury (National Health and Medical Research Council [NHMRC], 2009). Although long

and short-term risky consumption is commonly used to classify harmful drinking patterns, the cut-off at which these patterns are defined varies noticeably across countries and between research studies (Furtwaengler & Visser, 2013). In Australia, short-term risky consumption (i.e., HED) is defined as more than 4 standard drinks on a single occasion² for both men and women and long-term risky consumption as exceeding an average consumption of 2 standard drinks per day (NHMRC, 2009). A standard drink is defined as 10 g of ethanol (NHMRC, 2009). In Sweden, HED has been defined by the Swedish National Institute of Public Health (Andréasson & Allebeck, 2005) as 4 or more standard drinks for women and 5 or more for men and long-term risky consumption as 10 or more standard drinks per week for women and 15 or more standard drinks per week for men. A standard drink is defined as 12 g of ethanol (Andréasson & Allebeck, 2005). For comparative purposes, short-term risky consumption for women is defined as the consumption of more than 48 and 50 g of ethanol per session in Sweden and Australia respectively, while long-term risky consumption is more than 140 g of ethanol per week in Australia and more than 108 g in Sweden. Unless otherwise stated, research reported from Sweden and Australia in this chapter conforms to these definitions of short and long-term risky consumption.

The definition of both short-term and long-term risky drinking does not distinguish consumption patterns that are safe from those that are not. With the exception of some health outcomes (Section 2.5.2), elevated risks have been found at very low levels of alcohol consumption and continue to increase thereafter in a dose-dependent manner. Rather than defining the point at which alcohol use becomes unsafe, the definition of risky consumption represents an arbitrary point below which lifetime or single occasion risk of harmful

²A “single occasion” can be measured in terms of time (e.g., 4 hours) or as the consumption of a number of drinks that occurs without the BAC reaching zero. The latter definition is used in the official Australian alcohol consumption guidelines (NHMRC, 2009).

outcomes is considered acceptable for a volitional behaviour such as alcohol consumption. In Australia, this cut-off has been established with regard to alcohol-induced death and is set at the point where the risk reaches 1 in 100 (NHMRC, 2009). In other words, among those that consume alcohol below the cut-offs for risky drinking, fewer than 1% will die as a result of this consumption.

2.2 Sex-Specific Consumption Patterns

Sex differences in drinking patterns are ubiquitous. With a few exceptions among adolescent drinkers (Englund, 2014), large-scale cross-national surveys show that men drink more often and consume more alcohol per occasion (Wilsnack, Wilsnack, Kristjanson, Vogeltanz-Holm, & Gmel, 2009), while abstinence is more common among women (Shield et al., 2013). Globally, the average drinking frequency among men has been estimated to be between 40–250 % higher than that of women (Bloomfield et al., 2005) and lifetime abstinence can be found among 55.6% of women compared to 36.0% of men (Shield et al., 2013). In the European countries, consumption among adults (≥ 15 years) is 2.8 times higher among men than women. Among drinkers only (i.e., abstainers excluded) men's consumption is 2.1 times that of women³. It should, however, be noted that women need to drink less than men to achieve equal blood alcohol concentration levels (Section 2.6), which exaggerate the differences in consumption volume between the sexes. Accounting for physical differences between men and women, some studies have found that men and women tend to achieve similar average peak BAC during typical drinking occasion. A large-scale representative survey of US adults (York, Welte, & Hirsch, 2003) has, for instance, found that the average peak BAC during typical drinking occasions is almost identical

³ Calculations based on data from the Global status report on alcohol and health 2014 (WHO, 2014)

between men and women (0.037 for men and 0.036 for women). In a sample of Swedish student, the average peak BAC was found to be approximately 0.1 for both men and women (A. Andersson, Wiréhn, Ölvander, Ekman, & Bendtsen, 2009).

However, biological factors do not account for all differences in men and women's consumption. Other patterns, such as the proportion of abstainers among the two sexes are more closely linked to social factors such women's position in relation to men. Overall, the smallest difference in men and women's alcohol use and outcomes can be found in countries with the highest gender equality. Consumption rates of men and women in the top 10 and the bottom 10 countries listed on 2014 Global Gender Status Report (World Economic Forum, 2014) demonstrate this link. In the ten most gender equal countries, the average male to female consumption ratio (including abstainers) is 2.6, while for the bottom 10 countries in the index, this ratio climbs up to 4.7⁴. Additionally, a multinational study that included 29 European countries have found medium to strong negative associations between gender equality indicators and sex ratio of current drinkers (once in the past 12 months), weekly drinkers, and alcohol-induced cirrhosis, dependency, motor vehicle crashes, and aggression (Rahav, Wilsnack, Bloomfield, Gmel, & Kuntsche, 2006). Gender equality was not, however, related to the sex ratio of heavy consumption in this study. By global comparison, both Sweden and Australia are countries with high gender equality, which are reflected in consumption levels. Counting all adults (15 years or older), men consume around 2.4 times more alcohol than women in both countries. Excluding abstainers, the ratios are 1.9:1 in Sweden and 2.2:1 in Australia (WHO, 2014).

⁴ Calculations are based on data from the Global Status Report on Alcohol 2014 (WHO, 2014) and the Global Gender Gap Report 2014 (World Economic Forum, 2014).

2.3 Age-specific Consumption Patterns

In addition to differences between the sexes, age is also closely related to alcohol consumption in most Western countries (AIHW, 2014; P. Mäkelä et al., 2006; Office for National Statistics, 2012; Wilsnack et al., 2009). In these countries, men and women tend to reduce their alcohol intake per drinking session but instead drink more often as they grow older. In terms of women specifically, these patterns can be seen in several cross-national survey studies. For instance, a study using survey data from countries around the world has found that in all 21 countries that were sampled from Europe, North America, and Australasia, HED prevalence was highest among the youngest cohort of women (18–34 years). Similarly, P. Mäkelä et al. (2006) found that the mean quantity of alcohol per drinking day decreased with age among women in 12 of 13 examined European countries. The decline in HED was steady across age groups; Wilsnack et al. (2009) found a steady decreases with age for women in 20 of the 21 sampled countries, while P. Mäkelä et al. (2006) found the same in 10 out of 13 countries.

In Sweden and Australia specifically, national survey data shows that HED decreases across age groups for both men and women (Figures 2.1 and 2.2). In Sweden, HED (≥ 70 g ethanol) once a month or more is almost 2.5 times more common among women aged 16–29 years compared to those aged 50–64 years, and in Australia HED is over 3 times more common among women aged 18–24 years compared to those aged 45–54 years. Although HED decreases with age, it should be noted that it is still fairly common in middle age (Figure 2.1 and 2.2). Moreover, although only a small proportion of Australian women in all age groups report consuming 5 or more standard drinks daily or on most days, the prevalence of this drinking pattern is highest in the population aged 40–49 years followed by 50–59 years (3.4 and 3.2% compared to 1.6% among women aged 18–24 years) (AIHW, 2014).

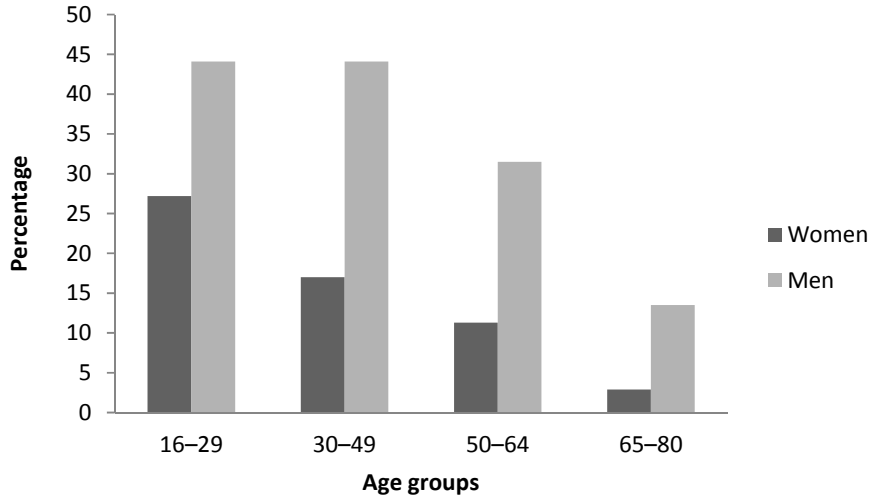


Figure 2.1. Percentage of Swedish men and women who consumed ≥ 70 g of ethanol at least once during the past 30 days in 2012. Source: Ramstedt et al. (2013).

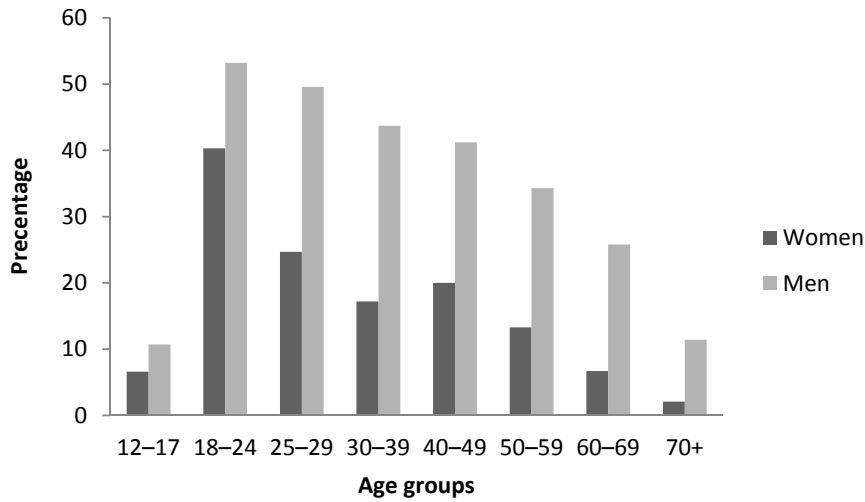


Figure 2.2. Percentage of Australian men and women who consumed ≥ 50 g of ethanol at least once per month in 2013. Source: AIHW (2014).

The age-related increase in drinking frequency with age is also evident among women in several countries (AIHW, 2014; Clemens, Matthews, Young, & Powers, 2007; Office for National Statistics, 2012; Wilsnack et al., 2009). In the cross-national study conducted by Wilsnack et al. (2009), data on drinking frequency among women was

available for 20 of the European, North American, and Australasian countries. In 17 of these countries, drinking frequency showed a steady increase with age among women and was highest in the oldest measured age group (50–65 years). In Sweden, close to 5% of women aged 45–64 years but less than 1% of women aged 16–29 years consumes alcohol at least 4 times per week (Figure 2.3). In Australia, women aged 55–64 years are more than 8 times more likely to consume alcohol daily than women aged 20–29 years (Figure 2.4). As can be seen in Figure 2.3, high frequency consumption among women continues to increase beyond middle age in Sweden, with the oldest age cohort being the most frequent drinkers. In Australia, drinking frequency peaks in the age group 65–74 years (Figure 2.4).

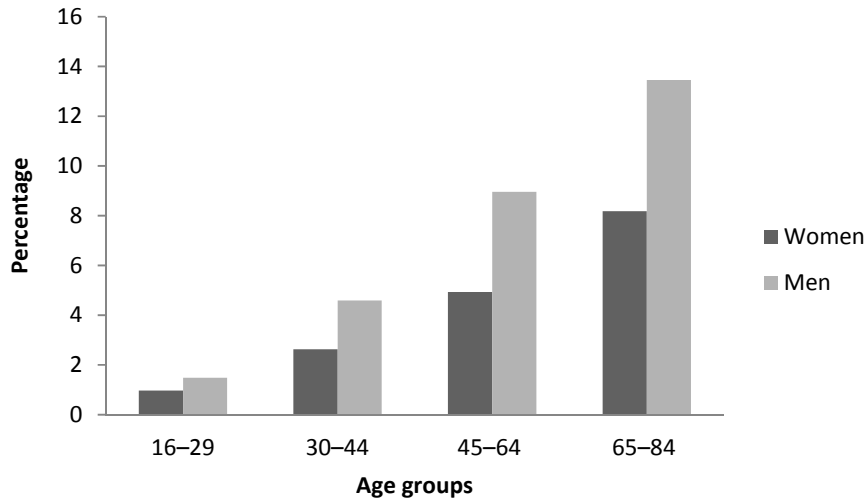


Figure 2.3. Percentage of Swedish men and women who consumed alcohol 4 times per week or more often in 2013. Calculations based on data from the 2013 Nationella folkhälsoenkäten (National health survey) accessed from Folkhälsomyndigheten (Public Health Agency of Sweden) in 2014.

Middle-aged women's alcohol culture

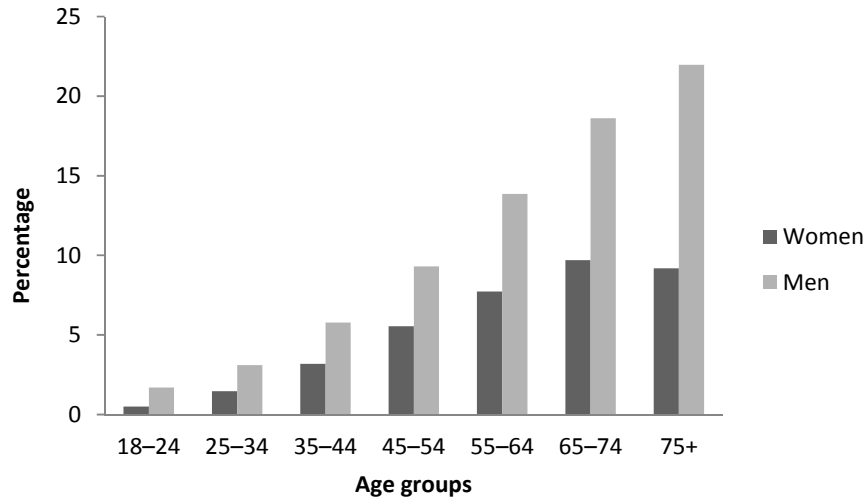


Figure 2.4. Percentage of Australian men and women who consumed alcohol every day in 2013. Source: AIHW (2014).

The changing drinking patterns with age have implications for the total volume of alcohol that is consumed. In Sweden, women aged 50–64 years consume over 30% more alcohol than women aged 20–24 years, and twice as much as women aged 25–29 years (Ramstedt et al., 2013). In Australia, the average daily consumption among women aged 51–70 years is around 30% and 90% higher than women aged 31–50 and 19–30 years (ABS, 2014b). As abstinence rates are relatively similar between young adulthood and old age (see Appendix A), it is likely that the increase in total consumption is a result of the increase in drinking frequency that occurs as women grow older (despite the higher frequency of HED among young women). Total consumption level has important implications for long-term health outcomes (Section 2.5.2) and the proportion of women that put themselves at risk for these outcomes are slightly higher in middle age than for any other age group in both Sweden and Australia (Figure 2.5). Generally, the volume-peak in middle age that can be observed in Sweden and Australia are evident in several, but not all, countries (Ahlström, Bloomfield, & Knibbe, 2001; Office for National Statistics, 2012).

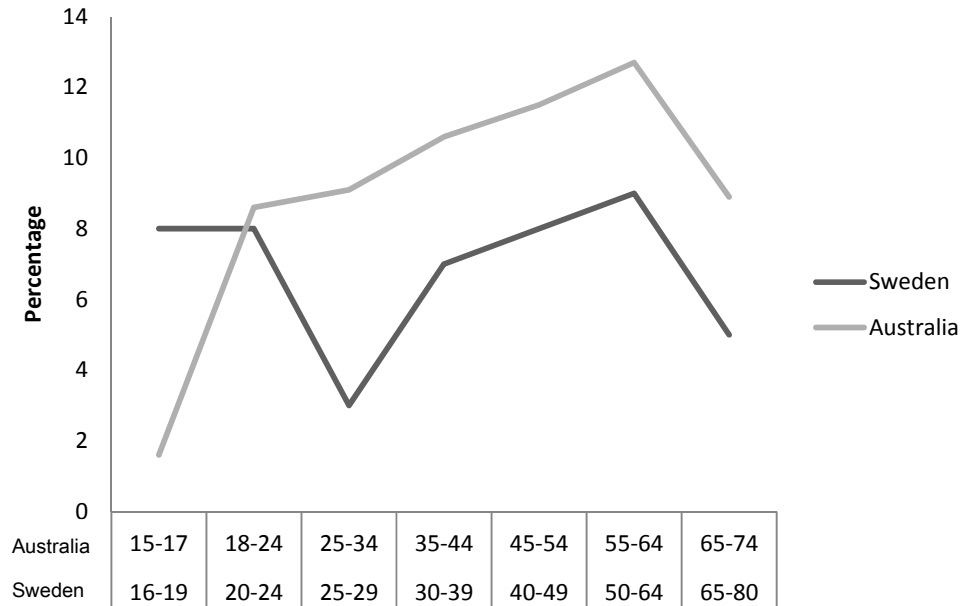


Figure 2.5. Percentage of women in different age groups in Sweden and Australia that consume alcohol at long-term risky levels in 2012.

Note. Age groups differ between the Swedish and Australian data sources. Source: ABS (2012b) and Ramstedt et al. (2013).

2.4 Consumption Trends over Time

2.4.1 Convergence among men and women

Although sex differences are clearly evident, a convergence between men and women's consumption patterns and related outcomes have taken place over the past decades (S. F. Greenfield, 2002; Keyes, Grant, & Hasin, 2008). The reduced sex gap in consumption is thought to have occurred as women increased their educational attainment, employment and economic independence, and in tandem with societal attitudes toward alcohol use among women becoming more lenient. In Sweden, women's consumption has increased from approximately 25% of men's consumption in 1968, to 34% in 1990 and 47% in 2012 (Centralförbundet för alkohol- och narkotikaupplysning [Swedish Council for Information on Alcohol and Other Drugs], 2012; Ramstedt et al., 2013). Between 1995 and

2011–12 in Australia, the female–male consumption ratio of average daily alcohol intake climbed from 0.39 to 0.54 (ABS, 2014b; McLennan & Podger, 1997).

One mechanism that has driven the closing sex gap is the tendency among women to drink greater volumes of alcohol and experience more alcohol-related problems than previous birth cohorts. This effect that has been observed among both younger, middle-aged, and older women (Alati, Betts, Williams, Najman, & Hall, 2014; Centralförbundet för alkohol- och narkotikaupplysning [Swedish Council for Information on Alcohol and Other Drugs], 2012; Grant et al., 2006; Grucza, Bucholz, Rice, & Bierut, 2008; Sulander, Helakorpi, Rahkonen, Nissinen, & Uutela, 2004; Waern, Marlow, Morin, Östling, & Skoog, 2013). Convergence has occurred when increases in consumption are either more rapid among women than men or when they are mirrored by decreasing or stable trends among men. One example of the latter can be found in Sweden where women's overall alcohol-related mortality has increased by 10% between 1997 and 2013, while decreasing by 18% among men during the same age period (Socialstyrelsen [The National Board of Health and Welfare], n.d.-a). However, convergence can also occur during periods when overall population consumption levels are decreasing. In these instances, convergence effects are the result of more rapid or larger reductions in consumption among men than among women.

2.4.2 Convergence among young and older drinkers

In some countries, such as Sweden, Australia, and Great Britain (Australian Institute of Health and Welfare, 2014; Office for National Statistics, 2012; Ramstedt, 2010) a homogenisation of drinking patterns is occurring, not only between men and women but also between younger and older people. Although some increases in alcohol consumption have been recorded among middle-aged and older people in these countries, this equalisation is mainly driven by a decrease in consumption among adolescent and younger people. In both Australia and Sweden, population survey data has shown a steady decline in young

people's consumption over at least a decade; in Australia the two main surveys assessing alcohol consumption among adolescents and young adults show reductions in consumption since 2002 (The Australian Secondary Students' Alcohol and Drug survey; White & Bariola, 2012) and 2001 (National Drug Strategy Household Survey; AIHW, 2014), respectively. In Sweden, a decrease in alcohol consumption in adolescence and young adulthood has been recorded since the early and mid-2000s (Englund, 2014; Ramstedt et al., 2013). Figure 2.6 and 2.7 gives an overview of recent changes to alcohol consumption patterns in Sweden and Australia. As can be seen in these figures, decreases in consumption among adolescent and young adult women are matched by small changes in the opposite direction among middle-aged and older women, resulting in an overall reduction in the gap between young and older female drinkers.

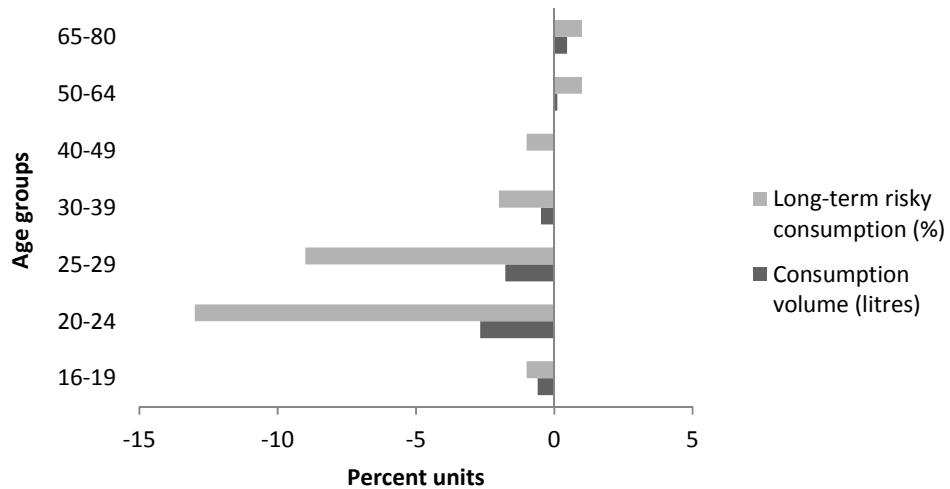


Figure 2.6. Relative change in percent units of long-term risky consumption and annual consumption volume from 2001–2012 among Swedish women. Source: Ramstedt et al. (2013).

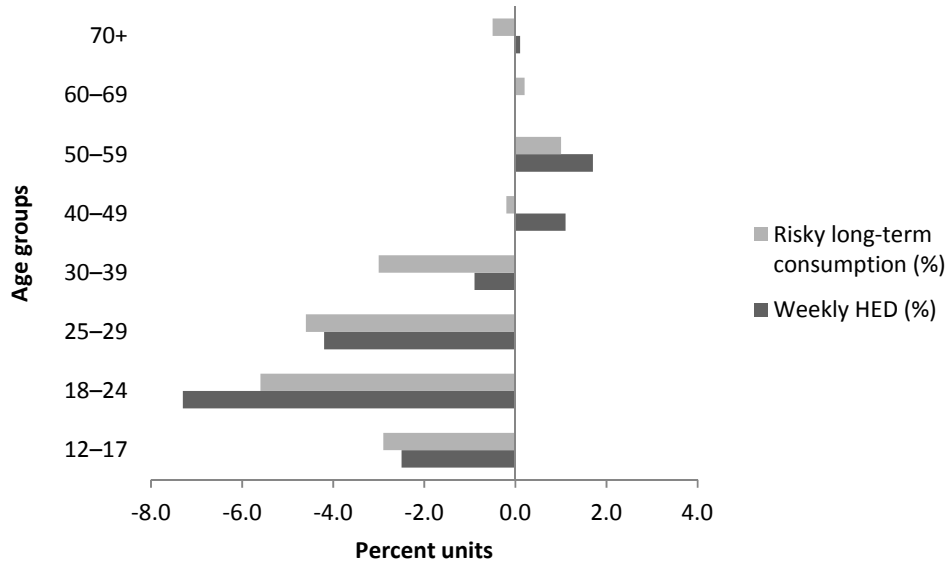


Figure 2.7. Relative change in percent units of long-term risky consumption and weekly HED from 2007–2013 among Australian women. Source: AIHW (2014).

One example of the reduced age-gap can be found in terms of HED, a consumption pattern traditionally dominated by young people. In 2007, the ratio of Australian women in the age groups 50–59 and 18–24 years who engaged in HED at least once a week was 0.24. In 2013 this ratio had risen to 0.49 (AIHW, 2014). Between 2004 and 2012 in Sweden, the ratio of monthly HED in the age groups 50–64 and 20–24 years increased from 0.25 to 0.42 (Ramstedt et al., 2013). Although this homogenisation is largely driven by the recent decrease in alcohol use among young people, it is likely to result in a more even distribution of problems associated with acute intoxication among young and older women. In addition, the share of problems associated with total consumption levels may increase further among middle-aged women (see Figures 2.6 and 2.7).

2.5 Alcohol-related Harm

Alcohol use is linked to a number of risks born by drinkers or those around them. As discussed, health risks from alcohol use can be classified as acute, referring to increased

risks of accident and injury from intoxication, or as long-term, referring to the cumulative effects of alcohol use on diseases and other conditions. Moreover, some researchers argue that the psychological suffering and financial costs that result from either the short or long-term effects of alcohol should be considered a third, separate category of alcohol-related harm (Gmel & Rehm, 2003). In the paragraphs below, an overview of the acute, cumulative, and the psychological and financial harm (i.e., social harm) associated with alcohol use is presented.

2.5.1 Risk of injury associated with acute intoxication

Alcohol consumption impairs psychomotor abilities and cognitive processes (Dry, Burns, Nettelbeck, Farquharson, & White, 2012; Fogarty & Vogel-Sprott, 2002) leaving consumers susceptible to a wide range of injuries. Consistent with these effects, studies show that alcohol consumption is linked to above-average rates of intentional and unintentional injury in both community and hospital samples (T. R. Miller & Spicer, 2012; Pridemore, Chamlin, & Andreev, 2013). Injuries linked to alcohol use include, but are not limited to; falls, drownings, traffic injuries, suicide, and (Chikritzhs et al., 2003; WHO, 2014). Estimates of alcohol involvement in the major injury categories show that intoxication is a factor in approximately 30% of all homicides and unintentional injuries and 20% of suicide cases and fatal traffic injuries (Smith, Branas, & Miller, 2006; World Health Organization, 2009). In total, it has been estimated that alcohol intoxication accounts for approximately 17.3% of all deaths from injuries worldwide (Shield, Gmel, Patra, & Rehm, 2012). Although the highest risk of injury is associated with heavy consumption, several studies have shown elevated injury severity at BAC levels as low as 0.01% (Phillips & Brewer, 2011).

Alcohol-attributable injuries do not only occur during the acute phase of intoxication and do not only affect the drinkers themselves. Alcohol hangover, a state that results from acute intoxication, has been linked to number cognitive impairments such as attention, reaction time, and memory deficits (Howland et al., 2010; Prat, Adan, Pérez-

Pàmies, & Sánchez-Turet, 2008). The risks associated with alcohol hangover has been examined in relation to simulated driving and flying, where significant performance impairments have been found across studies (Verster, 2007). Moreover, a substantial proportion of all alcohol-related injury is attributable other people's alcohol use. In the European Union, Croatia, and Switzerland, deaths resulting from vehicle crashes and assaults by intoxicated others was estimated at 1.04 per 100,000 people in 2010 (WHO, 2013). In 2004, a total of 7,710 people were thought to have lost their lives due to others' alcohol consumption, with a further 218,560 disability adjusted life years lost to the same cause (Rehm, Shield, Rehm, Gmel, & Frick, 2012). In Australia, in 2005, the death of 367 people and hospitalisation of a further 13,699 was attributed to someone else's drinking (Laslett et al., 2010).

2.5.2 Health risks associated with alcohol use

In addition to the deleterious effects of acute alcohol intoxication on injury, there is a well-established cumulative effect of alcohol on a wide range of diseases and conditions. The major disease categories where alcohol has been identified as a causal factor include but are not limited to cardiovascular disease, diabetes, cancers, infectious diseases, alcohol use disorders, and neurological disorders (Rehm, 2011). Some conditions, such as alcohol dependence and alcohol-induced pancreatitis, are fully attributable (i.e., 100%) to alcohol (Rehm, 2011). However, for most conditions, alcohol is a component cause, contributing to a fraction of all incidents in a population. For women, alcohol has been identified as a causal factor in approximately 29.0% of all deaths due to liver cirrhosis, 21.2% of deaths due to epilepsy, and 15.7%, 14.3%, 9.6%, and 7.4% of death due to liver, oesophagus, mouth and oropharynx, and breast cancer respectively (WHO, 2011). As with the acute effects of alcohol, studies show a largely dose-dependent relationship between alcohol intake and chronic health outcomes, with the largest burden of disease caused by heavy alcohol use. However, for some health outcomes, small quantities of alcohol consumption may be better

than no alcohol. For instance, research indicates low levels of alcohol use is associated with decreased risk of coronary disease, by increasing the levels of high density lipoprotein cholesterol and adiponectin, while decreasing fibrinogen levels (for a review, see Brien, Ronksley, Turner, Mukamal, & Ghali, 2011). Estimates presented by the WHO (2012) show deaths due to ischaemic heart disease would be 5.9% higher among European women in the absence of alcohol consumption. It should, however, be noted that researchers have challenged studies such as this by drawing attention to inherent biases in the comparisons that are typically made between drinkers and non-drinkers. The main criticism has been directed toward the tendency to include former drinkers or very occasional drinkers in the comparison “non-drinker” group. As former and occasional drinkers include people who have stopped or reduced their alcohol consumption due to poor health, the comparison group is naturally more unhealthy than the drinking group (Fillmore, Stockwell, Chikritzhs, Bostrom, & Kerr, 2007; Stockwell et al., 2016). Moreover, for some diseases, research has failed to find protective effects of moderate alcohol consumption. A meta-analytic review of case-controlled studies has found a significant increase of 5% in breast cancer incidents among light female drinkers (12.5 g/1 drink per day) compared to abstainers (Bagnardi et al., 2013; see also Seitz, Pelucchi, Bagnardi, & La Vecchia, 2012). The risk of some forms of breast cancer has been found to increase by over 80% among postmenopausal women (compared to never drinkers; C. I. Li et al., 2010). In Europe, the total number of lives lost to alcohol outweighs lives saved by a factor of 9.6 for women and 7.3 for men (Rehm et al., 2012).

2.5.3 Social harm

In addition to its impact on injury and disease, alcohol incurs substantial social harm of which a large part is born by people other than the drinker. One such harm is the economic burden of alcohol use, estimated at between 1–3% of the gross domestic product in high income countries (Rehm et al., 2009). Conservative estimates indicate that the cost

of alcohol in Australia was AUD 15.3 billion in the financial year 2004–05 (D. J. Collins & Lapsley, 2008) and SEK 20.3 billion in Sweden in 2002 (Jarl et al., 2008), the equivalent of approximately AUD 3.3 billion. A particularly large financial strain is placed on the health and welfare system and on enforcement agencies. In Sweden, the net medical care cost for alcohol was SEK 2,189,100,000 (AUD 332,289,000) in 2002 (Johansson et al., 2006), while in Australia, the cost of alcohol-related crime to the Police Service alone was over AUD 747,000,000 in the financial year 2004–05 (D. J. Collins & Lapsley, 2008). Moreover, indirect (and less easily estimated) costs from lost workforce productivity further contribute to the financial burden of alcohol. In Australia, it was estimated that 11.5 million working days were lost due to alcohol hangovers in 2001 at an annual cost of 3 billion (Roche, Pidd, & Kostadinov, 2015). It should be noted that alcohol generates profits through alcohol tax, trade, and employment; however, these profits are substantially smaller than the sustained costs. For example, the total tax revenue raised by the Australian government amounted to 6.8 billion dollars in the 2009–10 financial year (AIHW, 2014).

In addition to its associated costs, alcohol use exerts a considerable and negative influence on the emotional and physical welfare of drinkers and those around them. For instance, harmful alcohol consumption has been linked to decreases in marital satisfaction and increases family dysfunction, social isolation, child maltreatment, and stigma (Foran & O'Leary, 2008; Leonard & Eiden, 2007; Taylor, Toner, Templeton, & Velleman, 2008; N. K. Young, Boles, & Otero, 2007). The impact of "second-hand" social harm from alcohol is substantial. In a New Zealand study of people aged 12–80 years, it was found that exposure to other people's heavy alcohol consumption was associated with significantly lower levels of life satisfaction and with poorer health, after controlling for respondents own alcohol consumption and other demographics (Casswell, You, & Huckle, 2011). According to the authors, the harm to participants who were exposed to others' heavy drinking is comparable to the harm associated with being a low income earner.

Moreover, the incidents of second-hand social harm from alcohol are high; in a 2010 US population survey, the lifetime incidence of physical abuse, family or marital problems, and financial problems due to others' alcohol use were 22.6%, 17.6%, and 8.9%, respectively (T. K. Greenfield et al., 2014). In Australia, the 2013 National Household Drug Strategy survey (AIHW, 2014) estimated that over a quarter (26%) of Australians had experienced physical or verbal abuse or felt frightened due to others' drinking, while negative outcomes following from others' alcohol use has been reported by 16% of survey respondents in Sweden (Sundin, Jandberg, & Raninen, 2015). The incidents of second-hand harm among children are also high; in 2006/07 close to 20,000 children in Australia were victims of substantiated alcohol-related abuse (Laslett et al., 2010). In a representative sample of adult Australians who cared for children aged 17 years or younger, almost a quarter of the sample (22%) reported that their children had been adversely affected by their own or other people's alcohol use, ranging from outcomes such as being unsupervised in an unsafe situation, being yelled at, verbally abused, or physical hurt (Laslett, Ferris, Dietze, & Room, 2012). Parental alcohol abuse and maltreatment in childhood is linked to a marked increase in both harmful and abusive alcohol consumption (Seljamo et al., 2006; Widom, White, Czaja, & Marmorstein, 2007), and mental illness (Hill et al., 2008; Widom et al., 2007) later in life.

2.6 Sex-specific Alcohol Risks

Women have a greater sensitivity to alcohol than men do. Differences in body fat, lean tissue, body water content, liver size, and gastric alcohol dehydrogenase activity mean that women attain a greater BAC after drinking equivalent amounts of alcohol, even after controlling for body size (Baraona et al., 2001; Pozzato et al., 1995).

2.6.1 Women and the acute effects of alcohol

In addition to reaching higher BAC levels for the same intake, research also indicates that women are more adversely affected by alcohol intoxication compared to men. For instance, M. A. Miller, Weafer, and Fillmore (2009) examined sex differences in performance at equivalent BAC levels (0.65 g/kg) by reanalysing data from seven driving simulations. The results showed that women displayed significantly greater average impairment across tasks measuring speed of information processing, information processing capacity, and motor coordination compared to men (Cohen's $d = 1.16$ vs. 0.72 for men). Similar results were also observed in an earlier study examining the impact of alcohol intoxication on a rotary pursuit task, where significantly greater performance reductions were found among women (Dougherty, Bjork, & Bennett, 1998). The latter study also found that, unlike their female counterparts, the male participants were able to overcome some of the negative effects of alcohol on task performance over several testing sessions.

Although women reach a higher BAC for equal consumption and appear to be more vulnerable to the effects of intoxication, this may not translate to greater levels of actual injury. Few studies have examined injury risk separately among men and women while controlling for alcohol intake, and the results from these studies have been mixed. Some research, for instance, indicates that men are equally or more vulnerable to injury at any given consumption level compared to women, while other research has shown either no sex differences or that women are more vulnerable. For example, Rehm, Room, and Taylor (2008) used Australian and international data to calculate the relative injury risk for different levels of average alcohol intake (measured by 10 g increments). The results of the analysis showed that although men and women's injury mortality risk was similar at low levels of intake (up to around 20 g), the injury risk increased much more steeply for men after this point. For instance, an alcohol intake of 70 g per session once per week was identified as the consumption pattern with the highest lifetime risk per 1,000 people for both men and

women. However, while the risk was calculated at just over 40 per 1,000 for women it was found to be around 75 per 1,000 for men. In contrast, an emergency department study using data from six hospitals (Williams, Mohsin, Weber, Jalaludin, & Crozier, 2011) found similar risk odds ratios for men and women at consumption levels of 61–90 g (1.51 and 1.58) and 91 g or more (1.88 and 1.89). A survey study conducted across seven European countries has, moreover, failed to find any significant differences in self-reported injury likelihood between men and women after controlling for total consumption levels and HED (Kuendig, Plant, Plant, Kuntsche, et al., 2008). Findings such as these, where men are at higher or equal risk of injury at similar consumption levels, indicate that women's greater vulnerability to intoxication is offset by other non-physiological sex differences; men's general tendency to engage in aggressive and risk-taking behaviour may be one such difference (Graham, Wilsnack, Dawson, & Vogeltanz, 1998; Lendrem, Lendrem, Gray, & Isaacs, 2014).

However, not all studies of dose-specific injury risk show equal or increased risk among men. Several Australian hospital emergency studies have found greater vulnerability among women, particularly at higher intake levels. In one study (McLeod, Stockwell, Stevens, & Phillips, 1999), approximately equal injury rates between men and women were found for alcohol intake up to 60 g of ethanol (compared to no alcohol intake). However, at consumption levels of equal to or greater than 61 g, women experienced close to a 10-fold increase in injury risk, while men experienced a twofold increase. A second study (Stockwell et al., 2002) reported that at an intake of 91 g and above, odds ratios for injury increased to 11.3 for women and 4.4 for men. In addition to this apparent increased vulnerability to injury with high alcohol intake, women have been found to present at emergency departments at significantly lower levels of alcohol intake than men (Roche, Watt, McClure, Purdie, & Green, 2001; Stockwell et al., 2002). Increased vulnerability among women has similarly been found in a survey study conducted among American undergraduate students. In this study the female alcohol consumers were 60% more likely to report an alcohol-related injury when number of drinks per week was controlled for (Sugarman, DeMartini, & Carey, 2009).

The results from studies such as these do not lend support for the proposition that women's vulnerability to alcohol is moderated behavioural patterns such as reduced aggression and risk-taking.

The above research on the alcohol–injury relationship has yielded mixed results, making it difficult to draw inferences regarding the relative vulnerability of women to alcohol-related injury. The current Australian guidelines for alcohol consumption are based on the data collected by Rehm et al. (2008) with recommendations regarding maximum intake being the same for both men and women. On the other hand, a number of countries, including Sweden, adjust for an assumed vulnerability among women, setting the recommended intake at a lower level for this group (Andréasson & Allebeck, 2005). However, regardless of whether women's alcohol vulnerability is moderated by behavioural patterns, research clearly shows that risk-taking propensity abates with age. For instance, drink driving, a major contributor to alcohol-related injury, is more commonly found among younger drivers (Australian Transport Council, 2011). Therefore, if sex-specific behaviour patterns do in fact offset women's biological vulnerability to intoxication, it is likely to be doing so for younger, rather than older cohorts of drinkers.

2.6.2 Women and the long-term effects of alcohol

Unlike the acute effects of alcohol, there is little evidence to suggest that women's vulnerability to alcohol-related disease outcomes are mediated by behavioural patterns. Rather, the literature indicates that women tend to develop alcohol-related chronic conditions at significantly lower levels of consumption compared to men (Frezza et al., 1990; Lieber, 1997) and that women experience a telescoping effect whereby they move more rapidly from initiation of harmful consumption patterns to negative health outcomes. For instance, it has been found that women are at risk of developing liver disease at approximately half the intake of alcohol compared to men (Becker et al., 1996). In meta-analysis composing 17 studies, Rehm et al. (2010) found a substantially higher relative risk

for liver cirrhosis at all consumption levels; compared to abstainers, men that consumed 12–24 g of alcohol per day were 1.6 times more likely to develop cirrhosis. For women, an average daily consumption 12–24 g increased the risk 5.6-fold compared to abstainers. For an average consumption of more than 60 g per day, the relative risk for men was 14, while it was 22.7 for women. Women have also been found to have a higher sensitivity to alcohol-induced heart disease than men (Faris, Henein, & Coats, 2003; Fernandez–Sola & Nicolas–Arfelis, 2002). As previously discussed, low doses of alcohol have cardiac health benefits among middle-aged populations, however, the level at which the harm associated with alcohol exceeds its benefits is considerably lower for women than for men (Di Castelnuovo et al., 2006).

A heightened sensitivity toward the toxic effects of alcohol on brain functioning has also been found among women (Ammendola et al., 2001; Schweinsburg et al., 2003). Significantly reduced grey and white brain volume has been reported in a sample of men and women with diagnosed alcohol dependency compared to a control sample, with the magnitude of this reduction being greater among female alcohol-dependent drinkers (Hommer, Momenan, Kaiser, & Rawlings, 2001). Similar findings have also been reported in general population samples. For instance, Paul et al. (2008) found a significant negative relationship between alcohol consumption and brain volume among all participants, however, this effect was also found to be stronger among women ($r = -.29$ vs. $r = -.20$). Compared to men, reductions in brain volume among women have also been found to occur after shorter periods of harmful alcohol use (Mann et al., 2005), suggesting a telescoping effect.

Last, research indicates that women are disproportionately vulnerable to the development of problematic alcohol use. While a few studies have failed to find sex differences (e.g., Keyes, Martins, Blanco, & Hasin, 2010), several other studies have demonstrated a telescoping effect among women for both abuse and alcohol dependency (Hernandez-Avila, Rounsaville, & Kranzler, 2004; Sannibale & Hall, 2001; S. H. Stewart,

Gavric, & Collins, 2009; Wojnar, Wasilewski, Matsumoto, & Cedro, 1997). Some studies indicate that this telescoping effect is more pronounced among older participants (Johnson, Richter, Kleber, McLellan, & Carise, 2005; Randall et al., 1999). For instance, Randall et al. (1999) examined sex differences in the progression from regular heavy consumption to alcohol problems and first seeking of treatment in a clinical sample of men and women. On average, women moved significantly faster from regular consumption to both alcohol problems and treatment-seeking than men; however, differences were small or lacking among the younger participants. A later study (Johnson et al., 2005) failed to find significant differences in the time it took for men and women aged 29 or younger to progress from regular alcohol consumption to regular heavy consumption. Among participants aged 30 years or older, it had taken men 10.9 years and women 7.6 years; a significant difference in the time period between regular use and regular heavy use. Overall, the death rate among female alcoholics has been estimated to be between 50% and 100% higher than among male alcoholics (Walter, Dvorak, Gutierrez, Zitterl, & Lesch, 2005).

2.7 Age-related Alcohol Effects

In addition to differences between men and women, age-related physical changes and changing lifestyle factors with age can further compound the effects of alcohol. Although the impact of age has generated some research interest and knowledge, most of the research in this area has compared young and old drinkers. The understanding of the nature of age-related differences in middle age is therefore somewhat tenuous.

2.7.1 Physiological changes

Some of the physiological changes that occur with age appear to increase sensitivity to alcohol. For instance, body water content (expressed as a percentage of body weight) declines steadily from young adulthood to old age (B. T. Davies & Bowen, 1999), reducing the distribution volume of alcohol in the body. Although dated, two studies have

examined peak BAC levels among male participants aged from 19–63 (Vogel-Sprott & Barrett, 1984) and 20–59 years (Jones & Neri, 1985) after the consumption of equal alcohol doses/kg body weight. In both these studies it was found that age-related reductions to body water proportion correspond to elevated BAC levels for equal levels of consumption.

However, other studies have shown that age effects may not become evident until old age. Davis and Bowen (1999) compared the BAC levels of young (21–25 years), middle age (35–47 years), and older (> 60 years) women after ingestion of 30 g of alcohol. Although the older women's peak BAC differed significantly from the younger and middle-aged women's BAC, no significant differences were found between the young and middle-aged group. It should, however, be noted that the alcohol dose given to the women in this study was not adjusted to body weight. As the middle-aged women were heavier than the younger women, the latter received a slightly higher relative dose (0.506 vs. 0.460 g/kg). A second study comparing BAC levels in samples of male participants found that young (25.0 ± 2.9 years) and middle-aged (41.1 ± 6.6 years) participants did not significantly differ in terms of BAC levels for a constant alcohol dose/kg body weight ingestion (Tupler, Hege, & Ellinwood Jr, 1995).

Differences in performance at equivalent BAC levels across age groups have also been tested; however, these studies have not distinguished middle-aged from older age groups. For instance, Gilbertson, Ceballos, Prather, and Nixon (2009) compared men aged 50–74 and 25–35 years on cognitive performance tasks on both the ascending and descending limb of the BAC curve (peak BAC was 40 mg/100 ml). Compared to a placebo condition, young men recorded a decreased reaction time for one of the tasks while on the ascending limb, while the older men recorded an increase reaction time. No significant difference in performance was recorded for either group on tasks performed on the descending limb. Similar age differences have also been replicated in mixed sex samples on the completion of simulated driving tasks. Sklar, Gilbertson, Boissoneault, Prather, and Nixon (2012) conducted an experiment where young (25–35 years) and middle-aged/old

(55–74 years) participants were tested under one a placebo, 0.040, or 0.065 BAC condition. After controlling for baseline performance, results showed that impairment as a result of alcohol consumption was significantly higher among the older participants. Taken together, these studies indicate that sensitivity to the intoxicating effects of alcohol increases with age and result in measurable performance decrements. Additional research that includes samples of middle-aged participants is however needed to determine if increased alcohol sensitivity starts to manifest in middle age.

2.7.2 Compounding effects associated with lifestyle patterns

In addition to physiological changes related to aging, the differences in younger and older people's consumption patterns have implications for alcohol-related outcomes. Acute alcohol-related conditions are typically more common among young people, which reflects the greater levels of HED in this age group (AIHW, 2014; Ramstedt et al., 2013). Morbidity and mortality resulting from chronic alcohol conditions are, however, common in older age groups (Chikritzhs et al., 2003; WHO, 2014). This overrepresentation is thought to be the result of an accumulation of harmful consumption over many years (Socialstyrelsen [The National Board of Health and Welfare], 2014b), although current consumption patterns are also likely to have an impact. In both Sweden and Australia, statistics show that current long-term risky alcohol consumption is slightly higher among middle-aged women than young people (Ramstedt et al., 2013; WHO, 2014) (see Section 2.3). In Sweden, statistics of inpatient care among women show that conditions such as alcohol-attributable stomach and liver cancer and degeneration of the nervous system are dominated by mature-aged (50–64 years) followed by older (65–79 years) women. Other alcohol-related disorders such as alcoholic psychoses, alcohol abuse, dependence syndrome, unipolar major depression, falls, and drowning are more common among young adult women (30–49 years), while disorders and outcomes associated with acute intoxication such as motor vehicle crashes, excessive BAC, and alcohol poisoning are more common among women under the age of

30 years (Johansson et al., 2006). In Australia, chronic alcohol-induced death is highest among women aged 45–59 years. Over the 10-year period 1992–2001, the number of chronic deaths in this age group of women was approximately 40% higher than that of women aged 60–74 years, twice that of women aged 30–44 years, and over 18 times that of women under the age of 30 years (Chikritzhs et al., 2003). Unlike statistical data from many other countries, however, the total number of women that died from acute alcohol-related causes was also found to be slightly higher among women aged 60–74 years, followed by women aged 45–59 years compared to other age groups. Overall, the total number of alcohol-attributable deaths (including both acute and chronic conditions) is substantially higher among middle-aged women in both Sweden and Australia (Figure 2.8). This overrepresentation is typical of alcohol death trends worldwide; 2012 data compiled by the WHO (2014) show that the largest proportion of alcohol-attributable deaths occurs in the age bracket 40–49 years. In Sweden, alcohol-related deaths among women aged 45–59 years was 14.3 per 100,000 in 2014, which is over 5 times the national road toll (Socialstyrelsen [The National Board of Health and Welfare], n.d.-a; Trafikanalys [Transport analysis], 2014).

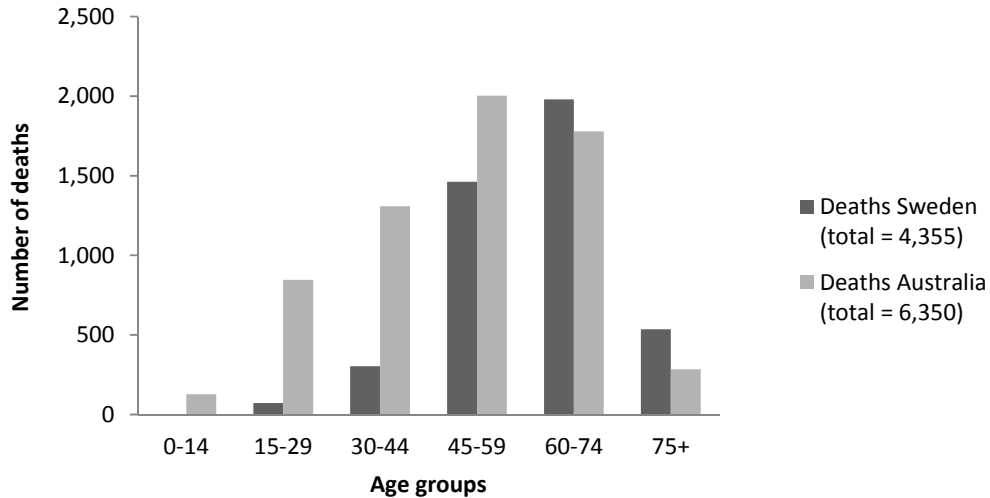


Figure 2.8. Number of alcohol-attributable deaths among women, by age group in the 10-year periods 1992–2001 (Australia) and 2006–2013 (Sweden).

Note. Australian statistics show net deaths, which includes lives saved, while Swedish statistics show lives lost only. Sources: Chikritzhs et al. (2003) and (Socialstyrelsen [The National Board of Health and Welfare], n.d.-a)

In addition to the impact of lifetime and current alcohol consumption patterns, several classes of medication that become increasingly common in middle age can interact with alcohol in problematic ways. Blood thinning medication (e.g., anticoagulants) can cause bleeding if taken with alcohol, and alcohol can interact with pain medications to compound the sedating effect of the drug and to increase the risk of cardiovascular disease and overdose (National Institute on Alcohol Abuse and Alcoholism, 2014). Australian statistics show that the use of over-the-counter and prescription medications increase with age, with close to 45% of men and women aged 50–64 years reporting recent use (Morgan et al., 2012). Moreover, 4.5% of women aged 40–49 years and 4.2% of women 50–59 years report use of pharmaceuticals for non-medicinal purposes in Australia. Although this proportion is higher than that of women aged 30–39 years, it is less than among those aged 20–29 years (5.4%) (AIHW, 2014). As in Australia, the number of drug prescriptions among women continues to climb with age in Sweden. The consumption of pharmaceuticals is

approximately 70% higher among women aged 45–59 years compared to women aged 30–44 years. Painkillers and anticoagulants, specifically, is 128.7 and 94.1% more common among women aged 45–59 years compared to women aged 30–44 years (and becomes exponentially more common in older age groups) (Socialstyrelsen [The National Board of Health and Welfare], n.d.-b).

2.8 Chapter Summary

In summary, the literature reviewed above shows that compared to men, women consume less alcohol, drink less often, and engage in fewer instances of HED. In addition to this, men and women tend to reduce their HED with age. However, the literature also indicates that the reduction in HED is paralleled by an increase in consumption frequency and overall consumption. Such patterns are of concern as high average consumption has implication for alcohol-related diseases and deaths (i.e., long-term harm). Current drinking patterns among middle-aged women are also likely to be further compounded by their physical vulnerability to alcohol and the cumulative effects of alcohol use over a lifetime. Indeed, in both Sweden and Australia, alcohol mortalities peak in middle and old age among women. In addition to these health impacts, trends over the last decade, whereby alcohol consumption has decreased among young female drinkers and increased slightly among middle-aged and older women, has narrowed the age-gap in consumption. If these trends continue over time, middle-aged and older women are likely to increase their proportional share of negative alcohol-related outcomes.

CHAPTER 3 Cultural Beliefs About Alcohol: Theory and Evidence

When a man lifts a cup, it is not only the kind of drink that is in it, the amount he is likely to take, and the circumstances under which he will do the drinking that are specified in advance for him, but also whether the contents of the cup will cheer or stupefy, whether they will induce affection or aggression, guilt or unalloyed pleasure. These and many other cultural definitions attach to the drink even before it touches the lips. (Mandelbaum, 1965, p. 282)

The above is a well-recognised ethnographic statement regarding the importance of socially held beliefs in determining both drinking patterns and their consequences. Alcohol beliefs are socially constructed and as such they tend to vary across different social groups. This variation has been proposed to explain much of the difference in drinking patterns that can be observed between different populations. In this research, four broad sets of alcohol beliefs will be examined in relation to middle-aged women's alcohol consumption. Each of these beliefs can be regarded as cultural in nature as they have been found to characterise and distinguish different groups. The first of these beliefs, *alcohol's use-value*, refers to the attributes that people assign to alcohol based on its physical properties; it denotes how alcohol as a substance is labelled and understood. The second category relates the *symbolic value* of alcohol, which refers to the way in which alcohol is used to express (or challenge) social structures and constructs such as gender, status, group belonging, and identity. While alcohol's use-value reflects beliefs about alcohol as a substance, this category relates to alcohol as a symbol. The third category refers to the belief or *expectancies* that people hold regarding alcohol's effect on the body and mind. Last, *alcohol norms* are the informal rules that dictate how alcohol should and should not be used.

This chapter contains a review of the existing literature on alcohol's use-value and symbolic value, alcohol expectancies, and alcohol norms. A description of each alcohol

belief will be given and its cultural variability and link to drinking outcomes will be reviewed. As the majority of the research in this area has been conducted on younger people, much of the literature that is presented here depicts the nature and outcome of these constructs among young drinkers. However, where research has been conducted on middle-aged women, these findings are highlighted and contrasted with the literature on young people.

3.1 Alcohol's Perceived Use-value

While the way that alcohol is understood is linked to its pharmacological properties (Social Issues Research Centre, 1998), it is often ascribed additional use-values. For instance, alcohol has at different times and for different groups been seen as a safe alternative to drinking water, a source of energy (K. Mäkelä, 1983), a medicine (S. E. Collins & Spelman, 2013; Osberg, Insana, Eggert, & Billingsley, 2011), and as a sacred substance (Babor et al., 2010). Moreover, contemporary conceptualisations of alcohol often define it as a compliment to a meal, a social lubricant, a stress or tension-reducing agent, or as a sexual enhancer (e.g., Pavis, Cunningham-Burley, & Amos, 1997). In an effort to describe key differences between national or pan-national drinking culture, K. Mäkelä (1983) proposed three central use-values of alcohol: the view of as a medicine, an intoxicant, and a nutrient. The first of these use-values describes alcohol as a substance that, through its pharmacological properties, can alleviate physical or mental illness. The use-value of alcohol as an intoxicant defines it as a substance used to achieve a state of drunkenness, while the use-value of alcohol as a nutrient focuses on its use as a taste and food product. The use-value of alcohol as an intoxicant and as a food and taste product has, in particular, been found to distinguish both cultural and subcultural groups of drinkers (see below).

3.1.1 National differences

The use-value of alcohol varies across cultural groups and impacts on the manner in which it is used. One example of difference in alcohol's use-value can be found in the

stereotypical distinction between Northern European and Anglo-American dry drinking cultures and the Southern European Mediterranean wet drinking cultures. In wet cultures alcohol has traditionally been viewed as a fairly neutral element of everyday life and as a complement to food, nutritionally not much different from tea or juice (i.e., seen as a nutrient; Heath, 1995a). Wet drinking cultures have been characterised by integrated, regular drinking that often occurs in a familial context (e.g., Allamani et al., 2000; Gamella, 1995), where children are gradually socialised into drinking (Rolando, Beccaria, Tigerstedt, & Törrönen, 2012). Although these regular drinking patterns result in a higher overall population consumption, drunkenness is uncommon. Countries with wet drinking cultures thus typically record higher rates of cirrhosis and other medical problems associated with prolonged alcohol use, but fewer instances of alcohol-related accidents or violent behaviour (e.g., Landberg, 2012).

Dry cultures have been marked by a history of heavy drinking as well as widespread and influential temperance movements (Levine, 1993), resulting in an ambivalent and morally charged view of alcohol (Peele, 2010). Alcohol's primary use-value is as an intoxicant, and it is understood as a powerful consciousness-altering substance that is associated with degradation and violence. However, alcohol and intoxication is also associated with positive states such as increased sexuality, sociability, and empowerment (Heath, 1997; Van Wersch & Walker, 2009). Unlike in wet cultures, alcohol use is set apart from daily (family) life and instead confined to particular times, places, and groups of people. The view of alcohol as a potentially dangerous substance also means that it is typically kept away from children and adolescents. However, as long as alcohol consumption remains confined, intoxication is tolerated or at times even celebrated (Room & Mäkelä, 2000). Initiation into drinking usually occurs later in life (e.g., early or mid-adolescence), often quite suddenly, and separate from the familial context. Dry drinking cultures have traditionally been distinguished by lower rates of overall consumption, higher prevalence of abstainers and greater incidents of heavy episodic weekend drinking (Allamani et al., 2000).

Despite the recent homogenisation of the drinking cultures of Europe (Leifman, 2001; Simpura & Karlsson, 2001), the distinction between dry and wet drinking cultures serves as an illustrative example of how the different use-values ascribed to alcohol (i.e., a nutrient vs. an intoxicant) influence both attitudes toward alcohol as well its use. However, although some consumption patterns and beliefs may, on an aggregate level, characterise a country as a whole, nation-based comparisons are likely to mask important differences at the subnational level. For instance, research suggests that some of the defining features of different drinking cultures have been implicitly based on male drinking patterns. P. Mäkelä et al. (2006) have shown that the assumed preference for beer (rather than wine) in Northern European countries is found among men but not among women. For the latter, in most countries regardless of location, wine was the most commonly preferred drink. As men consume more alcohol than women, it is possible that their drinking patterns have disproportionately contributed to an overall understanding of drinking culture. For the same reasons, it is conceivable that the intoxicant/nutrient distinction may be equally apt at distinguishing between young and older drinkers as it is at distinguishing between dry and wet drinking cultures (discussed below).

3.1.2 Subnational differences

A relatively recent body of work has focused on the meaning that participants themselves (as opposed to researchers or healthcare workers) ascribe to alcohol, intoxication, and other alcohol-related outcomes. These studies have provided insight into the both the use-values and symbolic value of alcohol among different groups. The majority of these studies have, however, focused particularly on young people's alcohol use.

3.1.2.1 *Alcohol as an intoxicant*

For instance, several studies that have investigated the meaning of alcohol among young people have found that for this cohort, the use-value of alcohol is strongly tied to

ideas of alcohol as an intoxicant. Researchers have for instance described that among young people, alcohol is often used with drunkenness as a deliberate goal; intoxication and drunkenness is seen by some young people as an activity in of itself (Fry, 2011; Measham & Brain, 2005). Rather than a negative outcome of alcohol consumption, drunkenness (and sometimes extreme drunkenness) is understood as a state of bodily pleasure and as a facilitator of a number of pleasurable emotions such as happiness, fun, and joy; and as a means to court risk and danger (Griffin, Bengry-Howell, Hackley, Mistral, & Szmigin, 2009; Tutenges & Rod, 2009). Moreover, through its disinhibiting effects, alcohol can create a sense of togetherness through a state of shared drunkenness (Demant & Østergaard, 2007). Alcohol use and intoxication has also been identified as a means through which young drinkers meet new people and develop and pursue romantic relationships (Sheehan & Ridge, 2001).

Although studies that investigate the meaning of alcohol in middle age are sparse, two qualitative studies that included samples of middle-aged women in Scotland and Sweden have been published. The first of these studies examined the meaning and role of alcohol among Scottish middle-aged (aged 30–50 years) men and women (Emslie, Hunt, & Lyons, 2012), while the second study investigated the changing role of alcohol in childhood, youth, and adulthood (including middle age) in a Swedish sample of men and women of varying ages (Bernhardsson, 2014). In these studies it was found that the middle-aged male participants (both Scottish and Swedish), on occasion, consumed alcohol with the expressed purpose of “getting drunk”. Although occasional HED occurred among some of the female participants in these studies, purposefully setting out to become drunk was not reported. To the knowledge of the author, no other studies have reported the explicit or celebrated use of alcohol as an intoxicant among middle-aged women (indicating that it is not seen as an intoxicant). Further research is, however, needed to ascertain if this reflects a true absence of intoxication-focused drinking or if this absence is an artefact of the limited number of investigations that have been conducted on middle-aged women.

3.1.2.2 *Alcohol, intoxication, and sociability*

As an intoxicant, alcohol can be used to enable pleasant physical and emotional states and to facilitate sociability (through its disinhibitory effects). However, sociability is not only enabled through heavy intoxication; alcohol is often used in moderate doses to create an atmosphere of cheerfulness, conviviality, and a sense of togetherness (Bernhardsson, 2014; Seaman & Ikegwonu, 2010). In interviews with middle-aged and older Italian men, Scarscelli (2007) distinguished between these two use-values, which he coined the “socialising/intoxicating value” and the “socialising/convivial value”, respectively. While the former use-value was characterised by sociability through a shared state of drunkenness, the latter emphasised a sense of joy, relaxation, and “good humour” facilitated by relatively moderate alcohol consumption. A similar distinction has been found in other studies (Grønkjær et al., 2011; Szmigin et al., 2008; Törrönen & Maunu, 2007). For instance, in a Danish focus group study of drinkers of varying ages (16–82 years), intoxication-oriented drinking (only reported by younger participants) was contrasted against using alcohol to create a “cosy” atmosphere where drinkers enjoyed the company of each other (Grønkjær et al., 2011). In focus groups and interviews with young adults from the United Kingdom, Szmigin et al. (2008) found a similar distinction between intoxication-oriented alcohol consumption (i.e., “getting muddled”, “wasted”, or “annihilated”) and drinking to engage in a relaxing and enjoyable form of sociability (i.e., “chilling”). A study of young Scottish men and women (Seaman & Ikegwonu, 2011), moreover, found a similar distinction between alcohol's social use-value. However in this study, the socialising/intoxicating use-value of alcohol was characteristic of drinking with friends, while the socialising/convivial consumption took place in the context of intimate relationships. For these young people, the socialising/convivial use of alcohol was signified by relaxation, intimacy, and domesticity.

In summary, the literature suggests that intoxication-focused alcohol use is more common among male and young drinkers than among middle-aged female drinkers.

Likewise, population statistics show that heavy alcohol use tends to be more common among men and in younger cohorts (P. Mäkelä et al., 2006; Wilsnack et al., 2009). However, not all young people engage in intoxication-focused drinking and, as indicated by the studies above, some young people use alcohol for both its socialising/convivial and socialising/intoxicating use-value. Thus, the unique feature of middle-aged women's alcohol use may be its distinct lack of focus on intoxication.

3.1.2.3 *Alcohol, food and taste*

The view of alcohol as a taste and food product has also been found to distinguish social groups. In the focus group study conducted by Emslie et al. (2012) middle-aged men and women spoke of how their alcohol consumption had changed as they grew older. Among these participants, alcohol had taken on a socialising/convivial use-value with age; but it had also become increasingly characterised by an interest in the taste of alcohol rather than its intoxicating effects. Similarly, Bernardsson (2014), found that drinking in adulthood was understood foremost as a taste experience. Often (but not always), this taste focus linked alcohol to food and eating; good wine was used complement and enhance the food experience. Although women in both studies used the intoxicating properties of alcohol as a way to relax at the end of the day, the idea of alcohol as a taste and food product appeared to be linked to a reduced focus on drunkenness. In both these studies, the notion of alcohol as a nutrient, or taste product, was accompanied by drinking patterns that were relatively moderate in nature.

3.1.2.4 *Alcohol as a medicine*

In addition to these common use-values, alcohol can also be understood and used as a means to reduce negative emotional states (i.e., as a medicine). Among young adults, alcohol is used to alleviate loneliness, heart break, and the strain from academic pressures (Kuntsche, Knibbe, Gmel, & Engels, 2005; Petrilli et al., 2014) and by adult and middle-aged

men and women to deal with work-related stress (Bernhardsson, 2014). Although alcohol has a recognised use-value as a medicine, to use alcohol in this way can be contentious. In both lay and scientific discourse, the use of alcohol to dull negative emotions is linked to alcohol misuse and dependency (Swendsen et al., 2000). Indeed, qualitative narratives where alcohol is depicted as a form of self-medication are frequently tinged with worry and concern. If participants speak of their own drinking in this way, their stories are often accompanied by an apparent need to legitimise and explain their consumption. For instance, the adults (no age specified) in Bernhardsson's (2014) study who used alcohol as a means to relax after a hard day of work justified their consumption by emphasising that they were able to set and keep limits to their drinking and by highlighting that they never drank to intoxication. Among young Italians, Petrilli et al. (2014) found that alcohol was seen as an appropriate means by which problems could temporarily be forgotten but only if it was consumed in a social setting. The use of alcohol as a medicine thus appears to be subjected to clear boundaries which allow drinkers to conceptualise their use as unproblematic.

3.1.3 Summary and implications

The reviewed literature shows that alcohol has a number of different use-values that revolve around the view of alcohol as an intoxicant, a nutrient, and a medicine. For instance, a commonly reported view of alcohol (at least in younger populations) identifies it as an intoxicant that can be used to attain a state of pleasurable drunkenness and to facilitate social and romantic relationships. The type of sociability that can be induced through alcohol appears, however, to be twofold; either sociability is facilitated by a collective and disinhibiting drunkenness (i.e., socialising/intoxicating) or through the social inhibition and sense of joy that can result from moderate alcohol consumption (i.e., socialising/convivial). The view of alcohol as a nutrient has also been identified in a few studies, and somewhat controversially, alcohol is also often recognised as a psychoactive agent that can alleviate negative emotional states. Moreover, the literature indicates that

important age and sex differences may exist in terms of alcohol's perceived use-value. The view of alcohol as an intoxicant to be used for drunkenness and socialising/intoxicating purposes appears to be common among young people and to be present among older adult men to some extent. However, this use-value appears to be absent (or hidden) among middle-aged women. Moreover, the view of alcohol as a nutrient (i.e., a taste experience) appears to develop and increase with age.

The use-value of alcohol that has been described is often intuitively linked to the observed consumption patterns of the group under investigation. For instance, the idea of alcohol as a taste and food product generally co-varies with a tendency toward moderate alcohol use, while the view of alcohol as an intoxicant co-varies with infrequent and heavy consumption. However, given the qualitative nature of the research that has been conducted in this area, empirical investigations of the relationship between alcohol's use-value and actual consumption are largely missing from the literature. As such, the current study was not only positioned to add to the rather limited understanding of alcohol's use-value among middle-aged women, but using a mixed-methods approach it also represented one of the first attempts to operationalise these beliefs and formally measure the strength of their relationship to harmful alcohol consumption.

3.2 Alcohol's Symbolic Value

In addition to its different use-values, alcohol is also imbued with wide-ranging symbolic meaning (e.g., Babor et al., 2010; Gefou-Madianou, 1992). The act of drinking (or abstaining) as well as the type of alcohol that is chosen and the manner in which it is drunk contributes to how social situations are constructed and understood. It also plays a role in the affirmation of relationships and in the enactment of cultural values, and it can serve as an expression of many aspects of social identity (including gender). An overview of the common symbolic values of alcohol is given below.

3.2.1 Defining situations

Alcohol is often used to define the nature of a drinking situation. For example, a glass of champagne is almost universally recognised as a sign of celebration (Charters et al., 2011), while the consumption of beer can help define a drinking occasion as informal and relaxed (Pettigrew & Charters, 2006). Moreover, alcohol often acts as a marker between work and leisure (Gusfield, 1996), although the nature of leisure that is linked to alcohol consumption may differ for men and women. In a continuation of Emslie et al.'s study (2012), Lyons, Emslie, and Hunt (2014) reanalysed and added more focus group material to further examine the experience and understanding of alcohol consumption among middle-aged Scottish men and women. The authors found that for the female participants, alcohol consumption marked a symbolic time and place during which they could disengage from their domestic responsibilities. This type of symbolic alcohol use often took place at home. By contrast, the men viewed alcohol as a reward for a hard day of paid work which often took place at the pub in the company of other men. Additionally, (heavy) alcohol consumption can define situations by acting as a symbolic "time-out" period where everyday norms can be transgressed without fear of social disapproval (Törnqvist, 2007; see also Section 3.3 for a discussion). Qualitative studies have explored the use of alcohol as a time-out among young people, finding that for this cohort, both alcohol's use-value as a disinhibiting intoxicant and its symbolic property as a time-out enables the exploration of otherwise sensitive topics such as sexuality, romantic relationships, and identity (Demant, 2007).

3.2.2 Social status and the Ideal Self

In societies, those possessions, actions, and characteristics that are collectively recognised as socially desirable affords individuals a sense of status and prestige. Alcohol consumption and drinking style play a role in the expression of these desirable attributes.

For instance, to drink imported beer and expensive wines or to buy drinks for other people can signal both status and affluence (Nosa, Adams, & Hodges, 2011; Pettigrew & Charters, 2010). Among adolescents, it has been found that regular (heavy) alcohol consumption in of itself can project maturity and experience, and thus, affords the drinker with a degree of social prestige (Demant, 2007; Järvinen & Gundelach, 2007). In youth, alcohol consumption can also be a way to present oneself as festive, socially competent, and popular (Demant & Järvinen, 2011; Lunnay, Ward, & Borlagdan, 2011; Tutenges & Rod, 2009).

The influence of alcohol and social identity on drinking outcomes has been examined in a few quantitative studies. Some of these studies have taken innovative approaches to the measurement of alcohol's symbolic value. For instance, researchers have argued that photographic and textual self-descriptions on social media networks such as Facebook can be viewed as active attempts at constructing idealised versions of the self (Casey & Dollinger, 2007; Ridout, Campbell, & Ellis, 2012). These researchers have also been able to show that a greater presence of alcohol imagery is linked to higher levels of alcohol use and alcohol problems among young people. Likewise, the link between alcohol consumption and status among young people has been formally measured. For example Dumas, Graham, Bernards, and Wells (2014) found that young men who engaged in more frequent HED and young women who drank more often were perceived as occupying high-status positions by their friends compared to those that engaged in fewer episodes of HED and who drank less often.

The traits and acts that are desirable tend to change as people age, and this is manifested through changes in the way that alcohol is used (Demant & Järvinen, 2011; Törnqvist, 2007). For instance, by interviewing the same young Danish drinkers at different ages 14–15, 15–16, and 18–19 years), Demant and Järvinen (2011) found that while extreme drunkenness resulting in vomiting and blackouts was seen as a badge of honour in early adolescence, in late adolescence the ideal was of a more mature drinker who possessed enough self-control to consume large quantities of alcohol without negative

outcomes (i.e., hold one's drink). In a Swedish longitudinal interview study, Törnqvist (2007) investigating the meaning of alcohol among participants in their twenties and again 15 years later. The author found that the preferred self that was channelled through alcohol consumption changed with age. In their mid-30s, participants' most salient form of idealised self revolved around having successfully settled down with a partner and a family. This "family ideal" was reflected through an alcohol consumption that was moderate and that took place during meals that were shared with other couples and sometimes with their children. Comparable results were also found in Emslie et al. (2012) focus group study with middle-aged men and women. Here, moderate alcohol consumption that did not interfere with participants responsibilities represented the ideal of being "older and wiser". In different studies, the idea that moderate alcohol consumption consumed at home with meals symbolises late adulthood has been expressed by a number of participants, both young and adult (Harnett, Thom, Herring, & Kelly, 2000; Roumeliotis, 2010).

3.2.3 Cultural, social, and ethnic identity

In addition to representing desirable attributes, alcohol is also a symbolic conduit for the expression of cultural, ethnic, and social identities. Among Niuean men, for instance, drinking is intertwined with the concept of "being Niuean" and in the expression of culturally important values such as generosity, respect, status, gifting, and host obligations (Nosa et al., 2011). Similarly, Grønkjær et al. (2011) has found that to drink alcohol is part of the cultural identity of Danish men and women of different ages. Among both young and older participants in this study, alcohol use was seen as important for sociability, and to abstain was viewed as counter-normative.

Alcohol consumption and drinking style can also be used to signal affiliation with a social group. For instance, studies on university populations have found that drinking, often to excess, is seen as an integral part of university life and of the student identity (L. A. Crawford & Novak, 2006; Livingstone, Young, & Manstead, 2011). In an earlier study, D.

Moore (1990) showed how English-born male Skinheads who lived in Australia expressed their English identity by adopting typical English drinking styles (e.g., drinking from pint glasses) while rejecting Australian drinking practices such as buying rounds (shouting). Traditionally, alcohol has been seen as a symbol of male bonding and friendship (Room, 2010), and studies indicate that alcohol continues to symbolise solidarity and group belonging among both younger and older men today (Emslie, Hunt, & Lyons, 2013; Nosa et al., 2011). However, studies have also shown that drinking can symbolise belonging and solidarity among young women (e.g., Sheehan & Ridge, 2001) and group inclusion among young people in general (Petrilli et al., 2014). For young people, the initiation of alcohol use has been described as a rite of passage into the world of adults (Sande, 2002).

3.2.4 The social construction of gender

While alcohol is used to express different types of social identities, one of its most pervasive symbolic uses can be found in relation to the social construction of gender. Gender roles refer to stereotypical beliefs regarding the inherent nature of men and women as well as expectations regarding how the two sexes ought to behave. According to social role theory (Eagly et al., 2000; W. Wood & Eagly, 2002), the traditional division of labour between men and women (public vs. private), meant that characteristics that enabled successful performance in each domain became seen as intrinsically male or female. Therefore, traits such as decisiveness, assertiveness, competitiveness, and aggression came to be regarded as masculine, while caretaking traits such as sensitivity, emotional expressiveness, compliance, and warmth came to be regarded as feminine (see also Lopata, 2006). Alcohol is deeply intertwined with the expression of these constructs; while heavy consumption is seen as an expression of traditional masculine traits, among women it is linked to promiscuity and seen as undermining their ability to adequately care for their families (Dempster, 2011; Holmila & Raitasalo, 2005; Lyons & Willott, 2008).

3.2.4.1 *Social construction of gender in quantitative research*

The understanding of drinking as a symbol of masculinity but not of femininity leads to the prediction that traditional gender roles in general would be associated with an increase in consumption for men but a decrease for women (e.g., Lye & Waldron, 1998). Moreover, it has been suggested that those (regardless of sex) who internalise masculine gender roles would be heavier drinkers than those that internalise feminine gender roles. To test these predictions, the propensity toward traditional or egalitarian gender roles have been operationalised in a number of ways: by tapping attitudes toward men and women's roles (gender role ideology), by measuring beliefs about men and women's inherent characteristics and engagement in gender stereotypical behaviour, and through the internalisation of gender-typed traits. Results from the studies that link these different constructs to alcohol use has shown some support for the predicted influence of gender roles. For instance, studies have found that men who engage in stereotypical behaviours and who hold stereotypical beliefs about men drink more than those who do not (Iwamoto, Cheng, Lee, Takamatsu, & Gordon, 2011; McCreary, Newcomb, & Sadava, 1999). In both adolescent and adults samples a more egalitarian gender role ideology has been associated with higher levels of drinking frequency and drinking volume among women and lower drinking frequency among men (Huselid & Cooper, 1992; Kubicka & Csemy, 2008; Mejia, Kaplan, Alderete, Gregorich, & Pérez-Stable, 2013). Further, in samples of both young men and women, the internalisation of either positive or negative masculine gender attributes have been linked to increased levels of substance and alcohol use (Kulis, Marsiglia, & Hurdle, 2003; Lengua & Stormshak, 2000; Peralta, Steele, Nofziger, & Rickles, 2010), while the internalisation of positive or negative feminine attributes has been associated with reduced levels of use (Kulis et al., 2003; Lengua & Stormshak, 2000; Ricciardelli, Connor, Williams, & Young, 2001).

However, inconsistent and contradictory findings have also been reported. For example, Christie-Mizell and Peralta (2009) found that egalitarian attitudes were associated with increased drinking frequency for *both* men and women, but that drinking volume was unrelated to gender role attitudes. De Visser and McDonnell (2012) showed that stereotypical gender views held by men were associated with greater intention to drink and get drunk but with lower levels of actual binge drinking. In samples of adult and middle-aged women, Murphy, Connelly, Evens, and Vander (2000) found that although egalitarian gender role attitudes were associated with increased consumption levels among the older women, no such association was found for the younger women. Similarly, some studies have found that internalised masculine traits are associated with lower levels of problematic alcohol use among women (compared to other women) (Sorell, Silvia, & Busch-Rossnagel, 1993), while other studies have found mixed or no support for a relationship between masculinity and alcohol consumption (Barrett & White, 2002; Sánchez-López, Cuellar-Flores, & Dresch, 2012). Comparable findings have been reported in terms of internalised femininity, which have been found to either increase (Möller-Leimkühler, Schwarz, Burtscheidt, & Gaebel, 2002) or have no effect on men and women's consumption levels and alcohol problems (Barrett & White, 2002; Sloan, Conner, & Gough, 2014).

Some of these inconsistent findings may be attributable to methodological differences (e.g., different conceptualisation of gender roles). However, another explanation for the contradictory findings in the existing literature may originate from the way that gender roles are measured. In the above cited studies, the influence of personally held views of men and women and internalised gender roles was estimated. However, research has shown that people often behave in accordance with perceived societal or cultural values rather than their own internalised values and beliefs (Zou et al., 2009). Some support for this notion can be found in a cross-national study examining gender roles and alcohol use among Moscow and Toronto residents. The authors of this study took the position that the internalisation of feminine traits such as caring, tenderness, and being easily hurt, can increase interpersonal

stress and by extension alcohol use. Results, however, showed that internalised femininity was associated with higher alcohol use among the Toronto women only, while masculinity was linked to increased alcohol use among the women living in Moscow. To explain these findings, the authors referred to societal disapproval of alcohol use among women in the two countries: In Russia, drinking is a gendered practice with a degree of stigma attached to women's alcohol use, while in Canada drinking practices are more liberalised. It was argued that in Russia, gendered drinking norms would prevent alcohol from being used as a coping strategy for stressors but in Canada, they would not. Conversely, internalised masculinity among Moscow women may represent a necessary break with a social structure that discourages drinking among women, thus increasing alcohol use among these women.

3.2.4.2 *Social construction of gender in qualitative research*

Moreover, qualitative research indicates that the symbolic link between alcohol and gender can manifest in a number of ways and that it may vary across social situations and different age groups. Studies of younger people have, for instance, shown that alcohol is used by women to either conform to or to challenge traditional gender roles. It has been found that some young women use alcohol as a catalyst for the exploration of gender boundaries and identities by engaging in traditional male behaviours, such as sexual assertiveness, aggression, and heavy drinking (Peralta, 2008; Rúdólfsdóttir & Morgan, 2009; Sheehan & Ridge, 2001). On the other hand, in a study of college women, A. M. Young, Morales, McCabe, Boyd, and D'Arcy (2005) found that the ability to "drink like a guy" gained women positive attention from their male peers; with the authors concluding that, in this college setting, the adoption of male drinking patterns by women had more to do with social status and the pursuit of romantic relationships, than with challenging existing gender norms.

In one of the few qualitative studies that have been conducted on cohorts other than younger women, Killingsworth (2006) investigated use of alcohol and discussions around the subject among mothers in a playgroup in Australia (ages not given). Caring for

their children had cast many of these women in stereotypical, homemaker-type roles. The author found that alcohol consumption and references to its use had become an important way in which the women distanced themselves from these traditional gender roles, while demonstrating equality with their husbands. Generally, research indicates that gender norms around alcohol use may be more stringent among older women. For example, (Lyons & Willott, 2008) conducted a focus group study where discussions around alcohol use among male and female friendship groups were explored. The participants in this study felt that older women (defined by participants as older than 30 or 40 years) who are drunk in public venues have lost control over their lives. However among young women, drinking was acceptable as it was seen as a fun and pleasurable activity and reward for hard work. Moreover, unlike older women, young women are most often not mothers and thus, the authors argued, public drinking did not threaten the link between femininity and motherhood for this group.

3.2.5 Summary and implications

Research published to date shows that the symbolic value of alcohol is diverse and that it touches many aspects of human life; it helps define situations and can be used to express a range of social constructs such as identity, status, ethnicity, and gender. Published research on the symbolic meaning of alcohol is plentiful, but again, this research has focused on young rather than middle-aged or older drinkers. Therefore, a detailed understanding of alcohol's symbolic role among middle-aged women cannot be gained from the existing literature. However, as a whole, the literature does indicate that the symbolic role of alcohol changes over the life course. For instance, studies conducted over time (e.g., Demant & Järvinen, 2011; Törnqvist, 2007), indicate that the form of idealised self that is symbolically expressed through alcohol changes as participants age. Moreover, the way that alcohol is used to conform to or resist traditional gender roles appears to take on different forms for young and older women. If symbolic values changes with age, there is cause to

believe that that the symbolic role of alcohol among middle-aged women will differ from other age groups. Therefore, age-specific examination of women's symbolic use of alcohol is needed.

The way that alcohol use is influenced by gender roles and to some extent by ideas around social roles and status has been investigated in quantitative research. However, many of the symbolic values of alcohol that have been described in qualitative research have not been operationalised or formally measured. Possibly, this is due to the different epistemological focuses of research in this area. Qualitative research investigating the meaning of alcohol in groups of people is often conducted with the aim of understanding the (situation bound) way in which meaning is negotiated challenged. As such, questions regarding the existence of durable and transcending ways of thinking about alcohol across remain unanswered, as does questions regarding prevalence of such thought patterns in larger populations and their ability to predict alcohol outcomes. As is the case with the literature on alcohol's use-value, the current project was thus able contribute, not only to the limited understanding of middle-aged women's symbolic use of alcohol, but also to a better understanding of the relationship between these symbolic meanings and drinking outcomes.

3.3 Learning How to Use and How to be Affected by Alcohol

The use-value and symbolic value of alcohol are the shared ideas that people hold regarding what alcohol is and the role that it plays. However, it is not only our understanding of what alcohol is that is socially transmitted. As noted by MacAndrew and Edgerton in their seminal 1969 cross-cultural study of alcohol; people learn *how to drink* and they also learn *how to be affected* by alcohol (MacAndrew & Edgerton, 1969). To support this claim the authors presented ethnographic evidence highlighting that the outcomes of alcohol consumption differ between societies, as well as across situations and over time. To account for these variations, MacAndrew and Edgerton argued that in cultures where people believe that alcohol would disinhibit and corrupt, they tend to view alcohol as a *time-out* period when

personal accountability for one's actions is temporarily suspended. However, the authors also demonstrated that even in these societies, intoxication is not associated with a lack of social control. Rather, they argued that drunken behaviour is guided by its own set of behavioural rules, and that adherence to these rules is remarkably strong, even among the "most seemingly disinhibited drunkard" (MacAndrew & Edgerton, 1969, p. 67).

The notion that the diverging outcomes of alcohol consumption can, at least partly, be ascribed to differences in people's alcohol-related beliefs has been addressed extensively in the empirical literature. In particular, studies of alcohol expectancies and drinking norms have been accumulating evidence of the impact of alcohol beliefs on alcohol use and related outcomes. In turn, these areas of research will be reviewed below.

3.3.1 Alcohol expectancies

Alcohol expectancies are defined as common beliefs regarding alcohol's physiological, behavioural, and cognitive effect (e.g., Goldman & Christiansen, 1987). These perceived effects can be either negative or positive in nature, and span outcomes such as increased sociability, sexual enhancement, relaxation, aggression, and cognitive or behavioural impairment (Brown, Goldman, Inn, & Anderson, 1980; Fromme, Stroot, & Kaplan, 1993; Rohsenow, 1983). There has been some support for the notion that beliefs about alcohol's effect predispose drinkers to act and feel in accordance with those beliefs. In experimental placebo studies, tension-reducing alcohol expectancies have been linked to lower levels of anxiety (Abrams & Kushner, 2004) and beliefs that alcohol enhances sexual arousal have been linked to risky sexual practices (Maisto, Carey, Carey, Gordon, & Schum, 2004). Moreover, aggression-related alcohol expectancies have in some studies been linked to self-reported aggressive acts when drinking (Barnwell, Borders, & Earleywine, 2006), although the findings in this area are somewhat mixed (see also Chermack & Taylor, 1995; Kachadourian, Homish, Quigley, & Leonard, 2012). There has also been some support for the time-out concept proposed by MacAndrew and Edgerton (1969). In qualitative studies,

alcohol has been identified as an explanation and excuse for some forms of violence (Graham & Wells, 2003; Tryggvesson, 2004), and it has been argued that those who believe that alcohol makes people lose control over their actions are less likely to attribute blame to perpetrators of violent acts, including sexual aggression (Abbey, 2002). However, as a whole, the literature reveals inconsistencies. For example, reviews have found that the excuse value of alcohol is not uniformly accepted (Bègue & Subra, 2008; Leonard, 2002) and the link between alcohol expectancies and behaviour (particularly aggression) is inconsistent across studies (Testa et al., 2006) and may not predict behaviour over time (Leonard, 2002). The impact of alcohol expectancies is also likely to be dependent on situational factors and the type of behaviour in question (Sayette, Dimoff, Levine, Moreland, & Votruba-Drzal, 2012; Tryggvesson & Bullock, 2006).

Although the link between alcohol expectancies and alcohol-related *behaviour* shows some inconsistency, the influence of alcohol expectancies on drinking patterns appears robust. Both negative and positive expectancies have been shown to explain a substantial amount of variance in the quantity and frequency of alcohol consumption (Cranford, Zucker, Jester, Puttler, & Fitzgerald, 2010; Scott-Sheldon, Terry, Carey, Garey, & Carey, 2012) as well as in problematic or abusive drinking (S. Fischer, Settles, Collins, Gunn, & Smith, 2012; M. D. Wood, Nagoshi, & Dennis, 1992). Support for the link between alcohol expectancies and alcohol-related outcomes have also been found in longitudinal studies (Leeman, Toll, Taylor, & Volpicelli, 2009), indicating a causal effect of these beliefs on drinking outcomes.

3.3.1.2 *National and subnational variations*

Although personal involvement with alcohol is thought to influence the formation of future alcohol expectancies, research indicates that vicarious experiences also play a role. For instance, beliefs about the powers and properties of alcohol starts to form in childhood, long before the initiation of personal alcohol consumption (Donovan, Molina, & Kelly, 2009)

and can also be found among lifetime abstainers (Johnson et al., 1996). Parents have been identified as an important source of the social transmission of alcohol expectancies. A link has been demonstrated between exposure to parental drinking, abuse, and alcohol dependency and positive expectancies such as increased sociability, reduced tension, or sexual enhancement in samples of young (Chen et al., 2011), adolescent (Brown, Tate, Vik, Haas, & Aarons, 1999), and adult offspring (Labrie, Migliuri, Kenney, & Lac, 2010; Pastor & Evans, 2003).

Although there is support for familial transmission of alcohol expectancies in the literature, research has also shown that broader population differences exist in terms of the type and intensity of endorsed expectancies, as well as in the relationship between expectancies and alcohol outcomes. For instance, research suggests that people in Western cultures tend to harbour more positive alcohol expectancies than those in non-Western cultures (e.g., Gilbert, Mora, & Ferguson, 1994; Shell, Newman, & Xiaoyi, 2010; Strahan, Panayiotou, Clements, & Scott, 2011) and that negative alcohol expectancies are more common among religious participants (Galen & Rogers, 2004). Age differences have also been documented; it has been found that older individuals endorse alcohol expectancies to a lesser degree than young people (Nicolai, Moshagen, & Demmel, 2012; Satre & Knight, 2001) and that negative expectancies is a stronger predictor of drinking status, frequency, and volume among older men and women (Leigh & Stacy, 2004), while positive alcohol expectancies exert a stronger influence on alcohol use among young people (Satre & Knight, 2001). Specifically, cognitive impairment expectancies have been linked to decreases in alcohol use among older participants, while social and sexual enhancement expectancies have been associated with increases in drinking among younger participants (Nicolai et al., 2012; Pabst, Baumeister, & Kraus, 2010). Last, sex differences have also been found; however, the nature of these differences is somewhat inconsistent across studies. Some research show that men tend to hold positive alcohol expectancies to a greater degree than women (Kirmani & Suman, 2010). Other studies, however, indicate that

only some positive expectancies (e.g., sexual enhancement) are more common among men, while others (e.g., social enhancement) are more common among women (Read, Wood, Lejuez, Palfai, & Slack, 2004).

3.3.2 Summary and implications

Alcohol expectancies are the beliefs people hold regarding alcohol's effect on the human body and mind. Previous research shows that these expectancies influence alcohol use (e.g., drinking frequency and volume) and to some degree the behaviours that people engage in when intoxicated (e.g., aggressive acts). The type of expectancies people hold and the link between these expectancies and drinking outcomes have also been found to differ across cultural groups as well as between men and women and younger and older cohorts. Specifically, it has been found that older participants are less likely to endorse alcohol expectancies in general but more strongly influenced by negative alcohol expectancies than younger people. Although the literature shows that sex differences exist in the endorsement of alcohol expectancies, these findings are inconsistent. However, the demonstrated link between alcohol expectancies and drinking outcomes as well as the culturally variant nature of expectancies indicate that they may be important constructs to include in investigations of middle-aged women's alcohol beliefs. Moreover, investigating alcohol expectancies using qualitative perspective (Studies 1 and 2) may result in a more detailed understanding of the exact nature of alcohol expectancies among middle-aged women.

3.3.3 Alcohol norms

Norms can be understood as a set of informal (and sometimes implicit) behavioural rules that are shared by a social group and that prescribe or prohibit different behaviours. Conceptually, researchers have distinguished between two types of norms; *descriptive norms* which describe the normal or typical behaviours of a group and *injunctive*

norms which describe a group's approval or disapproval of a particular behaviour. Injunctive and descriptive norms can in turn be divided into actual or perceived norms. Actual norms (as implied by the name) refer to the actual prevalence and approval of a behaviour, and can be obtained by averaging the behaviours and attitudes of a group. Perceived norms refer to the *perceptions* that people hold regarding the prevalence and acceptance of a behaviour in a particular group.

It has been argued that descriptive and injunctive norms serve different functions and goals (Cialdini, Reno, & Kallgren, 1990). Often (but not always) descriptive norms provide information regarding behaviours that are sensible or adaptive in different situations and can therefore help people choose actions that are accurate or effective. Injunctive norms, on the other hand, inform people what is considered morally right or wrong. To act in accordance with injunctive norms enables people to gain social acceptance and approval. Support for this distinction has been found in a word priming experiment where participants were asked to, as quickly as possible, identify whether a string of letters represented an actual word (Jacobson, Mortensen, & Cialdini, 2011). The words that were presented related to either accurate or efficient behaviour (e.g., accurate, beneficial) or to social approval (e.g., approval, team). The authors found that participants who were primed with descriptive norm words, such as typical and usual, recognised words that related to accurate or efficient behaviour more quickly than those that were primed with neutral words. Conversely, the quickest response among participants that were primed with injunctive norm words, such as should and ought, was found for goal words that related to social approval. Additionally, research that measures the predictive power of both injunctive and descriptive norms typically finds that, although related to each other, these two constructs independently predict variance in drinking outcome variables (Lee, Geisner, Lewis, Neighbors, & Larimer, 2007).

3.3.3.1 *Alcohol norms for different groups*

Alcohol use is surrounded by a complex normative system dictating in detail when, where, how, and by whom alcohol should and *should not* be drunk (Heath, 1995b). For instance, alcohol norms specify the situations during which it is inappropriate or unacceptable to drink or become intoxicated. Such situations can include while driving, while at work (e.g., Grønkjær et al., 2011), in the presence of small children (T. K. Greenfield & Kerr, 2003; Raitasalo, Holmila, & Mäkelä, 2011), or when alone (e.g., M. Stewart, 1992). Moreover, norms are highly dependent on the individual who is drinking, with consumption patterns and behaviours that are unacceptable for some people being acceptable for others. One salient example can be found in the norms that surround men and women's alcohol consumption. Reflecting broader values and beliefs around masculinity and femineity (see Section 3.2.4 for a discussion) drinking norms for men are typically more permissive than those that apply to women (Suls & Green, 2003; Zimmermann & Sieverding, 2011). Gender norms in drinking are pervasive, and they have been found in the most liberal settings and among the most gender egalitarian people (Ricciardelli et al., 2001).

While the literature clearly demonstrates gendered norms around drinking, some research also suggests that proscriptive norms become particularly strong as women reach middle age (e.g., Allamani et al., 2000; Van Wersch & Walker, 2009). Few studies have examined the drinking patterns deemed appropriate for middle-aged or older women. However, from the studies that have been conducted, some tentative conclusions can be made. For instance, Abrahamson (2012) explored the notion of acceptable drinking among women in their sixties, seventies, and eighties by analysing written accounts of personal drinking experiences. The author found that, among older women, an "ideal of abstinence" represented an appropriate relationship to alcohol. However, generational differences were evident, with middle-aged women conforming to an "ideal of moderation" rather than abstinence. The idea of moderate consumption as an indicator for acceptable drinking in

middle age was also found in the focus groups conducted by Emslie et al. (2012). In this mixed-sex sample of middle-aged drinkers, moderate drinking that did not interfere with responsibilities was understood as normative and age appropriate. Although the participants in this study occasionally engaged in heavy alcohol consumption, these events were reconceptualised as normative by highlighting that intoxication had not been purposeful (women only), or that they had not acted inappropriately or neglected their responsibilities as a result of their consumption. Taken together, previous research shows how alcohol norms are highly dependent on the characteristics of the drinker and that in terms of sex and age, more permissive norms may be enjoyed by men compared to women and by younger women compared to older women.

3.3.3.2 *The impact of alcohol norms on alcohol use*

The impact of alcohol norms on drinking outcomes have been explored in a number of quantitative studies. Particularly, the impact of the perceived alcohol use and alcohol acceptance of different referent groups has received attention in the literature. A referent group is social group or unit that a person belongs to, identifies with, or cares about, and can range from proximal to more distant (e.g., friends vs. community). Generally, the alcohol norms of more proximal referent groups exert a stronger influence over personal drinking than more distal groups (LaBrie, Hummer, Neighbors, & Larimer, 2010; Song, Smiler, Wagoner, & Wolfson, 2012). An overview of this literature is given below, most of which has been conducted on young people (particularly on college and university students).

A robust positive relationship has been found between perceived descriptive norms and personal alcohol use among college and university students (Clapp & McDonnell, 2000; Dams-O'Connor, Martin, & Martens, 2007). These results have been replicated in female (J. Miller, Prichard, Hutchinson, & Wilson, 2014) as well as in mixed sex samples (Larimer et al., 2009) and have been found in a number of places, including the USA (LaBrie, Atkins, Neighbors, Mirza, & Larimer, 2012), Europe (França, Dautzenberg, &

Reynaud, 2010; McAlaney & McMahon, 2007), and in Australia/New Zealand (J. Miller et al., 2014). Injunctive alcohol norms have similarly been linked to drinking intention and actual alcohol use in male and female student populations in America and elsewhere (Halim, Hasking, & Allen, 2012; Huchting, Lac, & LaBrie, 2008; Zimmermann & Sieverding, 2010). However, a few studies have reported an unexpected inverse relationship between perceived injunctive norms and alcohol consumption (Neighbors et al., 2008; Rimal & Real, 2003), and some studies have shown that injunctive norms of more distal reference groups exert a less powerful influence over personal drinking among students (Clapp & McDonnell, 2000; Dams-O'Connor et al., 2007).

While fewer in nature, the studies that have been conducted with populations other than students support the link between perceived norms and alcohol outcomes. For instance, the perceived alcohol consumption of same-aged people has been linked to increased alcohol consumption in a representative sample of 20-year-old Swiss men (Bertholet, Gaume, Faouzi, Daeppen, & Gmel, 2011) and in a community sample of adolescents ($M = 15.7$ years). Specifically, it was found that those adolescents who believed that their parents approved of their alcohol use were more likely to drink (Paschall, Grube, Thomas, Cannon, & Treffers, 2012). In a large study of adults in the United States of America ($M = 39$ years, range 18–65) it was found that coworkers' perceived alcohol use at work predicted personal alcohol use before and during the workday as well as alcohol impairment during the workday. Moreover, perceptions regarding close work-friends' acceptance of alcohol use during the workday predicted both alcohol use during the workday and general alcohol use among participants (Frone & Brown, 2010).

Results from longitudinal studies suggest that the relationship between perceived descriptive and injunctive norms and alcohol use is causal in nature, at least in student populations. For instance, Werner, Walker, and Greene (1996) found that friends' perceived drinking patterns was a strong predictor of both alcohol use and related problems at 32 months follow-up. After controlling for baseline drinking levels, Neighbors, Dillard, Lewis,

Bergstrom, and Neil (2006), found that perceived descriptive norms predicted personal drinking frequency two months later, but no direct relationship between drinking quantity and later consumption was found. Examining the predictive power of both injunctive and descriptive norms over time, Osberg et al. (2011) also found that both types of norms independently predicted later (one month) drinking volume and alcohol problems. It has also been found that friends' perceived approval of alcohol consumption (i.e., injunctive norms) predict alcohol consumption at four-month follow-up (Talbot, Wilkinson, Moore, & Usdan, 2014).

3.3.3.4 *Discrepancy between actual and perceived norms*

Not only have perceived norms been found to influence alcohol use in different populations; research also shows that people commonly believe that others are more approving of alcohol and drink more than they themselves do (Bertholet et al., 2011; Garnett et al., 2015). In population samples where participants have been asked to rate their own drinking compared to that of others like them, a tendency for at least some participants to underestimate their own drinking has been reported. For example, Garnett et al. (2015) measured the actual consumption levels of a large cross-cultural sample drawn from four English-speaking countries and compared it to participants' ranking of their own drinking relative to other people (e.g., average, very high). In this study, 14.5% of participants accurately ranked themselves, while close to 50% underestimated their own consumption levels compared to others. Underestimation was, however, more common among younger (16–24 years) and male participants. Comparable results were found in Bertholet et al. (2011) study of 20-year-old Swiss men. The authors similarly calculated the average sample consumption and compared it to the perceived alcohol consumption of same-aged people. Close to half of the sample (45.5%) underestimated their own consumption compared to people their age, while 19.3% were accurate in their estimation. However, as “people your age” included not only men but also women (who drink less than men) the self–other

discrepancy in this study may have been inflated by actual differences between the sample and the referent groups (i.e., other people). It should also be noted that while overestimation occurred in both the above studies, a large minority of participants underestimated others' alcohol consumption levels (38.5% and 35.2%, respectively), meaning that, on balance, the perceptions in these samples were fairly accurate.

Overestimation of others' drinking may be higher among problem drinkers than the general population. In a Canadian study (Cunningham, Neighbors, Wild, & Humphreys, 2012), a sample of participants with harmful drinking patterns were asked to estimate the percent of same-sexed Canadians that drank more than they do. The sample's average consumption was then compared to population survey data to calculate the proportion of the Canadian population that *actually* drank more than the sample. Comparison of these two measures showed that the estimated proportion of the population that drank more than the participants was approximately three times higher than the actual proportion of Canadians that did so. In another Canadian study (Wild, 2002), the injunctive beliefs of moderate and heavy drinkers were compared in a representative adult sample. It was found that participants who consumed 5 or more standard drinks at least once per week were more likely to believe that others (i.e., friends, coworkers, and the general public) drank more. Moreover, while moderate drinkers believed that others held more permissive alcohol norms than themselves, heavy drinkers believed their alcohol attitudes were in line with that of others.

3.3.4 Summary and implications

The research shows that alcohol norms, the informal rules that guide alcohol use, are robustly linked to drinking outcomes. Descriptive and injunctive norms, the perceived prevalence and acceptance of different drinking behaviour, have both been found to independently influence alcohol outcomes in cross-sectional and longitudinal studies. Moreover, research indicates that people (particularly student populations and problem

drinkers) tend to believe that others hold more permissive norms than they themselves do. Although the majority of studies that have been conducted in this field have been conducted using college and university students, those studies that have used community samples of adults have produced similar findings; thus, alcohol norms are unlikely to be an influential construct exclusively among young people.

Although the literature indicates that norms are influential across age groups, there is a lack of knowledge regarding the exact nature of alcohol norms among middle-aged women. Previous research indicates that norms are less permissive for middle-aged women (compared to men and younger people), and that moderation may be the ideal for consumption. However, additional studies are needed to examine this belief in larger samples. Moreover, a qualitative investigation of middle-aged women's alcohol norms may contribute knowledge regarding other drinking patterns that are considered normative and non-normative for middle-aged women. A qualitative investigation could also provide insight into the reason why norms are stricter for middle-aged women than for other groups. Furthermore, to the knowledge of the author, no previous studies have investigated the accuracy to which middle-aged women can identify consumption patterns among same-aged women (i.e., descriptive norms). As the perceived norms of others influence personal drinking, this knowledge is an important part of understanding alcohol consumption among middle-aged women.

3.4 Chapter Summary and Implications for the Research Studies

This chapter has given an overview of the varying use and symbolic values attributed to alcohol as well as the nature of alcohol expectancies and alcohol norms. Each of these broad categories of alcohol beliefs have been found to vary between national and subnational groups and their link to alcohol outcomes has been demonstrated. However, a large majority of all studies that have been conducted on these alcohol beliefs have been focused on men or young cohorts of drinkers. As such, the current understanding of the

manifestation of these beliefs among middle-aged women and their link to harmful alcohol consumption in this group is limited.

In the following chapters, the theory, methodology, and methods of the qualitative studies (Studies 1 and 2) are presented. The four broad alcohol beliefs identified in the above literature review provided the framework for these studies: The observations and interviews were designed to describe the nature of alcohol's symbolic and use-value for middle-aged women and the norms and expectancies that surround their alcohol use. The findings from the two qualitative studies, and to a lesser extent the content of this literature review, were subsequently operationalised in Study 3. Thus, the three studies conducted in this research program addressed the current gap in the literature by describing the nature of alcohol beliefs as well as estimate their level of sharedness and influence on drinking outcomes among middle-aged women.

CHAPTER 4 The Qualitative Studies: Theory, Methodology, and Methods

This chapter introduces the two qualitative studies (Studies 1 and 2) included in this research program. Both studies were conducted using the same theoretical starting point, methodological approach, and methods; as such, an overview of these aspects is given together in this chapter. The first qualitative study consisted of passive and unobtrusive observations of middle-aged women's alcohol consumption in public venues and the second study consisted of individual interviews where women were asked to discuss their own alcohol use.

4.1 Rational for the Selected Study Format

Observations and interviews can be used to highlight different aspects of a phenomenon, together allowing for a more complete picture to be developed. In the current research, the two data collection methods were used in this way, complementing rather than building on each other (see Figure 1.1). For example, although some of the interviewed women described instances of drinking in public venues such as restaurants or sports clubs, they rarely mentioned the localities (bars) that were targeted in observations. In contrast, the meaning and role of solitary alcohol use could be explored in interviews but not in observations. Additionally, although the observations did not readily identify injunctive norms or expectancies held by the women, these beliefs were implicitly and explicitly expressed in interviews. More generally, the observations allowed the researcher to document the social interactions that surround alcohol use, while the individual interviews enabled investigations of more private thoughts about alcohol that may not have surfaced using methods that draw on the social interaction between people (e.g., observations or focus groups). Last, the inclusion of unobtrusive observations allowed access to "natural" drinking behaviour that was unaltered by the (known) presence of a researcher. Thus, rather than informing each

other, the two data collection methods were used to enable a more complete picture of middle-aged women's alcohol consumption.

4.2 Framework

Given the current research's focus on culture, the data collection and analysis for Study 1 and 2 were centred on the principles of ethnography. Ethnography requires active and prolonged participation in the culture under investigation to develop an understanding of how its members view their world. Such time commitment was outside the scope of this project; however, the tenets of this methodology were nonetheless drawn upon. Specifically, the analytic framework proposed by Spradley and colleagues (McCurdy, Spradley, & Shandy, 2005; Spradley, 1979, 1980) was used. Spradley et al. conceptualise culture as learned and shared knowledge that is used to generate and interpret behaviour. Although it cannot be directly observed, cultural knowledge can be deduced by analysing people's behaviour (including speech messages) and the cultural artefacts they produce and use. The authors further postulate that cultural knowledge is either explicit or tacit. Explicit knowledge comprises conscious aspects of culture that are encoded in language and can be easily discussed. Tacit knowledge, however, exists outside participants' conscious awareness but is nonetheless expressed through behaviour and use of artefacts. The current studies were akin to a topic-oriented ethnography (Spradley, 1980), in that they focused specifically on one aspect of middle-aged women's lives (i.e., alcohol use).

Ethnography has a dual focus insofar as it takes an interest in both the way in which people create cultural knowledge and the way in which they use this knowledge to generate behaviour (Daly, 2007). The approach to the study of culture that is described by Spradley and colleagues (McCurdy et al., 2005; Spradley, 1979, 1980) is, however, dealing with the latter, which in line with the focus and epistemological position of this thesis: The current research focused on shared alcohol beliefs (i.e., cultural knowledge) and the way in which these beliefs influence alcohol consumption (i.e., generates behaviour).

4.3 Process of Inquiry

Although ethnography is rarely a purely deductive, theory-testing endeavour, it is recognised that all research is guided by at least some prior understanding (O'Reilly, 2009; Wilson & Chaddha, 2009). In ethnography, "sensitising concepts" are sometimes used to this purpose. Sensitising concepts can be understood as guiding concepts which draw attention to important features of the area under study, rather than a preconceived structure of knowledge to be confirmed by data collection (Gobo, 2008). Based on the literature, alcohol's use-value, symbolic value, and alcohol norms and expectations were identified as the starting point for the current investigation; the nature and relationship between these concepts were, however, developed inductively from the data. Thus, although the current research did not adopt a strict deductive approach, these concepts nonetheless guided the analysis by prompting the researcher to ask certain questions and investigate particular aspects of the interviewed women's alcohol use and beliefs (Wilson & Chaddha, 2009). Moreover, they provided the theoretical understanding necessary to enable adequate explanations of the social mechanisms that were examined and described (Wacquant, 2002).

4.4 Approach to Data Collection and Analysis

Spradley and colleagues (e.g., McCurdy et al., 2005; Spradley, 1979, 1980) offer a structured approach to the study of behaviour and cultural artefacts, which aims to gaining access the underlying cultural knowledge. This approach has been used as a guide for effective data collection and analysis in previous research (e.g., Friedman, 2006; Tripp & Rich, 2012) and is cited in current textbooks on qualitative methods (Bernard, 2011; Willig, 2013). Thus, the current research adopted a well-tested framework which focused the investigation on the shared alcohol beliefs of middle-aged women.

A number of basic steps for data collection and analysis is suggested by Spradley and colleagues (McCurdy et al., 2005; Spradley, 1979, 1980). In essence, these steps guide

investigations toward the examination of durable thought patterns and construct that are assumed to exist across social situations and interactions. First, a descriptive account of the topic under investigation is gathered. In the current research, this was done by asking interview participants to describe different drinking situations and by compiling descriptive accounts of alcohol use in public venues. At this stage, the focus remained on gaining a detailed overview of middle-aged women's alcohol consumption, while inferences regarding the underlying cultural knowledge were avoided. In the second step, a domain analysis is conducted to generate cultural categories. Cultural categories represent the way in which cultural knowledge is organised in the minds of participants. In the current research, categories were generated by grouping segments of data (called attributes) together based on similarities to form cultural categories. For instance, different types of drinking occasions were identified by grouping together observed behaviour that was similar in nature.

The identification of initial cultural categories is followed by a taxonomy analysis, which entails the identification of higher-order categories under which subcategories can be organised (McCurdy et al., 2005). For example, social drinking was identified as a higher-order category which subsumed different ways of consuming alcohol in social settings. The results of the initial domain analysis was allowed to shape the continuing data collection process: The identification of different drinking occasions prompted more focused observations of such occasions and question were added in interviews to gather more information about each occasion. According to Spradley and colleagues (McCurdy et al., 2005; Spradley, 1979, 1980) this ensures that the results from initial data analysis guide and focus subsequent data collection.

After cultural categories and taxonomies had been developed, the next step entailed identifying the meaning attached to these categories. The meaning of each category can be inferred by considering the nature of its included attributes. Similarly, the meaning of higher-order categories can be inferred by considering its subcategories. The analysis of attributes is facilitated by partial contrasting; a technique which entails the comparison of

closely related categories. By determining how related categories are different, a more complete understanding of its attributes can be developed (McCurdy et al., 2005). In the current research, partial contrasting was conducted as part of the data analysis. Moreover, observations and interviews were further focused to elicit more precise description of differences between categories and their attributes. As more data was gathered, descriptions of cultural categories and their meaning evolved to incorporate this new information (McCurdy et al., 2005).

As the last step of analysis, Spradley describes the identification of cultural themes. Cultural themes are core values or beliefs which are expressed in many (but not necessarily all) aspects of a culture, and which can help to explain why a culture is organised the way it is. Although they can be explicit, cultural themes are often unspoken (tacit) and require an the use of the researchers own observations, interpretations, and previous theoretical knowledge (McCurdy et al., 2005) to identify. Following the lead of Spradley et al. (McCurdy et al., 2005), cultural themes were identified by paying attention to reoccurring patterns in the data. Moreover, as suggested by the authors, comparisons with more well-established cultures (in this instance, young people's alcohol culture) were made to isolate the unique aspects of the overarching values and beliefs expressed by the participants in the current research.

4.5 Addressing Bias

The current research drew on the postpositivistic assumption that a patterned reality exists and that this reality can be (imprecisely) measured. Ontologically, this conceptualises knowledge as existing separately from the knower. The goal was therefore to represent the existing reality as accurately as possible. However, it was recognised that the influences of the researcher cannot be entirely removed from this process. Researchers' preconceived notions about the way the world works can influence the type of questions are asked and where attention is placed during the analytical process. Moreover, the responses

and actions of participants are inevitably influenced by the presence of a researcher.

Therefore, efforts to identify, manage, and minimise biases were employed in the qualitative studies. Specifically, the author engaged in a process of reflexivity, paid attention to social response bias in interviews, and adhered to the principles of trustworthiness during the analysis of the data.

4.5.1 The author's reflection on her background and perspective

A consideration of the background and perspective of the researchers is of importance as it influences the focus and methods of investigation, what findings that are deemed important, and frames the conclusions that are drawn (Malterud, 2001). This is particularly true for qualitative research, where the researchers become the tool through which data is collected. As the author of this research I therefore had to consider my cultural background and my own exposure to alcohol. Although I was brought up in Sweden, I moved to the United Kingdom as a young adult and lived there for three years before relocating to Australia: At the initiation of the current project, I had lived, studied, and worked in Australia for over five years. As alcohol and drinking permeates many part of these three countries, I had a lived experience (both as a drinker and as a non-drinker) of three similar, yet distinct national alcohol cultures. Through my experiences I had developed a naïve understanding of the cultural position of alcohol as well as an appreciation for the variability of the behavioural codes, ideas, beliefs, values, and concerns that are associated with alcohol use across countries. It was therefore of importance to ensure that this prior understanding did not bias the collection and analysis of the data. For example, when I left Sweden to live abroad the ambivalence that many Swedish people hold toward theirs and others' alcohol use became strikingly obvious to me. This was a curious discovery for me and one of several that came to define my thinking around the way alcohol is understood and used in Sweden. Given experiences such as this, at several points I wondered if I was paying more attention to those aspects that confirmed my prior understanding than to those

that challenged them. I sought to address the influence of prior understandings such as these through ongoing discussions with my primary supervisor and by paying attention to any information that contradicted the notions I had formed prior to or during the course of data collection and analysis. Moreover, the peer-review process was of particular importance (see Section 4.5.3 below). As part of this process I was able to ask the other involved researchers to review the data with the aim to identify and consolidate any differences between their and my interpretation.

4.5.2 Dealing with self-presentation in interviews

Unlike the natural data collected in unobtrusive observations, interview data is subjected to influences associated with social desirability. The tendency to represent oneself in a favourable manner can be heightened when sensitive topics, such as alcohol use, are discussed. Attempts were made to reduce the occurrence of bias by encouraging honest responses, developing rapport, and conveying non-judgmental stance before and during the course of the interview. In addition to these minimising efforts, measures were also taken to manage bias when it did occur. Specifically, efforts were made during the analysis to identify unrealistic representations of consumption patterns that were in line with norms around middle-aged women's alcohol use. Answers identified as affected by social desirability were not overlooked, however. Rather, they were analysed from the view point that they contained important information about the nature alcohol norms and the role that alcohol plays in the construction of a desired self-image.

4.5.3 Rigour

Lincoln and Guba (1985) introduced the concept of *trustworthiness* as an encompassing set of criteria against which the quality or "goodness" of qualitative research can be measured. Trustworthiness includes the principles of credibility, conformability, dependability, and transferability, four principles that are comparable to the quantitative

research concepts of internal validity, objectivity, reliability, and external validity/generalisability (Shenton, 2004). In the present work credibility (internal validity) was strived for by ensuring that what the participants said and did corresponded to the researcher's representation and explanation of those behaviours and viewpoints. To this end, a peer-review process was implemented during the analysis of the data. As part of this process, the grouping of data into categories as well as the interpretation of the meaning associated with each category was reviewed by a second researcher. Difference in categorisation and interpretation between the two researchers were discussed until consensus was reached (see Barry, Britten, Barber, Bradley, & Stevenson, 1999). The Australian data was reviewed by the principal supervisor of this program of research, while the Swedish data was reviewed by a Swedish researcher at the Centre for Social Research on Alcohol and Drugs (SoRAD), whose research areas include drinking cultures and the influence of gender on alcohol consumption. Additionally, the use of two different data collection methods prolonged the engagement with the data and allowed the researcher to view middle-aged women's alcohol use from different perspectives, making possible a more complete and thus accurate picture of the area under study (Hammersley & Atkinson, 2007; Lincoln & Guba, 1985). Last, the inductive, data-driven element of the data collection and analysis increased the likelihood that findings remained grounded in the data.

The second principle, confirmability (objectivity), refers to the ability of the researcher to produce results that are based on the data and that are not unduly influenced by the motivations, perspectives, or biases of the researcher (Lincoln & Guba, 1985). To increase confirmability, reflexivity was applied to the analytic process, whereby the researcher attempted to identify and discuss her personal intuitive understanding of both Swedish and Australian alcohol culture with other research team members. During these discussions, attempts were made to discern and account for the potential impact of this understanding on the analysis. Dependability (reliability), the third principle, refers to the replicability of the study and its results. It is recognised that dependability can be difficult to

achieve in qualitative research as social phenomena are inherently changeable (Jensen, 2008; Shenton, 2004). However, replication can be aided by clearly describing the framework and methods that were used as well as the researchers own background and perspective. In addition, Lincoln and Guba (1985) argued that dependability and credibility are similar concepts, whereby the achievement credibility should increase the degree of dependability. Simply, if findings are congruent with reality, they should be replicable.

Last, transferability (external validity/generalisability), describes the degree to which findings from one study can be applied to other contexts or groups. In quantitative research, this principle refers to the extent to which study findings can be transferable to the wider population. Although these claims are not made in the present project, an effort was made to describe the context of circumstances of the interviews and observations. Using this information, readers may determine for themselves if the context of the present work applies to their own area of research and consequently, whether the findings of this study can be applied (Shenton, 2004).

CHAPTER 5 Study 1 (Observations)

In this chapter, an overview of the participants, measures, procedure, and results of the observation studies is given. A short summary of the results is given at the end of this chapter. A similar overview of the interview studies is given in Chapter 6. A more extensive discussion of the findings from both the observation and interview studies can be found in Chapter 7.

5.1 Participants

During observations, women who were seen drinking alcohol and who appeared to be in the 45–59 year age-range were targeted. However, as the researcher did not interact with the participants during any of the observations, the exact age of those observed could not be determined. Often, the targeted women were part of larger groups that consisted of both men and other women that were either younger or older than the target age group. Although these patrons did not fit the inclusion criteria, observations were made of the groups as a whole; the actions and interactions between the members of these groups provided important information regarding the role that alcohol played in these women's lives. As all observed middle-aged women were part of groups with two or more members, these groups became a natural focus of the observations, hereon after referred to as observation units (OUs).

5.2 Measures

Observation sites such as public venues are often full of people and activities. As such, an observation schedule that focuses the attention of the researcher toward the theoretically relevant aspects of the situation is of importance. Spradley (1980, p. 78) suggested that any social situation can be broken down to the following nine dimensions, which can be used as a basic guide for observations;

1. Place: the physical place or places
2. Object: the physical things that are present
3. Event: a set of related activities that people carry out
4. Actor: the people involved
5. Activity: a set of related acts people do
6. Act: single actions that people do
7. Time: the sequencing that takes place over time
8. Feeling: the emotions felt and expressed
9. Goal: the things people are trying to accomplish

As these dimensions are interrelated (e.g., different actors can be involved in different activities) a dimensional matrix can be developed (see Appendix B). This matrix consists of a number of questions that help the researchers to tap into the nine dimensions, for instance; "*How are actors involved in activities?*" For the current study, the nine dimensions and these matrix questions were drawn on to make detailed observations of the OUs.

The observation guide as well as more practical matters such as note-taking were piloted during two separate observations in Australia. During the analysis of the pilot data, it was noted that *events* and *goals* could be conceptualised as overarching situational dimensions (see Figure 5.1). A description of middle-aged women's public alcohol consumption could be generated by observing the time period during which alcohol consumption was taking place, the physical characteristics of the environment (i.e., place), the people (i.e., actors) that made up the OUs, what those people were doing (i.e., acts and activities), the objects they were using, and the feelings that they were experiencing. By

conducting domain and taxonomy analyses on this data, different types of drinking events, each with a distinct goal, could subsequently be discerned.

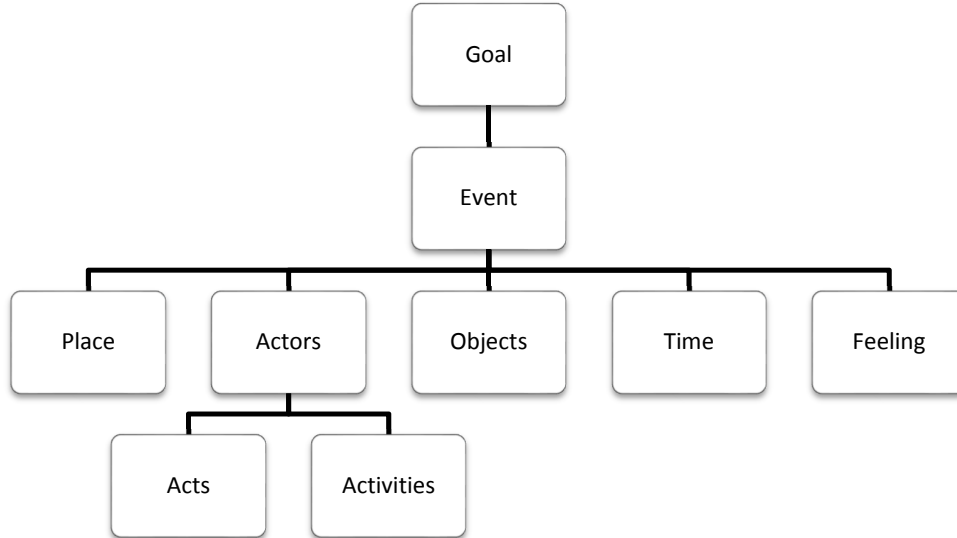


Figure 5.1. Conceptualisation of the relationship between of Spradley's nine situational dimensions.

The identification of the goal of each drinking event, in turn, enabled the researcher to make inferences about the meaning and role that alcohol and drinking played in reaching that goal. Moreover, by considering the acts and activities within each of these drinking events, conclusions regarding descriptive drinking norms could be drawn. As previously noted, injunctive norms and alcohol expectancies were more difficult to identify using the data generated from the observations. Both these beliefs are subtle and do not always coincide with overt behaviour, and it is likely that these difficulties would have been encountered with any observational schedule. Any conclusions regarding the nature of these beliefs were treated as tentative and in need of further verification.

5.3 Procedure

Ethical approval to conduct research with human participants was granted by the relevant institutions in both countries; in Sweden by the Regional Ethics Committee for

Human Research in Stockholm (ethics no. 2009/1741–31/5) and in Australia by the Queensland University of Technology (QUT) Human Research Ethics Committee (ethics no. 1100001335). The Australian approval extended across both the qualitative studies (Study 1 and 2) and the quantitative study (Study 3). The Swedish approval encompassed the two qualitative studies⁵. A waiver of consent from participants was granted by the approving bodies for the unobtrusive observations; neither was permission sought from premise owners to observe patrons. The consent waiver and the decision to not seek permission from owners was based on the unobtrusive nature of the observations, the public accessibility to venues (for patrons over the age of 18 years), and as observing others can be considered a normative behaviour in these environments. Health and safety approval was obtained from QUT. To ensure the safety of the researchers, interaction with other patrons were avoided. A second person accompanied the researcher for all observations conducted after 7 p.m. and all travel to and from venues were undertaken using private transport.

Following the piloting of the observation schedule, a series of six observations were conducted in Sweden and five observations were conducted in Australia. In Sweden, five of the observations were conducted in a mid-size town (population approximately 111,000) and one study was undertaken in central Stockholm, the capital city of Sweden (population approximately 1,373,000). All observations in Australia were conducted in the city centre or inner suburbs of Brisbane, a city with an approximate population of two million people. Public venues where the greatest number of patrons was of apparent middle age were selected for observations. This was done to make data collection more efficient by maximising the number of observations of middle-aged women per occasion. Some of these

⁵ Separate approval was sought to collect the final quantitative data in Sweden (ethics no. 2014/1358-32/5).

venues (in both countries) were busy earlier in the evening, while other venues were populated later at night and remained open into the early morning. Generally, the layout and use of these two types of venues differed. Most notably, the early-evening venues were largely filled with tables and chairs and most patrons were seated (e.g., Appendix C, venue A and B), while the late-night venues contained more open spaces where people were standing or moving around. Some of the late-night venues also included a dance floor (e.g., Appendix C, venue C and D). Music played in all sites but was louder in the late-night venues, and while food was served in all the visited venues, it was more frequently consumed in the early-evening venues. Observations were made between 5:00 p.m. and 2:00 a.m., depending on the type of venue and the presence of OUs. Observations lasted between 2.5 and 5 hours. A passive participant approach (Spradley, 1980) was taken to all observations. Observations can be purely non-participatory (for instance, televised programs can be observation), however, most often they involve a varying degree of participation on the behalf of the researcher (Spradley, 1980, see Figure 5.2). For the current research, the passive approach meant that although the researcher experienced the situation under investigation, she did not engage in conversation or otherwise interact with the observed women. The use of passive observations minimised any influence that the researcher had on the collected data.

DEGREE OF INVOLVEMENT	TYPE OF PARTICIPATION
<p style="text-align: center;">High</p> <p style="text-align: center;">↑</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Low</p>	Complete
	Likely to be conducted by ethnographers that are already members of the culture under study.
	Active
	The ethnographer seeks to do what the informants are doing.
	Moderate
	The ethnographer seeks to maintain a balance between participation and observation.
	Passive
	The ethnographer is present at the scene of action but does not participate or interact with other people to any great extent.
(no involvement)	Non-participation
	The ethnographer is not involved with the people or activities studied.

Figure 5.2. Different types of ethnographic observations, by level of involvement. Adapted from Spradley (1980).

During the pilot studies it was found that note-taking could rarely be conducted overtly without raising suspicion. As such, the author used her mobile phone to make short notes primarily consisting of key word or phrases which were later used to reconstruct the observed event in greater detail. The author also used a notepad to record notes, if privacy could be found. All notes made during the observations were transcribed into detailed field notes within 12 hours to increase the accuracy of recall. In addition to a description of the social scene under investigation, the field notes also contained initial reflections and impression of the data (e.g., Charmaz & Mitchell, 2001).

5.4 Results

Observations were made of as many middle-aged women as possible during each observation occasion. Even though venues with the greatest proportion of middle-aged female patrons were specifically targeted, this age group was nonetheless quite sparsely represented. As such, in most instances, it was possible to make observation of all or most of the middle-aged women who were present. Through the methods outlined in Chapter 4, all observations were analysed, resulting in four different social drinking events, each named after their respective goal: *Closeness Among Female friends*, *Romantic Closeness*, *Entertainment*, and *Entertainment and new Relationships*. The first two events focused on the goal of interpersonal closeness and two on social enhancement (Figure 5.3).

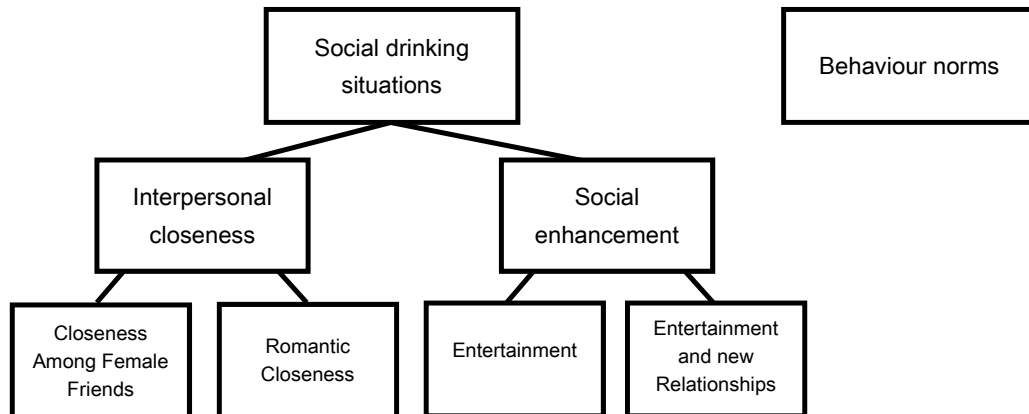


Figure 5.3. Illustration of cultural categories identified from the observation data.

All identified drinking events contained the act of drinking (as this was an inclusion criterion); however, contrast analysis showed that events could be distinguished based on differences in *how* alcohol was drunk and other aspects such as time and place of consumption and objects that were used by the OUs. In addition to these drinking events, it was tentatively concluded that norms around intoxication for middle-aged women were proscriptive in nature. Initially, analysis was conducted separately for the Swedish and

Australian data. However, as the same drinking events were identified in both data sets, the data was combined to produce the results presented below.

5.4.1 Closeness Among Female Friends

The first of the identified drinking events, *Closeness Among Female Friends*, took place among pairs or small groups of women (of which at least one woman appeared to be aged 45–59 years) who were seated alone or, in some instances, formed a subgroup within a larger group of drinkers. The women who took part in this drinking event appeared to be familiar with each other; their body language was relaxed and indicated a feeling of intimacy and contentment. Alcohol was consumed, but most often at a relatively slow pace. In addition to the consumption of alcohol, the women were engaged in conversations. These conversations held the attention of the women, who were solely focused on the speaker and what she conveyed: The women did not engage with or appear interested in the other people that were present around them. One example was observed among two Swedish women who were part of a larger mixed-sex group. Rather than interacting with the other members of the larger group, these two women engaged in conversation with each other for a lengthy period of time. They frequently leaned in toward each other, and one of the two women often gripped the arm of the other. While the remaining members were discussing topics that engage the entire group, these two women were standing at the edge of the main group with their backs turned against it. During some of these conversations, different objects were used as a focal point for the women's attention. For instance, a few women shared images on their mobile phones or shared and discussed other objects they had brought with them, such as jewellery.

The women also engaged in several acts of sharing. When food was ordered by these OUs, it was often presented in the form of platters that were shared by the group members. In some groups, alcohol was also an object that was shared. An example was observed in a group of Australian women who congregated around a table in a busy early-

evening venue. The women all drank from bottles of champagne or sparkling wine that were placed in ice buckets on the centre of the table. As new arrivals joined the group, they were given an empty glass and served from these bottles, rather than ordering their own drinks from the bar. Similar acts of sharing were observed among Swedish women. The *Closeness Among Female Friends* drinking events took place in early-evening venues that were predominantly furnished with chairs and tables that were arranged to encourage conversations among small or large groups. The music that was played at these venues was relatively low, allowing conversations to be held in normal speaking volume. The observed women's use of space was rather constricted as these groups typically remained seated or standing in the same place during their entire stay in the venue. In the Australian setting, most of these events took place between 5:00 and 9:00 p.m.; in the Swedish setting, a pair of women engaging in this particular drinking event was observed leaving their public venue at 11:00 p.m.

Taken together, the sense of familiarity and intimacy that were projected by the women, the undivided attention they gave each other, and the type of venues that were frequented indicated that this drinking event was strongly social in nature, whereby a sense of togetherness and intimacy was sought. In this context, it is possible that alcohol was understood in similar ways to the socialising/convivial use-value suggested by Scarscelli (2007) (see Section 3.1.2.2.), where the intoxicating effect of moderate consumption is used to create a joyful and relaxed social atmosphere. Moreover, the act of sharing (both food and alcohol) that was observed relatively often during these drinking events could be interpreted as symbolising social ties and closeness. If so, one symbolic value attributed to alcohol by the observed women would be that of friendship and bonding.

5.4.2 Romantic Closeness

In the *Closeness Among Female Friends* event, the goal appeared to be a form of intimate togetherness. This conclusion was derived partly from the apparent familiarity,

closeness, and inward focus that the women in these drinking events displayed. A similar set of acts and emotions was observed among couples who appeared to be romantically involved (only heterosexual pairs were observed in this study). These pairs were observed either alone or in larger groups of drinkers. The activities and acts of the pairs that were observed alone centred on the consumption of alcohol and food, or alcohol only. All pairs engaged in conversations and some pairs were also observed sharing alcohol (e.g., drinking wine from the same bottle). Generally, alcohol consumption by these couples was rather slow and most often moderate. As with the *Closeness Among Female Friends* event, the pairs paid attention to each other and seldom seemed interested in other people that were present in the venue. The pairs of romantically involved men and women that were observed in larger groups were less focused on each other as they frequently interacted with those around them. The larger groups that these pairs were part of were often engaged in *Entertainment* events (see below). Although the pairs frequently interacted with others, many of these couples danced together or shared moments of interaction during which they focused their attention solely on each other. As the goal of these interactions revolved around romantic closeness, they were classified under the current category. Nonetheless, these observations indicated that the middle-aged women could take part in more than one drinking event (i.e., *Romantic Closeness* and *Entertainment* events) during one evening and that the goals of the drinking event were not necessarily mutually exclusive.

The pairs that were alone were generally observed in early-evening venues that were largely furnished with tables and chairs (and without a dance floor). Often, these couples were seated in areas of these venues that were more secluded, including booths or areas that were further away from the bar. Similar to the *Closeness Among Female Friends* drinking events, these couples appeared to have selected settings that were conducive to the goal of the evening. Conversely, the pairs that were observed as part of *Entertainment* events were most often found, along with the group they belonged to, in places more suited to the entertainment focus of these groups (see below); late-night venues with more open

floor plans and a dance floor. The emotions that the two types of pairs projected differed somewhat; although both types were focused on each other and exuded a sense of intimacy and enjoyment of each other's company, the interactions of pairs found observed in *Entertainment* events also included a sense fun and joviality.

In summary, the observations that were made of what appeared to be romantically involved couples in public venues indicated that for middle-aged women, alcohol may play a meaningful role not only in the relationship with friends but also with partners. In observations, romantic couples were either eating and drinking or dancing together. These activities projected a sense of intimacy; however, the couples that were part of *Entertainment* events also expressed a sense of enjoyment and fun. In both these instances, it is conceivable that alcohol and its intoxicating properties were used to create a situation in which the romantic relationships could be enjoyed.

5.4.3 Entertainment

Entertainment, the third drinking event that identified in the data was centred on the creation of an entertaining and exciting atmosphere. This particular event was only observed in groups of drinkers that were either mixed-sex or all female. Although the attention of group members was mostly focused inward toward other group members, some interaction with other patrons was observed. Moreover, the *Entertainment* events took place in late-night venues that had more open spaces and louder music. The groups that were involved in these events were more mobile than the groups that took part in the *Closeness Among Female Friends* event in the sense that they moved around the venue to a greater extent. In many of these groups, individual group members or at times the whole group would move to the dance floor to dance. In addition to dancing, these groups often engage in storytelling and joking. One group member would often assume the role of storyteller during which time they held the attention of the whole or part of the group. The storytelling appeared to be designed to elicit mirth from the group members and was often met with

laughter or shouts of mock protest and indignation. One example is the following snippet of storytelling that was overheard among a group of mostly middle-aged women in Australia;

*"ah, don't **ever**⁶ go shopping with . . . she never calls anyone by their right name . . . she was singing and Steve⁷ and I were laughing . . . when she's not sober."*

Both the dancing and the storytelling that these groups engaged in were often accompanied by exaggerated gestures and play-acting. For instance, in a mixed-sex group in Australia, group members frequently threw their arms up in the air while talking and one woman repeatedly covered her eyes or pretended to fall off her chair in response to the comments made by other group members. Moreover, when dancing, some of the women exaggerated their movement for comic effect. The pace of alcohol consumption was generally quicker during this event and although alcohol was shared by some of the OUs, this did not occur with the same frequency as in the intimacy-focused events. The emotions that the *Entertainment* events projected centred on amusement, fun, and exuberance.

Similar to the *Closeness Among Female Friends* drinking event described above, the goal of the *Entertainment* event revolved around enjoying the company of friends, as the focus and attention of those involved were largely placed on the other group members. However, unlike the former drinking event, the atmosphere in *Entertainment* events was more boisterous and alcohol consumption was heavier. As such, for this drinking event, the role of alcohol was more closely aligned with a socialising/intoxicating use-value proposed by Scarscelli (2007). However, it must be noted that the alcohol consumption of the observed women did not compare to the more extreme forms of intoxication (e.g.,

⁶ Bolded for emphasis

⁷ This name has been changed for privacy

“annihilation” or being “wasted”) that some young people ascribe to their alcohol consumption in this context.

5.4.4 Entertainment and new Relationships

The fourth and last drinking event was the least commonly observed and involved pairs or groups of middle-aged women. Unlike the OUs that took part in the previous drinking events, these groups were distinguished by an outward focus of attention; rather than engaging in continuous conversations with group members, these women interacted with other patrons, mostly of the opposite sex, who appeared to be unknown to them. In addition to interacting with other patrons, the outward focus of these groups was evident in the way the women directed their gaze and in the way they positioned themselves in relation to the other group members. For instance, two Swedish women were observed standing at the bar, each drinking a cocktail. Rather than facing each other and engaging in the type of conversations that characterised the other drinking events, the women stood shoulder to shoulder with their backs against the bar. From this vantage point, they gazed out over the main areas of the venue, periodically talking to each other for relatively short periods. This more sporadic type of conversation was observed in most of the groups that took part of this drinking event. These conversations were often lacking the intimacy and attention that was observed during conversations in previously described events. However, much like the *Entertainment* event OUs, these women did at times interject exaggerated gestures and play-acting into their conversations. For instance, in one group of middle-aged women in Sweden, one of the group members repeatedly embraced her friend and ruffled her hair. In response, her friend aimed several mock punches at her shoulder. Thus, the Entertainment and new Relationship event shared elements with the Entertainment event. The distinction between these two events was that the Entertainment and new Relationship event contained an outward focus that was lacking in the Entertainment event.

Observations of the *Entertainment and new Relationships* drinking events were made exclusively in late-night venues, typically after 11:00 p.m., and were more common in the Swedish setting. The pairs or groups of middle-aged women who engaged in these drinking events were highly mobile, often moving between different tables, the bar area, and the dance floor. Dancing was relatively common and alcohol consumption was generally more pronounced than the intimacy-focused events. Some of the groups stayed together throughout the night, while others would break up into smaller pairs or smaller groups and later reunite. Pairs of men and women who appeared to have no previous relationship formed and broke up over the course of the night. Some of these women were also asked to dance and escorted to the dance floor by male patrons. Taken together, observations indicated that these drinking events provided the women with a social context within which they were able to connect with new people and potential romantic partners.

5.4.5 Behaviour norms

During the course of this study, two observations of potential relevance to behaviour norms were made. First, as discussed above, alcohol consumption was moderate and relatively slow in the intimacy-focused drinking events (*Closeness among Female Friends* and *Romantic Closeness*) but heavier and more rapid in the *Entertainment and Entertainment and new Relationships* events. Despite alcohol's disinhibiting effects, previous work has shown that different drinking situations are guided by norms that provide clear boundaries on appropriate and acceptable behaviour (Heath, 1995b; MacAndrew & Edgerton, 1969). These norms are contingent on the people who are drinking alcohol, with men and younger people typically being subjected to less social disapproval in terms of their alcohol use (Suls & Green, 2003; Zimmermann & Sieverding, 2011). The acceptability of different consumption patterns also varies with the occasion. For instance, studies of bachelorette parties have shown that these drinking events can act as an excuse for women to, for one night, engage in drinking patterns and behaviour that are normally viewed as

unacceptable (Montemurro & McClure, 2005). However, despite their variable nature, drinking norms are inherently understood by drinkers and violation of normative behaviour is often associated with both shame and social disapproval from others (Lunceford, 2008; Piacentini, Chatzidakis, & Banister, 2012).

Drawing on the existing understanding of the nature of drinking norms, it is likely that the observed women's alcohol consumption was guided by a consensual understanding of the drinking style that is permissible for each event. In terms of alcohol norms, this leads to the tentative conclusion that, at least under some circumstances, relatively heavy alcohol consumption is acceptable for middle-aged women. However, although women who were part of the events focused on social enhancement engaged in the boisterous and gregarious behaviours that are often associated with intoxication, it was also noted that some of these women took great care to show that they were not affected by alcohol. For example, several women were observed to walk in a deliberate and slow manner and at times supporting themselves by inconspicuously holding onto railings or other structures to appear unaffected by alcohol. It is possible that although *Entertainment* events in public venues afforded these women with a more permissive drinking context, normative limitations still applied to the level of intoxication that could be considered acceptable.

Although the literature suggests that drinkers share an understanding of specific alcohol norms, it must be noted that for the current study, observations could only be made of the drinking behaviour that were commonly displayed. As such, observations were made of actual descriptive drinking norms, and the perceived acceptability of this behaviour (i.e., injunctive norms) could only be inferred. Moreover, even if norms for drinking behaviours were shared by the women who took part in the drinking events, they may be specific to this setting. It is possible that the norms that governed the entertainment-focused events would be contested by those not taking part in these events. Thus, these findings indicated a need to further investigate the nature of drinking norms among middle-aged women. Overall, although the findings from the observations enabled the access to "natural" drinking

behaviour, they did not provide the rich and detailed data about alcohol beliefs that can be obtained from interviews.

5.5 Summary of Observation Findings

In summary, similar observations were made in Sweden and Australia, indicating that the goals of social drinking, and the role that alcohol played in attaining those goal, are similar in the two countries. Broadly, the goals of the events revolved around either interpersonal closeness or social enhancement (fun and entertainment). While inferences regarding norms were more difficult to make, the data nonetheless suggested that there were limits around the level of intoxication that was deemed appropriate and acceptable for middle-aged women. The observation findings extended the literature by offering an insight into the role and meaning that alcohol plays for middle-aged women in social (public) drinking situations. Overall, the data indicated that some of the symbolic and use-values of alcohol that have been identified in studies of younger people's alcohol consumption were also found among middle-aged women in public venues. For instance, the distinction between the socialising/convivial and socialising/intoxicating use-value of alcohol previously reported (Grønkjær et al., 2011; Scarscelli, 2007) was evident in the difference between the intimacy and entertainment-focused drinking events in the current research. In terms of the intimacy-focused events, it was of interest to note that consumption of alcohol in public venues appeared to strengthen middle-aged women's relationship with their romantic partners and their female friends. For the latter, the act of sharing alcohol and food seemed to be a symbolic expression of intimacy and friendship. The finding that alcohol was used for socialising/intoxicating purposes was somewhat unexpected given the strict norms that are place on middle-aged women's alcohol use relative to men and younger people (e.g., Allamani et al., 2000; Van Wersch & Walker, 2009). Last, it was also interesting to note that, for some of the observed women, alcohol appeared to be a means through which they could meet new people and pursue romantic relationships. As with the finding that alcohol was

used for both socialising/convivial and socialising/intoxicating purposes, this indicated that some of the functions that alcohol plays for younger drinkers can be found among middle-aged women.

CHAPTER 6 Study 2 (Interviews)

This chapter contains a description of the participant, measures, procedure, and results of the interview studies, followed by a short summary of the findings.

6.1 Participants

Women who were aged between 45–59 years and who had consumed alcohol at least once in the past 30 days were recruited for the interview studies. A range of recruitment methods were used, including bulk emails, snowballing techniques, and advertisements. Advertisements were posted on public notice boards and different online spaces. A total of 36 women were interviewed (17 in Australia and 19 in Sweden). Demographic information showed that the women were relatively comparable across the samples in terms of age, educational level, income, and vocational and marital status. The average age of the Australian women was 52.06 years (range 45–57, $SD = 3.86$), with 12 being married or in a de facto relationship and 12 having completed a university degree. In the Swedish sample, the average age was 52.21 years (range 45–58, $SD = 4.80$), and 13 women were married/de facto and 14 had completed a university degree. In the Australian sample 10 women worked full time, while 13 women did so in the Swedish sample. The most commonly reported annual household income bracket was AUD 80,001–120,000 in the Australian sample (five women, one response missing) and 40,000–80,000 in the Swedish (7 women) sample. It should be noted that 6 Swedish women reported an annual household income of between AUD 0–40,000. All but one participant in the Swedish sample and two participants in the Australian sample had children. Among these women, four in each sample were caring for children under the age of 15 years.

All participants completed the Alcohol Use Disorder Identification Test (AUDIT), a 10-question screening tool (range, 0–40) developed to identify potential risky alcohol consumption among respondents (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). A detailed description of the psychometric properties of the AUDIT can be found in Section

8.2.3. The mean AUDIT score among the Australian women was 4.94 (range, 1–9, $SD = 2.63$) and 4.00 (range, 1–15, $SD = 4.00$) among the Swedish women. As a score of 6 on the AUDIT has been found optimal in identifying risky drinking in a sample of 40 year old women (Aalto, Alho, Halme, & Seppä, 2009), this score was adopted as the cut-off for risky drinking in the current study. Four Swedish and five Australian women scored above the cut-off for risky drinking⁸. In addition to calculating the overall AUDIT score, one AUDIT question measuring typical consumption frequency and one question measuring typical consumption quantity were used to calculate drinking patterns among the interviewed women. As can be seen from Table 6.1, the majority of the women reported that they were light drinkers, with 15 Swedish and 12 Australian women reporting a typical consumption of 1–2 standard drinks per drinking occasion. Only one Swedish and two Australian participants reported drinking 5–6 standard drinks on a typical drinking occasion (thus classifying as heavy episodic drinkers). Table 6.1 also shows that on average, the Australian participants drank more frequently than the Swedish participants; 11 Australian women reported drinking 2 times per week or more often, while only three of the Swedish women drank this often.

⁸ The AUDIT used standard drinks as a measure to determine consumption levels. In the Swedish translation of the AUDIT a standard drink as defined as 12 g of ethanol, while in the Australian version uses a 10 g definition. This might bias results towards fewer identified risky drinkers in the Swedish sample (see Section 6.2.3.1).

Table 6.1. *Cross-Tabulation of Participant's Typical Consumption Quantity and Consumption Frequency, n (%)*

Drinking frequency	Standard drinks			Total
	1–2	3–4	5–6	
Swedish participants, <i>n</i> (%)				
Up to 4 times/month	14 (73.68)	2 (10.53)	0 (0.00)	16 (84.21)
2–3 times/week	1 (5.26)	1 (5.26)	1 (5.26)	3 (15.79)
4 times/week +	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Total	15 (78.95)	3 (15.79)	1 (5.26)	N = 19
Australian participants, <i>n</i> (%)				
Up to 4 times/month	4 (23.53)	1 (5.88)	1 (5.88)	6 (35.29)
2–3 times/week	6 (35.29)	1 (5.88)	1 (5.88)	8 (47.06)
4 times/week +	2 (11.76)	1 (5.88)	0 (0.00)	3 (17.65)
Total	12 (70.59)	3 (17.65)	2 (11.76)	N = 17

Note. Percentage totals may not add up exactly due to rounding.

6.2 Measures

The interviews were guided by a semistructured and open-ended interview script (Appendix D). The script was informed by the literature review, with questions written specifically to tap into the four broad alcohol beliefs that were the focus of this research. This approach was based on the assumption that the alcohol beliefs identified in the literature review represent a set of stable core constructs that transcend people's individual or socially bound experiences of alcohol and drinking. Moreover, the included questions were designed to elicit information on the topics of interest in this research, rather than an overview of the varying ways in which the participants assigned meaning to their drinking experiences. Several topics were addressed. For instance, the women were asked to describe common drinking situations, including where these situations took place, the people who present (or if they were alone), and what activities they engage in while drinking. Several prompts were made to elicit the role that alcohol played in these different situations. The women were also asked to describe and contrast ideal and unpleasant drinking situations and several probes were made at different times to capture the women's belief around alcohol's potential effect on themselves and others. The women were also asked to describe how they defined and

recognised intoxication, as this understanding may differ between people. Last, a number of questions were posed to investigate the influence of age and gender on alcohol beliefs and consumption patterns. The women were, for instance, asked to describe how (if at all) their own alcohol habits and perceptions had changed with age. Moreover, the women were asked to reflect on the way in which alcohol consumption differed among men and women their age and between younger and older women in general.

Two pilot studies (using the same procedure as the actual interviews) were conducted in Sweden to test the interview schedule. Questions that were unclear to participants were identified and modified. Moreover, some changes were made to questions to encourage richer, more insightful responses from participants. For instance, originally participants were asked to describe two or three of the most common situations during which they drank alcohol. During piloting it was discovered that focusing on the most common situation and describing that in detail enabled participants to better identify the role and meaning that alcohol held to them. A short pen-and-paper survey containing a number of demographic questions (e.g., age, educational level, and marital status) as well as the AUDIT was administered to the women after the interview was completed. This was done to avoid any bias that the introduction of a measure designed to identify risky drinking may have on interview responses.

6.3 Procedure

The Swedish interviews were conducted first, and were conducted either face-to-face or via telephone. Both of these two interviewing modes have advantages and disadvantages. Face-to-face interviews can facilitate rapport building with participants, which encourages more honest and complete responses (Knox & Burkard, 2009). Moreover, this interview mode allows the researcher access non-verbal cues such as facial expressions and gestures which can increase the understanding the communicated information (Opdenakker, 2006). However, the researcher's non-verbal cues can also inadvertently

communicate interest, concern, or approval to participants (Musselwhite, Cuff, McGregor, & King, 2007), which may influence the way participants' respond. Moreover, telephone interviews affords participants a degree of anonymity, which can encourage more open and truthful responses when sensitive topics, such as alcohol consumption, are discussed (Knox & Burkard, 2009). From a practical point of view, the telephone interviews also allow researchers to sample a more geographically wide sample than what is possible with face-to-face interviews only.

Small-scale comparisons that have been made between face-to-face and telephone interviews indicate that some procedural differences exist. For instance, telephone interviews have been found to yield fewer vocalised acknowledgements and collaborative completions from the interviewer, and more requests for clarification and response adequacy checks from the interviewee (Irvine, Drew, & Sainsbury, 2012). Although these procedural aspects may not result in differences in substantive content (see Stephens, 2007; Sturges & Hanrahan, 2004), it was of importance to determine if the content from the two types of interviews differed. Of particular concern was that telephone interviews have been found to be shorter in duration, with the proportion of time that the interviewer is speaking being longer (Irvine et al., 2012). As this could result in participants providing less detail or elaboration in their answers, it could have implications for the richness of the data. Comparisons showed that friendly rapport could be more difficult to develop in some telephone interviews; however, no discernible differences in the quality of the material were detected. Moreover, no substantial differences in the length of the two types of interviews were found, with telephone interviews averaging 31.07 minutes and face-to-face interviews 30.39 minutes. As telephone interviews are a more efficient and economical way to collect data and as they appeared to have generated similarly detailed material among the Swedish participants, it was decided to conduct all Australian interviews via telephone. It must, however, be noted that although deemed appropriate in the current study, the use of both telephone and face-to-face interviews allowed the Swedish participants (who were not

geographically distant) to choose the interview approach they were most comfortable with, while this choice was not available to the Australian participants.

Before the interview started, participants were greeted and given an overview of the study. Participant codes rather than names were used to link the background survey with the interview responses to further highlight the confidential nature of responses. Recruitment and interviewing continued until cultural categories were well developed and the taxonomy of these categories had been verified by subsequent data. This represented the point when additional data no longer contributes any new information. All interviews were audio-recorded and transcribed verbatim. Interviews ranged between 15–42 minutes, with an average length of 32 minutes.

6.3.1 Translation of quotations

As this thesis is written entirely in English, quotations from the Swedish participants required translation. This process entailed two stages. First, the Swedish quotations were translated by the author of this research. During this process attention was given to the sentiment of each quotation. When a literal or lexical translation altered the meaning of a quotation, different words or phrases (albeit with similar meaning) were used. The initial translation was then reviewed by a second Swedish–English bilingual researcher whose primary research interest lies in social psychology. The second researcher was asked to assess the faithfulness of the translation, with particular emphasis on the meaning conveyed in the original quotation. Each translated quotation was discussed until agreement between the two researchers was reached.

6.4 Results

The interviews yielded a rich account of middle-aged women's alcohol use (Figure 6.1). Some of the findings expanded on those uncovered in the observations. For instance, the social nature of drinking that was noted during observations was confirmed in interviews

and a similar distinction between using alcohol to enhance the fun and enjoyment of social situation and to facilitate interpersonal closeness was also found (subcategories are not showed in Figure 6.1). Additionally, the proscriptive norms around intoxication that were found in observations were confirmed in interviews. New information was also uncovered. For example, the symbolic use of alcohol to create social inclusion and to express appreciation for friends and a strong stigma associated with any consumption patterns that could be interpreted as abusive or problematic were also identified.

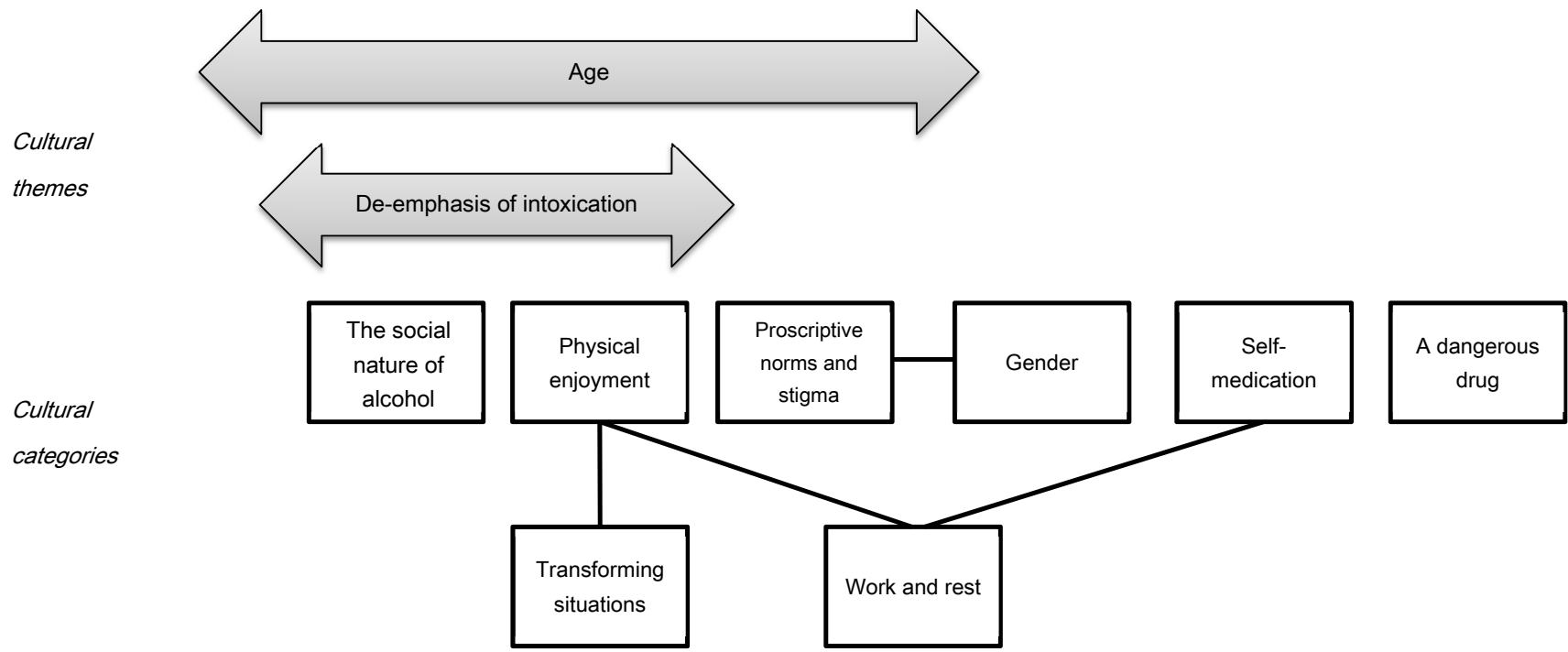


Figure 6.1. Illustration of cultural categories, relationships between categories, and cultural themes.

Alcohol was also understood as a product to be used to increase physical enjoyment, a higher-order category which contained the ideas of alcohol as a means to create pleasure and relaxation, as a product to be used for its taste, and as a form of self-indulgence and a reward. The idea of alcohol as physically enjoyable imbued it with an ability to symbolically transform everyday situations by adding a bit of luxury and sense of occasion. Further, alcohol was understood as a form of self-medication against negative emotional states such as stress, anxiety, sadness and depression, shyness, and loneliness. Among these, the idea of alcohol as a stress relief in combination with the idea of alcohol as inducing physical enjoyment resulted in the conceptualisation of alcohol as a symbolic demarcation between work and rest. Last, the idea of alcohol as a dangerous drug was uncovered, highlighted by concerns regarding dependency and abuse and the need to protect children from exposure to adults' drinking.

The cultural themes *de-emphasis of intoxication* and age were also identified. The social and enjoyment-focused use of alcohol was no longer driven by a need to become heavily intoxicated: heavy drinking had lost both meaning and purpose for the interviewed women. The de-emphasis of intoxication was moreover seen as both age-specific and age appropriate, and was found to influence both drinking norms and alcohol use. Last, a symbolic link between alcohol and gender was identified which further influenced drinking norms.

Below, an overview of the interviewed women's self-described drinking habits is given. This is followed by a description of the identified cultural categories, illustrated by participant quotations. The categories described represent the main ideas that were conveyed by a large number or a majority of participants. Thus, the following sections are primarily dedicated to the social understanding of alcohol that was shared by most of the interviewed women. Efforts are, however, made to give voice to the participants that expressed opposing views, where appropriate. As with the observational data, the Swedish and Australian interview transcripts were analysed separately before being compared.

Several similarities were found across the data sets; however, differences were also present. Where relevant, the findings from the Swedish and Australian women are contrasted to highlight these differences and similarities. For ease of comparison, each participant is given an identification number that indicates nationality (Australian = Au; Swedish = Sw).

6.4.1 Drinking patterns

In line with the AUDIT results, most of the interviewed women described their drinking as moderate, typically consisting of one or two glasses of wine (or other drinks) once per week or more often. Recent heavy alcohol consumption, which had led to noticeable intoxication, was reported by some of the women. This type of consumption was, however, uncommon and described as unintentional and undesirable. Some of the women spoke of how their alcohol consumption had changed with age from a less frequent but heavier to moderate but more regular use. Others reported that their drinking had changed little, remaining moderate throughout their youth and adulthood. The women described consuming alcohol in a number of locations, such as restaurants, sports clubs (Australian sample only), and at the home of family or friends. Most commonly, however, the women reported drinking alcohol in their own homes, a habit that was particularly common among the Swedish women. The majority of the Swedish women drank wine, while the Australian women were more diverse in their beverage type; while wine was common, they also drank beer, liquors, and cocktails relatively often. The Swedish women's drinking was mostly confined to the weekend (Friday or Saturday evening) but the Australian women commonly drank both on weekdays and during the weekend.

6.4.2 The social nature of alcohol

While alcohol was ascribed many different use-values and roles, all women (Swedish and Australian) spoke of alcohol as being part of social situations at least once

during their interviews. Within this context, the use-value of alcohol as a social lubricant was mentioned by several of participants; alcohol was attributed with the capacity to bringing about an atmosphere of conviviality and enjoyment and to inspire interesting conversations among those present. One participant put it this way:

Q1. *“Alcohol is a disinhibitor so there is that sense of relaxation and then there's probably, with the relaxation become, probably, less inclined to talk about work things and to talk about things that are maybe a bit more interesting.”* (Participant Au6, 56 years)

Alcohol as an intoxicant in social situations was discussed by women in both samples but it was more commonly mentioned by the Australian women. Moreover, some of the Swedish women were ambivalent toward this idea of alcohol. This ambivalence is exemplified in the following quotation, where a Swedish participant talks about the role alcohol plays for her and her friends in social situations.

Q2. *“Well, I don't know, it probably doesn't matter all that much. Actually, we could probably just as well drink coffee or something like that I guess. But, you know, it does feel a bit more relaxed and fun somehow actually, I guess I have to admit. A bit more festive.”* (Participant Sw12, 50 years)

While the Australian participant Au6 identified alcohol as an intoxicant and discusses its role as such in Q1, the Swedish participant in Q2 was more hesitant when describing the use of alcohol for its intoxicating effects. She started the segment by highlighting that the intoxicating effects of alcohol are not central or necessary to socialising, but then “admitted” that intoxication can play a positive role in social situations. As will be shown later in this analysis, this de-emphasis of alcohol's use-value as an intoxicant was a cultural theme that ran through many of the women's interviews, particularly in the Swedish sample.

Alcohol was also thought of as a substance that could be used to create a cosy and relaxed ambience, where those present could enjoy each other's company. For some of the Australian women, drinking situations were thought of as an opportunity to nurture friendships. A few women also spoke of enjoying this relaxation and intimacy, not only with friends but also at home with their husbands or partners. The description of alcohol in social situations in terms of conviviality, relaxation, and as part of creating a cosy atmosphere indicates that for the interviewed women, alcohol was more closely aligned to the socialising/convivial use-value than the socialising/intoxicating use-value often reported by young drinkers (see Scarscelli, 2007). Indeed, in both samples, the women situated and understood their own social drinking as distinct from that of younger people. Rather than being framed within the context of drunkenness and "partying", alcohol consumption was more strongly associated with the opportunity to cultivating meaningful social relationship. In these two quotations, a Swedish and an Australian woman offer their views on alcohol consumption among women their age:

Q3. *"But that you have found another way that it is more about spending time together, that when you were younger it was more about partying [pause] But the way it is now, it is about having a good time together and that you find a way to spend time with each other."* (Participant Sw6, 45 years)

Q4. *"We don't have drinks just to get drunk, we have drinks to be sociable and to relax with each other."* (Participant Au11, 53 years)

The idea of intoxication was examined among the women, finding that having "drunk too much" was recognised in oneself and others by slurred speech, motor control problems, poor behaviour, or behaviour that was deemed out of character. As can be seen in Q3 and Q4, the women felt that heavy intoxication and drunkenness played a less central role for them than it had done in the past. Drinking with friends was an opportunity to nurture

important relationship and heavy alcohol consumption was seen as detrimental to this type of intimate social experience. Meaningful interactions could not take place between two people who are too intoxicated, it was argued.

The shift away from the idea of drunkenness as central to social drinking also meant that alcohol consumption *itself* had become less important in social situations. For the women in both countries, alcohol was something they gathered around and something that added a pleasant aspect to social occasions; however, it was not seen as a central part of these occasions. The comments of these two participants exemplify this pattern of viewing alcohol as somewhat peripheral:

Q5. *"Yeah it's not that I'm going out to have a drink, I'm going out to catch up with friends and have a nice meal and included in that is the drink. So yeah, the alcohol side of it is not the be all and end all of the reason why I'm going out."* (Participant Au12, 52 years)

Q6. *"Now it is probably more of a habit, I think that, I don't believe that [pause] Or a habit, it is more [pause]it is nice, but I'm not sure it would be less, it wouldn't be less pleasant if we didn't drink wine [pause] these days, that's probably how it is"* (Participant Sw17, 46 years)

Q6 indicates that alcohol had become a habitual aspect of social situations that was not always reflected on, rather than a necessity.

In addition to this understanding of alcohol's use-value, it also took on a symbolic meaning in social situations, especially for the Australian women. For some of these women, alcohol consumption symbolised friendship and could be used in different ways to show appreciation of one's friends, as exemplified by this participant's statement connecting drinking with traditional sharing and greeting:

Q7. “. . . that sort sharing and greeting kind of tradition, you know, like you toast each other or that sort of thing when, when, when you first sit down that's like an opening to your meal and um, you know, appreciation of your friends.” (Participant Au5, 57 years)

Another symbolic value of alcohol was manifested in the use of alcohol as a gift. For instance, one Australian woman described how bringing a bottle of wine to a dinner party could be a way to show gratitude for the hospitality of those hosting the dinner. Additionally, some of the Australian women spoke of how consuming alcohol in social situations (or even holding a glass that appeared to contain alcohol) communicated sociability and inclusion. Alcohol, used to toast someone, as a gift, or even as a prop, thus symbolised friendship and affiliation.

6.4.3 Physical enjoyment: pleasure, taste, and food

In addition to the social nature of alcohol, the understanding of alcohol as playing a role in the creation of pleasurable experiences was central to the women's alcohol use. Aspects such as the environment in which alcohol was drunk and the taste of the drink had become central to the drinking experience. Moreover, the women often spoke of consuming alcohol while doing other activities they enjoyed and of the way that alcohol enhanced the pleasure of these activities. Underlying this understanding and use of alcohol was a focus on relaxation and well-being, where the surroundings, the taste, and the effect of alcohol all contributed to this state of mind. In the following two quotations, participants describe what a highly enjoyable drinking experience might look like:

Q8. “Or one of those lovely summer nights, when you sit with a glass of wine outside and you have this sunset, and [pause] yes, that kind of relaxed and beautiful thing.” (Participant, Sw3, 45 years)

Q9. *"I'm just going to sit in a nice small place [small laugh] kind of with a drink of something and just, you know, read the news on my phone or listen to music or something like that."* (Participant Au5, 57 years)

The idea of alcohol consumption as a pleasurable experience is not unique to the women in this sample. For instance, Mesham and Brain (2005) have shown how drunkenness is central to the hedonistic pursuit of bodily pleasure among young people. The current study indicates that although pleasure gained from alcohol continues to be important with age, the nature of this pleasure has changed. In this sample, pleasure was not understood as a mental numbness and altered sense of self brought on by extreme intoxication. Rather it revolved around relaxation and comfort, and was gained from the effects of moderate alcohol intake in calm and pleasurable surroundings. The distinction between the alcohol-related pleasure of youth and middle age was addressed directly by one of participants;

Q10. *". . . I think of it as a very pleasurable, relaxing thing whereas possibly when I was younger I would, would not have thought about it as, well pleasurable yes, but not relaxing."* (Participant Au8, 55 years)

Some of the women placed this new form of pleasure into the broader context of changing lifestyles and the emergence of new goals and interests with age. An Australian woman said of her preference for nicer more expensive wines:

Q11. *"And I suppose as you get older you get into a certain habit, that you like your lifestyle to follow a certain path and you like to relax and enjoy things . . ."*
(Participant Au13, 52 years)

With age, an appreciation of the finer things in life had become more prominent and with it alcohol had been reconceptualised as a product of refined pleasure.

The importance of taste, another form of physical enjoyment the women sought through their alcohol consumption, was also frequently raised by women in both samples. For many, the taste and quality of the alcohol they drank (often wine) was a focal point of the drinking experience. For instance, Q12; *"I'd rather not drink any alcohol if it's—it's horrible quality"* (Participant Au15, 47 years) and Q13; *"These days you drink because it tastes good and you enjoy finding a really good wine . . ."* (Participant Sw3, 45 years). Sentiments similar to those expressed in Q13 were particularly common among the Swedish participants. The majority of the women in this sample described their drinking as motivated by taste (e.g., Q14; *"you drink because it tastes good"*, Participant Sw8, 55 years) at least once during their interview. The idea of alcohol as a taste product was for many of the women incompatible with heavy alcohol consumption. In the same way that heavy drinking could ruin the social goal of creating a relaxing, cosy, and intimate atmosphere, so could drinking too much ruin the taste experience:

Q15 *" . . . sometimes the—the taste diminishes, you know the enjoyment of taste because it's just like drinking for the sake of it."* (Participant Au6, 56 years)

In addition to the emphasis on alcohol as a taste product, the Swedish women commonly linked alcohol to the consumption of food. Some of the Swedish women almost exclusively drank alcohol when eating and discussed alcohol as inseparable from food, for example:

Q16. *"I never drink a glass of wine without [inaudible] eat something. I wouldn't just be able to sit down and have a glass of wine . . ."* (Participant Sw7, 58 years)

For many Swedish women, alcohol enhanced and complemented the taste of the food, and was sometimes talked about as part of the meal itself. The notion of alcohol as a food product is similar to the social understanding of alcohol often found in wet drinking cultures. The idea of alcohol as a food product was similarly found among the Australian women;

however, they also spoke of consuming “predinner drinks” or of drinking a glass of wine after dinner, toward the end of the night.

As described above, several women in both countries had de-emphasised the importance of alcohol in social situations, stating that socialising itself was more important than the consumption of alcohol. Moreover, women in both samples felt that drunkenness was of little importance and that it could be detrimental to the taste experience they sought through their alcohol use. For many of the Swedish women, this was taken even further by completely separating taste-motivated drinking from alcohol use that was in any way motivated by intoxication. For example:

Q17. *“I guess I'm not really after any effect; it's more that I think it tastes good with two glasses of wine if you eat something nice.”* (Participant Sw7, 58 years)

Although the effect of alcohol on the mind and body are an inevitable part of any drinking experience, statements such as this were relatively common among the Swedish interviewees. Another example is given below. Here, a Swedish participant discusses the reasons behind her choice to drink alcohol:

Q18, Participant Sw12 (aged 50 years)

Participant: *Well, it is above all because I think that beer tastes **very**⁹ good.*

Interviewer: *Okay.*

Participant: *It's like, I could just as well drink low-strength beer. I like beer.*

Interviewer: *So perhaps it's a taste experience and not an intoxication experience?*

⁹ Bolded for emphasis

Participant: *Yes, it kind of has nothing to do with intoxication at that point, you're [inaudible] sitting on the steps [to your house] and it's warm and lovely and [pause] we've got the forest right around the corner . . .*

The importance of taste and the important of describing one's alcohol as taste rather than pharmacologically motivated was also evident when the Swedish women spoke of Swedish drinking traditions. In Sweden, shots of flavoured vodka (snaps) are traditionally consumed during cultural celebrations such as Midsummers and Christmas. Although many of the Swedish women reported that they usually drink snaps during these events, the responsibility for this drinking act was often displaced to the social situation (i.e., it was expected) rather than personal choice. Research examining the social understanding of different types of alcohol has found that spirits are often associated with intoxication-motivated drinking (Grønkjær et al., 2011). By displacing the responsibility of the consumption of snaps to the context, it is possible that the women sought to distance themselves from this this motive for drinking. Only if the consumption of snaps could be reconceptualised as a taste experience was agency claimed, for example:

Q19. *"I drink snaps, that is the only thing I drink. I only drink what tastes good [laugh] that is why I never drink spirits . . ."* (Participant Sw14, 49 years)

In this quotation Participant Sw14 distinguishes snaps (a liquor with around 40% ethanol content) from other spirits and constructs her drinking as oriented toward taste rather than intoxication. Overall, the interview material collected in this study indicates that although the focus on the taste of alcohol (as opposed to pharmacological effects) may reflect a changing relationship with alcohol connected with maturity, it also plays a role in the presentation of a desired self-image, at least among the Swedish women.

It should be noted that a few participants in each sample described instances of heavy intoxication during their interviews (e.g., Sections 6.4.1 and 6.4.8); although this was

always described as unintentional. Information regarding consumption patterns that was collected from the participants after the interview (Section 6.1) similarly indicated that three women (two Australian and one Swedish participant) engaged in HED, all of whom did so at least once per week. The actual number of women who engaged in this drinking pattern may, have been even higher as research show that self-reported consumption is often an underestimation of actual consumption (Knibbe & Bloomfield, 2001). Moreover, participants who engaged in HED may have, intentionally or unintentionally, reconceptualised their drinking to fit into an age-appropriate understanding of female alcohol consumption. As such, the de-emphasis of intoxication that was described by the interviewed women may have reflected ideas of appropriate alcohol use rather than actual consumption patterns.

6.4.4 Alcohol as self-medication

While the Swedish women often spoke of taste as the main or sole motivator for their alcohol consumption, many of the Australian women did view the intoxicating effects of moderate alcohol consumption as useful and more freely described their drinking as at times being pharmacologically motivated. For instance, a few of the Australian women spoke of how they used alcohol to overcome shyness and inhibition in social situations:

Q20. *"I think ultimately I think I choose to drink because it gives me something to do because I'm normally quite anxious in social situations."* (Participant Au2, 50 years)

For some of the Australian women, alcohol was also understood and used as a means to reduce negative emotional states, such sadness and stress. In particular, several of the women spoke of how a drink at home at night helped them let go of the stress they experienced from juggling work, family, and social commitments; for example:

Q21. *" . . . if I've had a really stressful day I'll pour one as soon as I get home anywhere between four and seven [o'clock]."* (Participant Au11, 53 years)

In contrast, the Swedish women were more likely to problematise or be ambivalent about the use of alcohol to alleviate negative emotions such as shyness or stress. In the first quotation below, Participant Sw1 (Q22) expresses her disapproval of people who use of alcohol to relax in social situations; by contrast Participant Sw16 (Q23), somewhat hesitantly, describes how alcohol makes her relax but also adds that she is not reliant on it. Both the women appear to be distancing themselves from alcohol as a way to self-medicate negative emotions and states.

Q22. *"But there are some people who find it hard to relax so they have to drink. But, it's perhaps not those kinds of people you want to associate with [laughs] . . ."*
(Participant Sw1, 46 years)

Q23. *"Yes, it is part of the weekend, to cook and have a glass of wine... But of course you do feel that you start to relax. I never thought [pause] but well [pause] you relax a little bit. Yes, although I relax anyway, I exercise to relax."* (Participant Sw16, 57 years)

Although the idea of alcohol as a stress relief was fairly common among the Australian women, it should be noted that not all the participants in this sample subscribed to this view. For instance, one Australian woman stated that; Q24; *"I'm not a person who drinks when they're depressed or unhappy."* (Participant Au6, 56 years).

6.4.5 Transforming situations

In both samples, the taste, relaxation, and pleasure that were associated with alcohol meant that its consumption was seen as an indulgent, somewhat luxurious activity. For many of the women, having a drink at home at night was thought of as a treat. For the Swedish women, alcohol was predominantly associated with finer foods, where alcohol enhanced the experience of eating; for example Participants Sw10 (aged 56 years) said (Q25) *"Not just [with] any food, but it should kind of be paired with food that is a bit tastier."*

Some of the Australian women also saw alcohol as a reward for hard work. The view of alcohol as a pleasurable treat imbued it with the power to transform mundane situations; several Swedish women spoke of how alcohol could lend a bit of "*luxury*" to situations, setting them apart as a "*something special*". The power of alcohol to transform mundane situations is further illustrated in the dialogue below where an Australian woman talks about her habit of drinking while cooking and eating during the work week.

Q26, Participant Au13 (aged 52 years)

Participant: *Um, I suppose it makes it a bit more enjoyable.*

Interviewer: *Um?*

Participant: *And it makes it more, um, less of a chore.*

Interviewer: *Oh, yeah?*

Participant: *It makes it something that we can sort of stand in the kitchen and have a glass of wine together and talk while we're cooking. And it also, it's having, I suppose, if you're having a glass of wine while you're eating dinner, then you're less likely to eat dinner in front of the TV and instead sit at the table. And make it, you know, have a discussion and a chat and sort of make dinner more pleasant experience rather than eating while you're watching something on the television.*

Moreover, the view of alcohol as an indulgent activity and among the Australian women as a stress relief, also meant that it was understood as a symbolic divider between work and responsibilities and enjoyment and rest. For the Australian women in particular, to sit down with a drink at the end of the day marked a transitory time and place where they could put their responsibilities to the side and focus on themselves. For instance, one Australian woman (Participant Au11, 53 years) stated that her end-of-the-day drink meant that (Q27): "*I've got the feeling that I can chill now, that I'm not responsible*". For some

women, the ritual of sitting down with a drink symbolised relaxation that in some ways was more important than the physical effects of the drink. Participant Au8 (aged 55 years) describes:

Q28. *"Yeah, I think with me it's probably a signal that, you know, my day is starting to unwind. You know, it's just nice to know that I can put my feet up. You know, lay back, put my feet up and, and even just one glass of wine, I don't have it every night, but just one glass of wine; it's got a lovely taste. And whether it's enough to make me relaxed I don't know [small laugh]. It's probably psychological. I have no idea, but I do think that it's just nice to kick back and have a glass."* (Participant Au8, 55 years)

While the Swedish women reported that their alcohol consumption most often took place at the weekends, drinking during the weekdays was common among the Australian women. The habit of using alcohol to reduce stress may explain this tendency, for instance, Q29: *"I tend to relax on the weekends so I think I use it as a stress relief during the week . . ."* (Participant Au11, 53 years). Moreover, alcohol was seen as a divider between work and rest by the women in both samples. However, the Swedish women tended to view alcohol as a marker of the end of the work week, while for several of the Australian women, alcohol was seen marker for the end of the workday. Generally, among the Australian women, alcohol was more integrated into everyday experiences, such as cooking or watching TV. This integration, as well as the changing meaning of alcohol with age, is demonstrated in Q30:

Q30. *"I think possibly then it was a fun thing to do, now it's just more of a, um, a part of life or just a, like I said, a relief more so than necessarily a fun thing."* (Participant Au15, 47 years)

Indeed, the frequent but relatively moderate use of alcohol had for a few of the Australian women become a source of concern; for example:

Q31. *"I don't drink to get drunk and I don't, or anything like that but it's, there is a constant use of it. And so when I, I do enjoy a glass of wine, there's no doubt about that but for me there's this, there's starting to be an overlay of, I suppose a guilt or a concern around it."* (Participant Au9, 53 years)

6.4.6 Alcohol as a dangerous drug

As is evident from the analysis presented above, alcohol was ascribed many positive use and symbolic values. However, the negative consequences that can follow from alcohol use for both the drinker and those around them were also raised by women in both samples (although slightly more often by the Swedish women). Several women spoke of the issue of dependency and abuse and the ease with which one's consumption could turn problematic. Two of the Australian women spoke of past or current concerns regarding their own alcohol use. The Swedish women also spoke of these issues, both in relation to their own and to that of other people. For some of these women, the allocation of drinking to the weekends was not only a consequence of viewing alcohol as a marker of the end of the week, it also held a practical and protective function by limiting the number of drinking occasions:

Q32. *". . . you don't want it to become a habit. If it happens one day, then it can happen two days and then three days, you know. So I, I would like, no, it feels, it, it's something that belongs to the weekend and to times when you are not working, let's just say."* (Participant Sw5, 55 years)

In contrast to wet drinking cultures where the use of alcohol is embedded in everyday life, alcohol consumption is consigned to the weekend in dry drinking cultures. In Sweden, this distinction has traditionally been very strong. To use alcohol during the week has been a

sign of a failure to heed to responsibilities and a potential sign of dependency or alcoholism (Törnqvist, 1999). Although these views are changing in Sweden, as more wet drinking patterns and attitudes are being adopted (something a few of the women themselves commented on), the old ideas around alcohol as a dangerous drug that should be limited to the weekend had remained salient for of the Swedish women. A further example of the view of weekday drinking as a gateway to alcohol abuse can be found in Participant Sw2's comment that:

Q33. “. . . but I do become a bit more worried when people drink alcohol during the week, because it makes me think [laughs], are they managing?” (Participant Sw2, 46 years)

Although the Swedish women's view of alcohol as a food product attested to a social understanding of alcohol that shares similarities with wet drinking cultures, the women thus appeared to simultaneously be influenced by the particularly strong history of Sweden as a dry drinking culture.

The notion that children needed to be shielded from alcohol and its effect was also expressed in some of the Swedish interviews. While a few women spoke of the importance of socialising children into a moderate, responsible, and safe pattern of drinking, others believed that children should never be exposed to adults' drinking. One woman had felt compelled to cut back on her drinking while she was raising her children; Q34; *“When my children grew up I almost **never**¹⁰ drank any alcohol”* (Participant Sw11, 57 years). Taken together, the Swedish women, to a greater degree than the Australian, viewed alcohol as a dangerous drug, attributing more negative outcomes to its use.

¹⁰ Bolded for emphasis

6.4.7 Alcohol, age, and gender

As seen above, alcohol held several symbolic functions for the interviewed women, signifying luxury, indulgence, and relaxation. In addition to these symbolic meanings, the participants further understood alcohol as symbolically linked to age and aging. Heavy drinking was seen as an unfortunate but a perhaps unavoidable expression of young adulthood, and many of the women reflected the wide-held understanding of drinking as a rite of passage for young people. Although perhaps not approved of, heavy alcohol consumption and drunkenness was understood as being part of young women's lives; Q35; *"Unfortunately or sadly that's part of their—their gender at the moment."* (Participant Au15, 47 years). Moreover, for some of the women, drinking and intoxication in youth was not seen as entirely negative, as it was a manifestation of a time when; Q36; *". . . you're supposed to be brazen, you're supposed to make noise, you're supposed to be seen."* (Participant Sw9, 57 years)

Many of the interviewed women asserted that their drinking patterns had changed with age. The alcohol intake per occasion had reduced but the frequency of consumption had increased (particularly among the Australian women). Dinner parties and similar social events had replaced consumption at late-night venues. For the women, this change in drinking patterns symbolised the progression from early to late adulthood. One Swedish participant, for example, described how drinking in her youth had been focused on intoxication and how the choice of beverage had been guided by price rather than taste. These drinking patterns had later evolved into a more "adult" consumption that was motivated by taste and that took place at dinner parties:

Q37, *"Well, I started to drink at college and then it was more about [pause] it was expected that you drank and preferably that you became drunk. . . . And then when I started working, then we sat probably sat almost every weekend, well it probably wasn't every weekend, but then you drank low-strength beer, because it was cheap. [Pause] And then, a few years later you started drinking wine, because it tasted good and there were more dinner parties; things became more adult-like."*

(Participant Sw2, 46 years).

To change one's drinking to moderate and responsible levels, and among the Swedish women to drink alcohol with food provided the women with a gauge for their own development and the "age appropriateness" of their behaviour. To engage in the same drinking behaviour as when younger was seen as a failure to mature and to take on the roles of adulthood. In the following quotation, a Swedish woman speaks of people that continue to drink heavily and to frequent late-night venues as they age.

Q38. *"Yeah, the thing about going out is that you might see someone who was standing there 20 years ago. Standing in the same spot and being just as drunk. And haven't progressed any further [in life]. [Pause] That isn't nice"* (Participant Sw3, 45 years)

A desire to distinguish one's own drinking from that of younger people was evident in several interviews, and it was particularly common among the Swedish women. As indicated in above quotation, young people's drinking culture was exemplified by the consumption that took place in late-night venues. To visit these venues as a middle-aged woman was thus seen as a controversial activity that some of the women distanced themselves from in interviews. For example, when a Swedish participant discusses her habit of having a few drinks with work colleagues on Fridays after work, she remarked:

Q39. *"And then you leave before all, when all the other young people arrive [laughs], then we go home."* (Participant Sw5, 55 years)

Drinking habits were not only a way for the women to project their own maturity and identity as adults. Some women also described how they experienced pressure from others to conform to age-appropriate drinking behaviour. For instance, one Swedish woman felt that, at her age, she was no longer "allowed" to go out and dance in public venues, an activity that she had enjoyed when younger:

Q40. *"The thing is, I love to go out and dance. But it is kind of, when you're older, you're not supposed to be out dancing. You can't, well, 'no, they should probably stay home' [pause] that's how it is."* (Participant Sw9, 57 years)

These quotations are interesting to consider in relation to the observational study results. In observations, heavy alcohol consumption and boisterous, playful behaviour was more often found in late than early-night venues. As such, it is easy to understand why these venues were associated with young people's drinking culture. The consumption of alcohol in late-night venues by middle-aged women may thus have represented a foray into the domain of young people's drinking; a behaviour that (at least among the interviewed Swedish women) was viewed with disapproval.

In addition to alcohol's symbolic role in the expression of age and in the process of (normative) aging, interviews also revealed that it played a role in the expression of gender. Participants in both samples agreed that alcohol consumption and intoxication was considered less acceptable for women than men their age. Some participants linked these views to the traditional role of women as mothers, for example:

Q41. *"I guess also the situation is that most of the women are mothers so they're expected to, whether the kids are there or not, I guess when you hit this mother thing that you have to be behaving all the time . . ."* (Participant Au15, 47 years)

In the above quotation, the mother image extended beyond situation where children were present, indicating the presence of a generalised social gender role that impacted on drinking in a range of situations. A few participants attributed these attitudes to the prevailing social climate of their childhood. During their upbringing, drunkenness among men had been fairly commonplace and more or less accepted, but unusual and stigmatic among women, for example:

Q42, Participant Sw7 (aged 58 years)

Participant: *"I remember when you were young yourself, when you saw a, well, a so-called gubbe¹¹ [laughs] who was drunk. It wasn't anything out of the ordinary."*

Interviewer: *"Right."*

Participant: *"But if a [drunk] woman had come along, that would have been awful."*

The women felt that the norms around men's drinking were more permissive, for instance:

Q43. *"... I think men are allowed a bit more largesse, and are allowed a bit of loss of control because, well you know, it's a male drinking culture."* (Participant Au1, 47 years). In addition to these perceived normative differences, the women also felt that alcohol played a more central role in men's friendships and that men may not be able to enjoy themselves in social situations unless they were drinking. Women, they believed, had developed other ways to socialise and connect with their same-sex friends, and therefore were less reliant on alcohol.

¹¹ Swedish colloquial expression for "old man". Depending on the context, it can be used either as an affectionate or derogatory term.

Thus, almost all the participants believed that middle-aged women's alcohol use was more harshly judged and that these views were linked to the symbolic role of alcohol in the expression of gender. The women were, however, less unanimous in the degree to which they themselves agreed with these norms. Most branded the discrepant alcohol norms as an unfair double standard and as an expression of lingering gender inequality, but a few participants had internalised these norms, for example:

Q44. *"It—it looks worse, it's more unacceptable, a woman that is dead-drunk, to be frank, than a man that is; to stagger around like that. And that's something I can agree with, like I think it looks terrible with a woman who is very drunk, you know. It, don't know, that's how I feel [small laugh]."* (Participant Sw12, 50 years)

Although both the Swedish and the Australian women felt that drinking norms were less permissive for women their age, differences were also evident between the samples. The women were asked to describe how men their age thought about and used alcohol. Despite the different judgment attached to men and women's drinking and intoxication, the majority of the Swedish women stated that the men and women they knew used and thought about alcohol in similar ways; any sex differences that had been evident when they were younger had disappeared with age. By contrast, the Australian women described a marked gender difference. Coined by one Australian woman as a *"blokedom"* mentality (Participant Au1, 47 years), the women in this sample believed that heavy consumption was admired by some men as a sign of manliness and toughness. One woman summed up this belief as follows:

Q45. *"Um, they see it as part of their manhood I suppose [small laugh] to be a drinker and a big drinker sometimes."* (Participant Au10, 52 years).

It was believed that many men ascribe to the stereotypical notion that real men drink beer together, and the women felt that alcohol consumption was surrounded by a

(Q46) *"boy's club sort of mentality"* (Participant Au8, 55 years). Moreover, a few Australian women spoke of how men's attitude toward alcohol was marked by a sense of invincibility and lack of concern with the long-term impact of their drinking. Although this attitude had started to waiver with age as men confronted their own mortality, differences still existed between the sexes. The women saw themselves and other women their age as more *"body conscious"* (Participant Au1, 47 years) and concerned about the effects of alcohol than men:

Q47. *"I don't think they have much regard as to health, you know, I think they—they'll just drink, I don't think it worries them too much of any long-term consequences or anything."* (Participant Au8, 55 years)

The idea of drinking as an expression of toughness and invincibility is closely linked to traditional views of alcohol as symbol of the male gender. Despite alcohol's link to masculinity, the Australian women also believed that men's drinking could be explained by a delayed maturity, for example: Q48 *"They grow up about forty or fifty . . ."* (Participant Au11, 53 years). The picture of masculinity that was painted by the women was not one of competence and resourcefulness as much as it was of immaturity and carelessness. This way of understanding men and their drinking also meant that men were absolved of a degree of responsibility for their drinking and that their drunken behaviours could even be considered amusing. An intoxicated man (but not an intoxicated woman) could, for instance, be cast in the role of *"the larrikin"* (Participant Au1, 47 years) of a party:

Q49. *". . . like a guy might be seen as kind of funny, you know, it's funny when he falls over, that sort of thing. Where it's definitely, a lady falling over is definitely not attractive."* (Participant Au6, 56 years)

The underlying male stereotype that was reflected in the behaviour of these men and the reaction of those around them is that of the "lovable idiot"; a well-recognised caricature of men that is often portrayed in media (Biddulph, 2002).

With men depicted as carefree and immature drinkers, the interviewed women often found themselves assuming responsibility for the practical aspects of social drinking situations and the welfare of the children that were present. At times, this responsibility impacted on women women's ability and opportunity to drink. When discussing the gendered norms around drinking, an Australian woman put it this way:

Q50. ". . . *we're all busy doing things, you know. And you just have a glass of wine that you're sipping at the same time and you're talking and you're chopping the veggies and whatever else. Whereas with the blokes, it really is one man with a set of tongs*¹² *[laughs] they're just sort of all there, you know, knocking back several beers.*" (Participant Au8, 55 years)

Moreover, some of the Australian women described that they were often the designated driver for their family, which further limited the opportunity to drink. Thus, although middle-aged men were subjected to more permissive drinking norms in both countries, the traditional male and female gender roles were enacted to a much greater degree in drinking situations in Australia than in Sweden.

6.4.8 Implications for drinking norms and stigma

As can be seen from the interview segments presented above, the social constructions of both age and gender influenced the view of what constitutes appropriate alcohol consumption for middle-aged women. To drink heavily was not only at odds with the traditional female caretaker role, but also with the understanding of normative aging; heavy intoxication was considered shameful by women in both countries. However, the shameful nature of intoxication was more acutely felt by the Swedish participants. When the

¹² Tongs are a type of cutlery that is used while frying meat and vegetables

participants talked about times when they had drunk more than intended, this difference became evident. The Australian women were more easily able to conceptualise this behaviour as isolated instances that did not threaten the appropriateness of their consumption overall, as illustrated by these two examples:

Q51. “. . . I'm comfortable with the level of alcohol intake that I have. Occasionally, I might say to myself 'I think that was quite a bit' um but in general, you know, it's just a social thing where probably, it limits, I limit it.” (Participants Au6, 56 years)

Q52. “I know, I drank too much once, it was about a year ago, it's over a year ago I think, and I still remember it. It is incredibly uncomfortable to even think about it [laughs].” (Participant Sw18, 46 years)

When describing their views of heavy intoxication among same-aged women, the Swedish participants often used strong words such as “*disgusting*” (Participant Sw5, 55 years), “*terrible*” (Participant Sw10, 56 years), “*scary*” (Participant Sw9, 57 years), and “*tragic*” (Participant Sw6, 45 years).

More broadly, the Swedish women were more ambivalent about their own alcohol consumption than the Australian women. They demonstrated a need to defend their drinking by spontaneously emphasising that their relationship with alcohol was unproblematic; for instance, Q53; “*I know how I am and how I drink. I mean I am 47 and if I haven't become an alcoholic yet I don't think I ever will [laughs]*” (Participant Sw1, 46 years). As previously discussed, the Swedish women were also hesitant to describe their own drinking as pharmacologically motivated, either as an intoxicant in social situations (Q2) or as a remedy for negative emotional states (Q22 and Q23). Again, it is conceivable that this reluctance was related to an understanding of pharmacologically motivated drinking as a sign of alcohol problems. Indeed, any drinking patterns that could be construed as problematic were carefully navigated by the Swedish women. Two such patterns were weekday and solitary

alcohol consumption. Unlike the Swedish participants, weekday drinking was relatively common among Australian women, and this practice was reported without any apparent attempts at justification. In addition to drinking during the week, several of the Australian women reported drinking when alone. Solitary drinking was for some women the inevitable result of living alone, but for others, it was a choice. For the most part, the women were quite neutral toward this habit with a few of them describing solitary drinking in terms of *“enjoying my own company”* (Participant Au5, aged 57 years, and Participant Au10, aged 52 years). By contrast, weekday solitary drinking were drinking behaviours the Swedish women felt they had to justify, as exemplified by these two participants:

Q54. *“I can also drink a glass of wine when I'm alone, I'm not against it. But I never want, in that case, to drink for other reasons than that I have a hankering for [the taste of] a glass wine And not to feel that you kind of drink it because you want to become intoxicated or anything like that. But because you simply have a hankering for it and it tastes good. And never to have a lot, but I just want to experience the pleasant taste, that's how it is.”* (Participant Sw5, 55 years)

Q55. *“And it [weekday drinking] is not taboo . . . because I don't drink [pause] a lot. But a cider, you know, in the middle of the week, or at home if you're celebrating something.”* (Participant Sw16, 57 years)

In the above quotations the issues of solitary and weekday drinking are in turn dealt with by two different women in their drinking narratives. The first woman justifies her solitary drinking by clearly describing it as taste rather than intoxication-motivated. The second woman describes and defends an instance of weekday drinking by deferring to the celebratory nature of the situation and by highlighting that her consumption is moderate.

6.4.9 Summary of interview findings

The interviews revealed the role and meaning that was assigned to alcohol by the interviewed women. Specifically, the participants understood alcohol in terms of sociability, physical enjoyment, as a means to self-medicate (Australian women) and to transform situations, as well as a symbolic expression of age and gender. Underlying this understanding of alcohol was a de-emphasis of intoxication: the role and meaning of alcohol was such that heavy consumption had lost its purpose and meaning. Importantly, the interviews also revealed that the women understood their own use of alcohol as uniquely adult in the sense that it characterised an appropriate and unproblematic alcohol consumption that was distinctly different from younger people's (problematic) consumption. This is a key finding because drinking patterns that are understood as normative often go unquestioned. As outlined in the first chapter of this thesis, harmful alcohol use is often defined in relation to perceptions of normality rather by objective measures of harm. Thus, if some of the identified alcohol beliefs identified in these interviews results in harmful consumption, they may do so without being challenged. In addition to these symbolic and use-values attached that were attached to alcohol, the women also perceive greater social sanctions for drinking compared to younger women and to men in general.

CHAPTER 7 Discussion of the Qualitative Findings (Study 1 and 2)

In this chapter, the findings from the qualitative studies are summarised and discussed in relation to previous literature. A special focus is placed on how the findings from this research, in conjunction with that of previous studies, can be used to identify alcohol beliefs that are more strongly expressed among middle-aged women. In addition, an overview and discussion of differences between the Swedish and Australian sample is given and attention is paid to the way in which the uncovered cultural themes may explain the nature of middle-aged women's alcohol beliefs.

7.1 Overview and Discussion of Results

7.1.1 The social nature of alcohol

The qualitative studies revealed that a number of use-values were ascribed to alcohol. Among these, alcohol's role as a social agent was commonly discussed. In this respect, alcohol was used to boost the atmosphere of social occasions, by increasing sociability and inspiring interesting conversations. The social nature of alcohol has been extensively described in previous literature and two broad types of social use-values has been suggested; socialising/convivial use-value, where alcohol is used to facilitate a sense of relaxation, joy, and good humour among the drinkers, and socialising/intoxicating where togetherness is achieved through a shared experience of intoxication (Grønkjær et al., 2011; Scarscelli, 2007; Szmigin et al., 2008; Törrönen & Maunu, 2007). While social/convivial use-value of alcohol has been described among both younger and older drinkers, the social/intoxicating use-value is not typically found among female middle-aged or older adults. This notion was largely supported in the current study. In interviews, women described their alcohol use exclusively as socialising/convivial. Alcohol was used to create an atmosphere of conviviality and intimacy and it was part of situations where important relationships were nurtured. Among the four drinking events discerned from the

observational data, the *Closeness Among Female Friends* and the *Romantic Closeness* drinking events similarly appeared to centre on a sense of togetherness and intimacy with friends or with partners. Interestingly, alcohol (e.g., a bottle of wine) was more often shared among the women who were part of this type of drinking events than those that were not. These acts of sharing as well as the apparent focus and goal of this type of social drinking indicated that (moderate) drinking was understood as a deeply social act that was undertaken to strengthen social ties. Moreover, the interviewed women understood non-intoxication oriented sociability as an aspect that distinguished their alcohol use from that of younger people and as a defining feature of drinking during middle age. This finding is in line with previous literature on the social use-value of alcohol: While men and young people have been found to use alcohol for both socialising/intoxicating and socialising/convivial purposes, only the latter has been described among middle-aged women. As such, the current findings lend support to the idea that this drinking pattern is normative for middle-aged women.

In contrast, however, a use-value akin to the socialising/intoxicating was also detected during the observation studies. Particularly, the two drinking events, *Entertainment* and *Entertainment and new Relationships* were characterised by different consumption patterns and a different social focus. In these events, boisterous and youthful behaviours, loud conversations, and playful or flirtatious acts were sometimes observed. In contrary to the more intimate form of socialising the interviewed women had described, some of the observed women appeared to be focused on meeting new people or potential romantic partners, a task that appeared to be at least partly enabled by the use of alcohol. These contrasts are important to consider as they show how some women step outside the discourse of alcohol and age that the interviewed women had implicitly described. It would be of interest to investigate how middle-aged women who engage in *Entertainment* events and *Entertainment and new Relationships* events understand and justified their own drinking.

In addition to these social use-values associated with alcohol use, alcohol was symbolically linked to friendship and social belonging, particularly among the Australian women. These women mention that drinking alcohol (or being seen to drink alcohol) in drinking situations could be a way to signal inclusion. They also spoke of using alcohol as a gift to convey gratitude for the hospitality of others and they described how toasting one's friends could be a way of showing them appreciation. Interestingly, the idea of alcohol as symbolically intertwined with social solidarity, reciprocity, and appreciation has been found in several studies of male drinking pattern (Emslie et al., 2013; Nosa et al., 2011) and has in particular been viewed as a hallmark of (male) Australian culture (Hall & Hunter, 1995; Room, 2010). Thus, it appears that some symbolic values previously found in male drinking cultures are present in middle-aged women's drinking, particularly among the Australian women.

7.1.2 Physical enjoyment: pleasure, taste, and food

What also appeared to characterise middle-aged women's alcohol use was a tendency for this group to construct alcohol as a product to be used for taste rather than for its intoxicating properties. Alcohol was often associated with eating and thought of as a product that would complement or enhance the flavours of food. In the Swedish sample in particular, alcohol was almost exclusively consumed with dinner. Alcohol's use-value as a taste and food product is a central feature of wet drinking cultures and has also been described in previous qualitative studies examining drinking in late adulthood and middle age (Bernhardsson, 2014; Emslie et al., 2012). Whether it is found on a national-level or described in qualitative research (here and elsewhere), a taste-focused approach to alcohol appears inherently incompatible with drunkenness. In the current study, several of the interviewed women described how heavy consumption ruined the taste of alcohol and many of the Swedish women explicitly stated that their alcohol consumption was motivated by taste rather than intoxication.

Moreover, this way of viewing and using alcohol carried symbolic meaning for the women. Moderate alcohol use that focused on the taste experience (and thus not intoxication) was seen as both age-typical and age appropriate. The symbolic representation of adulthood and middle age through moderate and taste-focused drinking has been expressed by groups other than middle-aged women, indicating a wider presence of these views in society. Particularly, the idea that late adulthood is represented by moderate consumption that takes places with meals has been found in a study examining the meaning attributed to alcohol by Swedish Year Nine students¹³ (Roumeliotis, 2010) and by middle-aged Scottish men and women (Emslie et al., 2012). Embracing the drinking patterns typical for middle age had become one way in which the women could establish an identity that was different from their younger self as well as from young women in general: Drinking patterns had become a way to both gauge and communicate normative aging. This may explain the need, particularly evident among the interviewed Swedish women, to clearly delineate their drinking from that of younger people, and to define (and sometimes redefine) their consumption as taste and not intoxication-focused.

Closely linked to its use-value as a taste product, alcohol was ascribed a role in the creation of physical enjoyment. To this end, not only the physical sensation created by alcohol, but also its taste and the surroundings that it was consumed in was used on to create a sense of pleasure and relaxation. Alcohol was often associated with situations of luxury, beauty, and tranquillity. Moreover, alcohol was used to enhance other pleasurable activities such as reading or listening to music. Some women spoke of alcohol and the pleasure it created as a treat, a self-indulgence, or as a reward for hard work. The association between alcohol (or other drugs) and pleasure is undeniable. However, the

¹³ In Sweden, students are typically aged 14-15 years in year 9.

findings of this study indicate that alcohol-related pleasure in middle age may be different from that of younger age groups. The literature on young people's alcohol culture has described a hedonistic pursuit of bodily pleasures through drunkenness (Fry, 2011; Measham & Brain, 2005; Szmigin et al., 2008). Specifically, pleasure has been described as gained from increased confidence, loosened inhibitions, and the experience of an altered sense of consciousness (Harrison, Kelly, Lindsay, Advocat, & Hickey, 2011). In contrast, alcohol-related pleasure among the interviewed women in the current research centred on a state of relaxation and well-being that were associated with relatively moderate alcohol use. Thus, while pleasure may be a universal feature of alcohol use, the type of pleasures sought may vary.

7.1.3 Transforming situations

In addition to these use-values, alcohol also took on a symbolic function in defining and transforming situations. A glass of wine could add enjoyment, festivity, and luxury to otherwise mundane everyday situation and tasks, such as cooking, or be used to mark and celebrate special occasions. Alcohol was also seen as a symbol of the transition from work to leisure. In a few instances, this demarcation was social in nature. Two of the interviewed Australian women spoke of how drinking with friends at the end of a workday or workweek was a contrast against the pressures and responsibilities they dealt with when working. However, for the majority of women, the symbolic use of alcohol to distinguish between work/responsibilities and rest/enjoyment often took place within the home. This finding echoes that of Emslie et al. (2012) who reported similar uses of alcohol among Scottish adult and middle-aged women. This appears to represent another important distinction from alcohol use among young drinkers. For young people, the disinhibiting effects of alcohol can be used to create a symbolic play-space where the restriction of norms can be loosened and responsibilities temporarily can be forgotten (e.g., Gusfield, 2003). Among the women in this study, the relaxation afforded by alcohol did not involve drunkenness, but was rather derived

from using moderate drinking to creating a small window during everyday life where a focus on oneself was made possible. The use of alcohol to mark the end of the work day was particularly common among the Australian women. For these women, alcohol was a greater part of everyday activities, such as having dinner or watching television. Moreover, alcohol was used as a way of treating oneself after a day's work, or as a way to unwind and relax at night.

7.1.4 Alcohol as a dangerous drug

In addition to these essentially positive use-values, alcohol was also understood as a substance that could result in negative outcomes for drinkers and those around them. Particularly, the interview participants (especially the Swedish women) spoke of the risk of abuse and dependency and the need to protect children from exposure to adults' alcohol use. Originally, this research set out to examine alcohol expectancies held by middle-aged women. Although the beliefs regarding alcohol's addictive effect that were uncovered are indeed a possible outcome of alcohol consumption, they do not correspond to the beliefs typically classified as alcohol expectancies. According to researchers in this field, alcohol expectancies pertain specifically to outcomes such as increased sociability, sexual enhancement, relaxation, aggression, and cognitive or behavioural impairment (Brown et al., 1980; Fromme et al., 1993; Rohsenow, 1983). Nonetheless, the addictive properties of alcohol were a salient negative outcome identified by the interviewed women and, as such, important to include for further investigation.

7.1.5 Self-medication and other sample differences

Although several of the cultural categories uncovered in the qualitative studies were common to the samples in both counties, several differences were also found. The use-value of alcohol as a form of self-medication was almost exclusively raised by the Australian women. Several participants in this sample described alcohol as a means to dull

negative emotional states, including sadness and loneliness, and particularly as a way to reduce the stress that followed from busy personal and professional lives. A few women, moreover, described their use of alcohol to reduce anxiety and inhibitions in social situations. In contrast, the Swedish women were reluctant to frame their alcohol use as pharmacologically motivated and viewed the use of alcohol for such "medicinal" purposes as potential markers of an abusive relationship with alcohol. The idea of alcohol as a means to deal with negative emotions has previously been found in research on young adults' and middle-aged men and women's alcohol use (Bernhardsson, 2014; Kuntsche et al., 2005; Petrilli et al., 2014). However, this literature also describes the controversial nature of using alcohol to self-medicate through its link with alcohol problems. Thus, the tendency among the Swedish women to reject the idea of alcohol as a form of self-medication may indicate a more pronounced need to defend one's drinking. In addition to the reluctance to discuss their drinking as pharmacologically motivated, the Swedish women seemed to be more ambivalent toward their own alcohol consumption and more fearful about alcohol in general. Particularly, the women exhibited a greater moral fear of dependency, demonstrated through the apparent need to define their consumption as non-problematic. A few of the Swedish women presented themselves as drinkers with the explicit caveat that although they drank, they were not in fact dependent on alcohol. The Swedish women were also more likely to defend or justify the engagement in drinking patterns that could be construed as problematic and to highlight the centrality of taste and their disinterest in intoxication as a way to communicate the age appropriateness and non-abusive nature of their drinking.

In addition a moral fear of dependency, the Swedish women also appeared to assign a greater degree of danger to alcohol than the Australian women. The risk that alcohol use may develop into dependency was mentioned more often in this sample along with the idea that children should be protected from the alcohol consumption of adults. In addition to their views on coping-focused consumption, these women identified a greater number of consumption patterns and habits as potentially dangerous, including drinking

alone or during the weekdays. The idea of these patterns as markers of problematic alcohol use is not new; there is an established link between coping-focused drinking, and to a lesser degree between solitary consumption and negative alcohol outcomes (Kuntsche et al., 2005). Weekday drinking, moreover, is often viewed as problematic in dry drinking cultures (Törnqvist, 1999), where alcohol use is typically confined to the weekends. However, the finding that these markers were more readily identified by the Swedish women indicates that alcohol may have been associated with a greater degree of danger for these women.

The view of alcohol as dangerous and morally charged substances in general is a hallmark of dry drinking cultures, which may explain the stronger presence of these ideas among the Swedish women. Thus, an interesting paradox was contained within the data from the Swedish interviews; although many of the use-values that women in both countries attributed to alcohol were reminiscent of wet drinking cultures (regular, moderate, and taste-oriented consumption), the alcohol beliefs of the Swedish women also appeared to be influenced by concerns around alcohol that are characteristic of dry drinking cultures. The dual cultural influence that was evident among the Swedish women is perhaps best understood in the context of the broader homogenisation of dry and wet drinking cultures that is taking place in Europe (Leifman, 2001; Simpura & Karlsson, 2001). Interestingly, the Swedish women drew sharper lines between their own alcohol use and that of younger people: Although women in both samples defined and understood their drinking in relation to younger people, alcohol was more strongly intertwined with the idea of age appropriate behaviour in the Swedish sample. It is possible that the greater level of ambivalence and moral fear of alcohol use among these women prompted them to more strongly align their consumption with the age-approved forms of use.

7.1.6 Understanding the link between age and alcohol

The symbolic link between alcohol and age has previously been described. Uptake of alcohol use is viewed as a rite of passage for young people, and various types of drinking

patterns have been linked to different stages of development and aging. In Demant and Järvinen's (2011) interview study with young (18–19 years) Danish drinkers, it was found that older adolescents viewed their ability to drink heavily but being able to “hold their drink” as distinguishing them from younger, less mature drinkers. In focus groups conducted by Emslie et al. (2012) moderate and responsible alcohol use was linked to the ideal of having grown “older and wiser”. In the current study, starting to drink alcohol with food and at dinner parties was seen as a symbolic move from youthful drinking toward more “adult-like” alcohol use. The common theme in the current study and in previous research appears to be that alcohol consumption is intrinsically linked to a project of self-improvement and development stretching from youth to middle age and potentially onwards. By contrasting one's own consumption from that of younger, less mature drinkers a sense of developmental achievement and maturity can be gained.

The idea of alcohol's involvement in maturity and aging may be understood by considering the concept of life scripts (Neugarten et al., 1965). Life scripts have been described as culturally shared expectations regarding the timing of important life events such as financial independence, marriage, and retirement (Janssen & Rubin, 2011). These shared expectations can be used for social comparison, allowing individuals to gauge their progress against that of their peers. On-time life events, particularly those that symbolically mark transitions between life stages are often viewed positively, while those that fail to occur on time (or not at all) can be associated with shame or stigma. The adoption of moderate and taste-focused alcohol consumption may be one such event that is expected to have taken place by late adulthood or middle age. This perspective could explain why engaging in consumption patterns typical of young people was seen as a sign of not having progressed in life (e.g., Quotation 38). In previous interviews with young Swedish drinkers (Törnqvist, 2007), a similar ethos was expressed by young men and women who had adopted an intoxication-focused approach to drinking. When reflecting upon their future drinking careers these young drinkers expressed a fear of waking up in their thirties to find that they are still

frequenting bars and that they had failed to realise their plans and dreams for the future (Törnqvist, 2007). In the current study, the Swedish women also spoke of external pressures to conform to age appropriate drinking patterns and behaviours, further indicating the widespread nature of these beliefs.

7.1.7 Self-presentation and the ideal self

As evidenced by the material presented above, alcohol was used to express an ideal version of the self. Women in both samples distanced themselves from younger drinkers and the failure of that youthful consumption patterns represented. This finding indicate that the desired self-image the women sought to present through their alcohol use is one of sophistication that is distinct from the intoxication-motivated consumption that has come to characterise youth drinking. Given the integral part that intoxication plays to the drinking experience, however, it is unlikely the women's use of alcohol was completely unmotivated by its intoxicating effects. The tendency (particularly among the Swedish women) to portray one's alcohol use as solely motivated by taste should therefore be interpreted as an indication of the role that alcohol plays in the construction of the ideal self. Moreover, the numerous consumption patterns that the Swedish women felt compelled to defend (e.g., weekday and solitary drinking), indicate that drinking was less controversial among the Australian women and that this group were more confident that their alcohol use fell within the boundaries of what is considered acceptable.

7.1.8 Understanding the link between gender and alcohol

In addition to its symbolic link to the idea age and aging, alcohol was also embedded in the expression of gender. The women in both samples felt that among people their age, alcohol use is not scrutinised or judged as harshly for men as it is for women. Several reasons were given for this by the women themselves, some of which are in line with previous literature on alcohol and gender. For instance, alcohol was understood as a

natural part of men's social world, playing a role both in the construction of a masculine identity and in men's friendships with other men. Several Australian women gave voice the male stereotype of the "lovable fool" (Biddulph, 2002), whereby differences in men and women's alcohol use were also understood as a result of men's delayed maturity and their perceived sense of invincibility. Within this discourse where men were portrayed as carefree and immature drinkers, the responsibility for drinking situations was often left to the Australian women. Thus, gender roles did not only influence alcohol use through norms; it also reduced the opportunity to drink.

Moreover, women in both samples felt that their role as mothers, or simply the fact that they were of an age where they were likely to have had children, meant that alcohol use and particularly intoxication was less acceptable for them. These findings indicate that motherhood is a social identity that extend beyond times and places when children were present or needed to be cared for. The mother-identity may explain why heavy alcohol use is less acceptable among middle-aged women than among men or younger people. First, as traditional gender roles conceptualise men as breadwinners (not the caregivers) (W. Wood & Eagly, 2002), alcohol use is not perceived as equally threatening to their ability to fulfil their parental responsibilities. Assuming that alcohol consumption takes place at night, a father can ensure that his children are provided for: A mother who drinks at night, however, limits her ability to provide the emotional care her children need (Holmila & Raitasalo, 2005). Second, young women are most often not mothers, or seen as of motherhood age, which may similarly explain why they are subjected to less proscriptive drinking norms compared to their older counterparts (cf. Lyons & Willott, 2008).

Although gendered views around drinking were part of the interviewed women's social world (particularly among the Australian women), the extent to which they were internalised varied. Some participants viewed differences in drinking norms as an unfair judgment placed on women and as a relic from less egalitarian times. Others spoke of these beliefs as their own, expressing a stronger disapproval of drunkenness among same-aged

women than among same-aged men. The difference between personal and perceived gender values is an important distinction which has been neglected in much of the quantitative research on alcohol and gender. In this body of research, alcohol consumption is typically tested against internalised gender roles among drinkers (see Section 3.2.4.1). However, as demonstrated by the current findings and previous research (Wild, 2002), the values and beliefs held by an individual do not always match those that the same individual believe are prevalent in their culture. Moreover, research indicates that personal as well as perceived values and belief exert important, but independent, influence on behaviour outcomes (Zou et al., 2009).

7.2 Summary

Overall, the data suggests that the subjective alcohol culture of middle-aged women in both countries is characterised by a focus on sociability, interpersonal closeness, taste, pleasure, relaxation, indulgence, as well as an understanding of alcohol as transforming situations, delineating work against rest, and as symbolically linked to age and gender. In turn, these symbolic and use-values were associated with a de-emphasis of intoxication and many were further understood as age typical and age appropriate consumption patterns. The women's beliefs around alcohol also contained the notion of alcohol as a potentially dangerous drug and they shared a personal and perceived unacceptability of heavy intoxication among same-aged women. Dependent or abusive use was associated with shame and stigma.

However, differences were also present between the samples. For instance, the idea of alcohol as a form of self-medication and as a symbol of friendships and appreciation were mainly or almost exclusively discussed by Australian women. Additionally, the Australian women appeared to place a greater emphasis on alcohol as delineator between work and rest during the weekdays than the Swedish women, while the Swedish women placed more emphasis on the idea of alcohol as a food and taste product and more strongly

de-emphasised the importance of intoxication. Overall, gender norms around drinking appeared to have a stronger influence over alcohol use among the Australian women. Similarly, although alcohol was symbolically linked to age in both samples, the line between drinking in middle and young age appeared to be more sharply drawn in the Swedish sample. Last, the Swedish women displayed a more ambiguous and uneasy relationship with alcohol. The dangerous nature of alcohol appeared more salient for these women and the unacceptability and stigma associated with heavy and dependent use appeared to be more acutely felt. Several drinking patterns, such as weekday or solitary drinking, that were viewed with suspicion by the Swedish women, were neutrally viewed by many of the Australian women. Indeed, alcohol use appeared more integrated into everyday life among the Australian women and relatively frequent alcohol use was perceived as acceptable by these women.

In summary, several alcohol beliefs were present in the two national samples, indicating the existence of a subjective alcohol culture that is shared by middle-aged women in different Western countries. This conclusion is in line with previous survey data which has consistently demonstrated that the objective drinking culture (i.e., drinking patterns and habits, see Chapter 2) are similar among middle-aged women in Western countries. However, although the majority of alcohol beliefs were shared among women in the two countries, some differences were also uncovered. These differences appeared to be in line with nationally specific ideas around alcohol. For example, the Swedish women's greater ambivalence around their alcohol consumption may reflect the dry drinking culture that has traditionally defined alcohol use in Sweden. Thus, although a unifying middle-aged women's alcohol culture appear to exist, the national context nonetheless plays a role in the manifestation of this culture.

In addition to these conclusions regarding the shared nature of middle-aged women's alcohol culture, conclusions can be made regarding differences between the alcohol culture of middle-aged women and that of other groups. Comparison of the current

findings with the existing literature on men and young people's alcohol use indicate that some of the alcohol beliefs identified in the qualitative studies are indeed more common among middle-aged women. For instance, the social/convivial use-value of alcohol may be found among middle-aged women *and* other groups; however, for middle-aged women, this appears to be the only acceptable use-value. Some beliefs appear to be qualitatively different among middle-aged women. For example, although middle-aged women share the notion of alcohol as physically enjoyable with young people, the current findings indicate that the manifestation of that enjoyment differs. Similarly, although the idea of alcohol as delineator against work can be found among other groups, the type of leisure it denoted (i.e., relaxation and well-being vs. escape from the boundaries imposed on sober behaviour) may differ. The understanding of alcohol as a taste product, at the expense of its function as an intoxicant, may also be more common among middle-aged women or among middle aged people in general. By drawing on the current findings and that of previous literature it can also be argued that although gender and age symbolically influence alcohol use for all drinkers, it does so differently for middle-aged women (through the motherhood role).

7.3 Implications for Study 3

Two tentative conclusions (to be tested in Study 3) can be made from the results presented above. First, the observations and interviews identified a number of alcohol beliefs that were shared by women in both countries; however, several differences were also uncovered. Thus, it can be expected that while participants in Study 3 will endorse several key alcohol beliefs to a similar extent, some beliefs will only be endorsed, or endorsed to a greater degree, by women in either country. Second, several alcohol beliefs were identified that may be linked to risky drinking. For example, it is reasonable to assume that the de-emphasis of intoxication, the negative norms around heavy consumption, the symbolic link between age, gender, and alcohol, as well as the perceived dangerousness of alcohol will be protective factors against risky drinking. As such, it can be expected that these beliefs

would associated with a lower likelihood of risky drinking in Study 3. Moreover, based on previous literature (see Section 3.1.2.4), it can be expected that the notion of alcohol as a means to self-medicate is associated with increased likelihood of risky drinking. However, it is more difficult to anticipate how the remaining identified symbolic and use-values that women ascribed to alcohol may influence consumption. For instance, ideas around alcohol as food and taste product may reduce the tendency to drink heavily, but it may also mean that alcohol plays an increasingly large role in everyday life, thus increasing likelihood of risky consumption. Likewise, in observations, the drinking events that focused on social enhancement were often associated with more rapid and heavier alcohol consumption than those that focused on intimacy. Conversely, participants described their social drinking (both focusing on entertainment and intimacy) as non-intoxication focused in interviews, which would indicate that social drinking is a protective factor against risky drinking.

7.3.1 Additional considerations: control measures

When testing the relationship between alcohol beliefs and risky drinking in Study 3, several control measures should be included to adjust for undue influences on the outcome variable. For example, socio-economic status (SES), which refers to a person's access to material and social resources and ability to participate in society (Pink, 2011), has been linked to alcohol use and consumption patterns. Common SES markers are income, educational level, occupation type, and area of residence. Of these, occupation type and residential area were deemed inappropriate measures for the current study. The classification of professions and the opportunities and social standing that are associated with them may differ cross-nationally. Additionally, reliable information regarding relative advantage and disadvantage of different residential areas is not available in Sweden. As such, educational attainment and income level was used as indicators of SES in the current study.

Higher income and educational attainment has been reliably linked to drinking status: Research conducted in a number of countries and in samples of both men and women show that abstinence is less common among those with higher income and level of education (Bloomfield, Grittner, Kramer, & Gmel, 2006; Cerdá, Johnson-Lawrence, & Galea, 2011; Folkhälsomyndigheten [Public Health Agency of Sweden], 2015; Organisation for Economic Co-operation and Development, [OECD], 2015; Powers & Young, 2008; Rundberg et al., 2005). However, income/education is a less consistent predictor of drinking patterns. Some studies show that higher income or education is associated with decreases in heavy consumption but with increases in drinking frequency (Huckle, You, & Casswell, 2009; Huerta & Borgonovi, 2010) and greater overall consumption (A. A. Moore et al., 2005; OECD, 2015). Cross-national comparisons has however demonstrated that the patterns are mixed, with education either increasing, decreasing, or showing little or no relationship with HED and overall consumption (Bloomfield et al., 2006; Folkhälsomyndigheten [Public Health Agency of Sweden], 2015). Australian data presented by the OECD (2015) show that women with lower education are significantly more likely to engage in HED.

The literature also show a consistent inverse relationship between religiosity and alcohol abuse and dependence (Haber et al., 2013; Moscati & Mezuk, 2014), and a considerable amount of research has linked anxiety and depression with excessive drinking and alcohol dependency (Bellos et al., 2013; Boschloo, van den Brink, Penninx, Wall, & Hasin, 2012; Hasin, Stinson, Ogburn, & Grant, 2007). Moreover, there is a link between marital status and alcohol use: people who are single, divorced, or widowed are more likely to be heavy or dependent alcohol users than their married counterparts (Grant, Stinson, & Harford, 2001; Teesson et al., 2010). However, sex differences appear to exist, with some studies indicating that the effect of being unmarried is more detrimental for men (Blazer & Wu, 2009; Mathiesen, Nome, Richter, & Eisemann, 2013) presumably due to tendency among men to have poorer social support system compared to women. As such, these factors were measured and controlled for in Study 3. Additionally, it was deemed appropriate

to control for national identity as the current research contained a cross-national comparison. Last, heavy, abusive, or dependent alcohol use can be associated with significant levels of shame and stigma among middle-aged women as indicated by the current and previous research (e.g., Allamani et al., 2000; Van Wersch & Walker, 2009). As such, middle-aged female respondents may be particularly reluctant to admit to harmful or abusive alcohol patterns, even in self-report measures. Therefore, it was necessary to control for social desirability in the current research. In summary, socio-economic status, religious beliefs, anxiety and depression, marital status, and national identity, social desirability were included as control variables in Study 3.

CHAPTER 8 The Quantitative Study: Method

In this chapter, the materials, procedure, and sample for Study 3 are described. In terms of the materials, the first section of this chapter describes the operationalisation and measurement of the independent variables (IVs), the identification and measurement of control variables, as well as the measurement of the dependent variable (DV), risky drinking. As many of the scales used in Study 3 were purpose-developed, a pilot study was conducted to test the new scales. A description of this process concludes the Method section. The Procedure section describes the data collection process. As previously discussed, an adequate sample of Swedish women could not be obtained for the last study, despite repeated and sustained efforts. For Study 3, this meant that the prevalence of the alcohol beliefs identified in the qualitative studies could not be assessed among Swedish middle-aged women, formal comparisons could not be made between the two countries, and last, the relationship between alcohol beliefs and risky drinking could not be tested among Swedish women. A discussion of the impact of exclusion of these tests on the ability to answer the research questions of this dissertation is given. An overview of the Australian participants concludes the chapter.

8.1 Operationalisation of the IVs

The majority of the IVs of Study 3 were based on the alcohol beliefs developed from the qualitative research findings of this research; however, a few of the included variables were informed by the literature review (see Figure 1.1). Given that many of the IVs had to be developed for the purpose of this study, they remained tentative until the measure developed to capture them had been subjected to psychometric analysis (Chapter 9). An overview of the tentative IVs is given in Table 8.1.

Table 8.1. *Tentative Independent Variables for Study 3*

Independent variables	Description
<i>Use-value</i>	
Social enhancement	Alcohol enhances the enjoyment of social situations
Interpersonal closeness	Alcohol is a means to create social and romantic closeness
Food and taste	Alcohol is used for its taste and in conjunction with food
Pleasure and relaxation	A relaxation-focused state of pleasure, derived from the drinking context, the taste of the drink, and other enjoyable activities
Self-indulgence	Alcohol as a means to treat, reward, and indulge oneself
Self-medication	Alcohol is a means to reduce negative emotions
De-emphasis of intoxication	Intoxication is not of importance and is detrimental to sociability and the taste experience of alcohol
<i>Outcome beliefs</i>	
Dependency and danger	It is easy to become dependent on alcohol and children need to be protected from its use
<i>Alcohol expectancies</i>	
Aggression and loss of control ^a	Alcohol consumption makes people lose control, become aggressive, and engage in risk taking
<i>Symbolic value</i>	
Friendship and inclusion	Alcohol is used to celebrate friendships and create social inclusion
Work and rest	Alcohol marks the transition from work to rest
Transforming situations	Alcohol can add luxury and a sense of occasion to a situation
Alcohol and age	Alcohol is symbolically linked to age
Alcohol and gender roles	
Actual	The impact of personally held gender roles on drinking patterns
Perceived	The impact of perceived gender roles on drinking patterns
<i>Norms</i>	
HED Actual Injunctive	Personal disapproval of HED
HED Perceived Injunctive	Perceived disapproval of HED by same-aged women
HED Frequency Descriptive ^a	Measures perceived frequency of HED among same-aged women
MFD Actual Injunctive	Personal disapproval of MFD
MFD Perceived Injunctive	Perceived disapproval of MFD by same-aged women
Drinking Frequency Descriptive ^a	Measures perceived drinking frequency among same-aged women
<i>Stigma</i>	
Alcohol abuse stigma	Abusive or dependent alcohol use is associated with stigma

^aIndependent variables informed by the literature review. All other independent variables were informed by the qualitative study findings.

As can be seen from Table 8.1, the proposed study IVs are organised according to the broad belief categories that were the focus of this research (alcohol's use-value, outcome beliefs, alcohol expectancies, symbolic value, and alcohol norms). Although it was not an original focus of the current research, alcohol abuse stigma was also included as an IV. This decision was based on the strong moral fear that the women appeared to hold toward dependent or abusive use of alcohol, particularly in the Swedish sample. The identified use-values include alcohol's role as a food and taste product, as a means to self-medicate, and as a means to bring about social enhancement, interpersonal closeness, relaxation and pleasure, and self-indulgence. Last, the de-emphasis of the importance of intoxication was included. Outcome beliefs reflected beliefs regarding the relative ease of which abuse and dependency can develop and the need to shield children from adult's use of alcohol. Additionally, items tapping into the potential markers of abusive alcohol use (e.g., drinking alone or during the work week) that were identified by the Swedish women is included in this category. Alcohol expectancies were measured through items describing aggression, dangerous behaviour, and loss of control as a consequence of alcohol consumption. Although these beliefs were not specifically voiced by the interviewed women, they were included to further investigate perceptions regarding the perceived dangerous nature of alcohol: Alcohol expectancy beliefs have consistently been linked to drinking outcomes in the literature (see Section 3.3.1). The symbolic value of alcohol includes the link between alcohol and friendship and inclusion, the idea of alcohol as a delineator between work and rest and as symbolically capable of transforming situations. The idea of alcohol as symbolising age and as related to personal and perceived gender roles is also captured under the symbolic value of alcohol. Last, alcohol norms are listed. Norms were measured for two types of drinking patterns; HED and moderate and frequent drinking (MFD) and captured both the actual and perceived acceptability of these two drinking patterns for same-aged women. Additionally, perceived frequency of HED and perceived drinking frequency (i.e., descriptive drinking norms) of same-aged women were included. The inclusion of

descriptive norms does not reflect a cultural category developed from the qualitative studies; however, previous literature has shown a consistent and positive link between perceived consumption of others and personal drinking, at least among adolescent and young adults. These norms are often based on a false sense of consensus, where others' drinking is erroneously believed to be more common and heavier than it is. Thus, the inclusion of descriptive drinking norms is of theoretical importance not only through their link with alcohol use but also as they can give the appearance of a permissive normative drinking climate (see Section 3.3.3).

Among the variables listed in Table 8.1, the norm variables and alcohol abuse stigma had been measured in previous research. As such, existing items and scales could be used to measure these constructs in the current research. Alcohol expectancies have also been measured previously, and a number of items from existing scales were adapted to specifically measure loss of control and aggression. However, the remaining constructs had to be developed for the purpose of the current research. To this end, a number of items reflecting the use-values, outcome beliefs, and symbolic values identified in the qualitative studies were generated. Together with the alcohol expectancy items, these items were administered to participants in Study 3 (described below). To ensure the construct validity of the purpose-developed measures, all items were subjected to an exploratory factor analysis (EFA). The outcome of this analysis is presented in Chapter 9 followed by the formal hypotheses regarding the endorsement of the final scales and their relationship to risky drinking.

8.2 Materials

8.2.1 The IVs

The alcohol belief measures that were developed for the purpose of the current study are described in the paragraphs *Social enhancement* through to *Alcohol and age*.

Each of these alcohol beliefs represented a cultural category from the qualitative studies. As such, they contained a number of related ideas (cultural attributes), each of which was captured by individual items in the current study. In developing these items, examples and the language used by the participants in the interviews were drawn on where possible to increase the fidelity of the measure. Moreover, care was taken to write items in such way that they captured beliefs about alcohol and not personal drinking motives. For instance, rather than constructing items such as; "I drink alcohol to feel less stressed" (i.e., a drinking motive) items were constructed as; "Alcohol is something you drink if you are stressed", to capture the meaning ascribed to alcohol by middle-aged women. To reduce repetitiveness and to increase readability, the developed items that started with the same stem. For instance, "Alcohol is something you drink..." (stem) "...to reduce anxiety." (statement)/"...enhance the taste of fine foods." (statement)¹⁴. All items were measured on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). An odd number of response categories were used as this format includes a neutral midpoint, therefore not forcing participants to choose a response that is either "agreeing" (e.g., 1–3 on a 6-point scale) or "disagreeing" (4–6 on a 6-point scale) with a statement. The 5-point scale was chosen over longer or shorter odd-number scales as it strikes a balance between providing enough response alternatives for variability in scores, and not becoming cumbersome or confusing for respondents (Gable & Wolf, 1993; Preston & Colman, 2000).

In total, 76 items were written to measure the cultural categories that were captured in the qualitative studies. This item pool was designed to be tested in both samples. As such, Australian women were to be subjected to items which reflected beliefs

¹⁴ A copy of the final questionnaire can be found in Appendix E. Moreover, an overview of the original items for each identified alcohol belief can be found in Appendix H.

held more strongly by Swedish women and vice versa. The original rationale behind this approach was to compare the way in which the different items clustered together in an EFA conducted separately for each sample in order to get an understanding of potential differences (and similarities) between Swedish and Australian middle-aged women.

8.2.1.1 *Use-value of alcohol*

Social enhancement. This construct included a view of alcohol as a substance that was used to enhance the enjoyment of social situations (e.g., "Alcohol is something you drink to have fun with your friends and family" and "Alcohol is something you drink to have conversations that are more interesting") and the notion that alcohol consumption was an inherently social activity and a natural part of social situations (e.g., "Alcohol is a natural part of social gatherings").

Interpersonal closeness. Interpersonal closeness captured the idea of alcohol as a substance that increases social and romantic closeness ("Alcohol is something you drink to create intimacy with other people") and that can be used to or nurture friendships ("Alcohol is something you drink to nurture friendships") and to enhance romantic relationships ("Alcohol is something you drink to feel romantic with someone").

Food and taste. This construct was measured by items that highlighted the centrality of the taste of alcohol ("Alcohol is above all a taste experience"), as well as the notion of alcohol is used to enhance the flavour of food ("Alcohol is something you drink to enhance the taste of fine foods"). Moreover, it included the idea that alcohol was an accompaniment to food and not a product to be drunk on its own ("Alcohol is something you drink with food and never by itself").

Pleasure and relaxation. This alcohol belief denotes the idea that the pleasure and enjoyment gained from alcohol is attributed to its taste, the environment that it is consumed in, and through the simultaneous engagement in other pleasant activities. This concept was captured by the inclusion of items measuring the idea of alcohol as something to be used

while doing other enjoyable activities (“I often engage in other pleasurable activities, such as reading a book or listening to music, while I drink”), a focus on the environment in which alcohol is consumed (“I like to have my drink in a peaceful environment”), and the relaxed enjoyment of an alcoholic drink (“I like to take my time and enjoy my drink”).

Self-indulgence. This construct included notions of alcohol consumption as a way to treat, reward, and indulge oneself (e.g., “Alcohol is something you drink if you want to indulge yourself”). The construct also included more concrete examples of indulgent use that had been given during the interviews (“Alcohol is something you drink to enjoy a beautiful summer’s day” and “Alcohol is something you drink if you want something refreshing on a hot day”).

Self-medication. This construct contained the idea of alcohol as means to reduce a number of negative affective states, such as anxiety, sadness or depression, loneliness, and stress (e.g., “Alcohol is something you drink to reduce anxiety” and “Alcohol is something you drink if you are stressed”). Moreover, it included items that described alcohol as a way to alleviate shyness and boost one’s self-confidence in social situations (“Alcohol is something you drink to become more self-confident in social situations”).

De-emphasis of Intoxication. De-emphasis of intoxication included the rejection of alcohol as a drink to be used primarily for its intoxicating properties (e.g., “Alcohol is something you drink primarily to get intoxicated”, reverse coded) and as central to social situations (“Alcohol is the most important part of social situations”, reverse coded). Moreover, items capturing the notion that drinking too much ruins both the taste of the drink (“I stop enjoying the taste of alcohol if I have too much of it”) and the social experience (“Drinking too much ruins the social experience”), and further impedes the ability to make meaningful connections with other people (“You cannot make meaningful connections with other people if you drink to intoxication”) were included.

8.2.1.2 *Outcome beliefs*

Dependency and danger. In interviews, the idea of alcohol as a dangerous drug was expressed through its link to dependency, and among the Swedish women through the notion that children should be protected from the alcohol use of adults. These ideas were captured in items such as; "It is easy to become dependent on alcohol" and "Alcohol is something you should not drink in front of children". Moreover, the Swedish women identified several markers of dependent alcohol use which were measured in items such as; "To drink during the work week is a sign of dependency" and "To drink when you are alone is a sign of dependency".

8.2.1.3 *Alcohol expectancies*

Loss of control and aggression. Although the interviewed women mostly discussed the dangers of alcohol use in relation to the development of dependency, a number of items measuring alcohol's perceived effect on aggression, loss of control, and the tendency to engage in dangerous behaviour were included. These items were adapted from the alcohol expectancy literature (e.g., Brown, Christiansen, & Goldman, 1987) and included items such as; "Drinking alcohol makes people become angry and on edge", "Drinking alcohol makes people do dangerous things", and "Drinking alcohol makes people less able to control themselves".

8.2.1.4 *Symbolic value of alcohol*

Friendship and inclusion. This construct reflected the use of alcohol to feel part of a social situation (e.g., "Alcohol is something you drink so you can be part of a social situation"), its use as a symbolic expression of reciprocity and appreciation (e.g., "To give a host alcohol is a sign of appreciation of their hospitality"), and as a sign of friendship (e.g., "To have a few drinks with someone is a sign of friendship").

Work and rest. The notion of alcohol as distinguishing work from rest was measured by items that tapped the idea of alcohol consumption as marking the end of the workday or workweek (e.g., "To have a drink means that the work day is over"), time to unwind (e.g., "Alcohol is something you drink to unwind at the end of the work week"), and as a time when responsibly could be put to the side (e.g., "To have a drink means that you can let go of your responsibilities for the day").

Transforming situations. The idea that alcohol could bring about a sense of luxury and occasion was measured by including items tapping the use of alcohol to mark a celebratory occasion (e.g., "Alcohol is something you drink to celebrate a special occasion"), its power to add something special to a situation (e.g., "Alcohol is something you drink to turn a situation into something special"), and through its ability to break the routine and dullness of everyday life (e.g., "To have a drink can make everyday situations feel less dull").

Alcohol and age. This construct consisted of ideas regarding alcohol use as defining features of both youth and middle age. Specifically, items relating to purposeful intoxication were written to tap into this consumption patterns as symbolic of youth (e.g., "Dinking to become purposefully intoxicated is a part of growing up") and as inappropriate in middle age (e.g., "Drinking to become purposefully intoxicated is shameful for women my age").

Alcohol and gender roles. The influence of gender roles on alcohol use was identified in the interviews. Questionnaires directly measuring the idea of alcohol as linked to gender roles have not been developed. However, several questionnaires that measure traditional gender role beliefs exist and these questionnaires have been used in numerous studies to predict alcohol use and drinking patterns (see Section 3.2.4.1). The gendered beliefs regarding alcohol use that were voiced in interviews were aligning with traditional ideas around women's social roles. As such, questionnaires capturing these attitudes were deemed appropriate for the current study. However, many of the existing measure of attitudes toward women's roles are quite dated. For instance, the widely used Attitudes

Toward Women Scale (Spence & Heinrich, 1972) include items such as “It is ridiculous for a woman to run a locomotive and for a man to darn socks” and “It is insulting to women to have the ‘obey’ clause remain in the marriage service”. As such, the Social Roles Questionnaire (SRQ) (Baber & Tucker, 2006), a more recently developed but less used scale, was selected. Capturing more contemporary ideas around men and women social roles, this questionnaire consists of two subscales; the Gender Transcendent (SRQ GT) scale and the Gender Linked (SRQ GL) scale. The SRQ GL scale includes statements measuring dichotomous traditional views of men and women's characteristics and roles, such as “Mothers should only work if necessary” and “Men are more sexual than women”. The SRQ GT scale measure non-stereotypical views of gender with items such as “People can be both aggressive and nurturing regardless of sex” and “Tasks around the house should not be assigned by sex”. In the original measure, respondent's agreement with items was measured on a 0–100% scale, with 10% increments. The SRQ GT scale is reverse coded so that higher scores on both scales indicate higher agreement with traditional attitudes toward women's roles.

As the measure is relatively recent, research attesting to its psychometric properties is somewhat limited. The scale authors themselves reported a Cronbach alpha value of .65 for the SRQ GT scale and .77 for the SRQ GL scale. Some subsequent studies have similarly found relatively low alpha levels for the SRQ GT (e.g., J. Fischer & Anderson, 2012, $\alpha = .63$; Webb, Sheeran, & Pepper, 2012, $\alpha = .65$). However, M. Davies, Gilston, and Rogers (2012) found an alpha level of .94 for this scale, and using a 5-point Likert scale, Ogletree, Fancher, and Gill (2014) found an alpha of .79. The SRQ GL scale has performed better; Cronbach alpha ranging from .75 to .94 across five studies (M. Davies et al., 2012; J.

Fischer & Anderson, 2012; Ogletree et al., 2014¹⁵; Starfelt, Young, White, & Palk, 2015¹⁶; Webb, Sheeran, & Pepper, 2012). As a whole, the SRQ has also demonstrated convergent validity, through a positive and statistically significant relationship with rape myth acceptance (M. Davies et al., 2012; Starfelt, Young, White, & Palk, 2015). Moreover, the SRQ has produced theoretically expected outcomes. For instance, both the scale authors (Baber & Tucker, 2006) and Ogletree et al. (2014) reported that men scored significantly higher than women on the SRQ and Fischer and Anderson (J. Fischer & Anderson, 2012) found that employed fathers scored significantly higher on the scale than stay-at-home fathers.

To suit the purpose of the current research, the SRQ response format was modified to reflect the finding from the qualitative studies which highlighting the importance of not only personally but also perceived societal gender roles. Drawing on previous studies, a referent shift consensus model was used (R. Fischer, 2009). This model requires participants to indicate their own beliefs as well as the beliefs they believe are common in their culture. For the current study, the respondents were instructed to indicate their agreement with each item and then to indicate how they believed other people would answer the same question. The responses were scored on two separate Likert scales presented parallel to each other (see Appendix E for an overview of the layout), one presented under the heading "What do YOU think?" and one under the heading "What would the AVERAGE AUSTRALIAN think?". To ensure that the response format did not become too unwieldy, 5-point Likert scales (1 = *strongly disagree*, 5 = *strongly agree*) were used rather than the original 0–100% scale. As discussed above, the SRQ has previously produced good internal consistency with a 5-point

¹⁵ The authors used a 5-point Likert scale

¹⁶ The authors used a 7-point Likert scale

Likert scale (Ogletree et al., 2014). As the scale has not been tested in Swedish samples it was translated to Swedish for the purpose of this research.

8.2.1.5 *Alcohol norms*

Injunctive norms for both HED and MFD consumption were measured. All norms were assessed in relation to alcohol consumption of women of the same age as the participants. Injunctive HED and MFD were measured by three and one item respectively. Respondents were presented with the stem; "How acceptable is it for women your age to..." which was followed by the three HED statements: "...drink to get intoxicated", "...drink so much they fall asleep" and "...drink a bottle of wine or equivalent on a single occasion", and the MFD item "...drink moderately (e.g., one or two glasses of wine) most days of the week". To measure both actual and perceived injunctive norms, the same referent shift consensus format that was used for the SRQ was implemented: Participants were asked to rate each statement on two separate 5-point Likert scales (1 = *unacceptable*, 5 = *acceptable*), one scale measuring participants' own beliefs and the other scale measuring the perceived beliefs of a typical Australian person. The average score of the three HED items were calculated to form a composite HED Actual Injunctive norms score and a composite HED Perceived Injunctive norm score. All injunctive norms were reverse scored so that higher scores indicated greater perceived unacceptability. In addition to injunctive norms, descriptive norms for drinking frequency and HED frequency were measured with two ordinal items; "How often do you think a typical woman your age has a drink containing alcohol?" (0 = *never*, 1 = *monthly or less*, 2 = *2–4 times a month*, 3 = *2–3 times a week*, 4 = *4 or more times a week*) and "How often do you think a typical woman your age has more than four drinks on one occasion?" (0 = *never*, 1 = *less than monthly*, 2 = *monthly*, 3 = *weekly*, 4 = *daily or almost daily*).

8.2.1.6 *Alcohol abuse self-stigma*

There are a number of scales that measure stigma; however the majority of these scales are specific to mental health disorders. Moreover, among the measures that captures stigma associated with alcohol and other substance use disorders, most focus on stigma that is experienced by misusers. However, as the participants of the current study were drawn from the general population (i.e., not necessarily dependent users of alcohol), a measure tapping into imagined stigma associated with hypothetical alcohol abuse was needed. A relatively new scale, the Perceptions of Problems in Living Questionnaire (PPLQ, Magovcevic & Addis, 2005) fitted this criterion. This questionnaire is designed to gauge how respondents would feel about themselves if they experienced either alcohol abuse or depression. First, respondents are instructed to read two vignettes outlining the symptoms (as defined by DSM-IV) of either disorder and to imagine what it would be like to experience these symptoms. Respondents are then presented with 14 items of which the first nine belong to a subscale measuring self-stigma and the remaining five items to a subscale measuring normativeness (i.e., the perceived commonality of either problem). Items are rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A higher score on the Self-stigma scale indicates increased negative perceptions of mental health problems and alcohol abuse. For the current research, the alcohol abuse vignette and the Self-stigma scale and were used. Self-stigma items include; "I would be ashamed to admit to having this problem" and "My family and friends might see me as a failure if I had this problem".

The PPLQ has not been extensively evaluated in the literature. In the original article Magovcevic and Addis (2005) reported a Cronbach alpha value of .87 for the Self-stigma scale. Moreover, and in line with the author's predictions, higher total PPLQ scores were linked to traditional male gender roles, thus lending support to the measures' convergent validity. A literature review located an additional three studies (Berger, Addis, Green,

Mackowiak, & Goldberg, 2013; Shepherd & Rickard, 2012; Syzdek, Addis, Green, Whorley, & Berger, 2014) that have used the PPLQ. However, in two of these studies (Berger et al., 2013; Syzdek et al., 2014) the authors did not report which vignette was used and in the third study (Shepherd & Rickard, 2012), the vignette was modified to reflect distorted body image, eating, and exercise concerns. Moreover, although reliability statistics was reported in two of these studies (Berger et al., 2013; Shepherd & Rickard, 2012), it was erroneously reported for the total scale, rather than individually for the subscales. As such, information regarding scale reliability and validity drawn from these studies should be interpreted with caution.

Nonetheless, Shepherd and Rickard (2012) found a significant and negative correlation ($r = -.34$) between the PPLQ and the Attitudes Toward Seeking Professional Psychological Help (ATSSH) scale (higher scores on the ATSSH represent more positive attitudes toward help-seeking) and a significant and positive correlation ($r = .47$) between the PPLQ and the Intentions to Seek Professional Psychological Help scale. Additionally, Berger et al. (2013) found a high level of agreement between mental health stigma as measured by the PPLQ and the Response to Mental Health Rating System, an observational protocol designed to rate verbal reaction to various mental health topics. Last, Syzdek et al. (2014) examined the effect of a Gender-Based Motivational Interviewing (GBMI) session designed to evoke behaviour change in a sample of men with anxiety and/or depression. Compared to a control group (no GBMI) participants who attended the GBMI session scored significantly lower on the PPLQ across three time periods. Taken together these studies offer tentative support for the convergent and criterion validity of the PPLQ. The Cronbach alpha for the total scale was reported at .87 by Shepherd and Rickard (2012) and at .91 by Berger et al. (2013).

8.2.2 Demographic and control variables

A number of descriptive and control variables were included in the final questionnaire. Demographic variables pertained to participants' country of birth, age, and occupation as well as consumption patterns and type of alcohol most often consumed. To gain an overview of respondents' consumption patterns, two questions from the AUDIT (see Section 8.2.3) were used; "How often do you have a drink containing alcohol?" and "How many standard drinks do you have on a typical day when you are drinking?" In addition to this, a separate question was included to measure prevalence of short-term harmful consumption (consuming more than 4 standard drinks in one sitting, NHMRC, 2009). An overview of the control variables is given below.

8.2.2.1 *Socio-economic status*

Educational and income levels were used as measures of socio-economic status. Educational level was measured by three generic categories; Primary school, High school, and University. Participants were asked to choose the response alternative that best described their educational attainment. To measure income, information regarding the estimated total disposable household income was collected as well as the composition of the respondent's household (i.e., number of adults and dependent children). This information enabled the calculation of equalised disposable household income¹⁷, a measure that is a more reliable indicator of a person's access to material resources than personal income. Using population percentile income, participants were then ranked according to the population equalised income percentile they fell within. The resultant ordinal measure of

¹⁷ Equalised income is calculated by dividing the total household income by an equalising factor. In Australia this factor is obtained by adding following values, each representing the different members of the household: First adult = 1, Second adult = 0.5, Child under 15 years = 0.3.

income thus represented an accurate assessment of participants' access to material resources and their ability to financially participate in society. The population percentile brackets used for comparison were those that were available in both Sweden and Australian; $\leq P10$, $> P10-P20$, $> P20-P50$, $> P50-P80$, $> P80-P90$, $> P90-P100$. It should be noted that the ranking against population percentiles was chosen with the planned Sweden–Australia comparison in mind. Comparing income directly across countries may be misleading as taxation differs as does and number of public services that are free or subsidised; thus, the same income may not correspond to similar financial resources and ability to participate in society in Sweden and Australia.

8.2.2.2 *Religious beliefs*

To measure religiosity, participants were asked to indicate whether they were atheist, agnostic, or if they belonged to any of the major religions; *Christianity*, *Islam*, *Judaism*, *Hinduism*, or *Buddhism*. Participants were also given an *Other* option where they could specify alternative religious beliefs. The responses were categorised into three variables. Participants who identified themselves as belonging to the one of the major religions as well as those who had named another religious belief under the option “other” were classified as Religious. Several participants had identified themselves as spiritual under the “other” option; these participants were classified as Spiritual. The remaining participants, who had expressed no religious or spiritual beliefs, were classified as Not Religious.

8.2.2.3 *National identity*

National identity was measured via two items; “Do you identify yourself as Australian?” and “Do you identify with any other nationality?” on a dichotomous scale (yes/no). Based on the answers given to these two questions participants were given an ordinal rank from 1 to 3, where 1 represented “Australian national identity only”, 2

represented "Australian and other national identity", and 3 represented "Other national identity only".

8.2.2.4 *Social desirability*

Social desirability, the tendency to portray oneself in a favourable fashion was measured using the Lie scale from the short-form of the Eysenck Personality Questionnaire–Revised (EPQR–S) (Eysenck, Eysenck, & Barrett, 1985). The short-form Lie scale consists of 12 items that measure the lifetime occurrence of desirable but unlikely behaviours such as "Do you always practice what you preach?" and unflattering but relatively common behaviours such "Have you ever cheated on a game?". The scale uses a dichotomous yes/no response alternative and each item is given a score of 0 or 1. The resulting scale range is 0–12 where higher scores are indicative of higher levels of social desirability.

The scale authors found a reliability score for men and women of .77 and .73 respectively in a population sample of adults from the United States of America (Eysenck et al., 1985). Reliabilities in the low to mid .70s have also been found in later studies from this country (Sato, 2005 $\alpha = .73$), from Canadian, and from Australian ($\alpha = .70$ and $\alpha = .71$, Francis, Brown, & Philipchalk, 1992). However, lower alpha levels have also been noted in English and American samples ($\alpha = .65$ and $\alpha = .66$ Francis et al., 1992). Although research testing the convergent validity of the EPQR–S is sparse, the validity of the longer EPQR Lie scale has been demonstrated in several studies. Significant and positive correlations have, for instance, been reported between the EPQR and the Impression Management ($r = .61$, $p < .001$) and the Self-Deceptive Enhancement ($r = .22$, $p < .02$) scale of Paulhus' (1991) Balanced Inventory of Desirable Responding (M. F. Davies, French, & Keogh, 1998) and Stöber's (2001) Social Desirability Scale–17 ($r = .60$, $p < .001$).

8.2.2.5 *Anxiety and depression*

The Hospital Anxiety and Depression (HAD) (Zigmond & Snaith, 1983) scale was used to account for the potential relationship between anxiety and depression and drinking outcomes in the current research. The HAD was chosen with the planned Sweden–Australia comparison in mind, as it has been translated and used in previous Swedish studies. Moreover, although this scale was originally designed to measure anxiety and depression in medical patients, it has since been used in non-clinical samples in Australia (Kilkkinen et al., 2007), Sweden (Lindwall, Gerber, Jonsdottir, Börjesson, & Ahlborg Jr, 2014), and elsewhere (J. R. Crawford, Henry, Crombie, & Taylor, 2001; Mahoney, Regan, Katona, & Livingston, 2005; Mykletun, Stordal, & Dahl, 2001). The scale is composed of two 7-item subscales separately measuring anxiety (HAD–A scale) and depression (HAD–D scale). Example items include; “I get sudden feelings of panic” (HAD–A scale) and “I have lost interest in my appearance” (HAD–D scale). The scale items are scored on 4-point ordinal scales (0–3, response alternative vary) yielding a score range of 0–21 for each subscale where higher scores indicate higher levels of anxiety and depression. A cut-off score of 8 for both subscales has been found to be optimal in terms of sensitivity and specificity (Bjelland, Dahl, Haug, & Neckelmann, 2002; Zigmond & Snaith, 1983). The scale authors did however note a positive linear relationship between scale scores and anxiety/depression. As such, a cut-off of 8 includes individual with milder expression of anxiety and depression than more stringent cut-offs (e.g., 11).

The HAD scale has been extensively used in both English and non-English-speaking populations, where it has been found to be a both valid and reliable test. A 2002 review of 15 studies using the HAD scale (Bjelland et al., 2002) concluded that the measure performed well as a case-finder for DSM–II diagnosed anxiety and depression. Moreover, the review reported strong correlations between the HAD scales and measures such as the Beck Depression Inventory, the Clinical Anxiety Scale, and the General Health

Questionnaire. The mean Cronbach alpha from the 15 reviewed studies was .83 for the HAD–A scale (range .68–.93) and .82 for the HAD–D scale (range .67–.90) (Bjelland et al., 2002). The factor structure and validity of the Swedish version of the HAD scale has been confirmed (Lisspers, Nygren, & Söderman, 1997), and internal consistency typically range from .70s to high .80s (G. Andersson, Kaldo–Sandström, Ström, & Strömgren, 2003; Besèr et al., 2014; Nilsson, Ivarsson, Alm-Roijer, & Svedberg, 2013) in Swedish samples.

8.2.2.6 Marital status

To adjust for the potential influence of relationship status a question about marital status was included, asking participants to indicate whether they were *single, never married, in a relationship, but not living together, de facto/married, divorced/separated, or widowed*.

8.2.3 The DV: risky drinking

The DV for Study 3 was measured by the AUDIT, an alcohol screening measure developed by the WHO (Babor et al., 2001) to identify harmful and hazardous drinkers. Using a pooled sample of nearly 2,000 respondents from six different countries (including Australia), the measure was specifically constructed to be cross-culturally appropriate (Saunders, Aasland, Babor, Fuente, & Grant, 1993). Since its construction, the AUDIT has been translated and further validated in number of countries, including Sweden (Bergman & Källmén, 2002; Selin, 2006; Wennberg, Källmén, Hermansson, & Bergman, 2006). In addition to its use as a screening measure, the AUDIT has been used in several epidemiological studies as a measure of the nature and prevalence of harmful drinking in different samples (e.g., Kinner, George, Johnston, Dunn, & Degenhardt, 2012).

The AUDIT consists of 10 items which are scored on a 0 to 4 ordinal scale (yielding a range of 0–40) where higher scores indicates a higher probability of harmful/hazardous drinking. The scale was constructed to measure three factors thought to be associated with current harmful and hazardous drinking; alcohol consumption (e.g., "How often do you have

a drink containing alcohol?”), dependence symptoms (e.g., “How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?”), and alcohol problems (e.g., “Have you or someone else been injured because of your drinking?”). However, there is mixed evidence regarding the factor structure of the AUDIT, with some studies indicating a two-factor solution (a consumption factor and an adverse consequences of drinking factor) rather than three-factor solution (e.g., Bergman & Källmén, 2002; Chung, Colby, Barnett, & Monti, 2002). The use of an overall score to indicate levels of harmful/hazardous drinking is most commonly applied in the literature.

The scale authors recommended a cut-off score of 0–7 for low-risk drinking or abstinence, a cut-off of 8–15 scores for moderate risky drinking, 16–19 for high-risk drinking, and 20–40 for possible dependence (Babor et al., 2001). The sensitivity and specificity of the AUDIT using a cut-off score of 8 (separating low-risk from all other categories of harmful or hazardous drinking) has been evaluated extensively in the literature. Compared to, for instance, alcohol dependence (DMS–III, IV, and ICD–10 criteria), problem use, and consumption levels, favourable sensitivity and adequate specificity has been demonstrated for this cut-off (for a review, see Reinert & Allen, 2007). However, lower cut-off scores have been shown to improve sensitivity for some subpopulations, including women. Indeed, studies have found that the AUDIT has a lower sensitivity for women than for men at the cut-off score of 8 (27% lower) and 7 (24% lower), and a review of studies using the AUDIT have found additional support for lowering the cut-off for women to 5 or 6 (Reinert & Allen, 2007). In 2006, Aalto, Tuunanen, Sillanaukee, and Seppä (2006) used a Finnish sample of 971 women, all 40 years old, to evaluate the optimal AUDIT cut-off score in terms of sensitivity and specificity. AUDIT scores were compared against self-reported heavy drinking (defined as the consumption of at least 140 g ethanol per week on average during the past month), finding that the optimal combination of sensitivity and specificity (.87 and .88, respectively) was reached at a cut-off of 6. Based on these findings, the current research used an AUDIT cut-off score of equal to and greater than 6 to identify risky drinkers.

As described, the AUDIT has been tested against a number of other well-established alcohol measures, with favourable sensitivity and adequate specificity, thus supporting the criterion validity of the AUDIT. In addition, the AUDIT has demonstrated a strong internal and test–retest reliability across a range of studies using different samples (e.g., different ethnic, sex, and age groups). Shields and Caruso (2003) reviewed studies published up until and including the year 2000. For 24 separate samples from 17 studies, the authors reported a median internal consistency coefficient of .81, with a range of .59 to .91. A later review by Reinert and Allen (2007), which included studies from 2002 to 2005, found a median reliability coefficient of 0.83 (range = .75–.97). This review included one Swedish study (Bergman & Källmén, 2002), which reported an internal consistency coefficient of .75 for women and .83 for men. This same study retested a subset of their original sample (61 respondents from the original sample 997) 3 to 4 weeks after the initial screening, finding a test–retest reliability coefficient of .93. Interclass correlations has also been investigated in a German sample of general practice patients (follow up at 1 month), finding a correlation coefficient of .95 (Dybek et al., 2006).

8.2.3.1 Specific consideration for the current study

Two AUDIT questions ask respondents to describe their alcohol consumption in terms of standard drinks (“How many standard drinks do you have on a typical day when you are drinking?” and “How often do you have six or more standard drinks on one occasion?”). Although standard drinks defined as any alcoholic drink containing 10 g of alcohol in the original measure, the scale authors acknowledged that standard drinks differ across countries and that adjustments would have to be done accordingly. In the Swedish and Australian versions of the AUDIT, standard drinks are defined in accordance with the guidelines of each country: 12 g in Sweden and 10 g in Australia. Thus, for these two AUDIT questions it can be assumed that among participants who select the same response category, the Australian participants, on average, consume 17% less alcohol than Swedish

participants. As a result of this, a slight bias toward assigning higher AUDIT scores to Australian compared Swedish participants will be contained within the data. Despite this, it was deemed appropriate to retain the format of the AUDIT for each country as changes to the established standard drinks size may confuse participants and introduce a second less predictable bias.

8.2.4 Piloting

Once a draft of the questionnaire containing all items and scales were finalised it was piloted among 11 Australian women. The pilot participants were asked to identify potential spelling or grammar errors, as well as to highlight any instructions or items that were difficult to understand. A number of minor changes were made based on the feedback gained from this process.

8.3 Procedure and Participants

Ethical clearance to conduct research with human participants was obtained from the QUT Human Research Ethics Committee (ethics no 1100001335, see Section 5.3) prior to data collection. Health and safety approval was obtained from a QUT advisory board. Women aged 45–59 years, who were current drinkers (past 30 days) and who resided in Australia were targeted for Study 3. Although one of the aims of the current study was to examine the impact of national context on alcohol beliefs, participants born in countries other than Australia were not excluded from participation. Migration patterns over many decades have transformed Australia into a multicultural country. As such, targeting participants of Australian decent only would have yielded results that are non-representative of this country. The final survey was administered anonymously online and participants were given the opportunity to enter a draw for one of three \$50 AUD supermarket gift cards. Participants were recruited via a media release (issued in May 2014), which was featured in national newspapers and television as well as local radio. Overall, the survey was accessed by 6,523

people, of whom 1,934 completed at least the first question of the survey¹⁸. The large number of participants that accessed the survey without responding to any items may have been a result of the broad coverage gained from the media release. It is also possible that the relatively limited number of studies and intervention efforts that, to date, have focused middle-aged women's alcohol use increased interest in the survey. Given the success of the media release, no other recruitment strategies were employed.

8.3.1 Recruitment efforts in Sweden

In Sweden, efforts to recruit participants were ongoing between April 2014 and August 2015. Several methods were employed; media outlets and women's websites were contacted, fliers were distributed, and social media and snowballing techniques were used. While there was no interest from national newspapers, television, or radio in Sweden, an article featuring the link to the online survey was published in a lifestyle magazine targeting women aged 50 years and older. Published 16 times per year, this magazine sells 85,800 copies per issue and has a stated readership of 156,000 (of which 92% is female). A second article, also featuring the link to the online survey, was published in a local newspaper with a weekly readership of 83,000 people (31,300 sold copies). The article containing the link was also published on the paper's website, which receives 91,000 unique visits each week¹⁹. In addition to these recruitment strategies, a mailbox drop was conducted, fliers for the study were distributed in two gyms, two pharmacies and in one General Practitioners' reception, and information regarding the study was posted on physical notice boards and on social media. Last, the study was posted on the Facebook page of a women's organisation

¹⁸ Due to a large number of questionnaires with substantial missing data, the final sample size was reduced by approximately 50%. An overview is given in Section 8.4.

¹⁹ A possible overlap between readers of the paper version and the website exists.

specifically addressing alcohol, narcotics, and dependency inducing prescription drug use among women. Acting as an umbrella organisation for other groups such as doctors, midwives, and immigrant groups, this umbrella organisation includes around 270,000 female members. However, despite these efforts, the total sample size recruited from Sweden amounted to no more than 84 women. As several of these questionnaires contained substantial missing data, the analyses using this sample were limited to around 50–60 participants (depending on the variables included in the analysis). The number of participants recruited from Sweden stand in stark contrast to the sample size obtained in Australia. A discussion of possible reasons for this discrepancy is given in the final Chapter of this thesis; however, no definitive reasons could be pinpointed.

8.3.2 Impact on the planned analysis and research questions

Given the outcome of the Swedish data collection, it was decided to exclude the Swedish component of Study 3 from this dissertation. Two main reasons were behind this decision. First, the extremely low Swedish response rate needs to be considered. For practical reasons, this research did not aim to recruit representative samples from either country. As such, it was accepted from the outset that findings from neither country sample would be fully generalisable. However, as participation was extremely low among Swedish women, it is likely that the women who did choose to complete the questionnaire were substantially different compared to the overwhelming majority that did not. As such, the inclusion of the Swedish sample would have introduced an unacceptable level of bias, much greater than any bias that was present in the Australian sample. Second, the small sample size precluded multivariate analyses and the inclusion of necessary control variables. This would have severely limited the understanding of the influence of each belief after controlling for all other beliefs and extraneous variables.

Originally this research aimed to answer three research questions by employing a series of qualitative and quantitative analyses. Table 8.2 gives an overview of the research questions and these planned analyses.

Table 8.2. *Overview of Planned Analysis for each Research Question*

	Analyses	
	Studies 1 and 2	Study 3
Research Question 1: What alcohol beliefs do middle-aged women in each country share?	Descriptions of alcohol beliefs	Mean agreement with alcohol beliefs (descriptive analysis)
Research Question 2: Are alcohol beliefs shared across the two countries?	Descriptions of similarities and difference	Test of mean differences in alcohol beliefs (e.g., <i>t</i> tests)
Research Question 3: Do middle-aged women's alcohol beliefs predict increased likelihood of risky drinking?	Tentative conclusions regarding impact of beliefs based on the nature of those beliefs	Predictive power of alcohol beliefs for risky drinking (regression models)

As the Swedish component of Study 3 was excluded, conclusion regarding the alcohol beliefs that are shared by women in this country (RQ1) was answered by the qualitative research only. For the Australian middle-aged women, however, the findings of the qualitative studies could be refuted or verified in Study 3. In terms of RQ2, conclusions could only be drawn based on the qualitative data. For RQ3, formal tests of the predictive power of the identified alcohol beliefs were only conducted for Australian middle-aged women. For the Swedish sample, conclusions could only be based on the qualitative findings.

All analyses that are presented in the remainder of this dissertation relates to the analysis of the Australian data. However, analyses were conducted using the Swedish data and interested readers can find these results in Appendix F.

8.4 Overview of the Australian sample

A total of 1,934 women accessed the survey and completed at least the first question (about age). Among these, 898 women were excluded due to an insufficient number of answered questions (less than two-thirds of the survey), resulting in a final sample size of 1,035. Comparisons between included and excluded participants were made in terms of age; no other questions were answered by a sufficiently large portion of excluded participants to enable meaningful comparisons. An independent means *t* test was calculated to determine if the mean age of each group was different. Homogeneity of variance for this test was violated ($p < .001$) and as such results for tests not assuming equal variance was interpreted. It was found that excluded participants ($M = 50.61$, $SD = 6.49$ years) were significantly younger than included participants ($M = 51.46$, $SD = 4.28$ years), $t(1517.98) = -3.36$, $p = .001$, although the effect size for this difference was small, Cohen's $d = -.16$.

8.4.1 Participant demographics

The mean age of participants was 51.46 years ($SD = 4.28$, range 45–59). A majority of the participants (76.95%) were born in Australia, with the remaining being born in

a European country other than Sweden (14.55%), in New Zealand (4.30%), in Africa (1.76%), in South or North America (1.27%), or in Asia/Oceania (1.17%). Full time employment was reported by 54.90% of the women, part-time employment by 26.94%, while 3.67% reported that they were students, 7.96% that they were unemployed or retired, and 5.00% that they were domestic workers (stay-at-home mother or carer). Most women (87.88%) reported that wine was their typical drink of choice, which was followed by beer (4.57%).

8.4.2 Participant scores on the control variables and the DV

An overview of the control variables and the DV is presented in Table 8.3, including the proportion of participants that scored above the cut-off score for anxiety, depression, and risky drinking as measured by the HAD–A scale, the HAD–D scale, and the AUDIT.

Table 8.3. *Overview of Control and Dependent Variables*

Control and Dependent variables	
Education, <i>n</i> (%)	
Primary school	1 (0.10)
High school	221 (21.58)
University	802 (78.32)
Equalised disposable household income, <i>n</i> (%) ^a	
≤ P10	26 (2.57)
> P10–P20	0 (0.00)
> P20–P50	101 (9.98)
> P50–P80	162 (16.01)
> P80–P90	166 (16.40)
> P90–P100	557 (55.04)
Religious, <i>n</i> (%)	
Religious	375 (37.20)
Not religious	618 (61.31)
Spiritual	15 (1.49)
National Identity, <i>n</i> (%)	
Australian only	804 (79.06)
Australian and other	183 (17.99)
Other country only	30 (2.95)
Married, <i>n</i> (%)	
Single, never married	76 (7.41)
Divorced/Separated	147 (14.34)
Widowed	14 (1.37)
In a relationship, but not living together	39 (3.80)
De facto/Married	749 (73.07)
HAD-Anxiety, <i>M</i> (<i>SD</i>)	7.07 (3.91)
> anxiety cut-off, <i>n</i> (%)	425 (42.16)
HAD-Depression, <i>M</i> (<i>SD</i>)	3.78 (3.32)
> depression cut-off, <i>n</i> (%)	137 (13.58)
AUDIT, <i>M</i> (<i>SD</i>)	8.34 (5.99)
> Risky drinking cut-off, <i>n</i> (%)	566 (56.83)

Note. HAD = Hospital Anxiety and Depression, AUDIT = Alcohol Use Disorder Identification Test.

^aPercent of sample that fall within the different population percentile brackets for disposable household.

As can be seen in Table 8.3, a large majority of the sample had obtained a university degree and 87.45% reported an income above the median disposable household income in Australia. Additionally, close to a quarter of participants described themselves as religious and over half as non-religious. It should, however, be noted that the response items

for this question did not distinguish between non-practicing and practicing religious people: Thus, it is likely that participants classified as religious included both of these categories. Moreover, a majority of the participants reported that they identified as Australian only, closely matching the proportion of participants who were born in this country. Married/de facto was the most common marital status, followed by divorced/separated. Last, around half of participants scored above the cut-off for anxiety and risky drinking, while approximately one eighth of participants scored above the cut-off for depression.

To enable further bivariate and multivariate analysis, the response categories for the ordinal control variables Education and Income had to be collapsed due to low cell counts. The new response categories for Education were Primary school/high school versus University. For the variable Income, the first two response categories were collapsed ($\leq P10$ and $< P10-P20 = \leq P20$).

8.4.2.1 *Population comparisons*

Age and sex-specific population characteristics such as country of birth, marital status, educational level, and religiosity are available from central databases in Australia. However, as such demographic information is not, to the best knowledge of the author, available for alcohol consumers only, direct comparison to the general population of current middle-aged drinkers could not be made. However, characteristics of relevant samples used in previous research can be used to gain an approximate picture of the representativeness of the sample. In terms of SES, Table 8.3 shows that a majority of the currents sample had completed a university degree and had a disposable income exceeding the population median. It is, however, expected that a sample of middle-aged drinkers would have a higher income and educational attainment than the general population based on both their age and drinking status: Income tends to increase with age and peak in the later parts of adulthood and middle age (ABS, 2013). Moreover, research consistently shows that current drinkers are more likely to have higher income and educational attainment compared to those that

abstain from alcohol (see Section 7.3.1). Nonetheless, the level of education and income in the current participants must be considered high.

A relatively large proportion of participants in this research scored above the cut-off for anxiety and depression as measured by the HAD Anxiety and Depression subscales. Previous studies using the HAD scale in different populations has found fairly consistent mean scores for the two subscales: Depression mean scores between 3.3–4.7 and Anxiety mean scores between 3.9–6.4 have been reported in eight and nine European studies respectively (see Hinz & Brähler, 2011). Among these, mean scores by sex and age groups was reported in a Swedish and a German study. In the Swedish study, 624 participants were surveyed in 1993 among which women aged 40–49 and 50–59 years scored, on average, 3.67 and 4.45 on the Depression scale and 4.86 and 4.72 on the Anxiety scale, respectively (Lisspers et al., 1997). In the German study, two survey samples (collected in 1998 and 2009) were combined to form an approximately representative sample of the German population. Break-downs by age and sex showed that mean scores for Depression among women aged 41–50 and 51–60 years were 4.5 and 5.0 and Anxiety means scores were 5.1 and 5.4. Although these scores are not specific to alcohol consumers only, they show that while the Depression scores of the participants in the current research may not deviate substantially from the population, it is possible that the Anxiety scores were higher than those in the population.

8.4.3 Participant consumption patterns

To gain a picture of participants' consumption patterns, Question 1 and 2 from the AUDIT (measuring drinking frequency and typical consumption) were cross-tabulated (Table 8.4). The resulting breakdown of drinking frequency and quantity show that the largest proportion of women drank moderately, with 1–2 standard drinks being the most common consumption pattern. A typical consumption of 3–4 standard drinks was however reported by just over one third of the sample. Drinking frequency was high; approximately half of the

sample consuming alcohol four or more times per week and approximately a further quarter consuming alcohol 2–3 times a week.

Table 8.4. *Cross-tabulation of Participant's Typical Consumption Quantity and Consumption Frequency, n (%)*

Drinking frequency	Standard drinks				Total
	1–2	3–4	5–6	7+	
Up to 4 times/month	122 (12.06)	48 (4.75)	11 (0.55)	3 (0.30)	184 (18.20)
2–3 times/week	149 (14.74)	91 (9.00)	19 (1.90)	7 (0.69)	266 (26.32)
4 times/week +	227 (22.45)	222 (21.96)	73 (7.22)	39 (3.86)	561 (55.49)
Total	498 (49.26)	361 (35.71)	103 (10.19)	49 (4.85)	N = 1,011

Note. Percentage totals might not add up exactly due to rounding.

In addition, 12-month prevalence of short-term harmful consumption (> 40 g, assessed by a separate question) was reported by 79.82% of the Australian women.

8.4.3.1 *Population comparison*

Some data is available for the consumption patterns of current middle-aged women in Australia; however, this information is partial and in some instances dated. For instance, the consumption patterns of 13,606 middle-aged Australian women who took part in the Australian Longitudinal Study on Women's Health in 1996 have been published. Among these women 11,543 were current drinkers of whom 70.9% drank on up to 2 days/week, 12.4% drank 3–4 days/week, and 16.7% drank more often than 4 days/week. Although dated, this information nonetheless indicates that consumption frequency is greater in the current sample of Australian women; 29.1% of the women in the Australian Longitudinal Study on Women's Health drank alcohol 3 days/week or more often, while 55.5% of the current sample drank alcohol 4 times or more often/week.

Comparative data on the AUDIT is difficult to find, not only due to the specific study population (middle-aged women who are current drinkers), but also because the current research used a stringent cut-off to identify risky drinkers (cut-off = 6): Many studies use a cut-off score of 8, despite evidence that the optimal cut-off is lower for women (Aalto et al.,

2006). However, one Finish study (Von der Pahlen et al., 2008) has used a cut-off score of 6 to measure risky drinking in a female population sample. In this study, 35.9% participants aged 18–49 years (drawn from a sample of twins and siblings) were identified as risky alcohol consumers. In an Australian study, a cut-off score of 8 resulted in 8% of women (aged 15–85+ years) being identified as risky drinkers (Fleming, 1996). In a sample of 1,230 Norwegian participants of different ages, a mean AUDIT score of 3.97 was found for women aged 45–55 years and 2.68 for women aged 56–65 years (Mathiesen et al., 2013). In a Finish study conducted on 40-year old women, a mean AUDIT score of 3.6 ($SD = 3.2$) was found (Aalto et al., 2006). Overall, the proportion of women with risky consumption patterns in the above studies was lower than in the current research. It must, however, be noted that AUDIT scores in these studies would most likely have been higher had these samples comprised of current drinkers only. Nonetheless, over half of the current sample was classified as risky drinkers (56.83%), which is a high proportion.

CHAPTER 9 Exploratory Factor Analysis, Scale Reliability, and Study Hypotheses

This chapter describes the EFA that was conducted on the items developed from the qualitative study findings. The purpose of this analysis was to develop a measure that captured the use-value and symbolic value of alcohol, outcome beliefs, and alcohol expectancies. Together with extant measures of alcohol norms, gender roles, and alcohol abuse self-stigma, the constructs derived from the factor analysis constituted the IVs of the current research. As the factor analysis finalised the predictor variables that were used to measure middle-aged women's subjective alcohol culture, this chapter also contains the formal hypotheses regarding the relationship between those variables and the DV.

9.1 Choice of Factor Analysis Technique

Principal component analysis has been identified as an ideally suited technique for scale development (Tabachnick & Fidell, 2007) and was therefore chosen to conduct the EFA. All rotation of factors was conducted using Direct Oblimin as it was expected that the underlying factors would be correlated.

9.1.1 Sample Adequacy and Factorability

Before the factor analysis, sampling adequacy and suitability of the data for reduction was assessed. To evaluate sampling adequacy, the sample size was first considered. With listwise exclusion of variables with missing values, the sample size for analysis was $N = 689$, which is more than adequate for factor analysis. In addition to the suitable (or excellent) sample size, the Kaiser–Meyer–Olkin test produced a value of .92, which according to Kaiser (1974, p. 35) is considered “marvellous” for sampling adequacy. The suitability of the data for reduction (factorability) was initially assessed through an inspection of the variable correlation matrix. The overall strength of correlations between items was fairly good, with 25% of all correlations being equal to or larger than .3. Four items

with no correlations equal to or above .3 were identified and removed from further analysis. The anti-image matrix was similarly inspected, showing no correlation between items below the recommended cut-off of .5²⁰ (Field, 2013). In addition, Bartlett's test of sphericity was significant at $p < .001$ indicating that, overall, the correlations between items were significantly different from zero.

9.1.2 Factor Extraction

Stevens (2012) has shown that sample size should be taken into account when determining the size at which factor loadings should be considered significant in factor analysis. Based on his recommendations for a sample size of 600, it was decided to only retain items with factor loadings of .21 or greater for further analysis. To determine the final factor structure, Eigenvalues, variance explained, and Scree plots were inspected and a Parallel analysis²¹ was conducted. The initial principal component analysis produced 16 factors with Eigenvalues above 1, accounting for 69.83% of variance in items. However, in this solution, only seven factors individually explained more than 2% of variance. An inspection of the Scree plot added little extra information. Although an inflexion point was identified, indicating the retention of four factors, this solution appeared to force items with little shared meaning together. Last, the parallel analysis showed that 11 factors in the current dataset had Eigenvalues that exceeded the Eigenvalues produced in a randomly generated dataset of the same size. Although not conclusive, the information gained from these tests indicate that a satisfactory factor solution would likely contain 10–16 factors. As no decisive number of factors was gained through the above tests (although an indicative range

²⁰ The lowest anti image correlation in the data set was .70.

²¹ Monte Carlo PCA for parallel analysis, developed by Marley Watkins. Available from <http://edpsychassociates.com/Watkins3.html>

was identified), seven principal component analyses with forced selection of 10–16 factors were run and each solution evaluated separately. Of these, the solution with the lowest number of cross-loadings and the greatest conceptual meaningfulness was selected, resulting in the retention of 13 factors²². The items and factor loadings for the final solution is shown in Table 9.1. In total, this solution accounted for 70.96% of the variance.

²² Items with cross-loading of $\geq .3$ were removed and the analysis was re-run without these items

Table 9.1. *Factor Items and Factor Loadings, N = 689*

Factor items	Factor loadings												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Alcohol is something you drink to numb emotional pain	.87	.01	.04	-.02	-.01	.01	-.03	-.03	-.09	.02	.03	-.05	-.08
Alcohol is something you drink to reduce anxiety	.77	.01	-.02	-.13	-.05	-.08	-.08	.00	.08	-.02	.00	.01	.05
Alcohol is something you drink if you feel sad or depressed	.75	.01	.01	.04	.03	.01	.18	-.07	-.03	-.02	-.01	-.05	-.11
Alcohol is something you drink if you are stressed	.70	.03	-.01	.15	.03	.00	.20	.02	.04	-.02	.06	-.16	-.11
Alcohol is something you drink to feel less shy	.63	-.01	.00	-.22	-.07	-.16	-.04	.08	.25	-.01	-.06	.14	.18
Alcohol is something you drink to feel less lonely	.63	.01	.00	-.19	-.06	.00	.05	-.14	-.08	-.04	-.04	-.09	.03
Alcohol is something you drink to become more self-confident in social situations	.62	-.01	.00	-.23	-.09	-.13	-.07	.08	.29	.00	-.05	.12	.15
Alcohol is something you drink if you have had a stressful day	.61	.03	.04	.08	.07	.00	.18	.06	.07	-.05	.08	-.20	-.10
Alcohol is something you drink to escape the routine of everyday life	.55	.00	.01	-.07	.02	.05	.16	-.12	.06	.00	-.05	-.18	-.15
Drinking alcohol makes people become aggressive	-.01	.96	.00	-.03	-.01	.00	.03	.03	-.04	-.01	.00	.01	.01
Drinking alcohol makes people become hostile	-.02	.95	.02	-.04	-.02	-.01	.02	.00	-.04	.00	-.01	.00	-.02
Drinking alcohol makes people fight more	-.02	.95	.00	-.03	-.01	.00	.01	.03	-.04	.01	.01	.00	-.03
Drinking alcohol makes people lose their tempers more quickly	.00	.92	.00	.00	-.01	.01	.01	-.01	-.01	-.02	.01	.01	-.01
Drinking alcohol makes people do dangerous things	.04	.85	.01	.02	.03	-.05	-.01	.07	.05	-.01	.01	.05	-.01
Drinking alcohol makes people become angry and on edge	.00	.83	-.03	-.02	.01	.02	-.03	-.04	-.06	.04	.06	.01	-.04
Drinking alcohol makes people less able to control themselves	.02	.71	.01	.07	.05	.01	-.02	-.03	.12	-.05	-.06	.03	.14
I like to have a drink in relaxing surroundings	-.06	.03	.94	-.03	-.04	.00	-.02	-.04	.05	.01	.03	.03	.00
I like to have a drink in a comfortable environment	-.04	.01	.93	-.01	-.02	.00	-.02	-.05	.09	.02	.03	.04	.00
I like to have my drink in a peaceful environment	-.01	.01	.85	-.04	.05	.04	.00	.03	-.08	-.01	-.06	-.05	.00
I often engage in other pleasurable activities, such as reading a book or listening to music, while I drink	.16	-.06	.48	.01	.01	.00	.08	.26	-.06	-.16	.01	-.07	-.01

Note. Primary factor loadings for each item are in boldface.

Table 9.1. *Factor Items and Factor Loadings, N = 689 (Continued)*

Factor items	Factor loadings												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Alcohol is something you drink to create warmth or closeness with others	-.03	.01	.05	-.83	.01	.00	.11	-.02	.07	.01	.00	-.04	-.05
Alcohol is something you drink to feel romantic with someone	.06	.03	.02	-.81	.05	.03	.03	-.03	-.05	-.05	.03	-.06	-.01
Alcohol is something you drink to create a cosy atmosphere with others	.00	.02	.01	-.75	.05	.01	.06	.00	.09	-.05	.04	-.07	.06
Alcohol is something you drink to nurture friendships	-.06	-.02	.05	-.74	.02	-.01	.14	-.05	.13	-.04	.01	.00	-.11
Alcohol is something you drink to create intimacy with other people	.26	.04	-.02	-.72	.00	-.05	.02	.04	.03	-.01	.02	.02	.05
Drinking to become purposefully intoxicated is a sign of immaturity	-.05	.06	.01	-.04	.87	-.02	-.02	.01	-.01	.02	.04	.03	.03
Drinking to become purposefully intoxicated is a sign of inexperience	-.10	.00	.00	-.07	.80	-.15	-.06	.06	.01	.06	.06	-.03	-.04
Drinking to become purposefully intoxicated is shameful for women my age	.11	.00	-.02	.01	.76	.07	.02	-.08	-.01	-.06	-.09	.04	.08
Drinking to become purposefully intoxicated is part of growing up	.07	.02	-.03	.05	.03	-.84	.01	-.02	.03	-.05	-.01	-.08	-.03
Drinking to become purposefully intoxicated is a rite of passage for young people	-.05	.01	-.01	-.01	.02	-.80	.08	-.04	.00	-.02	.01	-.08	-.03
Drinking to become purposefully intoxicated is part of being young	.03	.02	-.01	.00	.06	-.78	-.01	-.02	.02	-.07	-.09	-.03	-.05
Alcohol is something you drink if you want to treat yourself	.01	.02	.04	-.03	.03	.02	.88	.01	-.02	-.01	-.05	-.02	.06
Alcohol is something you drink if you want to indulge yourself	.02	.04	.04	-.01	-.02	-.01	.83	-.01	.03	-.05	-.04	-.03	.06
Alcohol is something you drink if you want to reward yourself	.05	-.03	-.02	-.07	-.02	-.03	.83	-.01	.01	.00	-.07	-.10	.04
Alcohol is something you drink to enjoy a beautiful summers' day	-.06	-.04	.03	-.22	.03	-.02	.55	-.02	.05	.00	.12	.02	-.08
Alcohol is something you drink if you want something refreshing on a hot day	.01	.01	-.09	-.05	-.07	-.11	.50	.01	.06	-.05	.13	.10	-.07
To drink during the work week is a sign of dependency	.02	-.03	-.01	-.01	.03	-.02	.02	-.89	-.01	-.05	.00	.00	.00
To drink when you are alone is a sign of dependency	-.01	.00	-.05	-.05	.02	-.05	-.01	-.89	.01	-.04	.01	.05	.02
It is easy to become dependent on alcohol	.13	.26	.15	.09	-.02	.00	.02	-.36	.11	.12	-.02	-.19	.03

Note. Primary factor loadings for each item are in bolded.

Table 9.1. *Factor Items and Factor Loadings, N = 689 (Continued)*

Factor items	Factor loadings												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Alcohol is something you drink to be sociable	-.10	.01	.01	.06	.02	.00	.05	-.02	.80	-.03	-.01	-.03	.04
Alcohol is something you drink to enjoy a party	.05	.02	-.01	-.10	-.05	-.05	.00	-.02	.75	-.06	.07	-.04	-.03
Alcohol is something you drink to have fun with your friends and family	-.02	-.05	.04	-.14	.00	-.03	-.05	.00	.73	-.02	.05	-.07	-.08
Alcohol is something you drink to make social gatherings more enjoyable	.05	-.02	.05	-.13	-.04	-.04	.01	-.02	.71	-.06	.01	-.06	-.07
Alcohol is something you drink so that you can be a part of a social situation	.15	.01	-.04	-.06	.01	-.08	.13	.02	.61	-.07	-.02	.12	.04
Toasting someone with a drink of alcohol is a way to show them your appreciation	-.05	.02	-.01	.02	-.01	-.01	.01	-.02	-.04	-.87	-.01	-.04	.05
To give a host alcohol is a sign of appreciation of their hospitality	-.02	.02	.01	.04	-.01	-.03	-.02	-.01	.03	-.84	.05	.06	.02
To have a few drinks with someone is a sign of friendship	.00	-.02	.06	-.10	.01	-.06	.01	-.03	.05	-.73	.04	.01	-.08
Alcohol is something you drink to enhance the taste of fine foods	.07	.01	.00	-.06	.02	.09	-.08	-.08	.03	-.10	.84	.05	-.02
Alcohol is an important complement to fine food	-.02	.01	-.06	-.02	.01	.08	.01	.03	.17	-.03	.71	-.12	-.08
Alcohol is above all a taste experience	-.03	.02	.06	-.01	-.02	-.05	-.01	.02	-.16	.02	.69	-.04	.16
Alcohol is something you drink because it tastes good	.04	-.04	.07	.06	.03	-.09	.26	.15	.03	-.02	.47	.06	.01
To have a drink means that the work week is over	-.07	-.05	.06	-.09	-.01	-.17	-.01	-.02	.05	.03	.08	-.79	.07
To have a drink means that the work day is over	.11	-.04	.05	-.01	-.03	-.14	.02	.07	.03	-.07	.06	-.74	.07
To have a drink means that you can let go of your responsibilities for the day	.14	-.05	.05	-.13	-.03	-.08	.06	-.12	-.04	-.06	-.03	-.56	-.02
Alcohol is something you drink to unwind at the end of the week	.17	-.06	.11	.07	.07	-.03	.23	.11	.21	-.03	.12	-.38	-.04
To have a drink can make everyday situations feel less dull	.25	.01	-.05	-.10	.00	.17	.13	-.04	.19	-.06	-.12	-.38	-.11
To have a drink while you are cooking can make it feel less like a chore	.16	.01	-.10	-.01	.06	.20	.09	.04	.22	-.15	-.08	-.36	-.05
Drinking too much ruins the social experience	-.03	.01	.06	.08	.08	.10	-.02	-.03	-.05	-.11	.02	-.06	.76
I stop enjoying the taste of alcohol if I have too much of it	-.12	.10	-.10	-.12	-.03	.03	-.01	.06	.00	.05	.00	-.14	.75
You cannot make meaningful connections with other people if you drink to intoxication	.10	-.06	.08	.13	.14	.00	.10	-.10	.01	.08	.06	.15	.58

Note. Primary factor loadings for each item are in bolded.

EFA is often used to reduce the length of surveys and as a technique to uncover a few underlying dimensions (factors). Typically, a 2–4 factors are retained. The advantage of retaining a restricted number of factors lies in the ability to conduct parsimonious analyses using a reduced number of factors. Thus, by comparison, a large number of factors were retained in the current study. While a 13-factor solution was supported by the tests described above (indicating a factor solution of 10–16 factors), it was also motivated by two additional reasons. First, the current research measured a broad range of diverse alcohol beliefs, and as such it can be expected that the final factor solution would reflect this diversity. In this sense, the retention of 13 factors can be described as in line with stated purpose of EFA: the grouping of items as based on their relationship with underlying constructs (Polit & Beck, 2008). Second, forced factor solutions producing a lower number of factors (i.e., 2–4) were examined and found to make little theoretical sense (see Appendix G). For instance, a four-factor solution grouped together items relating to alcohol and age (“Drinking to become purposefully intoxicated is a rite of passage for young people”), physical enjoyment (“Alcohol is something you drink if you want something refreshing on a hot day”), and sociability (“Alcohol is something you drink to enjoy a party”). As such, the retention of a relatively large number of factors meant that a theoretically sensitive analysis could be conducted, whereby different underlying constructs were differentiated rather than grouped into larger less informative constellations.

9.1.2.1. Interpretation of Factors

The first factor contained items describing alcohol as a means to escape from negative emotions and states such as depression, stress, and boredom (e.g., “Alcohol is something you drink if you feel sad or depressed” and “Alcohol is something you drink to escape the routine of everyday life”). This factor was labelled Self-medication (see Table 9.2

for an overview of factors and their interpretation). The second factor contained items that measured alcohol expectancies. Specifically, the items related to aggression, loss of control, and risk taking as a result of alcohol consumption (e.g., "Drinking alcohol makes people become aggressive"), which was captured in the factor name: Loss of Control and Aggression.

Table 9.2. *Summary of Factor Interpretations*

Factor name	Description
1. Self-medication	Alcohol is a means to reduce negative emotions such as stress, loneliness, and shyness
2. Loss of Control and Aggression	Alcohol makes people lose control and become aggressive
3. Relaxation and Pleasure	Alcohol is associated with relaxation and pleasure
4. Interpersonal Closeness	Alcohol is used to create interpersonal closeness, romance, and to nurture friendships
5. Unschooled Drinking	Intoxication is a sign of immaturity and is shameful for middle-aged women
6. Coming of Age	Purposeful intoxication is a rite of passage for young people
7. Self-indulgence	Alcohol is a reward, a treat, and a form of self-indulgence
8. Dependency	Describes the signs and danger of dependency
9. Social Enhancement	Alcohol is used to participate in and enhance social situations
10. Hospitality and Friendship	Alcohol symbolises friendship and hospitality
11. Food and Taste	Alcohol consumption is a taste experience
12. Work and Leisure	Alcohol delineate work and responsibilities from rest and enjoyment
13. De-emphasis of Intoxication	Intoxication ruins the social and taste experience associated with drinking

The third factor contained items measuring the idea of alcohol as a relaxing and pleasurable activity (e.g., "I like to have a drink in relaxing surroundings") and was thus named Relaxation and Pleasure. Factor four consisted of items measuring platonic and romantic closeness with others (e.g., "Alcohol is something you drink to create warmth or closeness with others"); this factor was labelled Interpersonal Closeness. Factor five and six both captured ideas around alcohol and age; factor five included items describing intoxication as a part of youth (e.g.,

“Drinking to become purposefully intoxicated is a rite of passage for young people”) and factor six contained items describing intoxication as a sign of immaturity and as shameful for middle-aged women (“Drinking to become purposefully intoxicated is shameful for women my age”). These factors were labelled Coming of Age and Unschooled Drinking. Factor seven contained items that described alcohol as a reward, a treat, and as an indulgence (e.g., “Alcohol is something you drink if you want to indulge yourself”) and was labelled Self-indulgence. Factor eight contained items describing the signs and ease of developing dependency (e.g., “To drink during the work week is a sign of dependency”) and as such was named Dependency. The ninth factor was labelled Social Enhancement as it contained items that described alcohol as a means to participate in and increase the enjoyment of social situations (e.g., “Alcohol is something you drink to enjoy a party”). Factor 10 contained items describing alcohol's role in the symbolic expression of one's appreciation of others (e.g., “To give a host alcohol is a sign of appreciation of their hospitality” and “To have a few drinks with someone is a sign of friendship”). This factor was named Friendship and Hospitality. Factor 11 captured the idea of alcohol as a taste experience and a complement to food (e.g., “Alcohol is something you drink to enhance the taste of fine foods”) and as such was named Food and Taste. Factor 12 contained items describing alcohol as a delineator between work and rest but also as a means to escape the dullness of responsibilities and chores (e.g., “To have a drink means that the work week is over” and “To have a drink while you are cooking can make it feel less like a chore”). As such, this factor was interpreted as more broadly measuring the idea of alcohol as signalling the transition from work to rest as well as enjoyment. This factor was thus named Work and Leisure. Last, factor 13 included items that measured the negative impact of intoxication on taste and on social experiences (e.g., “You cannot make meaningful connections with other people if you drink to intoxication”). This last factor was named De-emphasis of Intoxication. Together these factors made up a new scale which was named the

Role and Meaning of Alcohol Questionnaire–Mature-aged Women (RMAQ–MW). Higher scores on this measure indicate agreement with the measured alcohol beliefs.

Overall, the factor structure that was produced by the EFA showed high fidelity with the cultural categories developed from the qualitative studies (see Appendix H), further validating the findings from these studies. Almost all of the new factors contained some or most of the items from a single category (e.g., Pleasure and relaxation and De-emphasis of Intoxication). However, as mentioned items measuring the link between age and alcohol gave rise to two separate factors. The only category from the qualitative studies that was not represented in the final factor solution was the idea of alcohol as transforming situations from mundane to enjoyable or celebratory; items from this category loaded (in a theoretically meaningful way) on either Work and Leisure or Self-medication factor. It should also be noted that neither of the two new factors that measured the dangers associated with alcohol (Dependence and Loss of Control and Aggression) contained items describing the need to protect children from the alcohol use of adults.

9.2 Scale Reliability

Cronbach alpha was calculated for the newly developed as well as the established scales included in Study 3 (Table 9.3). Two subscales from newly developed RMAQ–WM, Dependency and De-emphasis of Intoxication produced alpha levels below the traditionally accepted level of .7 (Nunnally & Bernstein, 1994). Removing items from these scales may have improved alpha levels. However, as both scales only retained three items each, this was deemed inappropriate. The remaining RMAQ–MW subscales performed well, however, achieving acceptable or excellent alpha levels. In addition to this, the SRQ GT Actual and the EPQR–S produced unacceptable alpha levels. All scales with unacceptable reliability were excluded from further analysis.

Table 9.3. *Scale Information and Reliability Statistics*

	No items	Range	Cronbach alpha
Independent variables			
<i>RMAQ-MW</i>			
Self-medication	9	9–45	.93
Loss of Control and Aggression	7	7–35	.95
Relaxation and Pleasure	4	4–20	.83
Interpersonal Closeness	5	5–25	.92
Unschooling Drinking	3	3–15	.75
Coming of Age	3	3–15	.82
Self-indulgence	5	5–25	.85
Dependency	3	3–15	.69
Social Enhancement	5	5–25	.87
Hospitality and Friendship	3	3–15	.75
Food and Taste	4	4–20	.70
Work and Leisure	6	6–30	.82
De-emphasis of Intoxication	3	3–15	.58
<i>Attitudes toward women's roles</i>			
SRQ GT Actual	5	5–25	.56
SRQ GT Perceived	5	5–25	.82
SRQ GL Actual	8	8–40	.76
SRQ GL Perceived	8	8–40	.83
<i>Alcohol abuse stigma</i>			
PPLQ Self-stigma	9	9–45	.83
Control variables			
HAD-Anxiety	7	0–21	.85
HAD-Depression	7	0–21	.81
EPQR-S	12	0–12	.66
Dependent variable			
AUDIT	10	0–40	.82

Note. RMAQ-MW = Role and Meaning of Alcohol Questionnaire-Mature-aged Women, PPLQ = Perceptions of Problems in Living Questionnaire, SRQ = Social Roles Questionnaire, HAD = Hospital. Anxiety and Depression, EPQR-S = Eysenck Personality Questionnaire Revised-Short-form, AUDIT = Alcohol Use Disorder Identification Test.

9.3 Formal Hypotheses

The results of the EFA finalised the variables of Study 3, enabling hypotheses regarding the relationship between these variables and risky drinking to be postulated. Given the exclusion of the Swedish sample, the following Research Questions could be answered in Study 3: *What alcohol beliefs do Australian middle-aged women share?* and *Do Australian middle-aged women's alcohol beliefs predict increased likelihood of risky drinking?* The formal hypotheses for each of these Research Questions are presented below. Unless otherwise stated, all hypotheses are based on the findings of the qualitative studies.

9.3.1 RQ1: What alcohol beliefs do Australian middle-aged women share?

RQ1 related to the identification of alcohol beliefs that were sufficiently shared among women. In this research "sufficient sharedness" was defined as majority-endorsement of the items or scales that measured each included alcohol belief (see section 10.3 for further details). The following hypotheses were made:

9.3.1.1 *Hypothesis 1: the RMAQ–MW subscales*

It was hypothesised that majority-endorsement would be found for all the included RMAQ–MW subscales. That is, the women would endorse the idea of alcohol as increasing sociability and fun as well as interpersonal closeness (Social Enhancement and Interpersonal Closeness), as a symbol of friendship and appreciation (Hospitality and friendship), as means to reduce negative emotions (Self-medication), as a potentially dangerous drug (Loss of Control and Aggression) as a taste and food product (Food and Taste), as a pleasurable and indulgent activity (Pleasure and Relaxation and Self-indulgence), as a delineator against work (Work and Leisure), and for the two subscales measuring the link between age and alcohol (Unschooling Drinking and Coming of Age).

9.3.1.2 Hypothesis 2: attitudes toward women's roles

It was hypothesised that a majority of women would endorse the SRQ scales that measure perceived traditional gender role attitudes (SRQ GT Perceived and SRQ GL Perceived). Exploratory hypotheses were made regarding the endorsement of the included subscale that measure personally held traditional attitudes (SRQ GT Actual).

9.3.1.3 Hypothesis 3: HED injunctive norms

It was hypothesised that majority-endorsement would be found for the items measuring personally held disapproval of HED (HED Actual Injunctive) and perceived societal disapproval of HED (HED Perceived Injunctive) among same-aged women.

9.3.1.4 Hypothesis 4: MFD injunctive norms

It was hypothesised that majority-endorsement would *not* be found among the women on the items measuring personally held disapproval of MFD (MFD Actual Injunctive) and perceived societal disapproval of MFD (MFD Perceived Injunctive) among same-aged women.

7.3.1.5 Hypothesis 5: descriptive norms

Exploratory hypotheses were formulated for perceived drinking frequency and perceived HED frequency (i.e., HED Frequency Descriptive and Drinking Frequency Descriptive) of same-aged women.

9.3.1.6 Hypothesis 6: alcohol abuse self-stigma

It was hypothesised that majority-endorsement would be found for the PPLQ Self-stigma subscale.

9.3.2 RQ2: Do Australian middle-aged women's alcohol beliefs predict increased likelihood of risky drinking?

To address the second research question, multivariate analyses were conducted to assess the relationship between the included items or scales and the DV (risky drinking).

9.3.2.1 Hypothesis 7: the RMAQ-MW subscales

It was hypothesised that higher scores on those subscales measuring negative aspect of alcohol use (Loss of Control and Aggression, Unschooled Drinking, and Coming of Age) would be associated with a decreased the likelihood of risky drinking. Based on previous literature, it was hypothesised that Self-medication would be associated with an increased likelihood of risky drinking. Exploratory hypotheses were posed for the influence of the subscales Relaxation and Pleasure, Interpersonal Closeness, Self-indulgence, Social Enhancement, Hospitality and Friendship, Food and Taste, and Work and Leisure on the DV.

9.3.2.2 Hypothesis 8: attitudes toward women's roles

It was hypothesised that higher scores on the SRQ subscales would be associated with a decreased likelihood of risky drinking.

9.3.2.3 Hypothesis 9: HED and MFD injunctive norms

It was hypothesised that higher scores on HED Actual Injunctive and HED Perceived Injunctive as well as MFD Actual Injunctive and MFD Perceived Injunctive would be associated with a decreased likelihood of risky drinking.

9.3.2.4 Hypothesis 10: descriptive norms

Based on previous literature (see Section 3.3.3), it was hypothesised that higher scores on HED Frequency Descriptive (i.e., greater perceived frequency) and Drinking Frequency

Descriptive (i.e., greater perceived drinking frequency) among same-aged women would be associated with an increased likelihood of risky drinking.

9.3.2.5 Hypothesis 11: alcohol abuse self-stigma

It was hypothesised that the PPLQ Self-stigma subscale would be associated with a decreased likelihood of risky drinking. A summary of all study hypotheses is given in Table 9.4.

Table 9.4. Overview of Study Hypotheses

Independent variables	Majority-endorsement (Research question 1)	Relationship with Risky drinking (Research question 3)
<i>RMAQ–MW subscales</i>		
Self-medication	Yes	↑
Loss of Control and Aggression	Yes	↓
Relaxation and Pleasure	Yes	Expl
Interpersonal Closeness	Yes	Expl
Unschooling Drinking	Yes	↓
Coming of Age	Yes	↓
Self-indulgence	Yes	Expl
Social Enhancement	Yes	Expl
Hospitality and Friendship	Yes	Expl
Food and Taste	Yes	Expl
Work and Leisure	Yes	Expl
<i>Attitudes toward women's roles</i>		
SRQ GT Perceived	Yes	↓
SRQ GL Actual	Expl	↓
SRQ GL Perceived	Yes	↓
<i>Norms¹</i>		
HED Actual Injunctive	Yes	↓
HED Perceived Injunctive	Yes	↓
HED Frequency Descriptive	Expl	↓
MFD Actual Injunctive	No	↓
MFD Perceived Injunctive	No	↓
Drinking Frequency Descriptive	Expl	↓
<i>Alcohol abuse stigma</i>		
PPLQ Self-stigma	Yes	↓

Note. RMAQ–MW = Role and Meaning of Alcohol Questionnaire–Mature-aged Women, SRQ = Social Roles Questionnaire, HED = heavy episodic drinking, MFD = moderate and frequent drinking, PPLQ = Perceptions of Problems in Living Questionnaire, Expl = Exploratory hypothesis, ↑ = increased likelihood of risky drinking ↓ = decreased likelihood of risky drinking.

¹For injunctive norms higher scores indicate perceived unacceptability, for descriptive norms higher scores indicate lower perceived prevalence and frequency.

CHAPTER 10 Results of Study 3

In the current chapter, the following two research questions will be formally tested through a series of quantitative analysis: *What alcohol beliefs do Australian middle-aged women share?* and *Do Australian middle-aged women's alcohol beliefs influence risky alcohol consumption?* These two questions are dealt with in turn; the analyses that were conducted to test the first research question is presented first, followed by the analyses that tested the second question.

10.1 Missing Values

The data set contained a number of missing values, however, a missing data analysis revealed no systematic patterns among these values. As the sample size was large, no imputation of missing data was performed. Instead, participants were omitted from analysis on variables where they had missing values.

10.2 Analysis Overview

Several analyses were employed to answer the two research questions of Study 3; mean agreement with alcohol beliefs was calculated to test the first research question and bivariate association as well as sequential logistic regression analyses (to adjust for a non-normal distribution of the DV) were used to test the second research question. In terms of the bivariate calculations, the dataset contained discrete dichotomous, continuous dichotomous, ordinal, and continuous variables. As such, a number of tests of bivariate association were used for the different combinations of variables (Figure 10.1). Given the relatively large number of calculations (see Table 10.3), an adjusted p value of $< .01$ was adopted to identify significant associations.

	Discrete dichotomy	Continuous dichotomy	Ordinal	Interval
Discrete dichotomy	Phi	Phi	Cramér's V	Point-biserial correlation
Continuous dichotomy		Kendal tau-b	Kendal tau-b	Spearman's rho
Ordinal			Kendal tau-b	Spearman's rho
Interval				Pearson's correlations coefficient

Figure 10.1. Overview of analyses used to assess bivariate association between study variables.

10.3. RQ1: What Alcohol Beliefs do Middle-aged Australian Women Share?

Given the current research's focus on alcohol culture, the level of agreement with the beliefs under investigation is of theoretical importance: For any belief to be cultural in nature, it needs to be sufficiently shared within a social group. For the purpose of this research, "sufficient sharedness" was calculated through two steps. For alcohol beliefs that were measured by one item, a score above the neutral mid-point (3; all items were measured by scales ranging 1–5) was taken to indicate agreement with or acceptability of that belief. For those beliefs that were measured by a scale, the cut-off (> 3) was applied to the average scale score. Second, the proportion of participants that scored above the cut-off was calculated. Alcohol beliefs were classified as sufficiently shared if the majority ($> 50\%$) of participants scoring above the cut-off. Table 10.1 presents these statistics. The proportion of the sample that scored 4 or higher is also shown in this table to further illustrate the sample distribution.

Table 10.1. *Proportion of the Sample With Item or Average Scale Scores Above 3*

Independent variables	% of sample with M > 3	% of sample with M ≥ 4
<i>RMAQ–MW subscales</i>		
Self-medication	50.58	20.86
Loss of Control and Aggression	73.52	38.29
Relaxation and Pleasure	89.53	68.18
Interpersonal Closeness	25.00	10.02
Unschooling Drinking	52.40	30.85
Coming of Age	42.79	21.98
Self-indulgence	53.12	21.80
Social Enhancement	68.08	34.24
Hospitality and Friendship	67.06	39.98
Food and Taste	74.75	44.95
Work and Leisure	67.47	31.63
<i>Attitudes toward women's roles</i>		
SRQ GT Perceived	24.03	3.25
SRQ GL Actual	9.12	1.68
SRQ GL Perceived	60.69	14.55
<i>Norms¹</i>		
HED Actual Injunctive	78.99	48.94
HED Perceived Injunctive	80.88	50.26
MFD Actual Injunctive	47.19	27.39
MFD Perceived Injunctive	41.31	17.69
<i>Alcohol abuse stigma</i>		
PPLQ Self-stigma	82.35	41.28

Note. RMAQ–MW = Role and Meaning of Alcohol Questionnaire–Mature-aged Women, SRQ = Social Roles Questionnaire, HED = heavy episodic drinking, MFD = Moderate and Frequent drinking, PPLQ = Perceptions of Problems in Living Questionnaire.

Agreement in ≥ 50% of the sample is in boldface.

¹% shows the proportion of participants that indicated that these drinking patterns are unacceptable.

As can be seen, mean agreement above 50% was found for all the RMAQ–MW subscales with the exception of Interpersonal Closeness and Coming of Age. In terms of norms, the majority of participant rejected the notion that MFD consumption among middle-aged women was unacceptable, and believed that others shared this view. In fact, the perceived disapproval of others toward this consumption pattern was slightly lower than the personally

held disapproval. However, a large majority of women reported a personally held and perceived societal disapproval toward HED and, moreover, believed that alcohol abuse would be stigmatic for them. Last, the descriptive data shows that for actual and perceived traditional attitudes toward women's roles, mean agreement only exceeded 50% for the SRQ GL Perceived subscale. Overall, the results for the SRQ indicated that perceived gender role attitudes were more traditional than personally held gender role attitudes.

In addition to the injunctive MFD and HED norms displayed in Table 10.1, the women were also asked to estimate the drinking frequency and HED frequency among typical same-aged women (i.e., perceived descriptive norms). These items capture perceived consumption patterns rather than beliefs and value judgments regarding alcohol and drinking per se. As such, estimation of mean agreement (i.e., level of sharedness) is not an appropriate measure for these perceptions. Rather, these measures gave an indication of how accurately participants estimated the drinking patterns of women their age. In Table 10.2 the most frequent drinking patterns in the population of middle-aged women in Australia is presented and contrasted with perceived consumption patterns.

Table 10.2. *Overview Actual and Perceived Population Consumption Patterns*

Actual population consumption patterns (women, 50–59 years) ¹		Perceived consumption patterns of typical same-aged women	
Drinking frequency	Most common (✓)	Perceived drinking frequency	%
Never		Never	0.00
Less than weekly		Up to 4 times/month	19.32
Weekly	✓	2–3 times/week	56.18
Daily		4 times/week or more	24.55
HED, ≥ 50 g ethanol		HED, ≥ 50 g ethanol	
Never	✓	Never	3.58
Yearly		Less than monthly	39.50
Monthly		Monthly	36.82
Weekly		Weekly	18.81
Every day/most days		Daily/almost daily	1.29

Note. The proportions of participants that have correctly estimated the most common population consumption pattern are in boldface.

¹The response options or the age groupings used by the comparison population survey (AIHW, 2014) are not directly comparable the response alternatives used in this research.

As can be seen from this table, a majority of participants correctly identified the most common drinking frequency among approximately same-aged women. However, few the participants correctly identified *Never* as the most common occurrence of HED.

In summary, a majority of the participants were in agreement with nine of the 11 included RMAQ–MW constructs. A large majority of participants disapproved of HED among same-aged women, believed that this is the prevailing attitude in society at large, and felt that they would experience self-stigma if they suffered from abusive alcohol use. The majority of the women did, however, reject the idea that MFD consumption patterns are unacceptable and believed other also shared this view. The participants also believed that society at large ascribe different characteristics and roles to men and women. In terms of descriptive drinking norms, just over half of the participants identified the most common drinking frequency rate among women their age, but participant overestimated the prevalence of HED.

10.4 Do Australian Middle-aged Women's Alcohol Beliefs Predict Increased Likelihood of Risky Drinking?

10.4.1 Bivariate analyses

The results of the bivariate analyses are displayed in Table 10.3. As can be seen from this table, Education, HAD-Anxiety, and HAD Depression were the only control variables that were significantly associated with AUDIT scores. However, all norm variables, with the exception of Descriptive Drinking Frequency, and all RMAQ-RM subscales, with the exception of Aggression and Loss of Control and Food and Taste, were significantly associated with the DV. No significant associations with AUDIT were found for the SRQ subscales and the PPLQ Self-stigma scale.

Table 10.3. *Bivariate Relationships Between Study Variables*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Education ^{1(a)}	—													
2. Income ^{2(b)}	.12**	—												
3. Religious ^{3(c)}	.04	-.06	—											
4. National identity ^{4(c)}	.01	.03	-.01	—										
5. Marital status ^{5(c)}	.06	.33**	-.09**	.03	—									
6. HAD-Anxiety	-.08*	-.12**	-.01	.02	-.04	—								
7. HAD Depression	-.12**	-.16**	.01	.02	-.08	.63**	—							
8. HED Actual Injunctive	.09**	.06	-.12**	.02	.13**	-.05	-.06	—						
9. HED Perceived Injunctive	.01	.01	.02	-.14**	.01	.09**	.08	-.17**	—					
10. HED Frequency Descriptive ^b	.06	.03	.10**	-.02	.02	-.00	.00	-.12**	-.16**	—				
11. MFD Actual Injunctive	.04	-.03	-.02	.00	.06	-.01	-.01	-.37**	-.12**	-.04	—			
12. MFD Perceived Injunctive	-.04	-.02	.05	-.08	-.01	.10**	-.10**	.11**	-.38**	-.11	.25**	—		
13. Drinking Frequency Descriptive ^b	-.02	.01	-.03	.03	-.02	.01	.05	.12**	-.16**	-.30**	.07	-.27**	—	
14. Self-medication	-.05	-.07	.07	.01	-.11**	.44**	.38**	-.31**	.15**	.03	-.28**	.11**	.02	—
15. Loss of Control and Aggression	.02	-.08	-.01	.04	-.06	.08	.09**	.11**	-.10**	.07	.17**	-.05	-.03	.04
16. Relaxation and Pleasure	-.02	.09**	.01	.07	-.01	.02	-.02	-.07	-.01	-.03	-.16**	-.06	-.02	.17**
17. Interpersonal Closeness	.02	.02	.07	.00	-.07	.13**	.11**	-.22**	.04	.04	-.21**	.03	-.03	.53**
18. Unschooled Drinking	.04	.01	-.09**	.02	.06	-.02	.01	.33**	.01	-.01	.09**	-.12**	-.04	-.06
19. Coming of Age	-.01	.01	.06	.01	-.07	.04	.03	-.23**	-.02	.08	-.14**	-.01	-.00	.26**
20. Self-indulgence	-.02	-.06	.03	-.01	-.07	.10**	.06	-.26**	.07	.07	-.24**	.02	-.02	.53**
21. Social Enhancement	.01	-.02	.06	-.04	-.05	.10**	.08	-.29**	.05	.10	-.22**	.04	-.02	.56**
22. Hospitality and Friendship	.07	-.01	.01	-.07	-.03	.01	-.06	-.18**	.02	.05	-.17**	-.05	-.09**	.26**
23. Food and Taste	.10**	.07	.06	.07	.01	-.11**	-.16**	-.04	.02	-.03	-.22	-.11**	-.01	.06
24. Work and Leisure	-.03	-.04	.06	-.03	-.08	.26**	.21**	-.27**	.14**	.06	-.30**	.11**	.02	.66**
25. SRQ GT Perceived	.12**	-.05	.12**	-.01	-.11**	.05	-.01	.04	-.01	-.03	.09**	.01	.03	-.04
26. SRQ GL Actual	-.16**	-.03	-.18**	.00	.04	.10**	.15**	.07	.01	.07	-.01	-.01	-.07	.18**
27. SRQ GL Perceived	.04	-.08	.13**	-.02	-.10**	.03	.01	-.02	-.03	.04	-.00	-.05	-.01	.02
28. PPLQ Self-stigma	-.00	-.02	-.09**	-.02	.03	.16**	.15**	.16**	.04	-.03	.07	-.05	.00	.11**
29. AUDIT	-.11**	-.04	.07	.01	-.08	.30**	.33**	-.40**	.13**	-.18**	-.28**	.15**	.03	.50**

^adiscrete dichotomous variable ^bordinal variable ^ccontinuous dichotomous variable. All other variable are measured with interval scales.

¹(0 = Primary/high school, 1 = University), ²(0 = ≤ P20, 1 = > P20–P50, 2 = > P50–P80, 3 = > P80–P90, 4 = > P90–P100), ³(0 = Religious, 1 = Not religious = Spiritual), ⁴(0 = Australian only, 1 = Australian and other country, 2 = Other country only), ⁵(0 = Single, never married; 1 = Divorced/separated; 2 = Widowed; 3 = In a relationship, but not living together; 4 = De facto/married).

***p* < .01 (two-tailed)

Table 10.3. *Bivariate Relationships Between Study Variables (Continued)*

	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.
1. Education ^a															
2. Income ^b															
3. Religious ^c															
4. National identity ^c															
5. Marital status ^c															
6. HAD-Anxiety															
7. HAD Depression															
8. HED Actual Injunctive															
9. HED Perceived Injunctive															
10. HED Frequency Descriptive ^b															
11. MFD Actual Injunctive															
12. MFD Perceived Injunctive															
13. Drinking Frequency Descriptive ^b															
14. Self-medication															
15. Loss of Control and Aggression	—														
16. Relaxation and Pleasure	.01	—													
17. Interpersonal Closeness	.05	.09**	—												
18. Unschooled Drinking	.13**	.03	.03	—											
19. Coming of Age	.05	.06	.30**	.14**	—										
20. Self-indulgence	-.01	.20**	.50**	.04	.29**	—									
21. Social Enhancement	.00	.09**	.62**	-.04	.33**	.48**	—								
22. Hospitality and Friendship	-.02	.19**	.36**	.05	.29**	.38**	.42**	—							
23. Food and Taste	-.06	.22**	.21**	.10**	.11**	.30**	.20**	.28**	—						
24. Work and Leisure	-.04	.24**	.48**	-.02	.27**	.54**	.53**	.33**	.19**	—					
25. SRQ GT Perceived	.08	-.01	-.02	.02	.01	-.07	-.07	-.05	-.03	-.05	—				
26. SRQ GL Actual	.04	.03	.13**	.20**	.08	.10**	.11**	.08	-.04	.15**	-.07	—			
27. SRQ GL Perceived	.06	.09**	-.03	.06	.07	-.02	.01	.03	-.01	.01	.49**	.12**	—		
28. PPLQ Self-stigma	.21**	.07	.04	.21**	.05	.04	.06	.10**	-.05	.07	-.04	.19**	.04	—	
29. AUDIT	.03	.09**	.23**	-.15**	.13**	.30**	.29**	.10**	-.01	.44**	-.04	.09	.04	.06	—

^adiscrete dichotomous variable ^bordinal variable ^ccontinuous dichotomous variable. All other variable are measured with interval scales. ** $p < .01$ (two-tailed)

10.4.2 Multivariate analyses

To assess the multivariate relationships between the IVs and the DV, a series of regression models were calculated. To ensure that a parsimonious model was built only predictor variables that had a significant relationship with the DV were included. However, to investigate if suppression effects were present, all variables were initially entered into a regression model. None of the non-significant variables reached statistical significance ($p < .05$) in this analysis. Thus, the remaining results represent regression models that only contain study variables with significant bivariate relationship to the DV. The significant control variables were entered in the first step to adjust for their potential influence on the DV. In the second step, the norm beliefs were entered, and in the third step, the RMAQ–MW subscales. This order was used to evaluate the unique prediction of variance by the RMAQ–MW; as this scale was developed specifically for this research, it was of theoretical interest to determine its predictive power, above and beyond that of normative beliefs. The two ordinal variables (Education and HED Frequency Descriptive norms) were Dummy coded to enable their inclusion into the regression model.

10.4.2.1 *Assumptions and suitability of the data for analysis.*

Prior to model building, the suitability of the data for regression analyses was assessed. Inspection of the DV (AUDIT) showed a significant positive skew and kurtosis (Skewness z -score = 16.86, Kurtosis z -score = 9.43). To determine the potential impact of the non-normal distribution of the DV, a transformation of AUDIT scores using Logarithm 10 was conducted. Multiple regression analyses were run with the untransformed and the transformed DV. Results showed that although the overall model significance levels did not change, some of the individual predictor variables reached significance in the transformed model. Moreover, the overall fit of the model increased as a result of the transformation (Untransformed = Adj. R^2 = .40, Transformed = Adj. R^2 = .57). As such, it was deemed that

the non-normal nature of the DV had an undue influence over the model parameters and the proportion of variance explained. Although the use of the newly transformed DV appeared to have addressed some of these issues, a decision was made to dichotomise the DV and to conduct a binary logistic regression; a cut-off for risky drinking using AUDIT scores has previously been established based on optimal sensitivity and specificity (see section 8.2.3). As such, dichotomising the data according to this cut-off was theoretically meaningful.

The presence of multicollinearity was checked to further evaluate the suitability of the data for logistic regression analysis and the relationship between the continuous IVs and the logit of the DV was calculated to assess the linearity. Last, the fit of the model to the data points was assessed. No multicollinearity was detected between predictor variables, with an average Variance Inflation Factor (VIF) of 1.70 (no single VIF value exceeded 10) and no tolerance values below 0.20 or correlations above .8 found. However, the assumption of the linearity of the logit was breached for the variables HED Actual Injunctive and Coming of Age. To retain these variables in the regression, they were therefore dichotomised. Average scores of ≤ 3 were coded as 0 (disagree) while average scores of > 3 were coded as 1 (agree). Inspection of residuals indicated that the model fit the data points well; no more than 5.30% of the studentised and standardised residuals fell outside ± 1.96 and less than 1% fell outside ± 2.58 . No deviance values were greater than ± 2.58 , with only 2.87% being greater than 1.96. Inspection of outliers found no indication that individual cases exerted an undue influence on the model; no cases exceeded a Cook's value of 1 and all cases had DFBeta values of less than 1 for all study variables, including the constant.

10.4.2.2 *Regression models*

The final sequential regression models are displayed in Table 10.4. The first model, containing the control variables, was significantly associated with risky drinking $\chi^2(3) = 50.51, p < .001$, correctly classifying 61.32% of cases.

Table 10.4. *Logistic Regression Predicting Likelihood of Risky Drinking, N = 743*

Variables	B	S.E.	Wald	Sig.	O.R.	95% C.I. for O.R.	
						Lower	Upper
Model 1							
Education ¹	-0.43	0.21	4.33	.038	0.65	0.43	0.98
HAD-Anxiety	0.10	0.03	13.25	.000	1.11	1.05	1.17
HAD Depression	0.06	0.03	3.36	.067	1.06	1.00	1.14
Constant	-0.24	0.24	0.99	.320	0.79		
Model 2							
Education ¹	-0.33	0.23	2.02	.155	0.72	0.45	1.13
HAD-Anxiety	0.11	0.03	12.53	.000	1.12	1.05	1.18
HAD Depression	0.07	0.04	2.96	.085	1.07	0.99	1.15
HED Actual Injunctive ³	-1.03	0.26	15.73	.000	0.36	0.21	0.59
HED Perceive Injunctive	0.09	0.03	7.04	0.008	1.09	1.02	1.17
HED Frequency Descriptive:							
Never (referent)							
Less than monthly	0.39	0.43	0.83	.363	1.47	0.64	3.40
Monthly	0.80	0.43	3.49	.062	2.23	0.96	5.18
Weekly	1.49	0.47	9.94	.002	4.46	1.76	11.29
Daily or almost daily	1.85	0.96	3.72	.054	6.39	0.97	42.09
MFD Actual Injunctive	-0.52	0.08	46.79	.000	0.59	0.51	0.69
MFD Perceived Injunctive	0.28	0.09	9.82	.002	1.32	1.11	1.58
Constant	-0.54	0.63	0.72	.397	0.59		
Model 3							
Education ¹	-0.42	0.26	2.55	.110	0.66	0.39	1.10
HAD-Anxiety	0.04	0.04	1.29	.257	1.04	0.97	1.12
HAD Depression	0.04	0.04	1.16	.282	1.05	0.96	1.13
HED Actual Injunctive ³	-0.74	0.29	6.68	.010	0.48	0.27	0.84
HED Perceive Injunctive	0.09	0.04	6.32	.012	1.10	1.02	1.18
HED Frequency Descriptive:							
Never (referent)							
Less than monthly	0.43	0.46	0.88	.349	1.53	0.63	3.75
Monthly	0.82	0.46	3.15	.076	2.27	0.92	5.61
Weekly	1.64	0.51	10.20	.001	5.17	1.89	14.15
Daily or almost daily	1.76	1.15	2.33	.127	5.80	0.61	55.51
MFD Actual Injunctive	-0.36	0.08	18.32	.000	0.70	0.59	0.82
MFD Perceived Injunctive	0.20	0.10	4.36	.037	1.23	1.01	1.49
Self-medication	0.06	0.02	16.36	.000	1.07	1.03	1.10
Relaxation and Pleasure	0.04	0.03	1.26	.261	1.04	0.97	1.11
Interpersonal Closeness	-0.06	0.03	5.46	.019	0.94	0.89	0.99
Unschooling Drinking	-0.04	0.03	1.45	.229	0.96	0.91	1.02
Coming of Age	0.04	0.21	0.04	.838	1.04	0.70	1.56
Self-Indulgence	0.02	0.03	0.62	.431	1.02	0.97	1.07
Social Enhancement	0.08	0.03	7.37	.007	1.08	1.02	1.15
Hospitality/Friendship	-0.07	0.04	3.03	.082	0.93	0.85	1.01
Work and Leisure	0.07	0.03	7.28	.007	1.07	1.02	1.12
Constant	-3.97	1.03	14.99	.000	0.02		

¹University compared to Primary/high school

²Agree compared to not agree

³Unacceptable compared to acceptable

The Hosmer and Lemeshow test was non-significant, $\chi^2(8) = 13.43, p = .10$, further indicating that the classification was adequate for this step. Overall, 9.38% of variance was explained (Nagelkerke R^2), with the variables Education and HAD–Anxiety being significant predictors. The Norm variables were entered in the second model, with results showing that this block was significantly associated with risky drinking, $\chi^2(8) = 140.10, p < .001$. The overall model was also significant, $\chi^2(11) = 190.61, p < .001$, with a non-significant Hosmer and Lemeshow test result, $\chi^2(8) = 4.45, p = .82$. The second model increased the average correct classifications to 72.49% and the total variance explained to 32.10% as measured by Nagelkerke R^2 (an increase of 22.72%). HAD–Anxiety remained a significant predictor, as were all entered norm variables. Last, the RMAQ–MW subscales were entered as a block in the third model, which was found to be significantly associated with risky drinking, $\chi^2(9) = 86.72, p < .001$. The overall model was also significant, $\chi^2(20) = 277.33, p < .001$, increasing the average correct classification to 76.07% and the variance explained to 44.05% (an increase of 11.95%, Nagelkerke R^2). The Hosmer and Lemeshow test was non-significant, $\chi^2(8) = 9.82, p = .28$, for this model. In the final model, none of the control variables were significant, however all norm variables as well as the Self-medication, Interpersonal Closeness, Social Enhancement, and Work and Leisure subscales from the RMAQ–MW were significant predictors.

While no suppression effects had been identified in relation to the non-significant predictors, the results indicate that suppression was present for the variable Interpersonal Closeness. This variable retained its bivariate significant relationship with the DV in the regression models but the direction of the relationship changed from positive to negative. To further investigate this several regression models with Interpersonal Closeness in combination with one other predictor variable was run. It was identified that the relationship between Interpersonal Closeness and the AUDIT changed (became negative) when the Self-medication variable was entered into the regression model. To further explore this

finding, the relationship between Interpersonal Closeness and AUDIT was separately examined for those that agreed (≥ 3) with the Self-medication subscale and those that disagreed (< 3) with the scale. Results showed that among those that disagreed with Self-medication, there was a significant positive correlation between Interpersonal Closeness and AUDIT ($r = .16, p = .001$), while no significant relationship existed between Interpersonal Closeness and AUDIT ($r = .04, p = .35$) among participants that agreed with the Self-medication subscale. Although this finding further illustrated the relationship between Interpersonal Closeness and risky drinking it does not readily explain why this relationship became negative in the multivariate analysis.

CHAPTER 11 General Discussion

Middle-aged women's alcohol use has received little attention in the alcohol literature. However, although middle-aged women tend to engage in fewer instances of HED compared to younger women, they consume alcohol more frequently. In countries such as Sweden and Australia, statistics show that these drinking patterns result in higher total consumption levels among middle-aged women than in any other age group (Australian Bureau of Statistics, 2014b; Ramstedt et al., 2013). This is of particular concern as both women and older people are more vulnerable to the harmful effects of alcohol (see Section 2.6 and 2.7). To increase the understanding of middle-aged women's risky alcohol use, this dissertation investigated the alcohol culture that is shared by this group. The investigation took its starting point in the conceptualisation of alcohol culture as comprising an objective and a subjective component. Subjective culture denotes the unobservable aspects of a group's social world: the values and beliefs that the group share. In contrast, objective culture consists of the things that can be observed: behaviours, speech messages, and artefacts that are collectively produced. Importantly, the assumption underlying this conceptualisation is that a group's objective culture can be predicted from its subjective culture. To date, representative population data (AIHW, 2014; Ramstedt et al., 2013) have reliably catalogued the consumption pattern of middle-aged women (i.e., objective alcohol culture). It is known, with a high degree of reliability, what this group drink and how and where they tend to do it. However, few systematic attempts at describing the alcohol beliefs that middle-aged women share (i.e., subjective alcohol culture) have been made.

To address the gap in the understanding of middle-aged women's alcohol culture, the current program of research aimed to identify shared alcohol beliefs among middle-aged women in Sweden and Australia and to measure the link between these beliefs and risky alcohol consumption. The cross-national approach was taken to investigate what alcohol beliefs are shared by middle-aged women across Western countries, and which are specific

to the national context. Using a mixed-methods approach, three studies in each country were originally planned; observations of middle-aged women in public venues (Study 1), interviews (Study 2), and a quantitative survey (Study 3). Through this series of studies, the program of research aimed to answer three research questions:

RQ1: *What alcohol beliefs do middle-aged women in each country share?*

RQ2: *To what degree are alcohol beliefs shared across the two countries?*

RQ3: *Do middle-aged women's alcohol beliefs influence risky alcohol consumption?*

Studies 1 and 2 were primarily designed to investigate RQ1 and RQ2; that is, to identify shared alcohol beliefs in each sample and to describe any differences between the two groups. These two studies did, however, also begin to uncover the relationship between some of the alcohol beliefs and drinking outcomes (i.e., RQ3). Based on the findings of the qualitative studies, hypotheses to be verified or refuted in Study 3 were formulated. In Study 3, hypotheses relating to RQ1 were to be tested by calculating the prevalence of the identified alcohol beliefs in larger samples of Swedish and Australian middle-aged women. Hypotheses for RQ2 were to be tested by comparing the level of endorsement of alcohol beliefs in the two samples and hypotheses for RQ3 by formally testing the relationship between the alcohol beliefs and risky drinking (RQ3). However, although data collection for Study 3 was successful in Australia, an adequate sample size could not be obtained from Sweden. This meant that, for the Swedish sample, R1 and R3 could only be addressed by the qualitative studies. Similarly, comparisons between the two samples (R2) could only be made based on the qualitative data. Thus, some of the hypotheses that were formulated based the qualitative studies could not be further verified or refuted using quantitative methods. Moreover, two measures tapping alcohol beliefs (Dependency and De-emphasis of Intoxication), achieved unsatisfactory internal consistency and could not be included in

Study 3. As such, conclusions regarding these beliefs were also based on the qualitative findings only and as such remained more tentative in nature.

In this chapter, an overview of the study hypotheses is presented. Following this, the results from Study 3 are discussed, comparisons are made with previous literature, and conclusions regarding each research questions are offered. A consideration of the implications of the findings, suggested avenues for future research and the strengths and limitations of the research program concludes the chapter.

11.1 Research Question 1 and 2

11.1.1 Hypotheses for Study 3

To test RQ1 among Australian middle-aged women, the alcohol beliefs identified in the qualitative studies were measured by existing and purpose-developed scales. Whether or not a belief was sufficiently shared was determined by first calculating participants' mean agreement for each scale, followed by the proportion of participants in each sample that scored above the neutral scale mid-point (> 3 on Likert scales ranging from 1 to 5). Beliefs for which mean agreement was found among more than 50% of the sample was defined as sufficiently shared to be regarded cultural in nature. With this definition in mind, the findings of the qualitative studies were drawn on to propose a number of hypotheses (Table 11.1).

Table 11.1. *Overview of Hypotheses and Results for Research Question 1 (Australian Sample)*

Identified alcohol beliefs	Majority agreement	
	Hypotheses	Results
<i>RMAQ–MW subscales</i>		
Self-medication	Yes	Yes
Loss of Control and Aggression	Yes	Yes
Relaxation and Pleasure	Yes	Yes
Interpersonal Closeness	Yes	No
Unschooling Drinking	Yes	Yes
Coming of Age	Yes	No
Self-indulgence	Yes	Yes
Social Enhancement	Yes	Yes
Hospitality and Friendship	Yes	Yes
Food and Taste	Yes	Yes
Work and Leisure	Yes	Yes
<i>Attitudes toward women's roles</i>		
SRQ GT Perceived	Yes	No
SRQ GL Actual	Expl	No
SRQ GL Perceived	Yes	Yes
<i>Norms²</i>		
HED Actual Injunctive	Yes	Yes
HED Perceived Injunctive	Yes	Yes
HED Frequency Descriptive	Expl	n.a.
MFD Actual Injunctive	No	No
MFD Perceived Injunctive	No	No
Drinking Frequency Descriptive	Expl	n.a.
<i>Alcohol abuse stigma</i>		
PPLQ Self-stigma	Yes	Yes

Note. Expl = Exploratory hypothesis, n.a. = not applicable. Supported hypotheses are in boldface.

²Higher scores for actual and perceived injunctive norms indicate disapproval.

Higher scores for descriptive norms indicate high perceived frequency.

The RMAQ–MW, a measure of different alcohol beliefs not previously measured in the literature, was developed for the purpose of Study 3. It was hypothesised that the RMAQ–MW subscales measuring the idea of alcohol as a means to increase the fun and enjoyment of social situations (Social Enhancement), to nurture relationships (Interpersonal

Closeness), and as a symbolic expression of friendships (Hospitality and Friendship) would be endorsed by a majority of the participants. Likewise, it was expected that a majority of participants would endorse the four subscales measuring the pleasure-related understanding of alcohol (Relaxation and Pleasure, Self-indulgence, Food and Taste, and Work and Leisure), the two scales measuring the link between alcohol and age (Unschooling Drinking and Coming of Age) and the scale measuring alcohol as a means to reduce negative emotional states (Self-medication). It was also hypothesised that the participants would view alcohol as a potentially dangerous drug. Two scales measured the perceived danger associated with alcohol: Loss of Control and Aggression and Dependency. As discussed above, only Loss of Control and Aggression achieved adequate scale reliability; it was hypothesised that a majority of the women would endorse this scale. Additionally, as women in both samples had spoken of alcohol use in ways that reflected traditional ideas regarding men and women, a measure capturing these beliefs (SRQ) was included. It was hypothesised that a majority of participants would agree that societal attitudes toward gender characteristics and roles are traditional in nature (as measured by SRQ GT Perceived and SRQ GL Perceived). However, exploratory hypotheses were posed regarding whether these attitudes were internalised by the women (as measured by SRQ GL Actual)²³. Moreover, it was hypothesised that majority-endorsement would be found for items measuring personal and perceived disapproval of HED (HED Actual Injunctive and HED Perceived Injunctive) and on the scale measuring self-stigma associated with abusive alcohol consumption (PPLQ). However, it was also hypothesised that no majority-endorsement for the item measuring personal and perceived unacceptability of MFD drinking

²³ A second subscale measuring internalised traditional gender role attitudes (SRQ GT Actual) was precluded from analysis due to poor reliability.

patterns (MFD Actual Injunctive and MFD Perceived Injunctive) would be found. In addition to these scales, perceived drinking frequency (Drinking Frequency Descriptive) and HED (HED Frequency Descriptive) frequency were measured as these beliefs have previously been linked to alcohol consumption and can be an indicator of the perceived normative climate around alcohol use. Exploratory hypotheses regarding these drinking norms were posed.

11.1.2 Results for Research Question 1 and 2

The results of the mean agreement analysis are displayed in Table 11.1. As can be seen from this table; of the 18 directional hypotheses that were posed, 15 were supported by the data. The number of hypotheses that were supported indicates a high level of consistency between the qualitative and quantitative studies, which in turn increases the confidence with which the qualitative data can be interpreted. This is of importance, as some of the research questions could only be addressed by these data.

11.1.2.1 *The social nature of alcohol*

The hypotheses regarding the social nature of alcohol was partly supported in the Australian sample. Majority mean agreement was found for two of the three subscales that measured different aspects of alcohol's social nature. Specifically, the data showed that just under 70% of the sample agreed with the idea of alcohol as a social enhancer and as a symbol of friendship and hospitality. However, the participants did not agree with the idea of alcohol as a means to increase interpersonal closeness, with mean agreement only found among a quarter of the women. In the Swedish qualitative data, the women described alcohol as a means to increase social enhancement and interpersonal closeness, but unlike the Australian women they did not view alcohol as playing a significant role in hospitality and celebration of friendships.

The idea of alcohol as a social enhancer is a reoccurring theme in the alcohol literature and has been found among both sexes and in young and older drinkers (Grønkjær et al., 2011; Scarscelli, 2007; Szmigin et al., 2008). Thus, the current research adds further weight to the notion that this use-value continues to be endorsed by women as they enter middle age. The shared idea of alcohol as a symbolic expression of friendship and appreciation aligns with broader cultural ideas around alcohol and friendship in Australia. The central role of alcohol to the Australian national identity has previously been described. This literature argues that for Australians, alcohol has become intertwined with a romanticised image of friendship and solidarity, described within a culture of mateship (Pease, 2001; Room, 2010). This link between alcohol and national identity has historically been describing the male experience and more recent research show that drinking and portrayals of alcohol consumption continues to be a gendered behaviour that is linked to different norms and expectations for men and women (Edelheim & Edelheim, 2011; Killingsworth, 2006). Although the link between alcohol and being Australian is implicitly based on male constructions of identity, these beliefs are nonetheless broadly recognised and understood by men and women alike (Advocat & Lindsay, 2013; Allan et al., 2012). The results from the current research add to these findings by showing that the symbolic link between alcohol and friendship and hospitality is also part of Australian mature-aged women's alcohol culture. However, unlike other accounts of the link between alcohol national identity (Advocat & Lindsay, 2013), the consumption that symbolises this link among middle-aged women was not necessarily heavy or intoxication-focused. As such, the current findings point to the importance of alcohol as symbolically embedded in friendship and appreciation among middle-aged women, but also highlight that the nature of this link is different in this group. It is of interest to note that these sentiments were not evident in the Swedish qualitative data: Their absence highlights influence that the local context (in this

instance the national alcohol culture) can have on the alcohol culture of subnational groups (Clinard & Meier, 2015; Gelder, 2005).

The Australian participants did not agree with the idea of alcohol as a means to increase interpersonal closeness, with mean agreement only found among a quarter of the sample. The lack of majority-endorsement of the Interpersonal Closeness scale was an unexpected finding as interpersonal closeness was observed during drinking situations in Study 1. Moreover, the notion that a focus on social intimacy rather than “partying” is a defining feature of older adulthood was expressed in interviews by women from both countries. Two explanations could be given for the conflicting results of the qualitative and quantitative studies regarding interpersonal closeness. First, it is possible that the importance ascribed to interpersonal intimacy that was found in the qualitative samples was specific (i.e., not generalisable) to the groups that were included in these studies. However, the interpersonal use-value was found in all four qualitative studies (and in two national samples) which speak against this conclusion. Alternatively, it is possible the essence of interpersonal closeness that was noted in the qualitative studies was not adequately captured by the Interpersonal Closeness subscale. Further research is needed to determine if interpersonal closeness is in fact a use-value collectively assigned to alcohol by middle-aged women.

Overall, the qualitative and quantitative data suggests that alcohol is equally understood as a social enhancer among Swedish and Australian women, but that the symbolic value of alcohol as an expression of friendship and hospitality may be specific to Australian women.

11.1.2.2 *Physical enjoyment*

As hypothesised, a majority of the Australian women agreed with the use-values that were associated with physical enjoyment (measured by Relaxation and Pleasure, Self-indulgence, Food and Taste, and Work and Leisure). Among these use-values, the notion

that alcohol is linked to relaxation and pleasure was particularly prominent in the Australian sample with agreement found among close to 90% of participants. This was followed by close to 75% agreement for the Food and Taste subscale, and over 65% agreement for the Work and Leisure subscale. The idea of alcohol as a self-indulgent activity was less strongly endorsed but agreement was nonetheless found among just over half of the participants. The qualitative data similarly indicated that these use-values were endorsed by the Swedish women. However, the distinction between work and leisure appeared to be particularly strong among Australian women, while the focus on food and taste was stronger among the Swedish women.

The subscale Relaxation and Pleasure includes items describing the consumption of alcohol in comfortable, peaceful, and relaxing surroundings and drinking while engage in other pleasurable activities such as reading a book or listening to music. As previously described, the notion of alcohol as a pleasurable activity has been found in the literature on young people's drinking (Fry, 2011; Measham & Brain, 2005; Szmigin et al., 2008). However, the nature the pleasure that is sought by this group may be different from that sought by middle-aged women as it often centres on enjoying the bodily manifestations of drunkenness. The subscale Food and Taste describes alcohol as a taste experience and a complement to food and the idea of alcohol consumption as foremost motivated by taste. The endorsement of this subscale is in line with previous literature, which has shown the increasing importance of taste that occurs with age (Bernhardsson, 2014; Emslie et al., 2012). Coupled with the de-emphasis of intoxication also found among the participants (Section 11.1.2.5), this use-value is closely linked with the meaning ascribed to alcohol in traditional wet drinking cultures (Heath, 1995a). This finding lends further support to the argument that alcohol culture is better understood if examined at the subnational level (P. Mäkelä et al., 2006). When alcohol cultures are deduced from aggregate national-level measures of consumption patterns, they naturally become more descriptive of the groups

that consume most alcohol (i.e., men and young drinkers in general). Although Australia and Sweden as a whole may be distinguished by the intoxication-motivated drinking that is common in dry drinking cultures, this observation fail to adequately capture the alcohol culture of middle-aged women in these countries.

The Work and Leisure subscale tapped into the idea of alcohol as symbolically defining times when work and responsibilities could be put to the side and the participants could unwind. However, this subscale also included the notion that alcohol consumption could reduce some of the monotony associated with everyday chores such as cooking. Thus the delineation that alcohol offered was one between relaxation and work/domestic responsibilities. This finding is similar to that of Lyons et al. (2014) who investigated the role and meaning of alcohol among Scottish middle-aged men and women. In this study, alcohol played a similar role, signalling that domestic responsibilities had come to an end for the day. Among men however, alcohol (often drunk at the pub) was viewed reward for a hard day of paid work. Among young drinkers, alcohol is also used as a demarcation of free time; however, here alcohol consumption enables a legitimised way to temporarily escape the boundaries and restrictions of everyday norms (e.g., Gusfield, 2003; Seaman & Ikegwuonu, 2010). When the current findings are considered in the context of this previous research, it can be concluded that the understanding of alcohol as a symbolic maker of leisure exist across different cohorts but that the type of leisure it signifies may differ.

Last, the notion of alcohol as a self-indulgent activity is perhaps best understood in relation to the above discussed symbolic and use-values. With alcohol consumption being viewed as pleasurable, relaxing, well-tasting, and as a marker for rest and leisure, its role as an indulgence and reward makes intuitive sense. Moreover, the Self-indulgence subscale

also contained the notion that work should be rewarded with alcohol, an association that has been promoted by the alcohol industry in Australia²⁴. Overall, the qualitative and quantitative results indicate that alcohol is strongly associated with physical enjoyment in the form of relaxation, self-indulgence, enjoyment of its taste, and as a means to wind down and put aside both the pressure and boredom of everyday life.

11.1.2.3 *Alcohol as a dangerous drug*

In the interviews, the potential dangerousness associated with alcohol and drinking was brought up by women in both samples, but more often so by the Swedish women. The danger that was most discussed was the risk of developing alcohol dependency, a belief that was captured by the RMAQ–MW subscale Dependency. Although this measure had to be excluded, a second measure (the Loss of Control and Aggression subscale) with items tapping expectancies relating to loss of control, aggression, and risk taking was included. As expected, this subscale was endorsed by a majority of the Australian participants (73.52%) in Study 3. The exclusion of the Dependency subscale meant that results regarding the perceived dangerousness of alcohol among middle-aged women are less conclusive. However, the endorsement of the Loss of Control and Aggression subscale in conjunction with the qualitative findings offer support for the notion that, in addition to a number of positive symbolic and use-values, alcohol was also understood as potentially dangerous. Thus overall, findings suggest that alcohol is indeed viewed as a dangerous drug; however, more so by Swedish women. It is possible that the understanding of alcohol as addictive and dangerous among Swedish women reflects the ambivalent and fearful view of alcohol that is

²⁴ Exemplified by the long-running "hard earned thirst" campaign aimed at selling Victoria Bitter, a popular Australian beer.

common in dry drinking cultures (e.g., Peele, 2010). Again, this points to the potential influence of the national context on the way that alcohol is understood by the same cohort of drinkers in different countries.

11.1.2.4 *Alcohol as self-medication*

In interviews, the idea of alcohol as a form of self-medication was discussed by some of the Australian women; however, this notion was rejected by the Swedish women. As expected, the idea of alcohol as a form of self-medication was shared by a majority (just over half, 50.58%) of the Australian sample in Study 3. Taken together the qualitative and quantitative results indicate that the notion of alcohol as a means to reduce negative emotional states was a less common alcohol belief among the Swedish women, but that it to some degree united the Australian women. The idea of alcohol as medicine is commonly found in the alcohol literature (see Section 3.1.2.4), where it has been described as a means to alleviate loneliness, pressures, and work-related stress. However, this literature also discusses how the self-medication use-value of alcohol is linked to alcohol problems. In the interviews, the Swedish women demonstrated a strong need to distance themselves from consumption patterns that could be seen as abusive in nature. As such, the reluctance to describe alcohol as a form of self-medication could be symptomatic of a moral fear of and ambivalence alcohol rather than a tendency to never use alcohol in this way.

11.1.2.5 *De-emphasis of intoxication*

The de-emphasis of intoxication was a reoccurring theme (i.e., a cultural theme) in interviews, particularly among Swedish women. Moreover, de-emphasis of intoxication was, by the women themselves, seen as a distinguishing feature of alcohol use in middle age. This view of alcohol and intoxication has previously been noted in samples of adult and middle-aged women (Emslie et al., 2012) and is a finding that stands in stark contrast to research on men's and younger people's alcohol use. For men, heavy alcohol use and the

ability to hold one's drink can be seen as a sign of masculinity (Dempster, 2011), an association that was also discussed by the Australian women in the current study. For young people, the literature has shown that alcohol is understood as a means to pursue intoxication for its own sake. Heavy drinking holds a meaningful role for this group as it creates the possibility of friendships, identity exploration, and romantic pursuits (Dempster, 2011; Petrilli et al., 2014; Seaman & Edgar, 2012; Sheehan & Ridge, 2001). Interestingly, however, a study of young Scottish drinkers aged 18–25 years found that participants in their early twenties had started to move away from a sole focus on drunkenness, with more moderate consumption patterns becoming meaningful (Seaman & Ikegwuonu, 2011). Again, this indicates that middle-aged women share some alcohol beliefs with younger drinkers. The key difference between these groups may instead lay in the restricted number of ways that alcohol can be appropriately used in middle-age. Being male or being young appears give drinkers permission to act irresponsibly (e.g., become intoxicated) in a way that is not permitted for middle-aged women.

Although the level of agreement with de-emphasis of intoxication could not formally be tested in the Australian sample, the findings of the qualitative findings and that of previous research nonetheless suggest that this belief may also be a central feature of mature-aged women's alcohol culture. The de-emphasis of intoxication is likely attributable to several factors such as reduced tolerance of alcohol with age (see Section 2.7.1) and an increasing number of work and social commitments. However, social and cultural factors are also likely to explain the changing view of intoxication. Moderate wine consumption that focused on taste has long been seen as more civilised and marked by a greater level of self-constraint and sophistication compared to (heavy) beer or spirit drinking (Martin, 1999).

Moreover, in Sweden a long-standing concern about the national dry drinking and its impact on heavy drinking, drunkenness, and violence has been voiced by authorities and by media (Room, 2005). Within this discourse, the moderate drinking patterns of wet

drinking cultures has been hailed as a better, more sophisticated alternative to the Swedish drinking culture. It is possible that the ideal of the continental wet drinking cultures has been adopted by Swedish middle-aged women way to project a desired (and age-appropriate) identity.

11.1.2.6 *Alcohol as a symbol of age and gender*

The symbolic link between age and alcohol was identified in both Swedish and Australian interviews; however, it was also found that the Swedish women were particularly careful to delineate their drinking from that of young people. The symbolic link between age and alcohol was measured by two RMAQ–MW subscales; Unschooled Drinking and Coming of Age. Together these two subscales measure the idea that heavy alcohol consumption is a part of being young and a rite of passage for young people (Coming of Age) but shameful and a sign of immaturity in middle age (Unschooled Drinking). Results from Study 3 showed that majority-endorsement was only found for Unschooled Drinking (52.40%), although a fairly large proportion of the sample (42.79%) agreed with Coming of Age. In terms of Unschooled Drinking, the findings of the current research are line with previous literature which has identified moderate consumption, often in conjunction with meals, as a symbol of adulthood and middle age (Emslie et al., 2012; Roumeliotis, 2010). In the current sample, the women agreed that drunkenness represented a failure to develop a level of maturity appropriate for middle age. However, the women did not agree with the symbolic use of alcohol as a rite of passage into the world of adults, a belief that has been described in previous research (Sande, 2002; Seaman & Ikegwuonu, 2011). The rejection of this alcohol belief may be best understood in relation to the overall alcohol culture of middle-aged women. With this culture revolving around moderate, taste-motivated consumption and the potential dangerous nature of alcohol, it is possible that middle-aged women disapprove of intoxication-focused consumption, not only for themselves, but for people in general. Taken together, the qualitative and quantitative findings indicate that alcohol is indeed linked to

appropriate ageing in middle age but that overall, the endorsement of these ideas may be stronger among Swedish women.

In the qualitative interviews, women in both samples described that their alcohol use was judged more harshly than men's, possibly due to their role as mothers or because they were of an age where they were expected to have taken on this role. However, the women were less unanimous in the degree to which they had themselves internalised these traditional gender attitudes. Moreover, traditional attitudes appeared to be a stronger influence on actual alcohol consumption among the Australian women. Two scales adapted from the SRQ was used in Study 3 to measure perceived societal gender role attitudes (SRQ GT Perceived and SRQ GL Perceived) and one subscale (SRQ GL Actual) measured women's personally held attitudes²⁵. The results from Study 3 partly supported the hypotheses that societal gender role attitudes were perceived as traditional, with majority agreement (60.69%) found for the subscale SGQ GL Perceived. This subscale specifically describes certain roles and traits as gender specific (e.g., that mothers should avoid working and that men are more sexual than women). Interestingly, however, fewer than 10% of the participants agreed with these beliefs themselves. This discrepancy clearly highlights that middle-aged women felt subjected to gender role attitudes that they themselves rejected. Moreover, it points to the importance of considering both personal and perceived gender attitudes when examining the way that people think about and understand gender roles.

Taken together, the results indicate that the presence of traditional gender roles is part of middle-aged women's lives and that these beliefs may colour their understanding of alcohol and its appropriate use. However, both the qualitative and quantitative findings

²⁵ A second subscale measuring internalised traditional gender role attitudes was precluded from analysis due to poor reliability.

indicate that it is the perceived attitudes of others, rather than personally held beliefs, that are traditional in nature. Moreover, the qualitative data indicates that although present in both samples, traditional gender role attitudes were more influential among the Australian women. This difference mirror objective measures of gender equality in Sweden and Australia. According the Global Gender Gap Index, Australia is ranked as the 24th most gender equal country in the world, while Sweden is ranked as number four (World Economic Forum, 2014).

11.1.2.7 Drinking norms and alcohol abuse self-stigma

The interview studies found that both the Swedish and the Australian women felt that HED is unacceptable for same-aged women and believed that this view is shared by society at large. However, while the Swedish women held similar views of MFD, the Australian women viewed these drinking patterns as acceptable and though that others shared these views. In line with this finding, Study 3 found that a majority of the Australian women agreed with both personal and perceived unacceptability of HED (mean agreement of 78.99% and 80.88%, respectively) but rejected the idea of MFD drinking patterns as unacceptable and believed that others rejected this notion to an even greater extent (mean agreement of 47.19% and 41.31%, respectively). In addition to these injunctive norms, analyses were also conducted to test the exploratory hypothesis regarding descriptive drinking norms. Results showed that a bit over half of the participants (56.18%) correctly identified the most common drinking frequency among women their age, while 24.55% overestimated it. Only 3.58% of participants correctly estimated the prevalence of HED, with the remaining 96.42% overestimating it.

Overall, the qualitative and quantitative results indicate strong non-permissive norms in relation to HED for Swedish and Australian middle-aged women and in relation to MFD among the Swedish women only. Furthermore, the qualitative studies indicated that the non-permissive norms around HED may be particularly strong among Swedish women. The

findings that MFD is seen as acceptable for middle-aged Australian women is likely due to the higher frequency of alcohol use in the Australian compared to the Swedish population of mature-aged women. As discussed in Chapter 1 (see Table 1.1), weekly or more frequent alcohol consumption occurs among 48.7% of 50–59 year old Australian women (AIHW, 2014), but only among 28.8% of Swedish women aged 45–64 years (Public Health Agency of Sweden, 2014). As previously noted in the literature, those patterns that are perceived to be common (i.e., normative) are often seen as safe and acceptable, regardless of any risks that may be associated with them (Aitken, 2015; Green et al., 2007; Grønkjær et al., 2011; Holloway et al., 2008). Thus, the acceptance of MFD among Australian women could be a reflection of the commonality of this drinking pattern among same-aged women. The acceptability of MFD are also in line with the more integrated way in which alcohol was viewed and used by the Australian participants as evidenced by the interview studies. During interviews, the Australian women spoke of how alcohol had become part of many daily activities, such as cooking dinner. Alcohol was also a treat and a reward and a way to unwind and relax at night. For this sample in particular, alcohol consumption seemed to be a taken for granted part of everyday life.

For the Swedish women, the disapproval of MFD likely reflected the lower frequency of drinking among mature-aged women in this country. As drinking prevalence is lower in Sweden, frequent consumption is less likely to be normalised. In addition to this, the lower acceptability of MFD among Swedish women may be explained by differences in national drinking culture. The legacy of the traditionally dry drinking culture of Sweden was echoed in the Swedish women's ambivalence and suspicion toward weekday drinking. Thus, MFD may have been understood as unacceptable as it would mean that consumption took place at times outside of the weekend (cf. Törnqvist, 1999).

In addition to the negative injunctive norms around HED (and MFD among the Swedish women), the qualitative data also indicated that the participants in both samples

attached a high degree of stigma to abusive alcohol use. As with the injunctive drinking norms, this appeared to be particularly true among the Swedish women, further indicating a more morally fraught relationship with alcohol. The notion that abusive alcohol use is associated with self-stigma was supported by the findings of Study 3; mean agreement with the PPLQ was found for over 80% of the Australian sample.

11.2 Research Question 3

11.2.1 Hypotheses for Study 3

The qualitative studies were primarily designed to identify and describe alcohol beliefs shared by the middle-aged women, including differences and similarities between the two samples (RQ1 and RQ2). However, the nature of some of the identified beliefs, the women's own accounts of how these beliefs influenced their alcohol use, as well as previous research on similar constructs could be drawn on to formulate some hypotheses relating to RQ3. Specifically, the link between alcohol and age/gender as well as the negative injunctive norms and the self-stigma that surround middle-aged women's alcohol use and abuse all appeared to limit the alcohol consumption of the participants. Additionally, the literature has demonstrated a consistent link between descriptive norms and alcohol use, whereby high perceived consumption among other is linked to higher personal consumption (e.g., França et al., 2010; Frone & Brown, 2010; LaBrie et al., 2012; J. Miller et al., 2014). Likewise, previous research has shown that using alcohol to self-medicate is linked to higher incidents of harmful alcohol consumption (Swendsen et al., 2000), while negative alcohol expectancies have been linked to reduced consumption (Satre & Knight, 2001). Based on these considerations, it was hypothesised that those scales that measured traditional gender roles, negative injunctive alcohol norms, alcohol abuse self-stigma, negative alcohol expectancies and those that linked alcohol to age (Unschooling Drinking and Coming of Age) would predict the a lower likelihood of risky drinking in Study 3. Moreover, it was

hypothesised that the subscale Self-medication and higher perceived drinking frequency and prevalence of HED among same-aged women would be associated with increased likelihood of risky drinking. Exploratory hypotheses were posed for the remaining of the uncovered alcohol beliefs. The hypotheses for Study 3 are summarised in Table 11.2.

Table 11.2. Overview of Study Hypotheses for Research Question 3 (Australian Sample)

Independent variables	Relationship with risky drinking	
	Hypotheses	Results
<i>RMAQ-MW subscales</i>		
Self-medication	↑	↑
Loss of Control and Aggression	↓	<i>n.s.</i>
Relaxation and Pleasure	Expl	<i>n.s.</i>
Interpersonal Closeness	Expl	↓ ¹
Unschooling Drinking	↓	<i>n.s.</i>
Coming of Age	↓	<i>n.s.</i>
Self-indulgence	Expl	<i>n.s.</i>
Social Enhancement	Expl	↑
Hospitality and Friendship	Expl	<i>n.s.</i>
Food and Taste	Expl	<i>n.s.</i>
Work and Leisure	Expl	↑
<i>Attitudes toward women's roles</i>		
SRQ GT Perceived	↓	<i>n.s.</i>
SRQ GL Actual	↓	<i>n.s.</i>
SRQ GL Perceived	↓	<i>n.s.</i>
<i>Norms</i>		
HED Actual Injunctive	↓	↓
HED Perceived Injunctive	↓	↑
HED Frequency Descriptive	↓	↓
MFD Actual Injunctive	↓	↓
MFD Perceived Injunctive	↓	↑
Drinking Frequency Descriptive	↓	<i>n.s.</i>
<i>Alcohol abuse stigma</i>		
PPLQ Self-stigma	↓	<i>n.s.</i>

Note. Expl = Exploratory hypothesis, ↑ = significant and positive relationship, ↓ = significant and negative relationship, *n.s.* = not significant. Supported hypotheses are in boldface.

¹Suppression effect was found.

11.2.2 Results for Research Question 3

To answer RQ3, the predictive power of each belief on risky drinking was assessed in the Australian sample using sequential logistic regression analyses. Overall, 14 directional hypotheses were posed, of which four were supported.

11.2.2.1 *The influence of alcohol's social nature*

For the three subscales that tapped alcohol's social nature, it was found that Social Enhancement was associated with significant increase in risky drinking likelihood while no significant relationship was found between Hospitality and Friendship and risky drinking. Interpersonal Closeness was associated with significant decrease in the DV, however, an unexplained suppression effect was found for this scale meaning that interpretations were difficult to make. Thus, these results indicate that social enhancement, a use-value commonly attributed to alcohol by participants in both samples, is a risk factor for risky drinking among middle-aged women. In observations it was noted that social drinking events that were focused on social enhancement were associated with heavier alcohol consumption; however, in interviews, the women described their social alcohol use as being non-intoxication focused. Indeed, the focus on sociability and not on intoxication were by some women seen as a feature that distinguished their consumption from that of younger people. As the quantitative findings supported the observation data, it must be conceded that although the interviewed women understood their alcohol use in social setting as motivated by factors other than intoxication, their actual consumption may have exceeded safe levels. A possible explanation for the discrepancy between the interview and the quantitative results can be found in the way that harmful alcohol consumption is understood. Research has found that people tend to equate harmful alcohol use with consumption patterns that deviate from the norm, rather in terms objective measures of harm (Aitken, 2015; Green et al., 2007; GrønkJær et al., 2011; Holloway et al., 2008). Additionally, it has

been found that harmful alcohol use has become synonymous with young people's overt drunkenness in public places (Aitken, 2015; Green et al., 2007; Grønkjær et al., 2011; Holloway et al., 2008). If current participants viewed their social consumption of alcohol as normal and distinct from the perceived reckless and destructive nature of young people's drinking, they may have failed to identify potential harms associated with it.

The failure to identify harmful consumption patterns may also have been compounded by a poor understanding of national guidelines for safe alcohol consumption. Although this understanding was not measured in the current research, data from the 2013 National Drug Household Survey (AIHW, 2014) show that only just under a fifth of Australian women are able to correctly identify the number of standard drinks that can safely be consumed in one sitting. Among the remaining respondents, close to half were unsure, while the safe number of drinks were overestimated by 16.5% and underestimated by 15.9%. The understanding of what constitutes a standard drink is similarly poor; 55% of Australian wine drinkers (both men and women) underestimate the number of standard drinks that are contained in a 750 ml bottle of wine (Petroulias, 2014).

The RMAQ–MW subscale Hospitality and Friendship measured the idea that alcohol could be used to show appreciation for friendships and the hospitality of others. Specific items discussed having drinks with or toasting someone and gifting alcohol as symbolic gestures of appreciation and friendship. Although a large majority (67.06%) of the Australian women endorsed this subscale, it is possible that the drinking situations during which these beliefs are enacted are not associated with heavy drinking or are too infrequent in nature to have an impact on consumption patterns. Toasting someone represent a form of ritualised celebratory drinking that perhaps only occur a few times per year and, gifting someone with a bottle of wine, may be also be a relatively rare behaviour that furthermore bears little direct influence on personal consumption. Last, to “have a few drinks with someone” may for these women be associated with more intimate social engagements,

which in observations were linked to moderate rather than heavy consumption. Thus, although Hospitality and Friendship measured a culturally shared alcohol belief among Australian women, it did not appear to be associated with risky drinking.

In terms of Interpersonal Closeness, this scale showed a positive relationship with risky drinking on the bivariate level. However, at the multivariate level the direction of this relationship became negative after the Self-medication variable was entered into the regression model. Further investigations revealed that among those that disagreed with Self-medication there was a significant positive correlation between Interpersonal Closeness and risky drinking while no such relationship was found among participants that agreed with the Self-medication subscale. While this finding makes intuitive sense, it nonetheless does not explain why the negative bivariate relationship would become positive in the multivariate analysis. As such, interpretations of results pertaining to Interpersonal Closeness scale should be made with caution.

11.2.2.2 *The influence of physical enjoyment*

Among the four subscales that measured different aspect of the physical enjoyment associated with alcohol use (Relaxation and Pleasure, Self-indulgence, Food and Taste, and Work and Leisure), only Work and Leisure was associated with a significant increase in the likelihood of being a risky drinker. No significant relationships with risky drinking were found for the remaining three scales. As previously discussed, the idea of alcohol as a symbolic marker between work and leisure has been found among both young and male drinkers: For these groups, alcohol-fuelled leisure time consists of a temporary escape from the boundaries and restrictions of everyday norms and responsibilities (Gusfield, 2003; Seaman & Ikegwonu, 2010), which in turn appear to necessitate a heavy and intoxication-focused consumption (Harnett et al., 2000). However, for the women in the current sample, a different mechanism may explain the link between Work and Leisure and risky drinking. The Work and Leisure subscale contained ideas of alcohol as means to relax

and to escape the responsibilities and boredom of everyday life. Although these beliefs may not be linked to heavy consumption per se, they could result in the integration of alcohol into everyday life. This in turn could increase drinking frequency and subsequently lead to risky consumption patterns.

In terms of the enjoyment-focused beliefs that were not associated with risky drinking, several reasons can be put forward. First, the nature of the use-value measured by Relaxation and Pleasure may explain why it was not linked to risky drinking. In the interviews it was identified that the type of pleasure the participants sought from alcohol was focused on relaxation and well-being that was gained from moderate alcohol intake. The link between moderate alcohol consumption and pleasure, may thus explain why this particular use-value was not associated with risky drinking. This link may also explain why the subscale Self-Indulgence was not predictive of risky drinking. This subscale measured the idea of alcohol as a treat and a reward; thus, if alcohol-related pleasure is associated with moderate consumption, using alcohol to self-indulge may also be associated with moderate consumption. Previous research has found that among younger drinkers, alcohol-related pleasure is sought through drunkenness (Griffin et al., 2009; Tutenges & Rod, 2009). Had the same been true for middle-aged women, both the view of alcohol as a pleasure inducing drug and as a means to self-indulge may have been risk factors for harmful alcohol consumption.

Last, the qualitative findings indicated that drinking alcohol with food represented an approach to alcohol that was incompatible with intoxication-focused drinking. This would suggest that the notion of alcohol as linked to food and taste may be protective against risky drinking. However, the interviews also indicated that thinking of alcohol as a part of meals meant that it had become a more integrated, and therefore a common aspect of the women's daily lives. If this were true, the idea of alcohol as a food and taste product may be linked to risky drinking through an increase in consumption frequency. However, the failure

to predict risky drinking from the Food and Taste subscale indicate that neither of these possible mechanisms were at work among the participants. Rather, the idea of alcohol as linked to food and taste had no impact on whether the women used alcohol in a risky or non-risky way. More generally, it should be noted that the failure to establish a link between Pleasure and Relaxation, Self-Indulgence, and Food and Taste and the outcome variable did not only excluded these beliefs as risk factors, but also as protective factors against risky drinking. That is, the approach to alcohol use that was captured by these beliefs did not appear to reduce or replace other more harmful alcohol beliefs.

11.2.2.3 *The influence of ideas regarding alcohol's dangerous nature*

Contrary to the hypothesis, Loss of control and Aggression (measuring negative alcohol expectancies) was not associated with a decreased likelihood of risky drinking. This finding contradicts previous literature which has shown that negative alcohol expectancies are associated with decreases in alcohol consumption among both younger (Scott–Sheldon et al., 2012) and middle-aged people (Nicolai et al., 2012). Indeed, some research indicates that negative alcohol expectancies are a stronger predictor of reductions in harmful consumption among older compared to younger drinkers (Leigh & Stacy, 2004). Although an unexpected finding, it is possible that the women in the current sample associated aggression and loss of control with alcohol use generally, but not specifically with their own consumption. Thus, although it captured a shared cultural belief about alcohol, it may not have had direct relevance to the women's own alcohol use. Although this belief is of theoretical interest when describing middle-aged women's alcohol culture, it is perhaps less so in terms of understanding risky alcohol consumption in this group.

The interviews indicated that dependency outcome-beliefs were held by some of the women, particularly in the Swedish sample. Although such beliefs may intuitively be linked to a reduction in risky drinking, it would be ill-considered to draw conclusions based on the qualitative studies only. For instance, a fear of dependency may reduce both drinking

occasions and intake levels; however, this may only be the case if participants perceive themselves to be at risk for developing abusive or dependent alcohol use. Indeed, considering the findings relating to the Loss of control and Aggression subscale, it is possible that the women thought of dependency as a problem relevant for others but not for themselves. Thus, although the qualitative studies indicates that the risk of dependency is a salient belief, particularly among the Swedish women, formal tests of the link between fear of dependency and risky drinking needs to be conducted before conclusions can be drawn regarding this belief.

11.2.2.4 *The influence of alcohol as self-medication*

It was hypothesised that the idea of alcohol as a form of self-medication would increase the likelihood of risky drinking. This prediction was supported in Study 3: The likelihood of risky drinking increased by 7% for each unit of increase on the RMAQ–MW Self-medication subscale. The use of alcohol as a way to reduce emotional distress is assumed to be a way to compensate for a lack of adaptive coping responses (Hussong, 2003). For such individuals, a dependence on alcohol to regulate negative emotions may develop, resulting in high levels of consumption, particularly when experiencing stress or other negative emotions. The finding of the current research is consistent with both cross-sectional and longitudinal studies which have linked drinking to avoid negative affect (i.e., self-medication) to greater levels of harmful alcohol consumption (Crum et al., 2013; Martens et al., 2008). However, research also indicates that the tendency to use alcohol to cope is not uniform across social groups, with some findings suggesting that women are less likely than men to use alcohol this way. Comparison between men and women also indicate that the link between drinking to avoid negative effect and harmful consumption patterns is stronger among men (for a review of sex differences in coping-focused drinking, see Nolen-Hoeksema, 2004). Therefore, when investigating alcohol use among middle-aged women it is of importance to establish, first, whether these women share an understand of alcohol as

a form of self-medication, and second, if this belief is associated with risky drinking. Taken together, the results of Study 3 indicate that this indeed was the case for the Australian participants.

11.2.2.5 *The influence of alcohol as a symbol of age and gender*

It was hypothesised that the scales measuring the link between age and alcohol and those that tapped actual and perceived traditional gender role attitudes would be associated with a reduction in the likelihood of risky drinking. However, the results did not support these predictions, with no multivariate relationship found between these subscales and the DV. These results are inconsistent with the interview findings, which suggested that the symbolic link between age and alcohol influenced alcohol use among women in both samples (and particularly so among the Swedish women). Moreover, the Study 3 findings contradicted previous literature which has described the existence of age-specific drinking norms (e.g., Allamani et al., 2000; Van Wersch & Walker, 2009). It is possible that the two subscales developed to measure the symbolic link between age and alcohol did not adequately capture the beliefs that were expressed in the interviews. However, it is also possible that the link between age and alcohol use was specific to the interview samples, and as such, not generalisable to the wider population of middle-aged women.

The absence of a link between actual and perceived traditional gender role attitudes and risky drinking was also an unexpected finding. Although there is some inconsistency in the literature regarding the link between traditional gender role attitudes and alcohol use (see Section 3.2.4.1), a previous study has found that personally held egalitarian gender roles were associated with increased consumption levels among middle-aged women (Murphy et al., 2000). Moreover, the current research distinguished between personally held attitudes and perceived societal attitudes toward women. This distinction was based on the finding that women unanimously believed that society judged their alcohol use more harshly, but varied in the degree to which they had internalised these beliefs. It was anticipated that

this distinction would increase the ability to predict risky drinking as our behaviours are often more strongly influenced by the views we believe others hold than the views we hold ourselves (Zou et al., 2009).

One possible explanation for the failure to predict risky drinking from gender role attitudes may be found in the measures that were used. The SRQ measures traditional, dichotomous views of the characteristics of men and women and the roles that they should occupy. The scale does not, however, directly measure the manifestation of gender role attitudes in alcohol use. It is therefore possible that the traditional views of women's roles that were held by some of the women extended to a number of areas in life, but not to the consumption of alcohol. In effect, the women would endorse traditional gender role attitudes, but not feel that a risky alcohol consumption threatened those beliefs. Gender role attitudes specific to drinking behaviour have been measured in a survey study of English university students aged 18–25 years (De Visser & McDonnell, 2012). This was done by asking participants to indicate whether they believed that HED or alcohol consumption in general were masculine (i.e., traditional) or feminine behaviours. After controlling for covariates (age, SES, sensation seeking, and descriptive norms), these two beliefs were correlated against four measures of personal alcohol use; overall weekly consumption, HED, intention to drink, and intention to get drunk. Calculations were conducted separately for the male and female participants. From the eight computations, only three were significant among the female proportion of the sample. Viewing alcohol consumption as a masculine behaviour was associated with a decrease in overall consumption and intention to drink and understanding HED as a masculine behaviour was associated with decrease in personal HED. However, it must be noted that the significant associations were small in nature, ranging from $r = -.09$ to $r = -.15$. As such, this study produced partial (and weak) support for a link between specific alcohol-related gender role attitudes and consumption pattern. Nonetheless, these findings offer some support for the notion that a more specific measures may have resulted in

significant results in the current research. Generally, research indicates that specific (rather than general) beliefs are better predictors of actual behaviour (Ajzen & Cote, 2008).

Alternatively, it can be argued that the SRQ identified women with traditional views of alcohol and gender (although this was not explicitly measured). As traditional gender role attitudes often extend to drinking (Dempster, 2011; Holmila & Raitasalo, 2005; Lyons & Willott, 2008), it may be assumed that this was the case; indeed, it was based on this assumption that the SRQ was chosen for the current research. Should this be true, the current findings indicate that although actual and perceived traditional views of gender and drinking are present among some of the women, such views do not influence personal tendencies to engage in risky drinking. In this instance, women would hold certain attitudes toward alcohol use and believe that others shared them, without acting on these beliefs and perceptions. This conclusion is inconsistent with a large body of work on the influence of both personally held and perceived societal attitudes (e.g., Rise, Sheeran, & Hukkelberg, 2010; Zou et al., 2009). However, it could be argued that gender roles attitudes (traditional or egalitarian) are no longer constructs that are important or salient enough among middle-aged women to influence their behaviour.

11.2.2.6 *The influence of alcohol norms and alcohol abuse self-stigma*

In terms of the descriptive norms, perceived drinking frequency did not predict risky drinking; however, higher perceived HED frequency was associated with higher likelihood of risky drinking. Specifically, participants who believed that same-aged women engage in weekly HED were 5.17 times more likely to be risky drinkers compared to those that who believed HED never occurred among same-aged women. Previous literature has shown that perceived frequency of a particular consumption pattern (e.g., HED) or alcohol-related behaviour (e.g., alcohol use in the work place) is linked in increase engagement in those patterns and behaviours (França et al., 2010; Frone & Brown, 2010). In the current research, descriptive norms specific to either HED or MFD was measured against a more

generalised drinking outcome (i.e., risky drinking). Thus, the current study identified that, for Australian middle-aged women, perceptions regarding HED frequency but not drinking frequency per se, was a risk factor for risky drinking.

In terms of injunctive norms, and in line with the hypotheses, it was found that personal disapproval of HED and MFD among same-aged women was associated with lower likelihood of risky drinking. This is in line with literature on younger drinkers which has shown that injunctive norms are predictive of alcohol consumption, drinking volume, and alcohol problems in prospective studies (Osberg et al., 2011; Talbott et al., 2014). As such, the current results indicate that injunctive norms exert similar influence among middle-aged women as they do among young people. Unexpectedly, perceptions regarding others' disapproval of HED or MFD among same-aged women were associated with a greater likelihood of risky alcohol consumption. Although counterintuitive, several potential explanations for this finding can be suggested. First, there is some evidence to suggest that older adults are less susceptible to social influences than young adults (Gardner & Steinberg, 2005). Given the strong focus on young people's alcohol use in the norm literature, the importance of the perceived approval or disapproval of others may thus have been exaggerated.

An inverse relationship between perceived acceptability of a behaviour and the engagement in the same behaviour has, however, been observed in some previous research studies. For instance, perceived disapproval of more distal referent groups (typical student vs. friends and family) toward gambling and alcohol consumption has been linked to greater engagement in these behaviours among college students (Neighbors et al., 2007; Neighbors et al., 2008). Similar results have been found by Rimal and Real (2003). In this study, perceived societal disapproval of alcohol consumption was associated with increased likelihood of personal consumption, but only among participants who also believed that drinking was frequent among their peers. Drawing on psychological reactance theory

(Brehm, 1966), the authors suggested that these findings may reflect a desire among participants to rebel against perceived restrictions to their freedom. However, this tendency may only be actualised if peers are also perceived to act against the norms of society. The findings of Rimal and Real (2003) fits with the patterns found in Study 3; the Australian participants (correctly) perceived MFD patterns to be fairly common among women in their age group, and overestimated the prevalence of HED. As such, perceived societal disapproval of HED and MFD, in conjunction with relatively high levels of perceived engagement in these drinking patterns by other same-aged women, may explain why HED and MFD perceived injunctive norms were linked to increased likelihood of risky drinking. Indeed, some of the women in the interviews described the normative sanctions against their drinking as unfair and dated. However, caution must be taken when generalising findings among young people to that of older cohorts; a sense of rebelliousness and desire to resist restrictions placed on one's drinking may be more closely related to adolescence and young adulthood than middle age.

A second explanation, whereby drinking patterns influenced beliefs, is also possible. Previous research has indicated that risky drinkers tend to overestimate the alcohol consumption of others (Cunningham et al., 2012), possibly as a result of a subconscious need to redefine one's own drinking as less problematic. Although these results demonstrate an opposite effect compared to those found in the current research (i.e., risky drinker perceived disapproval to be greater), they still point to possibility of a reversed causality between norms and behaviour. Given the non-permissive nature of middle-aged women's alcohol use in general, it is possible that participants with risky consumption patterns were self-conscious of their drinking and thus sensitised to the real and imagined disapproval of others. Further research would be needed to conclusively determine why perceived disapproval toward two different drinking patterns is linked to increased risky consumption among middle-aged women.

Last, and also unexpectedly, it was found that alcohol abuse self-stigma did not influence the likelihood of risky drinking. Indeed, the bivariate relationship between the PPLQ and the AUDIT was close to zero ($r = .06$). This finding is particularly surprising when considering the results pertaining to injunctive norms; as discussed, participants' own disapproval toward MFD and HED was associated with reduced likelihood of risky drinking. As such, it could be expected that alcohol abuse self-stigma would similarly protect against risky drinking. One possible explanation for the lack of relationship between self-stigma and risky drinking may be that women conceptualised their own drinking as substantially different from a person with abusive drinking patterns. If so, the prospect of becoming dependent on alcohol, regardless of its attached stigma, may not act as a deterrent on current drinking patterns. It is also possible, however, that risky drinkers are highly motivated to drink and that associated stigma do not waiver that motivation. This in of itself would be an important finding as risky drinkers who also experience self-stigma in relation to those consumption pattern may be less willing to seek help (Keyes, Hatzenbuehler, et al., 2010).

11.2.3 Generalising the findings of Study 3 to Swedish middle-aged women

It can be argued that some the alcohol beliefs that were found to predict risky drinking among Australian women would predict risky drinking in samples of Swedish women. As previously discussed, descriptive norms and actual injunctive norms as well as beliefs similar to those measured by the Self-mediation and Work and Leisure subscales have been linked to drinking outcomes in previous studies (Crum et al., 2013; França et al., 2010; Frone & Brown, 2010; Harnett et al., 2000; Martens et al., 2008; Osberg et al., 2011; Talbott et al., 2014) indicating that they exert consistent influences on alcohol use in different populations. Moreover, as drinking events that were focused on social enhancement (observation data) were associated with heavier alcohol use in both countries, it could be expected that the RMAQ-MW subscale Social Enhancement would predict increased likelihood of risky consumption on both samples. In terms of the unexpected relationship

found between perceived injunctive norms and risky drinking, it could again be argued that findings would be similar in a Swedish sample. Both samples of women experienced social sanctions for alcohol consumption, and as such, it could be expected that Swedish risky drinkers would be similarly sensitised to the disapproval of others. However, some uncertainties regarding the influence of alcohol beliefs for Swedish middle-aged women remain. For example, Sweden has achieved greater gender equality than Australia, and such external factors may have impacted on the relationship between gender role attitudes and risky drinking for Swedish women.

11.3 Summary

The current research was successful in identifying and measuring a number of shared alcohol beliefs among middle-aged women. In Study 3, majority agreement was found in most instances where it was expected (based on the qualitative findings). Generally, the highest level of agreement was also found for the beliefs that were most commonly discussed in the interviews, further supporting the validity of the findings of both the qualitative and quantitative studies. Taken together, the results indicated that several alcohol beliefs are shared by middle-aged women in Sweden and Australia, supporting existence of a pan-national alcohol culture among middle-aged women in Western countries. Specifically, it was found that a majority of women in both countries ascribed relaxing, pleasure-inducing, and self-indulgent use-values to alcohol, and that they also viewed it as a taste and food product and as a social enhancer. These ideas regarding alcohol were coupled with the view of alcohol as a dangerous drug, and a non-permissive culture around drinking that was signified by personal and perceived disapproval of HED and strong self-stigma attached to abusive alcohol use.

Comparison with previous literature suggests that although several of the identified beliefs may be shared with male and younger drinkers, the nature of these beliefs (e.g., Work and Leisure and Relaxation and Pleasure) is different among middle-aged women.

Moreover, men and younger drinkers appear to conceptualise and use alcohol in more diverse ways compared to middle-aged women. For example, both moderate and intoxication-focused consumption appears to hold a role and meaning for these groups, while only the former is seen as appropriate for middle-aged women. Other beliefs, such as strong non-permissive HED norms and the idea of alcohol as a food and taste product may be more common among middle-aged women than among young women. As such, although overlap with other cohorts exists, the nature of middle-aged women's alcohol culture appears to be distinguishable from that of other groups. The notion that middle-aged women share a distinguishable culture around alcohol is further supported by the distinctive consumption patterns (i.e., objective alcohol culture) that are displayed by this group (AIHW, 2014; Ramstedt et al., 2013; Wilsnack et al., 2009).

Differences between the two samples were also found, however, indicating that while pan-national features can be distinguished, the alcohol culture of mature-aged women is at the same time influenced by its local context. For instance, the acceptance of MFD and the greater tendency to view alcohol as a delineator against work and responsibilities among the Australian women may be a reflection of a more integrated use of alcohol in this country. Similarly, the greater ambivalence toward alcohol use, the particularly strict drinking norms, and the strong self-stigma that was found among Swedish women may reflect broader national beliefs remnant from Sweden's history as a dry drinking culture. The notion that the alcohol culture of mature-aged women in each country is influenced by the broader national context is in line with the current understanding of national and subnational cultures. Specifically, it is argued that while subcultural groups hold beliefs that distinguish them from the dominant national culture, they often share some or several beliefs contained within that culture (Clinard & Meier, 2015).

In terms of RQ3, several of the identified alcohol beliefs were found to predict an increased likelihood of risky drinking in the Australian sample. After adjusting for the

influence of control variables, personal disapproval of MFD patterns and HED, low levels of perceived HED prevalence, and Interpersonal Closeness²⁶ was significantly associated with reduced risky drinking likelihood, while perceived societal disapproval of MFD patterns and HED, Self-medication, Social Enhancement, and Work and Leisure were associated with increased odds of risky drinking. Some of the beliefs that were linked to risky drinking were also shared among by a majority of the women. These beliefs should be considered as of particular importance, as they are not only characteristic of middle-aged women's alcohol culture, but also risk or protective factors for risk drinking. Specifically, perceived and actual disapproval of HED, actual and perceived approval of MFD as well as the idea of alcohol as a means to self-medicate, to enhance social situations, and to distinguish between work and rest were all sufficiently shared and predictive of drinking outcomes.

11.4 Contribution to Knowledge

The present research examined the influences on risky drinking among middle-aged women, a previously understudied group of drinkers. The results from this research will thus add to the limited understanding of alcohol use in this cohort. Moreover, the current research sought to determine whether the alcohol culture of middle-aged women extends across national borders. It was found that although common pan-national alcohol beliefs exist, some country-level differences are also evident. Based on this finding, caution should be taken when generalising locally generated findings about alcohol cultures across countries: Even in countries that are relatively similar (e.g., Western secular states), unique national characteristics exist which may result in variations in alcohol values and beliefs. Although concepts such as "masculine drinking culture" and "youth drinking culture" (De

²⁶ To be interpreted with caution due the presence of an unexplained suppression effect.

Visser & Smith, 2007; Järvinen & Room, 2007) assumes that common alcohol beliefs and behaviours can be found across countries, national comparisons are likely to produce more representative descriptions of these alcohol cultures.

The use of both qualitative and quantitative methods further contributed new knowledge to the literature on alcohol culture and on middle-aged women's alcohol use. The qualitative studies made possible a more in-depth examination of the nature of alcohol beliefs and context within which the relationships between these beliefs and risky drinking can be understood. For instance, the overall findings of this research suggested that alcohol norms are more stringent for middle-aged women, which is in line with previous research (e.g., Allamani et al., 2000; Van Wersch & Walker, 2009). However, the qualitative findings also revealed a plausible mechanism to explain the occurrence of these norms: In interviews, the participants spoke of heavy drinking in middle age as a failure to obtain the level of personal development and maturity which is expected for this life stage. Drawing on the concept of a life scripts (Janssen & Rubin, 2011; Neugarten et al., 1965), these beliefs may explain the particularly strong social disapproval toward drinking among middle-aged women. Moreover, the qualitative studies indicated that among the different traditional gender roles that may influence alcohol use, it was that of being a mother and responsible for the safety and well-being of one's family that was most salient for middle-aged women. Using only quantitative methods, such nuances would not have been uncovered.

Moreover, the inclusion of quantitative measures made the current research one of a limited number of projects that has attempted to empirically link shared alcohol beliefs with drinking outcomes. Although the result of the research indicated that several common beliefs are indeed linked to risky drinking, many were not. This is in of itself an important finding. Previous research has been conducted on groups with harmful consumption patterns (e.g., men or younger people) have identified shared beliefs that are seemingly responsible for those patterns (Fry, 2011; Harnett et al., 2000; Sheehan & Ridge, 2001). However, as the

current research demonstrate, such assumptions could be premature and contribute to the cultural attribution fallacy that is common in cultural research (Matsumoto & Yoo, 2006). Last, to measure the findings of the qualitative studies, a new scale, the RMAQ-MW was developed. Although this scale requires further validation, it nonetheless represents a new tool to measure subjective alcohol culture among middle-aged women.

11.5 Implications

By taking a cultural approach, the current research sought, not only to identify beliefs that influence risky drinking, but also to identify which of these beliefs that are shared by a majority of middle-aged women. For health promotions and interventions delivered at the population level, an understanding of the factors that not only increase the likelihood of risky drinking but are also common among middle-aged women is essential.

Among the shared beliefs that were identified as predictors of risky drinking, several common themes could be detected. First, beliefs around alcohol as self-medication and as a separating work from leisure both contained ideas of alcohol as a form of escapism, where it is used as a means to reduce stress and negative emotions and states such as loneliness, shyness (Self-medication), and boredom (Work and Leisure). Second, the Work and Leisure subscale also measured the use of alcohol to demark the end of the workday and to unwind and relax, which may be linked to an understanding of alcohol as integrated into everyday life. Moreover, as previously discussed, MFD was seen as acceptable by the majority of the Australian participants and over 80% of the sample believed that alcohol consumption took place at least twice per week among same-aged women. These findings, alongside those of the qualitative studies, indicate that frequent use of alcohol is normalised among middle-aged women in Australia. This conclusion is in line with previous research which has shown that harmful alcohol use is often equated with public intoxication (Aitken, 2015; Green et al., 2007; Grønkjær et al., 2011; Holloway et al., 2008) and supports the notion that normative patterns of alcohol use are often considered

unproblematic regardless of whether they are harmful or not. Last, it was found that that commonly held ideas regarding alcohol as a social enhancer was associated with greater risky drinking likelihood. As previously discussed, it is likely that this understanding and use of alcohol was linked to consumptions above what is defined as safe for any one occasion. This is an interesting conclusion given that the women appeared to view their use of alcohol, both alone and in social situations, as distinctly non-intoxication focused.

Researchers on young drinkers (e.g., Borlagdan et al., 2010; Petrilli et al., 2014; Sheehan & Ridge, 2001) have highlighted the importance of using the role and meaning that alcohol plays for this group as a starting point for effective interventions. For Australian middle-aged women, health benefits may similarly be gained by including messages that target the idea of alcohol as a means to escape negative emotions, including the boredom and mundaneness of everyday life. Likewise, educational information that promotes a better understanding of the negative long-term health risks associated with regular consumption and of the definitions of short-term harmful alcohol consumption may be beneficial. The effectiveness of the latter could be enhanced by aligning the understanding of short-term harm with current consumption guidelines and challenging beliefs that equate it with the intoxication-focused “binge drinking” that is often linked to young people. In interviews, the Australian participants viewed themselves as “body conscious” and more concerned about the effects of alcohol than men their age. This finding indicates that middle-aged women could be relatively susceptible to health messages around alcohol consumption.

Several large scale campaigns have been conducted in Australia to challenge alcohol beliefs and meanings that are linked to harmful drinking. For instance, the Good Sports campaign (Munro, 2000) has targeted the long-standing association between alcohol and sports and the National Binge Drinking Strategy (Department of Health, 2013) has addressed the intoxication culture among younger people by promoting safer consumption patterns. Underpinning these approaches is a recognition that meaningful changes to

harmful alcohol beliefs and cultures requires concerted efforts from community and government organisations, industry partners, legislative bodies, and educational institutions. The Good Sports program focused on the introduction of responsible service within clubs and arenas, the discontinuation of using alcohol as prizes for performance, engagement with the community, clear advertising of a responsible alcohol policy, and on reducing the opportunity for older players to modeling heavy consumption for younger players. The National Binge Drinking Strategy instituted a harm minimisation and behavioural change campaign as well as community partnerships and early interventions and diversion programs. Although successful, these campaigns challenged well-recognised alcohol cultures that have been the target of growing community awareness and concern. In comparison, there has been no recognition of the existence of an alcohol culture for middle-aged women, and relatively little discussion around harmful alcohol use in this group of drinkers. Moreover, campaigns such as the Good Sports and the National Binge Drinking Strategy are based on the recognition that much of the harm that arises from both the youth and alcohol/sport cultures takes place in social and public contexts. As such, key initiatives such as responsible service of alcohol and policing (e.g., enforcement of legal drinking age) targeting these context are integral aspects of the interventions. Similar approaches are not likely to be effective for middle-aged women as harmful drinking patterns may not predominantly take place in social public context or easily recognised as harmful when it does. As such, interventions limited to educational messages and awareness-raising may be a better first step to tackling the harmful alcohol beliefs that are common among middle-aged women.

Last, it was also found that a large majority of middle-aged women overestimated the prevalence of HED among same-aged women, and moreover, that greater perceived HED is linked to increased likelihood of risky drinking. Previous research has found that drinkers often overestimate the consumption their peers (A. Andersson et al., 2009; Garnett

et al., 2015), and studies conducted on student population suggest that providing information about the actual consumption patterns of other students can reduce the incidence of HED (Lewis & Neighbors, 2007). As such, providing middle-aged women with accurate information regarding the prevalence of HED among same-aged women may similarly reduce instances of risky drinking. More research is needed, however, to determine the effectiveness of addressing misperceived norms among middle-aged women (cf. Lewis & Neighbors, 2006). As demonstrated by this research, caution needs to be taken when generalising findings from one group to another.

11.5.1 Issues for help-seeking

It was found that, with age, alcohol and drinking had become focused on connectedness, taste, refined pleasure, and relaxation. With these use-values attributed to alcohol, heavy consumption no longer held a meaningful function and as such was difficult to understand or explain. Indeed, the current research indicates that the norms that surround middle-aged women's alcohol consumption are strict and alcohol abuse is associated with high levels of self-stigma. Despite this non-permissive culture around middle-aged women's alcohol, the findings showed that perceived societal disapproval against drinking (both MFD and HED) was significantly higher among risky compare to low-risk drinkers. Additionally, alcohol abuse self-stigma was not associated with reductions in risky drinking, meaning that risky alcohol consumption occurred among women who experience self-stigma in relation to alcohol abuse. The presence of self-stigma and perceived societal disapproval among risky drinkers is problematic, as these factors may act reduce the willingness to seek for alcohol issues (Keyes, Hatzenbuehler, et al., 2010). Although further research is needed to examine the impact of social disapproval, stigma, and willingness on help-seeking, a recognition of these issues may be need to be incorporated in public health effort aimed at promoting alcohol treatment. Moreover, a consideration of these beliefs needs to be present among individual practitioners who treat middle-aged women with alcohol problems.

11.6 Strengths

Several strengths were associated with the current research. First, the mixed-methods approach increased the reliability of the findings as it allowed the researcher to examine the same phenomenon using different data collection methods (i.e., triangulation). As all research methods are associated different limitations, the use of multiple methods increases the confidence in findings (Bryman, 2004). In particular, the reliability of alcohol beliefs that were present across the different studies could be assumed to be high. Moreover, the mixed-methods approach enabled a deeper understanding of the investigated phenomena (the qualitative studies) as well as the ability to generalise findings to the wider population and estimate the impact of uncovered beliefs on alcohol outcomes (the quantitative study). The cross-national approach was a further strength of the current research. By comparing the findings of two national samples, some conclusions regarding the beliefs that are shared by middle-aged women in different Western countries could be made. Such shared, pan-national beliefs may be considered to be the core characteristics of middle-aged women's alcohol culture.

11.7 Limitations

11.7.1 The qualitative studies

Limitations of the qualitative studies pertain to the samples that were used and the adequacy of the research methods in capturing the alcohol beliefs that were present in these samples. The aim of the qualitative studies were to generate an initial understanding of commonly held alcohol beliefs to be further validated or refuted in Study 3. A focus was not placed on ensuring that a fully representative sample of social drinking occasions or interview participants was obtained as any alcohol beliefs that could not be generalised beyond the qualitative studies would be identified in Study 3. However, although the mixed-methods design identified non-generalisable findings, it did not guard against the

unintentional omission of alcohol beliefs. The observations were relatively few in number and the interview participants self-selected into the study rather than being strategically chosen based on their consumption patterns and experiences with alcohol. As such, it is possible that important alcohol beliefs that exist in the population of middle-aged women was not represented in observations and interviews and their inclusion thus neglected in Study 3. It should be noted that a degree of diversity in the captured beliefs were ensured by the use of two different data collection methods and by including samples from two countries. Nonetheless, omissions could have occurred which would have impacted on conclusions made regarding the nature (and influence of) alcohol beliefs among middle-aged women.

A number of strategies were put in place to reduce bias during data collection and analysis (e.g., reflexivity, peer-review, rigour, and attention to self-presentation in interviews). Regardless, it is likely that some of the researcher's own perspective and experiences of alcohol use influenced the research process and outcomes. Other practical aspect of the design could have exerted undue influence over the data. For the Swedish sample, both telephone and face-to-face interviews were offered, while the Australian sample was limited to telephone interviews only. As such, the Swedish participants, to a greater extent, were able to choose an interview format they were comfortable with. Although no discernable differences in terms of content and length of interviews could be found between the two interview modes, it is possible that the ability to choose interview format encouraged a richer and more honest description of alcohol use among the Swedish women.

11.7.2 The quantitative studies

Several limitations were also present for the quantitative study. First, the representativeness of the sample used in Study 3, and consequent issues around generalisability, must be considered. It must be noted that as this research sampled a

specific group of middle-aged women (current drinkers) relevant population and previous research samples against which the current sample could be compared were difficult to locate. Nonetheless, the comparisons that were made indicated that income and educational attainment were higher than expected in the current sample, as was the proportion of participants that scored above the cut-off anxiety and risky drinking. While it is difficult to offer explanations as to why the current sample appeared to be of high SES, it is perhaps easier to understand why a relatively high proportion of women were risky drinkers. The recruitment of participant in Australian was conducted via media release, which stated that the purpose of the current research was to gain a better understanding of alcohol use among middle-aged women. Currently, there is a limited availability of research and information tailored specifically to address problematic alcohol use among middle-aged women. Therefore, it is possible that the project attracted a disproportionate number of women who were concerned about their own consumption and eager to find information about alcohol use problems.

In terms of RQ1, the overrepresentation of certain demographics could influence the generalisability of the results. For instance, Australian data shows that women with higher educational levels are significantly less likely to engage in HED (OECD, 2015). A highly educated sample may therefore result in overinflated disapproval toward HED compared to the population. Moreover, the putative link between moderate, taste-focused alcohol consumption and sophistication may be a reflection of the social status of the current sample rather than of middle-age per se. Indeed, higher education was significantly correlated with stronger disapproval of HED and higher scores on the Food and Taste subscale in the current sample, which appears to support this notion. However, these correlations were very small in magnitude (around 10%), which indicate that these alcohol beliefs were minimally influenced by educational level. No significant correlations were found between income and disapproval of HED and Food and Taste. Moreover, although HED has

been found to be less common among well-educated women in population samples, close to 80% of the current participants reported having consumed more than 4 standard drinks in one sitting at least once in the past 12 months. Among the general Australian population of women aged 50–59 years, the corresponding proportion is 22.4% (AIHW, 2014). Additionally, at a multivariate level, education was not predictive of risky drinking.

In addition to potential influence of SES, positive and significant bivariate correlations were found between anxiety (as measured by the HAD–Anxiety scale) and the Work and Leisure ($r = .26$) and the Self-medication ($r = .44$) subscales. As the number of women who scored above the cut-off for anxiety was high, the current sample may have overestimated the prevalence of these alcohol beliefs among the general population.

It should also be noted that a large number of participants were excluded from the survey due to insufficient number or questions answered. Comparisons revealed that those that were excluded were significantly younger than the participants that were retained ($M = 50.61$ vs. $M = 51.46$). Although the effect size for this difference was small, it is possible that this slightly younger group of participants would have answered the questions in a style more similar to younger cohorts of drinkers than the included sample. Nonetheless, it must be kept in mind the mean age of the included sample (51.46 years) was very close the midpoint of the age-range (45–59 years) targeted in this research. As such, the retained sample closely aligned to the targeted age group. In summary, the non-representative nature of the sample may have impacted on the accuracy with which RQ1 could be answered. However, in terms of RQ3, adjustment for the potentially confounding effects of different demographics could be made in the multivariate analyses, increasing the validity of the results pertaining to this question.

In addition to the potential impact of the non-representative sample, four scales had to be excluded from Study 3 due to unacceptable reliability. Two of these were the RMAQ–MW subscales Dependency and De-emphasis of Intoxication. As the constructs

measured by these scales could not be included in Study 3, conclusions regarding their prevalence and influence on risky drinking are based on qualitative data only, and as such, are less certain. Moreover, as the lie scale from the EPQR-S (Eysenck et al., 1985) was excluded, social desirability could not be controlled for. As such, it is possible that results were unduly impacted by a tendency among some participants to answer the included questions in socially desirable ways. Last, the SRQ GT Actual was also excluded due to poor reliability; however, actual gender role attitudes were captured by the SRQ GL allowing inferences to be made regarding this phenomenon.

Last, the current research was cross-sectional in nature which introduces uncertainty around causality. As previously discussed, the positive relationship between perceived disapproval of HED and MFD and risky drinking suggested that risky drinking may, for these beliefs, be the cause rather than the outcome. It is also possible that reversed causality was present for the remaining alcohol norm measures. In terms of descriptive norms, risky drinkers have been found to overestimate the consumption levels of others (Cunningham et al., 2012). It has been suggested this is a type of defence mechanism against stigma, whereby risky drinkers unconsciously redefine their own consumption as normative. However, if we accept that the positive relationship between perceived disapproval of HED and MFD and risky drinking was due to a heightened awareness of external disapproval, it would seem unlikely that the women in this sample would engage in a defence mechanism of this kind. In terms of personal disapproval of HED and MFD, it is certainly possible that non-risky drinkers develop a lower tolerance of both HED and MFD over time. Speaking against this conclusion, however, is the existence of longitudinal studies that have linked injunctive drinking norms with alcohol longitudinally, at least among young people (Osberg et al., 2011; Talbott et al., 2014).

In terms of Self-medication, literature indicates that the emotional suffering caused by mental illness can be exasperated by alcohol consumption (Mauri et al., 2006). As such,

it could be conceived that risky consumption patterns would cause increased emotional distress and subsequently shape ideas around alcohol as a way to alleviate this distress. However, there is also overwhelming consensus in the literature that negative emotional states (and a desire to escape these states) are an independent causal factor for harmful consumption patterns (Swendsen et al., 2010). In conjunction with the longitudinal studies that have linked drinking to avoid negative affect to greater levels of harmful alcohol consumption (Crum et al., 2013), it can be argued that Self-medication was indeed the causal factor of risky drinking in the current study. In previous sections, potential mechanisms explaining the link between Work and Leisure and Social Enhancement and risky drinking have been put forward. Moreover, social drinking motives, a concept similar to the social enhancement use-value measured by the Social Enhancement subscale, has been prospectively linked to consumption levels in adult population samples (Crutzen, Kuntsche, & Schelleman-Offermans, 2013). Although idea of alcohol as a symbolic demarcation between work and leisure and consumption patterns has not been formally assessed, it is conceptualised as an alcohol beliefs that shapes the way in which alcohol is used (e.g., Harnett et al., 2000). Thus, although reversed causality cannot be entirely dismissed for these beliefs, there is strong empirical and theoretical support for their causal effect.

11.7.2.1 Recruitment of the Swedish sample

The current research was not able to obtain an adequate sample for Study 3 from Sweden. Survey studies of alcohol or alcohol and other substances that are conducted by established Swedish institutes (e.g., Statistics Sweden) typically record response rates around 50%–80% among adolescents or the general population. Moreover, alcohol research conducted by individual research teams or marketing research firms has achieved similar response rates (see Table 11.3 for an overview). Although failed recruitment efforts are unlikely to be published, these studies nonetheless show that successful alcohol studies are

routinely conducted in Sweden. Two reasons for the low response rate in the current study can be proposed. In the qualitative data, it was noted that middle-aged Swedish women appeared to have a more ambivalent and morally fraught relationship to alcohol than their Australian counterparts. Based on this finding it can be speculated that the low survey uptake in Sweden may have been due to an unwillingness to answer questions regarding personal alcohol consumption. Moreover, the current research sought and obtained ethical approval for Study 3 from the relevant authorities in Sweden; however, the project was associated with an Australian university not likely to be recognised by Swedish women. It is possible that this instilled uncertainty among prospective participants, further contributing to the low response rate.

Table 11.3. *Recruitment Details of Previous Alcohol Studies in Sweden*

Study description	Data collection	Participants	Response rate	Authors
A large-scale study of middle-aged women's mental and physical health. Alcohol use and a range of other health indicators were measured.	A postal survey and a routine physical examination conducted upon return of the survey. Data was collected from 1995 to 2000.	Women aged 60-70 years, recruited from the Lund area, south of Stockholm	Response rate = 64.2%	Samsioe, Lidfeldt, Nerbrand, and Nilsson (2010). Author affiliations: Lund University Hospital; Lund University; University Hospital, Malmö.
A study estimating alcohol consumption volume.	A telephone alcohol survey conducted by a public opinion firm.	Men and women aged 16–69 years. Participants were recruited from the northern and southern part of Sweden.	Northern Sweden: cooperation rate = 52%, completion rate = 49% Southern Sweden: cooperation rate = 53%, completion rate = 51%	P. Mäkelä, Bloomfield, Gustafsson, Huhtanen, and Room (2008). Author affiliations: Alcohol and Drug Research Group, National Research and Development Centre for Welfare and Health (STAKES); University of Southern Denmark; Stockholm University, and University of Melbourne.

Table 11.3. *Recruitment Details of Previous Alcohol Studies in Sweden (Continued)*

Study description	Data collection	Participants	Response rate	Authors
A study which entailed the assessment of consumption pattern followed by personalised feedback to participants regarding their drinking and related health risks.	Participants were recruited via email. Both the assessment and feedback sessions were conducted online.	Third semester students from a south-eastern university (all faculties) were invited. Information regarding age and sex of participants is not given.	Response rate = 45.77%	A. Andersson et al. (2009). Author affiliations: Health Care Research and Development Unit, County Council in Östergötland; Linköping University; Karolinska Institutet.
A study comparing the response rate and quality (internal consistency and mean scores) of responses to the AUDIT using either a web-based or pen-and-paper response format.	Participants in the pen-and-paper condition received an envelope containing an introductory letter, the AUDIT, and a paid return envelope. Participants in the web condition received a postcard with the same introductory text, an URL link and a log-in code. Two reminders were sent out to non-respondents in both conditions. Data collection was undertaken by a marketing company.	Two random population samples of men and women aged 17-71 years were targeted.	Pen-and-paper response rate: After initial send-out = 25% After first reminder = 39% After second reminder = 54% (276 men, 344 women and 43 undisclosed) Web-version response rate: After initial send-out = 13% After first reminder = 18% After second reminder = 26% (140 men and 184 women)	Källmén, Sinadinovic, Berman, and Wennberg (2011). Author affiliations: STAD-section, Centre for Research in Psychiatry; Karolinska Institutet; Stockholm University.

11.8 Future Research

Although the current program of research added new knowledge about middle-aged women's alcohol culture, several questions were also raised. For instance, uncertainty around causality remains for perceived disapproval of HED and MFD, which should be addressed by longitudinal designs. Moreover, future quantitative studies using representative samples are needed to verify the prevalence of the identified alcohol beliefs and research including Swedish participants (potentially making use of pre-existing panels) should be conducted to better understand the alcohol culture of this group.

In addition to the use of representative samples, further research in this area could include comparison groups of male and/or younger and older drinkers to gain a more complete picture of the differences that exists between middle-aged women and these groups. As discussed, it is likely that there is some overlap in alcohol beliefs among different groups of drinkers. It is possible that that this overlap is explained by a gradual uptake of the beliefs identified in the current research with age. For instance, studies of young drinkers have found that they see their own intoxication-motivated drinking as a liminal phase and that they associate adulthood with moderate and domestic consumption (Harnett et al., 2000; Roumeliotis, 2010). As these beliefs are present from a young age, it is possible that women start to project an adult identity by engaging in non-intoxication focused consumption before they reach their middle age years.

Additionally, survey data show that although men continue to consume greater volumes of alcohol throughout the lifespan, they too experience a reduction in HED and an increase in drinking frequency (AIHW, 2014; Folkhälsomyndigheten [Public Health Agency of Sweden], 2015; Ramstedt et al., 2013). This raises questions around whether beliefs such as the de-emphasis of intoxication and the focus on food and taste are characteristic of middle-aged women or of middle age more broadly. As such, it would be of interesting to extend the current research to include age and sex comparisons.

The impact of self-stigma and the non-permissive alcohol culture that surrounded middle-aged women's alcohol use on help-seeking behaviour warrant further attention. In the current study, alcohol abuse self-stigma was found among over 80% of the sample. Although this is a high number, research indicates that perceived stigma around alcohol use is high in most cohorts (Keyes, Hatzenbuehler, et al., 2010). Again, comparisons with other groups would further elucidate the relative magnitude of self-stigma among middle-aged women. Moreover, research directly investigating the link between perceived norms/self-stigma and help-seeking propensity is needed. As help-seeking is an integral part of combatting harmful alcohol use, it is of key importance to understand the influence of this alcohol belief.

The current research examined the impact of middle-aged women's subjective alcohol culture on risky alcohol consumption. From the findings a number of beliefs that could be potential targets in interventions tailored for middle-aged women were identified. These included the notion of alcohol consumption as a form of escapism and as part of everyday life. Moreover, findings suggested that challenging ideas around short-term harmful alcohol consumption as synonym with intoxication-focused drinking among young people, focusing on the health implications of frequent consumption, and providing information regarding standard drinks and current guidelines for safe consumption may be effective ways of combatting harmful alcohol use among middle-aged women. However, the findings presented here should be seen as a first step toward the design of such interventions: Further research is first needed to evaluate the effectiveness of above suggested messages in addressing harmful alcohol use among middle-aged women. It is important that research continue in this area as alcohol harm, particularly long-term harm, is prevalent among middle-aged women, yet have received little attention from health promoters.

The final multivariate model in Study 3 explained 34.67% of the variance in the DV, after accounting for the control variables. Although encouraging, these results nonetheless indicate that other unmeasured factors influence drinking among middle-aged women. Such factors could include alcohol beliefs not identified in this study but also a range of other age-related factors. For instance, work and family commitments are often greater in older and middle adulthood and physiological changes that are associated with aging may increase the sensitivity to alcohol. Given the proportion of unexplained variance, and the prevalence of alcohol-related harm among middle-aged women, it is imperative that research continue in this area.

11.9 Conclusions

Based on the findings of the current and previous work, it can be argued that a common cross-national alcohol culture exists among middle-aged women and that several of the alcohol beliefs that characterise this culture influence risky alcohol consumption. Importantly, however, the current research also shows that national context influences the alcohol beliefs that are held by middle-aged women: Although shared cross-national core beliefs were identified, other beliefs were found to be either unique to or more common in one of the two national samples. While health promotion efforts targeting these common alcohol beliefs may be applicable across Western countries, researchers and practitioners should consider the influences that national context exerts on alcohol beliefs and consequent alcohol consumption.

References

- Aalto, M., Alho, H., Halme, J. T., & Seppä, K. (2009). AUDIT and its abbreviated versions in detecting heavy and binge drinking in a general population survey. *Drug and Alcohol Dependence, 103*(1-2), 25-29. doi: 10.1016/j.drugalcdep.2009.02.013
- Aalto, M., Tuunanen, M., Sillanaukee, P., & Seppä, K. (2006). Effectiveness of structured questionnaires for screening heavy drinking in middle-aged women. *Alcoholism: Clinical and Experimental Research, 30*(11), 1884-1888. doi: 10.1111/j.1530-0277.2006.00233.x
- Abbey, A. (2002). Alcohol-related sexual assault: a common problem among college students. *Journal Of Studies On Alcohol. Supplement*(14), 118.
- Abrahamson, M. (2012). Moral norms in older Swedish women's drinking narratives. Enduring patterns and successively new features. *Nordic Studies on Alcohol and Drugs, 29*(4), 371-396. doi: 10.2478/v10199-012-0034-7
- Abrams, K., & Kushner, M. G. (2004). The moderating effects of tension-reduction alcohol outcome expectancies on placebo responding in individuals with social phobia. *Addictive Behaviors, 29*(6), 1221-1224. doi: 10.1016/j.addbeh.2004.03.020
- Advocat, J., & Lindsay, J. (2013). To drink or not to drink? Young Australians negotiating the social imperative to drink to intoxication. *Journal of Sociology, 51*(2), 139-153. doi: 10.1177/1440783313482367
- Ahacic, K., Kennison, R. F., & Kåreholt, I. (2012). Changes in sobriety in the Swedish population over three decades: Age, period or cohort effects? *Addiction, 107*(4), 748-755. doi: 10.1111/j.1360-0443.2011.03692.x
- Ahlström, S., Bloomfield, K., & Knibbe, R. (2001). Gender differences in drinking patterns in nine European countries: descriptive findings. *Substance Abuse, 22*(1), 69-85. doi: 10.1023/a:1026475910263
- Aitken, R. (2015). *Alcohol in later life: a qualitative study on alcohol use among older people in New Zealand*. (Masters of Science), Massey University.
- Ajzen, I., & Cote, N. G. (2008). Attitudes and the prediction of behavior. In W. D. Crano & R. Prislin (Eds.), *Attitudes and attitude change* (pp. 289-311). New York: Psychology Press.
- Alati, R., Betts, K. S., Williams, G. M., Najman, J. M., & Hall, W. D. (2014). Generational increase in young women's drinking: a prospective analysis of mother-daughter dyads. *JAMA psychiatry, 71*(8), 952-957. doi: 10.1001/jamapsychiatry.2014.513

- Allamani, A., Voller, F., Kubicka, L., & Bloomfield, K. (2000). Drinking cultures and the position of women in nine European countries. *Substance Abuse, 21*(4), 231-247.
- Allan, J., Clifford, A., Ball, P., Alston, M., & Meister, P. (2012). 'You're less complete if you haven't got a can in your hand': Alcohol consumption and related harmful effects in rural Australia: The role and influence of cultural capital. *Alcohol and Alcoholism, 47*(5), 624-629. doi: 10.1093/alcalc/ags074
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders. DMS-5* (5th ed.). Washington, DC: American Psychiatric Publishing.
- Ammendola, A., Gemini, D., Iannaccone, S., Argenzio, F., Ciccone, G., Ammendola, E., . . . Bravaccio, F. (2001). Gender and peripheral neuropathy in chronic alcoholism: A clinical-electroneurographic study. *Journal of the Peripheral Nervous System, 6*(1), 65-65.
- Anderson, K. (2004). *The world's wine markets: Globalization at work*. Cheltenham, UK: Edward Elgar Publishing.
- Andersson, A., Wiréhn, A. B., Ölvander, C., Ekman, D. S., & Bendtsen, P. (2009). Alcohol use among university students in Sweden measured by an electronic screening instrument. *BMC Public Health, 9*(1), 229-238. doi: 10.1186/1471-2458-9-229
- Andersson, G., Kaldo-Sandström, V., Ström, L., & Strömgren, T. (2003). Internet administration of the Hospital Anxiety and Depression Scale in a sample of tinnitus patients. *Journal of psychosomatic research, 55*(3), 259-262. doi: 10.1016/S0022-3999(02)00575-5
- Andréasson, S., & Allebeck, P. (2005). Alkohol och hälsa: en kunskapsöversikt om alkoholens positiva och negativa effekter på vår hälsa [Alcohol and health: a overview of the positive and negative effects of alcohol on our health]. Stockholm: Statens Folkhälsoinstitut [Swedish National Institute of Public Health].
- Australian Bureau of Statistics. (2012a). Apparent Consumption of Alcohol, Australia, 2010-11. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2012b). Australian Health Survey: First Results, 2011-12. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2013). Household income and income distribution, Australia, 2011-12. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2014a). Apparent Consumption of Alcohol, Australia, 2013-14. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2014b). Australian Health Survey: nutrition first results—Foods and nutrients, 2011–12—Australia. Canberra: Australian Bureau of Statistics.

- Australian Institute of Health and Welfare. (2014). 2013 National Drug Strategy Household Survey detailed report. Canberra: Australian Institute of Health and Welfare.
- Australian Transport Council. (2011). National Road Safety Strategy 2011–2020. Retrieved from http://www.infrastructure.gov.au/roads/safety/national_road_safety_strategy/.
- Baber, K. M., & Tucker, C. J. (2006). The social roles questionnaire: a new approach to measuring attitudes toward gender. *Sex Roles, 54*(7-8), 459-467. doi: 10.1007/s11199-006-9018-y
- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). The Alcohol Use Disorders Identification Test. Geneva: World Health Organization.
- Babor, T. F., Holder, H., Caetano, R., Homel, R., Casswell, S., Livingston, M., . . . Hill, L. (2010). Alcohol: no ordinary commodity. In T. Babor, R. Caetano, S. Casswell, G. Edwards, N. Giesbrecht, K. Graham, J. W. Grube, L. Hill, H. Holder, R. Homel, M. Livingston, E. Österberg, J. Rehm, R. Room & I. Rossow (Eds.), *Alcohol: no ordinary commodity. Research and public policy* (2nd ed., pp. 11-22). Oxford: Oxford University Press.
- Bagnardi, V., Rota, M., Botteri, E., Tramacere, I., Islami, F., Fedirko, V., . . . Pasquali, E. (2013). Light alcohol drinking and cancer: a meta-analysis. *Annals of oncology, 24*(2), 301-308. doi: 10.1093/annonc/mds337
- Baldwin, J. R., Faulkner, S. L., & Hecht, M. L. (2005). A moving target: the illusive definition of culture. In J. R. Baldwin, S. L. Faulkner, M. L. Hecht & S. L. Lindsley (Eds.), *Redefining culture: perspectives across the disciplines* (pp. 3-26). Mahwah: Lawrence Erlbaum Associates.
- Baraona, E., Abittan, C. S., Dohmen, K., Moretti, M., Pozzato, G., Chayes, Z. W., . . . Lieber, C. S. (2001). Gender differences in pharmacokinetics of alcohol. *Alcoholism: Clinical and Experimental Research, 25*(4), 502-507.
- Barnwell, S. S., Borders, A., & Earleywine, M. (2006). Alcohol–aggression expectancies and dispositional aggression moderate the relationship between alcohol consumption and alcohol-related violence. *Aggressive Behavior, 32*(6), 517-527. doi: 10.1002/ab.20152
- Barrett, A. E., & White, H. R. (2002). Trajectories of gender role orientations in adolescence and early adulthood: a prospective study of the mental health effects of masculinity and femininity. *Journal Of Health And Social Behavior, 43*(4), 451-468.
- Barry, C. A., Britten, N., Barber, N., Bradley, C., & Stevenson, F. (1999). Using reflexivity to optimize teamwork in qualitative research. *Qualitative Health Research, 9*(1), 26-44.

- Becker, U., Deis, A., Sorensen, T. I., Gronbaek, M., Borch-Johnsen, K., Muller, C. F., . . . Jensen, G. (1996). Prediction of risk of liver disease by alcohol intake, sex, and age: a prospective population study. *Hepatology*, *23*(5), 1025-1029.
- Bègue, L., & Subra, B. (2008). Alcohol and aggression: perspectives on controlled and uncontrolled social information processing. *Social and Personality Psychology Compass*, *2*(1), 511-538. doi: 10.1111/j.1751-9004.2007.00051.x
- Bellos, S., Skapinakis, P., Rai, D., Zitko, P., Araya, R., Lewis, G., . . . Mavreas, V. (2013). Cross-cultural patterns of the association between varying levels of alcohol consumption and the common mental disorders of depression and anxiety: secondary analysis of the WHO Collaborative Study on Psychological Problems in General Health Care. *Drug and Alcohol Dependence*, *133*(3), 825-831. doi: 10.1016/j.drugalcdep.2013.08.030
- Berger, J. L., Addis, M. E., Green, J. D., Mackowiak, C., & Goldberg, V. (2013). Men's reactions to mental health labels, forms of help-seeking, and sources of help-seeking advice. *Psychology of Men and Masculinity*, *14*(4), 433. doi: 10.1037/a0030175
- Bergman, H., & Källmén, H. (2002). Alcohol use among Swedes and a psychometric evaluation of the Alcohol Use Disorders Identification Test. *Alcohol and Alcoholism*, *37*(3), 245-251. doi: 10.1093/alcalc/37.3.245
- Bernard, H. R. (2011). *Research methods in anthropology: qualitative and quantitative approaches*. Lanham: Altamira Press.
- Bernhardsson, J. (2014). *Normalitetens gränser: en fokusgruppstudie om alkoholkultur (er), genus-och åldersskapande [The boundaries of normality: a focus group study on alcohol culture(s) and the construction of gender and age]*. (Unpublished doctoral dissertation), Stockholm University, Stockholm.
- Bertholet, N., Gaume, J., Faouzi, M., Daepfen, J.-B., & Gmel, G. (2011). Perception of the amount of drinking by others in a sample of 20-year-old men: The more I think you drink, the more I drink. *Alcohol and Alcoholism*, *46*(1), 83-87. doi: 10.1093/alcalc/agq084
- Besèr, A., Sorjonen, K., Wahlberg, K., Peterson, U., Nygren, Å., & Åsberg, M. (2014). Construction and evaluation of a self rating scale for stress-induced Exhaustion Disorder, the Karolinska Exhaustion Disorder Scale. *Scandinavian journal of psychology*, *55*(1), 72-82. doi: 10.1111/sjop.12088
- Biddulph, S. (2002). *Manhood* (4th ed.). London: Vermilion.

- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale: an updated literature review. *Journal of psychosomatic research*, *52*(2), 69-77.
- Blazer, D. G., & Wu, L.-T. (2009). The epidemiology of at-risk and binge drinking among middle-aged and elderly community adults: national Survey on Drug Use and Health. *American Journal of Psychiatry*, 1162-1169. doi: 10.1176/appi.ajp.2009.09010016
- Blocker, J. S., Fahey, D. M., & Tyrrell, I. R. (2003). *Alcohol and temperance in modern history: an international encyclopedia* (Vol. 1). Santa Barbara, CA: ABC-CLIO.
- Bloomfield, K., Allaman, A., Beck, F., Helmersson Bergmark, K., Csemy, L., Eisenbach-Stanglrmgard, I., . . . Mendoza, M. R. (2005). Gender, culture and alcohol problems: a multi-national study. Project final report Berlin, Germany: Institut for Medical Informatics, Biometrics and Epidemiology.
- Bloomfield, K., Grittner, U., Kramer, S., & Gmel, G. (2006). Social inequalities in alcohol consumption and alcohol-related problems in the study countries of the EU concerted action 'Gender, Culture and Alcohol Problems: a Multi-National Study' *Alcohol and Alcoholism: International Journal of the Medical Council on Alcoholism*, *41*(1), i26-i36. doi: 0.1093/alcalc/agl073
- Borlagdan, J., Freeman, T., Duvnjak, A., Lunnay, B., Bywood, P., & Roche, A. (2010). From ideal to reality: Cultural contradictions and young people's drinking. Adelaide: National Centre for Education and Training on Addiction, Flinders University.
- Boschloo, L., van den Brink, W., Penninx, B. W. J. H., Wall, M. M., & Hasin, D. S. (2012). Alcohol-use disorder severity predicts first-incidence of depressive disorders. *Psychological Medicine*, *42*(04), 695-703. doi: 10.1017/S0033291711001681
- Brehm, J. W. (1966). *A theory of psychological reactance*. New York: Academic Press.
- Brien, S. E., Ronksley, P. E., Turner, B. J., Mukamal, K. J., & Ghali, W. A. (2011). Effect of alcohol consumption on biological markers associated with risk of coronary heart disease: systematic review and meta-analysis of interventional studies. *British Medical Journal*, *342*, 30-31. doi: 10.1136/bmj.d636
- Brown, S. A., Christiansen, B. A., & Goldman, M. S. (1987). The Alcohol Expectancy Questionnaire: an instrument for the assessment of adolescent and adult alcohol expectancies. *Journal of Studies on Alcohol*, *48*(5), 483-491.
- Brown, S. A., Goldman, M. S., Inn, A., & Anderson, L. R. (1980). Expectations of reinforcement from alcohol: their domain and relation to drinking patterns. *Journal of Consulting and Clinical Psychology*, *48*(4), 419-426.

- Brown, S. A., Tate, S. R., Vik, P. W., Haas, A. L., & Aarons, G. A. (1999). Modeling of alcohol use mediates the effect of family history of alcoholism on adolescent alcohol expectancies. *Experimental and Clinical Psychopharmacology*, *7*(1), 20-27. doi: 10.1037/1064-1297.7.1.20
- Bryman, A. (2004). Triangulation. In M. S. Lewis-Beck, A. Bryman & T. F. Liao (Eds.), *Encyclopedia of social science research methods*. London: SAGE.
- Casey, P. F., & Dollinger, S. J. (2007). College students' alcohol-related problems: an autophotographic approach. *Journal of Alcohol and Drug Education*, *51*(2), 8-25.
- Casswell, S., You, R. Q., & Huckle, T. (2011). Alcohol's harm to others: reduced wellbeing and health status for those with heavy drinkers in their lives. *Addiction*, *106*(6), 1087-1094. doi: 10.1111/j.1360-0443.2011.03361.x
- Cennamo, L., & Gardner, D. (2011). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, *23*(8), 891-906. doi: 10.1108/02683940810904385
- Centralförbundet för alkohol- och narkotikaupplysning [Swedish Council for Information on Alcohol and Other Drugs]. (2012). *Drogutvecklingen i Sverige 2011 [Drug trends in Sweden 2011]*. Stockholm: Centralförbundet för alkohol- och narkotikaupplysning [Swedish Council for Information on Alcohol and Other Drugs].
- Cerdá, M., Johnson-Lawrence, V. D., & Galea, S. (2011). Lifetime income patterns and alcohol consumption: investigating the association between long-and short-term income trajectories and drinking. *Social Science and Medicine*, *73*(8), 1178-1185. doi: 10.1016/j.socscimed.2011.07.025
- Charmaz, K., & Mitchell, R. G. (2001). Grounded Theory in ethnography In P. Atkinson, A. Coffey, S. Delamont, J. Lofland & L. Lofland (Eds.), *Handbook of ethnography*. London: Sage.
- Charters, S., Velikova, N., Ritchie, C., Fountain, J., Thach, L., Dodd, T. H., . . . Terblanche, N. (2011). Generation Y and sparkling wines: a cross-cultural perspective. *International Journal of Wine Business Research*, *23*(2), 161-175. doi: 10.1108/17511061111143016
- Chen, C. Y., Storr, C. L., Liu, C. Y., Chen, K. H., Chen, W. J., & Lin, K. M. (2011). Differential relationships of family drinking with alcohol expectancy among urban school children. *BMC Public Health*, *11*, 87-95. doi: 10.1186/1471-2458-11-87
- Chermack, S. T., & Taylor, S. P. (1995). Alcohol and human physical aggression: pharmacological versus expectancy effects. *Journal of Studies on Alcohol*, *56*(4), 449-456.

- Chi–Yue, C., & Hong, Y. Y. (2007). Cultural processes: basic principle. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psycholog: handbook of basic principles* (pp. 785- 804). New York: Guilford Press.
- Chikritzhs, T., Catalano, P., Stockwell, T., Donath, S., Ngo, H., Young, D., & Matthews, S. (2003). Australian alcohol indicators, 1990-2001 (Vol. 200). Australia: Curtin University of Technology and Turning Point, Alcohol and Drug Centre Inc.
- Christie-Mizell, C., & Peralta, R. (2009). The gender gap in alcohol consumption during late adolescence and young adulthood: gendered attitudes and adult roles? *Journal of Health and Social Behavior, 50*(4), 410-426. doi: 10.1177/002214650905000403
- Chung, T., Colby, S. M., Barnett, N. P., & Monti, P. M. (2002). Alcohol Use Disorders Identification Test: factor structure in an adolescent emergency department sample. *Alcoholism: Clinical and Experimental Research, 26*(2), 223-231. doi: 10.1111/j.1530-0277.2002.tb02528.x
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*(6), 1015-1026. doi: 10.1037/0022-3514.58.6.1015
- Clapp, J. D., & McDonnell, A. L. (2000). The relationship of perceptions of alcohol promotion and peer drinking norms to alcohol problems reported by college students. *Journal of College Student Development, 41*(1), 19-26.
- Clemens, S., Matthews, S., Young, A., & Powers, J. (2007). Alcohol consumption of Australian women: Results from the Australian Longitudinal Study on Women's Health. *Drug and Alcohol Review, 26*(5), 525-535.
- Clinard, M., & Meier, R. (2015). *Sociology of deviant behavior*. Boston, MA: Cengage Learning.
- Collins, D. J., & Lapsley, H. M. (2008). *The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05*. (P3-2625). Australia: Macquarie University, University of Queensland, University of New South Wales.
- Collins, S. E., & Spelman, P. J. (2013). Associations of descriptive and reflective injunctive norms with risky college drinking. *Psychology of Addictive Behaviors, 27*(4), 1175-1181.
- Cranford, J. A., Zucker, R. A., Jester, J. M., Puttler, L. I., & Fitzgerald, H. E. (2010). Parental alcohol involvement and adolescent alcohol expectancies predict alcohol involvement in male adolescents. *Psychology of Addictive Behaviors, 24*(3), 386-396. doi: 10.1037/a0019801

- Crawford, J. R., Henry, J. D., Crombie, C., & Taylor, E. P. (2001). Normative data for the HADS from a large non-clinical sample. *British Journal of Clinical Psychology, 40*(4), 429-434. doi: 10.1348/014466501163904
- Crawford, L. A., & Novak, K. B. (2006). Alcohol abuse as a rite of passage: the effect of beliefs about alcohol and the college experience on undergraduates' drinking behaviors. *Journal of Drug Education, 36*(3), 193-212. doi: 10.2190/F0X7-H765-6221-G742
- Crum, R. M., Mojtabai, R., Lazareck, S., Bolton, J. M., Robinson, J., Sareen, J., . . . Alvanzo, A. A. H. (2013). A prospective assessment of reports of drinking to self-medicate mood symptoms with the incidence and persistence of alcohol dependence. *JAMA Psychiatry, 70*(7), 718-726. doi: 10.1001/jamapsychiatry.2013.1098
- Crutzen, R., Kuntsche, E., & Schelleman-Offermans, K. (2013). Drinking motives and drinking behavior over time: a full cross-lagged panel study among adults. *Psychology of Addictive Behaviors, 27*(1), 197. doi: 10.1037/a0029824
- Cunningham, J. A., Neighbors, C., Wild, T. C., & Humphreys, K. (2012). Normative misperceptions about alcohol use in a general population sample of problem drinkers from a large metropolitan city. *Alcohol and Alcoholism: International Journal of the Medical Council on Alcoholism, 47*(1), 63-66. doi: 10.1093/alcalc/agr125
- Daly, K. (2007). *Qualitative methods for family studies and human development* Los Angeles: SAGE.
- Dams-O'Connor, K., Martin, J. L., & Martens, M. P. (2007). Social norms and alcohol consumption among intercollegiate athletes: The role of athlete and nonathlete reference groups. *Addictive Behaviors, 32*(11), 2657-2666.
- Davies, B. T., & Bowen, C. K. (1999). Total body water and peak alcohol concentration: a comparative study of young, middle-age, and older females. *Alcoholism: Clinical and Experimental Research, 23*(6), 969-975.
- Davies, M., Gilston, J., & Rogers, P. (2012). Examining the relationship between male rape myth acceptance, female rape myth acceptance, victim blame, homophobia, gender roles, and ambivalent sexism. *Journal of Interpersonal Violence, 0886260512438281*. doi: 10.1177/0886260512438281
- Davies, M. F., French, C. C., & Keogh, E. (1998). Self-deceptive enhancement and impression management correlates of EPQ-R dimensions. *The Journal of psychology, 132*(4), 401-406.
- De Visser, R. O., & McDonnell, E. J. (2012). 'That's OK. He's a guy': a mixed-methods study of gender double-standards for alcohol use. *Psychology & Health, 27*(5), 618-639. doi: 10.1080/08870446.2011.617444

- De Visser, R. O., & Smith, J. A. (2007). Alcohol consumption and masculine identity among young men. *Psychology and Health, 22*(5), 595-614. doi: 10.1080/14768320600941772
- Demant, J. (2007). Youthful drinking with a purpose. *Nordisk Alkohol- & narkotikatidsskrift [Nordic Studies on Alcohol and Drugs], 24*(2), 149-176.
- Demant, J., & Järvinen, M. (2011). Social capital as norms and resources: focus groups discussing alcohol. *Addiction Research and Theory, 19*(2), 91-101. doi: 10.3109/16066351003725776
- Demant, J., & Østergaard, J. (2007). Partying as everyday life: investigations of teenagers' leisure life. *Journal of Youth Studies, 10*(5), 517-537. doi: 10.1080/13676260701594828
- Dempster, S. (2011). I drink, therefore I'm man: gender discourses, alcohol and the construction of British undergraduate masculinities. *Gender and Education, 23*(5), 635-653. doi: 10.1080/09540253.2010.527824
- Department of Health. (2013). National Binge Drinking Strategy. Retrieved October 19, 2016, from <http://health.gov.au/internet/anpha/publishing.nsf/Content/NBDS>.
- Di Castelnuovo, A., Costanzo, S., Bagnardi, V., Donati, M. B., Iacoviello, L., & De Gaetano, G. (2006). Alcohol dosing and total mortality in men and women: an updated meta-analysis of 34 prospective studies. *Archives of Internal Medicine, 166*(22), 2437-2445. doi: 10.1001/archinte.166.22.2437
- Donovan, J. E., Molina, B. S. G., & Kelly, T. M. (2009). Alcohol outcome expectancies as socially shared and socialized beliefs. *Psychology of Addictive Behaviors, 23*(2), 248-259. doi: 10.1037/a0015061
- Dougherty, D. M., Bjork, J. M., & Bennett, R. H. (1998). Effects of alcohol on rotary pursuit performance: a gender comparison. *Psychological Record, 48*(3), 393.
- Dry, M. J., Burns, N. R., Nettelbeck, T., Farquharson, A. L., & White, J. M. (2012). Dose-related effects of alcohol on cognitive functioning. *PLoS One, 7*(11), e50977. doi: 10.1371/journal.pone.0050977
- Dumas, T. M., Graham, K., Bernards, S., & Wells, S. (2014). Drinking to reach the top: young adults' drinking patterns as a predictor of status within natural drinking groups. *Addictive Behaviors, 39*(10), 1510-1515. doi: 10.1016/j.addbeh.2014.05.019
- Dybek, I., Bischof, G., Grothues, J., Reinhardt, S., Meyer, C., Hapke, U., . . . Rumpf, H.-J. (2006). The reliability and validity of the Alcohol Use Disorders Identification Test (AUDIT) in a German general practice population sample. *Journal of Studies on Alcohol, 67*(3), 473-481. doi: 10.15288/jsa.2006.67.473

- Eagly, A. H., Wood, W., & Diekmann, A. B. (2000). Social role theory of sex difference and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123-174). London: Lawrence Erlbaum Associates, Inc.
- Edelheim, J. R., & Edelheim, S. M. (2011). Sober on the holiday—is it un-Australian? *Annals of Leisure Research, 14*(1), 22-42. doi: 10.1080/11745398.2011.575044
- Emslie, C., Hunt, K., & Lyons, A. (2012). Older and wiser? Men's and women's accounts of drinking in early mid-life. *Sociology of Health and Illness, 34*(4), 481-496. doi: 10.1111/j.1467-9566.2011.01424.x
- Emslie, C., Hunt, K., & Lyons, A. (2013). The role of alcohol in forging and maintaining friendships amongst Scottish men in midlife. *Health Psychology, 32*(1), 33. doi: 10.1037/a0029874
- Englund, A. (2014). *Skolelevers drogvanor 2014 [Drug habits among students]*. (Rapport nr 146). Stockholm: Centralförbundet för alkohol- och narkotikaupplysning [Swedish Council for Information on Alcohol and Other Drugs].
- Eriksen, S. (1990). Drunken Danes and sober Swedes? Religious revivalism and the temperance movements as keys to Danish and Swedish folk cultures In B. Stråth (Ed.), *Language and the construction of class identities. The struggle for discursive power in social organisation: Scandinavia and Germany after 1800* (pp. 55-94). Gothenburg: Department of History, Gothenburg University.
- Etter, J., & Gmel, G. (2011). Paradoxical changes in alcohol consumption and CAGE ratings between 1996 and 2006 in the general population of Geneva. *Alcohol and Alcoholism: International Journal of the Medical Council on Alcoholism, 46*(2), 128-128. doi: 10.1093/alcalc/agq102
- Eysenck, S. B. G., Eysenck, H. J., & Barrett, P. (1985). A revised version of the psychoticism scale. *Personality and individual differences, 8*(1), 21-29.
- Faris, R. F., Henein, M. Y., & Coats, A. J. S. (2003). Influence of gender and reported alcohol intake on mortality in nonischemic dilated cardiomyopathy. *Heart Disease, 5*(2), 89-94. doi: 10.1097/01.HDX.0000061702.79961.47
- Faulkner, S. L., Baldwin, J. R., Lindsay, S. L., & Hecht, M. L. (2005). *Layers of meaning: an analysis of definitions of culture*. Mahwah: Lawrence Erlbaum Associates.
- Fernandez-Sola, J., & Nicolas-Arfelis, J. M. (2002). Gender differences in alcoholic cardiomyopathy. *Journal of Gender-Specific Medicine, 5*(1), 41-47.
- Ferrell, J. (1998). Freight train graffiti: subculture, crime, dislocation. *Justice Quarterly, 15*(4), 587-608.

- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Los Angeles SAGE.
- Fillmore, K. M., Stockwell, T., Chikritzhs, T., Bostrom, A., & Kerr, W. (2007). Moderate alcohol use and reduced mortality risk: systematic error in prospective studies and new hypotheses. *Annals of Epidemiology*, *17*(5), S16-S23. doi: 10.1016/j.annepidem.2007.01.005
- Fischer, J., & Anderson, V. N. (2012). Gender role attitudes and characteristics of stay-at-home and employed fathers. *Psychology of Men and Masculinity*, *13*(1), 16. doi: 10.1037/a0024359
- Fischer, R. (2009). Where is culture in cross cultural research?: an outline of a multilevel research process for measuring culture as a shared meaning system. *International Journal of Cross Cultural Management*, *9*(1), 25-49. doi: 10.1177/1470595808101154
- Fischer, S., Settles, R., Collins, B., Gunn, R., & Smith, G. T. (2012). The role of negative urgency and expectancies in problem drinking and disordered eating: testing a model of comorbidity in pathological and at-risk samples. *Psychology of Addictive Behaviors*, *26*(1), 112-123. doi: 10.1037/a0023460
- Fleming, J. (1996). The epidemiology of alcohol use in Australian women: Findings from a national survey of women's drinking. *Addiction*, *91*(9), 1325-1334.
- Fogarty, J. N., & Vogel-Sprott, M. (2002). Cognitive processes and motor skills differ in sensitivity to alcohol impairment. *Journal of Studies on Alcohol*, *63*(4), 404-411. doi: 10.15288/jsa.2002.63.404
- Folkhälsomyndigheten [Public Health Agency of Sweden]. (2015). *Nationella Folkhälsoundersökningen [National Population Health Survey]*. Stockholm: Folkhälsomyndigheten.
- Foran, H. M., & O'Leary, K. D. (2008). Alcohol and intimate partner violence: a meta-analytic review. *Clinical Psychology Review*, *28*(7), 1222-1234. doi: 10.1016/j.cpr.2008.05.001
- Foundation for Alcohol Research and Education. (2014). *Annual alcohol poll: attitudes and behaviours*. Foundation for Alcohol Research and Education.
- França, L. R., Dautzenberg, B., & Reynaud, M. (2010). Heavy episodic drinking and alcohol consumption in French colleges: the role of perceived social norms. *Alcoholism: Clinical and Experimental Research*, *34*(1), 164-174. doi: 10.1111/j.1530-0277.2009.01078.x
- Francis, L. J., Brown, L. B., & Philipchalk, R. (1992). The development of an abbreviated form of the Revised Eysenck Personality Questionnaire (EPQR-A): its use among

- students in England, Canada, the USA and Australia. *Personality and Individual Differences*, 13(4), 443-449.
- Frezza, M., Di Padova, C., Pozzato, G., Terpin, M., Baraona, E., & Lieber, C. S. (1990). High blood alcohol levels in women: the role of decreased gastric alcohol dehydrogenase activity and first-pass metabolism. *New England Journal of Medicine*, 322(2), 95-99.
- Friedman, A. J. (2006). *Biological classification historical case studies: Fostering high school students' conceptions of the nature of science*. (Unpublished doctoral dissertation), Wayne State University, Detroit, Michigan.
- Fromme, K., Stroot, E. A., & Kaplan, D. (1993). Comprehensive effects of alcohol: development and psychometric assessment of a new expectancy questionnaire. *Psychological Assessment*, 5(1), 19-26. doi: 10.1037/1040-3590.5.1.19
- Frone, M. R., & Brown, A. L. (2010). Workplace substance-use norms as predictors of employee substance use and impairment: a survey of US workers. *Journal of Studies on Alcohol and Drugs*, 71(4), 526. doi: 10.15288/jsad.2010.71.526
- Fry, M. (2011). Seeking the pleasure zone: Understanding young adult's intoxication culture. *Australasian Marketing Journal*, 19(1), 65-70. doi: 10.1016/j.ausmj.2010.11.009
- Furtwaengler, N. A. F. F., & Visser, R. O. (2013). Lack of international consensus in low-risk drinking guidelines. *Drug and Alcohol Review*, 32(1), 11-18. doi: 10.1111/j.1465-3362.2012.00475.x
- Gable, R. K., & Wolf, M. B. (1993). *Instrument development in the affective domain: measuring attitudes and values in corporate and school settings*. Boston: Klunder Academic.
- Galen, L. W., & Rogers, W. M. (2004). Religiosity, alcohol expectancies, drinking motives and their interaction in the prediction of drinking among college students. *Journal of Studies on Alcohol and Drugs*, 65(4), 469. doi: 10.15288/jsa.2004.65.469
- Gamella, J. F. (1995). Spain. In D. B. Heath (Ed.), *International handbook on alcohol and culture* (pp. 254-269). Westport: Greenwood Press.
- Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. *Developmental Psychology*, 41(4), 625. doi: 10.1037/0012-1649.41.4.625
- Garnett, C., Crane, D., West, R., Michie, S., Brown, J., & Winstock, A. (2015). Normative misperceptions about alcohol use in the general population of drinkers: a cross-sectional survey. *Addictive Behaviors*, 42, 203-206. doi: 10.1016/j.addbeh.2014.11.010
- Geertz, C. (1973). *The interpretation of cultures: selected essays* New York: Basic Books.

- Gefou-Madianou, D. (1992). *Alcohol, gender and culture* London: Routledge.
- Gelder, K. (2005). *The subcultures reader*. London: Routledge.
- Gilbert, M. J., Mora, J., & Ferguson, L. R. (1994). Alcohol-related expectations among Mexican–American women. *The International Journal of The Addictions, 29*(9), 1127-1147.
- Gilbertson, R., Ceballos, N. A., Prather, R., & Nixon, S. J. (2009). Effects of acute alcohol consumption in older and younger adults: perceived impairment versus psychomotor performance. *Journal of Studies on Alcohol and Drugs, 70*(2), 242.
- Gmel, G., & Rehm, J. (2003). Harmful alcohol use. *Alcohol Research and Health, 27*(1), 52-62.
- Gobo, G. (2008). *Doing ethnography*. Los Angeles: SAGE.
- Goldman, M. S., & Christiansen, B. A. (1987). Expectancy theory: thinking about drinking. In H. T. Blane & K. E. Leonard (Eds.), *Psychological theories of drinking and alcoholism* New York: Guilford Press.
- Goodenough, W. H. (2003). In pursuit of culture. *Annual Review of Anthropology, 32*(1), 1-12.
- Graham, K., & Wells, S. (2003). 'Somebody's gonna get their head kicked in tonight!' Aggression among young males in bars—A question of values? *British Journal of Criminology, 43*(3), 546-566. doi: 10.1093/bjc/43.3.546
- Graham, K., Wilsnack, R., Dawson, D., & Vogeltanz, N. (1998). Should alcohol consumption measures be adjusted for gender differences? *Addiction, 93*(8), 1137-1147. doi: 10.1080/09652149834964
- Grant, B. F., Dawson, D. A., Stinson, F. S., Chou, S. P., Dufour, M. C., & Pickering, R. P. (2006). The 12-month prevalence and trends in DSM–IV alcohol abuse and dependence: United States, 1991-1992 and 2001-2002. *Alcohol Research and Health, 29*(2), 79-91. doi: 10.1016/j.drugalcdep.2004.02.004
- Grant, B. F., Stinson, F. S., & Harford, T. C. (2001). Age at onset of alcohol use and DSM–IV alcohol abuse and dependence: a 12-year follow-up. *Journal of Substance Abuse, 13*(4), 493-504.
- Green, C. A., Polen, M. R., Janoff, S. L., Castleton, D. K., & Perrin, N. A. (2007). "Not getting tanked": definitions of moderate drinking and their health implications. *Drug and Alcohol Dependence, 86*(2), 265-273. doi: 10.1016/j.drugalcdep.2006.07.002.
- Greenfield, S. F. (2002). Women and alcohol use disorders. *Harvard Review of Psychiatry, 10*(2), 76-85.

- Greenfield, T. K., Karriker-Jaffe, K. J., Giesbrecht, N., Kerr, W. C., Ye, Y., & Bond, J. (2014). Second-hand drinking may increase support for alcohol policies: new results from the 2010 National Alcohol Survey. *Drug and Alcohol Review, 33*(3), 259-267. doi: 10.1111/dar.12131
- Greenfield, T. K., & Kerr, W. C. (2003). Tracking alcohol consumption over time. *Alcohol Research and Health, 27*(1), 30-38.
- Griffin, C., Bengry-Howell, A., Hackley, C., Mistral, W., & Szmigin, I. (2009). "Every time I do it I absolutely annihilate myself": loss of (self-)consciousness and loss of memory in young people's drinking narratives. *Sociology, 43*, 457-476. doi: 10.1177/0038038509103201
- Gruzca, R. A., Bucholz, K. K., Rice, J. P., & Bierut, L. J. (2008). Secular trends in the lifetime prevalence of alcohol dependence in the United States: a re-evaluation. *Alcoholism: Clinical and Experimental Research, 32*(5), 763-770. doi: 10.1111/j.1530-0277.2008.00635.x
- Grønkjær, M., Curtis, T., Crespigny, C. D., & Delmar, C. (2011). Acceptance and expectance: cultural norms for alcohol use in Denmark. *International Journal Of Qualitative Studies on Health and Well-Being, 6*(4). doi: 10.3402/qhw.v6i4.8461
- Gusfield, J. (2003). Passage to play: ritual of drinking time in American society In M. Douglas (Ed.), *Constructive Drinking: Perspectives on Drink from Anthropology*. London: Routledge.
- Haber, J. R., Grant, J. D., Sartor, C. E., Koenig, L. B., Heath, A., & Jacob, T. (2013). Religion/spirituality, risk, and the development of alcohol dependence in female twins. *Psychology of Addictive Behaviors, 27*(3), 562. doi: 10.1037/a0031915
- Halim, A., Hasking, P., & Allen, F. (2012). The role of social drinking motives in the relationship between social norms and alcohol consumption. *Addictive Behaviors, 37*(12), 1335-1341. doi: 10.1016/j.addbeh.2012.07.004
- Hall, W., & Hunter, E. (1995). Australia. In D. B. Heath (Ed.), *International handbook on alcohol and culture* (pp. 7-19). Westport: Greenwood Press.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: principles in practice* (3rd ed.). London: Routledge.
- Harnett, R., Thom, B., Herring, R., & Kelly, M. (2000). Alcohol in transition: Towards a model of young men's drinking styles. *Journal of Youth Studies, 3*(1), 61-77. doi: 10.1080/136762600113040
- Harrison, L., Kelly, P., Lindsay, J., Advocat, J., & Hickey, C. (2011). 'I don't know anyone that has two drinks a day': young people, alcohol and the government of pleasure. *Health, Risk & Society, 13*(5), 469-486. doi: 10.1080/13698575.2011.596190

- Hasin, D. S., Stinson, F. S., Ogburn, E., & Grant, B. F. (2007). Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry*, *64*(7), 830-842. doi: 10.1001/archpsyc.64.7.830
- Heath, D. B. (1995a). An anthropological view of alcohol and culture in international perspective. In D. B. Heath (Ed.), *International handbook on alcohol and culture* (pp. 328-348). Westport: Greenwood Press.
- Heath, D. B. (1995b). *International handbook on alcohol and culture*. Westport: Greenwood Press.
- Heath, D. B. (1997). Cultural variations among drinking patterns. In M. Grant & J. Litvak (Eds.), *Drinking patterns and their consequences* (pp. 103-128). Washington: Taylor and Francis.
- Hernandez-Avila, C. A., Rounsaville, B. J., & Kranzler, H. R. (2004). Opioid-, cannabis- and alcohol-dependent women show more rapid progression to substance abuse treatment. *Drug and Alcohol Dependence*, *74*(3), 265-272. doi: 10.1016/j.drugalcdep.2004.02.001
- Hill, S. Y., Shen, S., Lowers, L., Locke-Wellman, J., Matthews, A. G., & McDermott, M. (2008). Psychopathology in offspring from multiplex alcohol dependence families with and without parental alcohol dependence: a prospective study during childhood and adolescence. *Psychiatry Research*, *160*(2), 155-166. doi: 10.1016/j.psychres.2008.04.017
- Hinz, A., & Brähler, E. (2011). Normative values for the Hospital Anxiety and Depression Scale (HADS) in the general German population. *Journal of Psychosomatic Research*, *71*(2), 74-78. doi: 10.1016/j.jpsychores.2011.01.005
- Hofstede, G. (1980). *Culture's consequences: international differences in work-related values*. Beverly Hills: SAGE.
- Holloway, S. L., Jayne, M., & Valentine, G. (2008). 'Sainsbury's is my local': English alcohol policy, domestic drinking practices and the meaning of home. *Transactions of the Institute of British Geographers*, *33*(4), 532-547.
- Holmila, M., & Raitasalo, K. (2005). Gender differences in drinking: why do they still exist? *Addiction*, *100*(12), 1763-1769. doi: 10.1111/j.1360-0443.2005.01249.x
- Hommer, D., Momenan, R., Kaiser, E., & Rawlings, R. (2001). Evidence for a gender-related effect of alcoholism on brain volumes. *The American Journal of Psychiatry*, *158*(2), 198-204.

- Howland, J., Rohsenow, D. J., Bliss, C. A., Almeida, A. B., Calise, T. V., Heeren, T., & Winter, M. (2010). Hangover predicts residual alcohol effects on psychomotor vigilance the morning after intoxication. *Journal of Addiction Research and Therapy*, 1(101). doi: 10.4172/2155-6105.1000101.
- Hsieh, F. Y., Bloch, D. A., & Larsen, M. D. (1998). A simple method of sample size calculation for linear and logistic regression. *Statistics in Medicine*, 17(14), 1623-1634.
- Hübner, L. (2012). Swedish public opinion on alcohol and alcohol policy, 1995 and 2003. *Journal of Substance Use*, 17(3), 218-229. doi: 10.3109/14659891.2012.688400
- Huchting, K., Lac, A., & LaBrie, J. W. (2008). An application of the theory of planned behavior to sorority alcohol consumption. *Addictive Behaviors*, 33(4), 538-551. doi: 10.1016/j.addbeh.2007.11.002
- Huckle, T., You, R. Q., & Casswell, S. (2009). Socio-economic status predicts drinking patterns but not alcohol-related consequences independently. *Addiction*, 105(7), 1192-1202. doi: 10.1111/j.1360-0443.2010.02931.x
- Huerta, M., & Borgonovi, F. (2010). Education, alcohol use and abuse among young adults in Britain. *Social Science and Medicine*, 71(1). doi: 10.1016/j.socscimed.2010.03.022
- Huselid, R. F., & Cooper, M. L. (1992). Gender roles as mediators of sex differences in adolescent alcohol use and abuse. *Journal of Health and Social Behavior*, 348-362.
- Hussong, A. M. (2003). Further refining the stress-coping model of alcohol involvement. *Addictive Behaviors*, 28(8), 1515-1522. doi: 10.1016/S0306-4603(03)00072-8
- Irvine, A., Drew, P., & Sainsbury, R. (2012). 'Am I not answering your questions properly?' Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. *Qualitative Research*, 13(1), 87-106. doi: 10.1177/1468794112439086
- Iwamoto, D. K., Cheng, A., Lee, C. S., Takamatsu, S., & Gordon, D. (2011). "Man-ing" up and getting drunk: the role of masculine norms, alcohol intoxication and alcohol-related problems among college men. *Addictive Behaviors*, 36(9), 906-911. doi: 10.1016/j.addbeh.2011.04.005
- Jacobson, R. P., Mortensen, C. R., & Cialdini, R. B. (2011). Bodies obliged and unbound: differentiated response tendencies for injunctive and descriptive social norms. *Journal of Personality and Social Psychology*, 100(3), 433-448. doi: 10.1037/a0021470
- Janssen, S. M. J., & Rubin, D. C. (2011). Age effects in cultural life scripts. *Applied Cognitive Psychology*, 25(2), 291-298. doi: 10.1002/acp.1690

- Jarl, J., Johansson, P., Eriksson, A., Eriksson, M., Gerdtham, U. G., Hemström, Ö., . . . Room, R. (2008). The societal cost of alcohol consumption: An estimation of the economic and human cost including health effects in Sweden, 2002. *The European Journal of Health Economics*, *9*(4), 351-360. doi: 10.1007/s10198-007-0082-1
- Jensen, D. (2008). Dependability. In L. M. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods*. Los Angeles: SAGE.
- Johansson, P., Jarl, J., Eriksson, A., Eriksson, M., Gerdtham, U., Hemström, Ö., . . . Room, R. (2006). *The social cost of alcohol in Sweden 2002*. Stockholm: Stockholm Universitet.
- Johnson, P. B., Gurin, G., & Rodriguez, O. (1996). The self-generated alcohol expectancies of Puerto Rican drinkers and abstainers. *Substance Use and Misuse*, *31*(9), 1155-1165.
- Johnson, P. B., Richter, L., Kleber, H. D., McLellan, A. T., & Carise, D. (2005). Telescoping of drinking-related behaviors: gender, racial/ethnic, and age comparisons. *Substance Use and Misuse*, *40*(8), 1139-1151. doi: 10.1081/JA-200042281
- Jones, A. W., & Neri, A. (1985). Age-related differences in blood ethanol parameters and subjective feelings of intoxication in healthy men. *Alcohol and Alcoholism*, *20*(1), 45-52.
- Järvinen, M., & Gundelach, P. (2007). Teenage drinking, symbolic capital and distinction. *Journal of Youth Studies*, *10*, 55-71. doi: 10.1080/13676260701196137
- Järvinen, M., & Room, R. (2007). *Youth drinking cultures: European experiences* (Vol. 13). Hampshire, UK: Ashgate Publishing, Ltd.
- Kachadourian, L. K., Homish, G. G., Quigley, B. M., & Leonard, K. E. (2012). Alcohol expectancies, alcohol use, and hostility as longitudinal predictors of alcohol-related aggression. *Psychology of Addictive Behaviors*, *26*(3), 414-422. doi: 10.1037/a0025842
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, *39*(1), 31-36.
- Kerr, W. C., Greenfield, T. K., & Midanik, L. T. (2006). How many drinks does it take you to feel drunk? Trends and predictors for subjective drunkenness. *Addiction*, *101*(10), 1428-1437. doi: 10.1111/j.1360-0443.2006.01533.x
- Keyes, K. M., Grant, B. F., & Hasin, D. S. (2008). Evidence for a closing gender gap in alcohol use, abuse, and dependence in the United States population. *Drug and Alcohol Dependence*, *93*(1-2), 21-29. doi: 10.1016/j.drugalcdep.2007.08.017

- Keyes, K. M., Hatzenbuehler, M. L., McLaughlin, K. A., Link, B., Olfson, M., Grant, B. F., & Hasin, D. (2010). Stigma and treatment for alcohol disorders in the United States. *American Journal of Epidemiology*, *172*(12), 1364-1372. doi: 10.1093/aje/kwq304
- Keyes, K. M., Martins, S. S., Blanco, C., & Hasin, D. S. (2010). Telescoping and gender differences in alcohol dependence: new evidence from two national surveys. *American Journal of Psychiatry*, *167*(8), 969-976. doi: 10.1176/appi.ajp.2009.09081161
- Kilkkinen, A., Kao-Philpot, A., O'Neil, A., Philpot, B., Reddy, P., Bunker, S., & Dunbar, J. (2007). Prevalence of psychological distress, anxiety and depression in rural communities in Australia. *Australian Journal of Rural Health*, *15*(2), 114-119. doi: 10.1111/j.1440-1584.2007.00863.x
- Killingsworth, B. (2006). 'Drinking stories' from a playgroup: Alcohol in the lives of middle-class mothers in Australia. *Ethnography*, *7*(3), 357-384.
- Kinner, S. A., George, J., Johnston, J., Dunn, M., & Degenhardt, L. (2012). Pills and pints: Risky drinking and alcohol-related harms among regular ecstasy users in Australia. *Drug & Alcohol Review*, *31*(3), 273-280.
- Kirby, D., & Luckins, T. (2006). 'Winnies and pats...brighten our pubs': Transforming the gendered spatial economy in the Australian pub, 1920-1970. *JAS: Australia's Public Intellectual Forum*(87), 75-86.
- Kirkby, D. (2003). "Beer, glorious beer": gender politics and Australian popular culture. *The Journal of Popular Culture*, *37*(2), 244-256.
- Kirmani, M. N., & Suman, L. (2010). Gender differences in alcohol related attitudes and expectancies among college students. *Journal of the Indian Academy of Applied Psychology*, *36*(1), 19-24.
- Knibbe, R. A., & Bloomfield, K. (2001). Alcohol consumption estimates in surveys in Europe: comparability and sensitivity for gender differences. *Substance Abuse*, *22*(1), 23-38. doi: 10.1080/08897070109511443
- Knox, S., & Burkard, A. W. (2009). Qualitative research interviews. *Psychotherapy Research*, *19*(4-5), 566-575. doi: 10.1080/10503300802702105
- Kruse, H. (1993). Subcultural identity in alternative music culture. *Popular music*, *12*(01), 33-41.
- Kubicka, L., & Csemy, L. (2008). Women's gender role orientation predicts their drinking patterns: a follow-up study of Czech women. *Addiction*, *103*(6), 929-937. doi: 10.1111/j.1360-0443.2008.02186.x

- Kuendig, H., Plant, M. A., Plant, M. L., Miller, P., Kuntsche, S., & Gmel, G. (2008). Alcohol-related adverse consequences: cross-cultural variations in attribution process among young adults. *European Journal of Public Health, 18*(4), 386-391. doi: 10.1093/eurpub/ckn007
- Kuendig, H., Plant, M. L., Plant, M. A., Kuntsche, S., Miller, P., Gmel, G., . . . Knibbe, R. (2008). Beyond drinking: differential effects of demographic and socioeconomic factors on alcohol-related adverse consequences across European countries. *European Addiction Research, 14*(3), 150-160. doi: 10.1159/000130419
- Kulis, S., Marsiglia, F. F., & Hurdle, D. (2003). Gender identity, ethnicity, acculturation, and drug use: exploring differences among adolescents in the Southwest. *Journal of Community Psychology, 31*(2), 167-188. doi: 10.1002/jcop.10041
- Kuntsche, E., Knibbe, R., Gmel, G., & Engels, R. (2005). Why do young people drink? A review of drinking motives. *Clinical Psychology Review, 25*(7), 841-861. doi: 10.1016/j.cpr.2005.06.002
- Källmén, H., Sinadinovic, K., Berman, A. H., & Wennberg, P. (2011). Risky drinking of alcohol in Sweden: a randomized population survey comparing web- and paper-based self-reports. *Nordisk alkohol- & narkotikatidskrift [Nordic Studies on Alcohol and Drugs], 28*(2), 123-130. doi: 10.2478/v10199-011-0013-4
- LaBrie, J. W., Atkins, D. C., Neighbors, C., Mirza, T., & Larimer, M. E. (2012). Ethnicity specific norms and alcohol consumption among Hispanic/Latino/a and Caucasian students. *Addictive Behaviors, 37*(4), 573-576. doi: 10.1016/j.addbeh.2012.01.007
- LaBrie, J. W., Hummer, J. F., Neighbors, C., & Larimer, M. E. (2010). Whose opinion matters? The relationship between injunctive norms and alcohol consequences in college students. *Addictive Behaviors, 35*(4), 343-349. doi: 10.1016/j.addbeh.2009.12.003
- Labrie, J. W., Migliuri, S., Kenney, S. R., & Lac, A. (2010). Family history of alcohol abuse associated with problematic drinking among college students. *Addictive Behaviors, 35*(7), 721-725. doi: 10.1016/j.addbeh.2010.03.009
- Landberg, J. (2012). Self-reported alcohol consumption and the risk of alcohol-related problems: a comparative risk-curve analysis of the 3 Baltic countries, Sweden, and Italy. *Alcoholism: Clinical and Experimental Research, 36*(1), 113-118. doi: 10.1111/j.1530-0277.2011.01597.x
- Larimer, M. E., Kaysen, D. L., Lee, C. M., Kilmer, J. R., Lewis, M. A., Dillworth, T., . . . Neighbors, C. (2009). Evaluating level of specificity of normative referents in relation to personal drinking behavior. *Journal of Studies on Alcohol and Drugs Supplement*(16), 115-121. doi: 10.15288/jsads.2009.s16.115

- Laslett, A., Catalano, P., Chikritzhs, T., Dale, C., Doran, C., Ferris, J., . . . Wilkinson, C. (2010). *The range and magnitude of alcohol's harm to others*. Fitzroy, Australia: Turning Point Alcohol and Drug Centre.
- Laslett, A., Ferris, J., Dietze, P., & Room, R. (2012). Social demography of alcohol-related harm to children in Australia. *Addiction, 107*(6), 1082-1089. doi: 10.1111/j.1360-0443.2012.03789.x
- Lee, C. M., Geisner, I. M., Lewis, M. A., Neighbors, C., & Larimer, M. E. (2007). Social motives and the interaction between descriptive and injunctive norms in college student drinking. *Journal of Studies on Alcohol and Drugs, 68*(5), 714-721. doi: 10.15288/jsad.2007.68.714
- Leeman, R. F., Toll, B. A., Taylor, L. A., & Volpicelli, J. R. (2009). Alcohol-induced disinhibition expectancies and impaired control as prospective predictors of problem drinking in undergraduates. *Psychology of Addictive Behaviors, 23*(4), 553-563. doi: 10.1037/a0017129
- Lehman, D. R., Chi-yue, C., & Schaller, M. (2004). Psychology and culture *Annual Review of Psychology, 55*(1), 689-714. doi: 10.1146/annurev.psych.55.090902.141927
- Leifman, H. (2001). Homogenisation in alcohol consumption in the European Union. *Nordic Studies on Alcohol and Drugs, 18*(English Supplement), 15-30.
- Leifman, H., & Trollidal, B. (2014). *Alkoholkonsumtionen i Sverige 2013 [Alcohol consumption in Sweden 2013]*. (Rapport nr 142). Stockholm: Centralförbundet för alkohol- och narkotikaupplysning [The Swedish Council for Information on Alcohol and Other Drugs].
- Leigh, B. C., & Stacy, A. W. (2004). Alcohol expectancies and drinking in different age groups. *Addiction, 99*(2), 215-227. doi: 10.1046/j.1360-0443.2004.00641.x
- Lendrem, B. A. D., Lendrem, D. W., Gray, A., & Isaacs, J. D. (2014). The Darwin Awards: sex differences in idiotic behaviour. *British Medical Journal, 349*, g7094. doi: 10.1136/bmj.g7094
- Lengua, L. J., & Stormshak, E. A. (2000). Gender, gender roles and personality: gender differences in the prediction of coping and psychological symptoms. *Sex Roles, 43*(11-12), 787-820. doi: 10.1023/a:1011096604861
- Lenke, L., & Olsson, B. (2002). Swedish drug policy in the twenty-first century: a policy model going astray. *The Annals of the American Academy of Political and Social Science, 582*(1), 64-79.
- Leonard, K. E. (2002). Alcohol's role in domestic violence: a contributing cause or an excuse? *Acta Psychiatrica Scandinavica, 106*(s412), 9-14. doi: 0.1034/j.1600-0447.106.s412.3.x

- Leonard, K. E., & Eiden, R. D. (2007). Marital and family processes in the context of alcohol use and alcohol disorders. *Annual Review of Clinical Psychology, 3*, 285. doi: 10.1146/annurev.clinpsy.3.022806.091424
- Levine, H. G. (1993). Temperance cultures: alcohol as a problem in Nordic and English-speaking cultures. In M. Lader, G. Edwards & C. Drummon (Eds.), *The nature of alcohol and drug-related problems* (pp. 16-36). New York: Oxford University Press.
- Lewis, M. A., & Neighbors, C. (2006). Social norms approaches using descriptive drinking norms education: a review of the research on personalized normative feedback. *Journal of American College Health, 54*(4), 213-218. doi: 10.3200/JACH.54.4.213-218
- Lewis, M. A., & Neighbors, C. (2007). Optimizing personalized normative feedback: the use of gender-specific referents. *Journal of Studies on Alcohol and Drugs, 68*(2), 228-237.
- Li, C. I., Chlebowski, R. T., Freiberg, M., Johnson, K. C., Kuller, L., Lane, D., . . . Prentice, R. (2010). Alcohol consumption and risk of postmenopausal breast cancer by subtype: the Women's Health Initiative Observational Study. *Journal of the National Cancer Institute, 102*(18), 1422-1431. doi: 10.1093/jnci/djq316
- Li, Z., Zeki, R., Hilder, L., & Sullivan, E. (2012). Australia's mothers and babies 2011: Australian Institute of Health and Welfare.
- Lieber, C. S. (1997). Gender differences in alcohol metabolism and susceptibility. In R. W. Wilsnack & S. C. Wilsnack (Eds.), *Gender and alcohol: individual and social perspectives*. (pp. 77-89). New Jersey: Rutgers Center of Alcohol Studies.
- Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., . . . Ezzati, M. (2013). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet, 380*(9859), 2224-2260. doi: 10.1016/S0140-6736(12)61766-8
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills: SAGE.
- Lindwall, M., Gerber, M., Jonsdottir, I. H., Börjesson, M., & Ahlborg Jr, G. (2014). The relationships of change in physical activity with change in depression, anxiety, and burnout: a longitudinal study of Swedish healthcare workers. *Health Psychology, 33*(11), 1309. doi: 10.1037/a0034402
- Lisspers, J., Nygren, A., & Söderman, E. (1997). Hospital Anxiety and Depression Scale (HAD): Some psychometric data for a Swedish sample. *Acta Psychiatrica Scandinavica, 96*(4), 281-286. doi: 10.1111/j.1600-0447.1997.tb10164.x

- Livingstone, A. G., Young, H., & Manstead, A. S. R. (2011). "We Drink, Therefore We Are"
The role of group identification and norms in sustaining and challenging heavy
drinking "Culture". *Group Processes and Intergroup Relations*, 14(5), 637-649. doi:
10.1177/1368430210392399
- Lopata, H. Z. (2006). Gender and social roles. In J. Saltzman Chafetz (Ed.), *Handbook of
the sociology of gender*. New York: Springer-Verlag
- Lunceford, B. (2008). The walk of shame: a normative description. *ETC: A Review of
General Semantics*, 65(4), 319-329.
- Lunnay, B., Ward, P., & Borlagdan, J. (2011). The practise and practice of Bourdieu: the
application of social theory to youth alcohol research. *International Journal of Drug
Policy*, 22(6), 428-436. doi: 10.1016/j.drugpo.2011.07.013
- Lye, D. N., & Waldron, I. (1998). Relationships of substance use to attitudes toward gender
roles, family and cohabitation. *Journal of Substance Abuse*, 10(2), 185-198.
- Lyons, A. C., Emslie, C., & Hunt, K. (2014). Staying 'in the zone' but not passing the 'point of
no return': embodiment, gender and drinking in mid-life. *Sociology of Health and
Illness*, 36(2), 264-277. doi: 10.1111/1467-9566.12103
- Lyons, A. C., & Willott, S. (2008). Alcohol consumption, gender identities and women's
changing social positions. *Sex Roles*, 59, 694-712. doi: 10.1007/s11199-008-9475-6
- MacAndrew, C., & Edgerton, R. B. (1969). *Drunken comportment: a social explanation*.
Chicago: Aldine.
- Magovcevic, M., & Addis, M. E. (2005). Linking gender-role conflict to nonnormative and
self-stigmatizing perceptions of alcohol abuse and depression. *Psychology of Men
and Masculinity*, 6(2), 127-136. doi: 10.1037/1524-9220.6.2.127
- Mahoney, R., Regan, C., Katona, C., & Livingston, G. (2005). Anxiety and depression in
family caregivers of people with Alzheimer disease: the LASER-AD study. *The
American Journal of Geriatric Psychiatry*, 13(9), 795-801. doi: 10.1097/00019442-
200509000-00008
- Maisto, S. A., Carey, M. P., Carey, K. B., Gordon, C. M., & Schum, J. L. (2004). Effects of
alcohol and expectancies on HIV-related risk perception and behavioral skills in
heterosexual women. *Experimental and Clinical Psychopharmacology*, 12(4), 288.
doi: 10.1037/1064-1297.12.4.288
- Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The
Lancet*, 358(9280), 483-488.
- Mandelbaum, D. G. (1965). Alcohol and culture. *Current Anthropology*, 6(3), 281-288.

- Mann, K., Ackermann, K., Croissant, B., Mundle, G., Nakovics, H., & Diehl, A. (2005). Neuroimaging of gender differences in alcohol dependence: are women more vulnerable? *Alcoholism: Clinical and Experimental Research, 29*(5), 896-901. doi: 10.1097/01.ALC.0000164376.69978.6B
- Martens, M. P., Neighbors, C., Lewis, M. A., Lee, C. M., Oster-Aaland, L., & Larimer, M. E. (2008). The roles of negative affect and coping motives in the relationship between alcohol use and alcohol-related problems among college students. *Journal of Studies on Alcohol and Drugs, 69*(3), 412-419. doi: 10.15288/jsad.2008.69.412
- Martin, A. L. (1999). National reputations for drinking in traditional Europe. *Parergon, 17*(1), 163-186.
- Mathiesen, E. F., Nome, S., Richter, J., & Eisemann, M. (2013). Alcohol use patterns in a Norwegian general population-based sample with special reference to socio-demographic variables. *Journal of Public Health, 21*(3), 241-249. doi: 10.1007/s10389-012-0541-8
- Matsumoto, D., & Yoo, S. H. (2006). Toward a new generation of cross-cultural research. *Perspectives on Psychological Science, 1*(3), 234-250. doi: 10.1111/j.1745-6916.2006.00014.x
- Mauri, M. C., Volonteri, L. S., De Gaspari, I. F., Colasanti, A., Brambilla, M. A., & Cerruti, L. (2006). Substance abuse in first-episode schizophrenic patients: a retrospective study. *Clinical Practice and Epidemiology in Mental Health, 2*(1), 2-4. doi: 10.1186/1745-0179-2-4
- McAlaney, J., & McMahon, J. (2007). Normative beliefs, misperceptions, and heavy episodic drinking in a British student sample. *Journal of Studies on Alcohol and Drugs, 68*(3), 385.
- McArthur, J. A. (2008). Digital subculture: a geek meaning of style. *Journal of Communication Inquiry, 58*-70. doi: 10.1177/0196859908325676
- McCreary, D. R., Newcomb, M. D., & Sadava, S. W. (1999). The male role, alcohol use, and alcohol problems: a structural modeling examination in adult women and men. *Journal of Counseling Psychology, 46*(1), 109-124. doi: 10.1037/0022-0167.46.1.109
- McCurdy, D. W., Spradley, J. P., & Shandy, D. J. (2005). *The cultural experience: ethnography in complex society*. Waveland Press.
- McLennan, W., & Podger, A. (1997). *National Nutrition Survey: selected highlights, Australia, 1995*. (0642257930). Canberra: Australian Bureau of Statistics and Department of Health and Family Services.

- McLeod, R., Stockwell, T., Stevens, M., & Phillips, M. (1999). The relationship between alcohol consumption patterns and injury. *Addiction, 94*(11), 1719-1734.
- Measham, F., & Brain, K. (2005). 'Binge' drinking, British alcohol policy and the new culture of intoxication. *Crime, Media, Culture, 1*(3), 262-283. doi: 10.1177/1741659005057641
- Mejia, R., Kaplan, C. P., Alderete, E., Gregorich, S. E., & Pérez-Stable, E. J. (2013). Influence of gender role attitudes on smoking and drinking among girls from Jujuy, Argentina. *Preventive Medicine, 57*(3), 194-197. doi: 10.1016/j.ypmed.2013.05.011
- Miller, J., Prichard, I., Hutchinson, A., & Wilson, C. (2014). The relationship between exposure to alcohol-related content on Facebook and predictors of alcohol consumption among female emerging adults. *Cyberpsychology, Behavior, and Social Networking, 17*(12), 735-741. doi: 10.1089/cyber.2014.0337
- Miller, M. A., Weafer, J., & Fillmore, M. T. (2009). Gender differences in alcohol impairment of simulated driving performance and driving-related skills. *Alcohol and Alcoholism: International Journal of the Medical Council on Alcoholism, 44*(6), 586-593. doi: 10.1093/alcalc/agp051
- Miller, T. R., & Spicer, R. S. (2012). Hospital-admitted injury attributable to alcohol. *Alcoholism: Clinical and Experimental Research, 36*(1), 104-112. doi: 10.1111/j.1530-0277.2011.01593.x
- Montemurro, B., & McClure, B. (2005). Changing gender norms for alcohol consumption: social drinking and lowered inhibitions at bachelorette parties. *Sex Roles, 52*(5/6), 279-288. doi: 10.1007/s11199-005-2672-7
- Moore, A. A., Gould, R., Reuben, D. B., Greendale, G. A., Carter, M. K., Zhou, K., & Karlamangla, A. (2005). Longitudinal patterns and predictors of alcohol consumption in the United States. *American Journal of Public Health, 95*(3), 458-464. doi: 10.2105/AJPH.2003.019471
- Moore, D. (1990). Drinking, the construction of ethnic identity and social process in a Western Australian youth subculture. *British Journal of Addiction, 85*(10), 1265-1278.
- Morgan, T. K., Williamson, M., Pirotta, M., Stewart, K., Myers, S. P., & Barnes, J. (2012). A national census of medicines use: a 24-hour snapshot of Australians aged 50 years and older. *The Medical Journal of Australia, 196*(1), 50-53. doi: 10.5694/mja11.10698
- Moscatti, A., & Mezuk, B. (2014). Losing faith and finding religion: religiosity over the life course and substance use and abuse. *Drug and Alcohol Dependence, 136*, 127-134. doi: 10.1016/j.drugalcdep.2013.12.018

- Munro, G. (2000). Challenging the culture of sport and alcohol. *International Journal of Drug Policy, 11*(3), 199-202. doi: 10.1016/S0955-3959(00)00056-6
- Murphy, S. A., Connelly, C. D., Evens, C., & Vander, S. A. (2000). Roles, lifestyles, and well-being as predictors of alcohol consumption among young and midlife women. *Health Care for Women International, 21*(8), 677-699. doi: 10.1080/073993300300340510
- Musselwhite, K., Cuff, L., McGregor, L., & King, K. M. (2007). The telephone interview is an effective method of data collection in clinical nursing research: a discussion paper. *International Journal of Nursing Studies, 44*(6), 1064-1070. doi: 10.1016/j.ijnurstu.2006.05.014
- Mykletun, A., Stordal, E., & Dahl, A. A. (2001). Hospital Anxiety and Depression (HAD) scale: factor structure, item analyses and internal consistency in a large population. *The British Journal of Psychiatry, 179*(6), 540-544. doi: 10.1192/bjp.179.6.540
- Mäkelä, K. (1983). The uses of alcohol and their cultural regulation. *Acta Sociologica, 26*(1), 21-31.
- Mäkelä, P., Bloomfield, K., Gustafsson, N. K., Huhtanen, P., & Room, R. (2008). Changes in volume of drinking after changes in alcohol taxes and travellers' allowances: results from a panel study. *Addiction, 103*(2), 181-191.
- Mäkelä, P., Gmel, G., Grittner, U., Kuendig, H., Kuntsche, S., Bloomfield, K., & Room, R. (2006). Drinking patterns and their gender differences in Europe. *Alcohol and Alcoholism: International Journal of the Medical Council on Alcoholism, 41*(1), i8-i18. doi: 10.1093/alcal/agl071
- Möller-Leimkühler, A. M., Schwarz, R., Burtscheidt, W., & Gaebel, W. (2002). Alcohol dependence and gender-role orientation. *European Psychiatry: The Journal of the Association of European Psychiatrists, 17*(1), 1-8. doi: 10.1016/S0924-9338(02)00624-7
- National Health and Medical Research Council. (2009). *Australian guidelines to reduce health risks from drinking alcohol*. Canberra: National Health and Medical Research Council.
- National Institute on Alcohol Abuse and Alcoholism. (2014). *Harmful Interactions. Mixing alcohol with medicines*. (NIH Publication No. 13-5329). Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Neighbors, C., Dillard, A. J., Lewis, M. A., Bergstrom, R. L., & Neil, T. A. (2006). Normative misperceptions and temporal precedence of perceived norms and drinking. *Journal of Studies on Alcohol, 67*(2), 290-299.

- Neighbors, C., Lostutter, T. W., Whiteside, U., Fossos, N., Walker, D. D., & Larimer, M. E. (2007). Injunctive norms and problem gambling among college students. *Journal of Gambling Studies, 23*(3), 259-273. doi: 10.1007/s10899-007-9059-3
- Neighbors, C., O'Connor, R. M., Lewis, M. A., Chawla, N., Lee, C. M., & Fossos, N. (2008). The relative impact of injunctive norms on college student drinking: the role of reference group. *Psychology of Addictive Behaviors, 22*(4), 576-581. doi: 10.1037/a0013043
- Neugarten, B. L., Moore, J. W., & Lowe, J. C. (1965). Age norms, age constraints, and adult socialization. *The American Journal of Sociology, 70*(6), 710-717.
- Nicolai, J., Moshagen, M., & Demmel, R. (2012). Patterns of alcohol expectancies and alcohol use across age and gender. *Drug and Alcohol Dependence, 126*(3), 347-353. doi: 10.1016/j.drugalcdep.2012.05.040
- Nilsson, U. G., Ivarsson, B., Alm-Rojjer, C., & Svedberg, P. (2013). The desire for involvement in healthcare, anxiety and coping in patients and their partners after a myocardial infarction. *European Journal of Cardiovascular Nursing, 14*(7), 147-154. doi: 10.1177/1474515112472269
- Nolen-Hoeksema, S. (2004). Gender differences in risk factors and consequences for alcohol use and problems. *Clinical Psychology Review, 24*(8), 981-1010. doi: 10.1016/j.cpr.2004.08.003
- Norström, T., & Ramstedt, M. (2006). Sweden—is alcohol becoming an ordinary commodity? *Addiction, 101*(11), 1543-1545. doi: 10.1111/j.1360-0443.2006.01540.x
- Nosa, V., Adams, P., & Hodges, I. (2011). Distinctive alcohol cultural practices amongst Niuean men living in Auckland, New Zealand. *Kotuitui: New Zealand Journal of Social Sciences Online, 6*(1-2), 62-72. doi: 10.1080/1177083X.2011.592198
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York: McGraw-Hill Education.
- O'Reilly, K. (2009). *Key concepts in ethnography*. London: SAGE.
- Office for National Statistics. (2012). *General Lifestyle Survey overview: a report on the 2010 General Lifestyle Survey*. The Office for National Statistics.
- Ogletree, S. M., Fancher, J., & Gill, S. (2014). Gender and texting: masculinity, femininity, and gender role ideology. *Computers in Human Behavior, 37*, 49-55. doi: 10.1016/j.chb.2014.04.021
- Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research, 7*(4).

- Organisation for Economic Co-operation and Development. (2015). *Tackling harmful alcohol use: economics and public health policy*. OECD Publishing.
<http://dx.doi.org/10.1787/9789264181069-en>.
- Osberg, T. M., Insana, M., Eggert, M., & Billingsley, K. (2011). Incremental validity of college alcohol beliefs in the prediction of freshman drinking and its consequences: a prospective study. *Addictive Behaviors, 36*(4), 333-340. doi: 10.1016/j.addbeh.2010.12.004
- Pabst, A., Baumeister, S., & Kraus, L. (2010). Alcohol-expectancy dimensions and alcohol consumption at different ages in the general population. *Journal of Studies on Alcohol and Drugs, 71*(1), 46-53. doi: 10.15288/jsad.2010.71.46
- Paschall, M. J., Grube, J. W., Thomas, S., Cannon, C., & Treffers, R. (2012). Relationships between local enforcement, alcohol availability, drinking norms, and adolescent alcohol use in 50 California cities. *Journal of Studies on Alcohol and Drugs, 73*(4), 657. doi: 10.15288/jsad.2012.73.657
- Pastor, A. D., & Evans, S. M. (2003). Alcohol outcome expectancies and risk for alcohol use problems in women with and without a family history of alcoholism. *Drug and Alcohol Dependence, 70*(2), 201-214. doi: 10.1016/S0376-8716(03)00007-3
- Paul, C. A., Au, R., Fredman, L., Massaro, J. M., Seshadri, S., DeCarli, C., & Wolf, P. A. (2008). Association of alcohol consumption with brain volume in the Framingham study. *Archives of Neurology, 65*(10), 1363-1367. doi: 10.1001/archneur.65.10.1363
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver & Wrightsman, L. S. (Eds.), *Measures of personalit and social psychological attitudes* (Vol. 1, pp. 17-59). London: Academic Press.
- Pavis, S., Cunningham-Burley, S., & Amos, A. (1997). Alcohol consumption and young people: Exploring meaning and social context. *Health Education Research, 12*(3), 311-322. doi: 10.1093/her/12.3.311
- Pease, B. (2001). Moving beyond mateship: Reconstructing Australian men's practices. In B. Pease & K. Pringle (Eds.), *A man's world? Changing men's practices in a globalized world* (pp. 191-204). London: Zed Books.
- Peele, S. (2010). Alcohol as evil - Temperance and policy. *Addiction Research and Theory, 18*(4), 374-382. doi: 10.3109/16066359.2010.487953
- Peralta, R. L. (2008). "Alcohol allows you not to be yourself": toward a structured understanding of alcohol use and gender difference among gay, lesbian, and heterosexual youth. *Journal of Drug Issues, 38*, 373-399. doi: 10.1177/002204260803800201

- Peralta, R. L., Steele, J., Nofziger, S., & Rickles, M. (2010). The impact of gender on binge drinking behavior among U.S. college students attending a midwestern university: an analysis of two gender measures. *Feminist Criminology*, *5*(4), 355-379. doi: 10.1177/1557085110386363
- Peterson, C. C. (2013). *Looking forward through the lifespan: developmental psychology* (6th ed.). French Forest: Pearson Higher Education
- Petrilli, E., Beccaria, F., Prina, F., & Rolando, S. (2014). Images of alcohol among Italian adolescents. Understanding their point of view. *Drugs: education, prevention and policy*, *21*(3), 211-220. doi: 10.3109/09687637.2013.875128
- Petroulias, T. (2014). Community Attitudes to Road Safety–2013 Survey Report. Melbourne: The Social Research Centre.
- Pettigrew, S., & Charters, S. (2006). Consumers' expectations of food and alcohol pairing. *British food journal*, *108*(3), 169-180. doi: 10.1108/00070700610650990
- Pettigrew, S., & Charters, S. (2010). Alcohol consumption motivations and behaviours in Hong Kong. *Asia Pacific Journal of Marketing and Logistics*, *22*(2), 210-221. doi: 10.1108/13555851011026953
- Phillips, D. P., & Brewer, K. M. (2011). The relationship between serious injury and blood alcohol concentration (BAC) in fatal motor vehicle accidents: BAC= 0.01% is associated with significantly more dangerous accidents than BAC= 0.00%. *Addiction*, *106*(9), 1614-1622. doi: 10.1111/j.1360-0443.2011.03472.x
- Piacentini, M. G., Chatzidakis, A., & Banister, E. N. (2012). Making sense of drinking: the role of techniques of neutralisation and counter-neutralisation in negotiating alcohol consumption. *Sociology of Health & Illness*, *34*(6), 841-857.
- Pink, B. (2011). Technical paper: Socio-Economic Indexes for Areas (SEIFA). Canberra: Australian Bureau of Statistics.
- Polit, D. F., & Beck, C. T. (2008). *Nursing research: generating and assessing evidence for nursing practice*. Philadelphia: Lippincott Williams and Wilkins.
- Powers, J. R., & Young, A. F. (2008). Longitudinal analysis of alcohol consumption and health of middle-aged women in Australia. *Addiction*, *103*(3), 424-432. doi: 10.1111/j.1360-0443.2007.02101.x
- Pozzato, G., Moretti, M., Franzin, F., Crocè, L. S., Lacchin, T., Benedetti, G., . . . Campanacci, L. (1995). Ethanol metabolism and aging: the role of "first pass metabolism" and gastric alcohol dehydrogenase activity. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *50*(3), B135-B141.

- Prat, G., Adan, A., Pérez-Pàmies, M., & Sánchez-Turet, M. (2008). Neurocognitive effects of alcohol hangover. *Addictive Behaviors, 33*(1), 15-23. doi: 10.1016/j.addbeh.2007.05.002
- Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta psychologica, 104*(1), 1-15.
- Pridemore, W. A., Chamlin, M. B., & Andreev, E. (2013). Reduction in male suicide mortality following the 2006 Russian alcohol policy: an interrupted time series analysis. *American Journal of Public Health, 103*(11), 2021-2026. doi: 10.2105/AJPH.2013.301405
- Rahav, G., Wilsnack, R., Bloomfield, K., Gmel, G., & Kuntsche, S. (2006). The influence of societal level factors on men's and women's alcohol consumption and alcohol problems. *Alcohol and Alcoholism: International Journal of the Medical Council on Alcoholism, 41*(1), i47-i55. doi: 10.1093/alcalc/agl075
- Raitasalo, K., Holmila, M., & Mäkelä, P. (2011). Drinking in the presence of underage children: attitudes and behaviour. *Addiction Research and Theory, 19*(5), 394-401. doi: 10.3109/16066359.2011.560693
- Ramstedt, M. (2010). Change and stability? Trends in alcohol consumption, harms and policy: Sweden 1990-2010. *NAT Nordisk alkohol & narkotikatidskrift, 27*(5), 409-423.
- Ramstedt, M., Lindell, A., & Raninen, J. (2013). Tal om alkohol 2012: en statistisk årsrapport från Monitorprojektet [Alcohol numbers 2012: a statistical annual report from the Monitor project]. Stockholm: Centrum för socialvetenskaplig alkohol- och drogforskning (SoRAD) [Social Research on Alcohol and Drugs].
- Randall, C. L., Roberts, J. S., Del Boca, F. K., Carroll, K. M., Connors, G. J., & Mattson, M. E. (1999). Telescoping of landmark events associated with drinking: a gender comparison. *Journal of Studies on Alcohol, 60*(2), 252-260.
- Read, J. P., Wood, M. D., Lejuez, C. W., Palfai, T. P., & Slack, M. (2004). Gender, alcohol consumption, and differing alcohol expectancy dimensions in college drinkers. *Experimental and Clinical Psychopharmacology, 12*(4), 298.
- Rehm, J. (2011). The risks associated with alcohol use and alcoholism. *Alcohol Research and Health, 34*(2), 135.
- Rehm, J., Mathers, C., Popova, S., Thavorncharoensap, M., Teerawattananon, Y., & Patra, J. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *The Lancet, 373*(9682), 2223-2233. doi: 10.1016/S0140-6736(09)60746-7

- Rehm, J., Room, R., & Taylor, B. (2008). Method for moderation: measuring lifetime risk of alcohol-attributable mortality as a basis for drinking guidelines. *International journal of methods in psychiatric research*, *17*(3), 141-151. doi: 10.1002/impr.259
- Rehm, J., Shield, K. D., Rehm, M. X., Gmel, G., & Frick, U. (2012). Alcohol consumption, alcohol dependence and attributable burden of disease in Europe *Potential gains from effective interventions for alcohol dependence*. Toronto: Centre for Addiction and Mental Health (CAMH).
- Rehm, J., Taylor, B., Mohapatra, S., Irving, H., Baliunas, D., Patra, J., & Roerecke, M. (2010). Alcohol as a risk factor for liver cirrhosis: a systematic review and meta-analysis. *Drug and Alcohol Review*, *29*(4), 437-445. doi: 10.1111/j.1465-3362.2009.00153.x
- Reinert, D. F., & Allen, J. P. (2007). The Alcohol Use Disorders Identification Test: an update of research findings. *Alcoholism: Clinical and Experimental Research*, *31*(2), 185-199. doi: 10.1111/j.1530-0277.2006.00295.x
- Ricciardelli, L. A., Connor, J. P., Williams, R. J., & Young, R. M. (2001). Gender stereotypes and drinking cognitions as indicators of moderate and high risk drinking among young women and men. *Drug and Alcohol Dependence*, *61*(2), 129-136. doi: 10.1016/S0376-8716(00)00131-9
- Rickly-Boyd, J. M. (2012). Lifestyle climbing: toward existential authenticity. *Journal of Sport & Tourism*, *17*(2), 85-104. doi: 10.1080/14775085.2012.729898
- Ridout, B., Campbell, A., & Ellis, L. (2012). 'Off your Face (book)': alcohol in online social identity construction and its relation to problem drinking in university students. *Drug and Alcohol Review*, *31*(1), 20-26. doi: 10.1111/j.1465-3362.2010.00277.x
- Rimal, R. N., & Real, K. (2003). Understanding the influence of perceived norms on behaviors. *Communication Theory*, *13*(2), 184-203. doi: 10.1111/j.1468-2885.2003.tb00288.x
- Rinker, D. V., & Neighbors, C. (2013). Reasons for not drinking and perceived injunctive norms as predictors of alcohol abstinence among college students. *Addictive Behaviors*, *38*(7), 2261-2266. doi: 10.1016/j.addbeh.2013.02.011
- Rise, J., Sheeran, P., & Hukkelberg, S. (2010). The role of self-identity in the theory of Planned behavior: a meta-analysis. *Journal of Applied Social Psychology*, *40*(5), 1085-1105. doi: 10.1111/j.1559-1816.2010.00611.x
- Roberts, B. W., Wood, D., & Smith, J. L. (2005). Evaluating Five Factor Theory and social investment perspectives on personality trait development. *Journal of Research in Personality*, *39*(1), 166-184. doi: 10.1016/j.jrp.2004.08.002

- Roche, A. M., Pidd, K., & Kostadinov, V. (2015). Alcohol-and drug-related absenteeism: a costly problem. *Australian and New Zealand journal of public health*. doi: 10.1111/1753-6405.12414
- Roche, A. M., Watt, K., McClure, R. O. D., Purdie, D. M., & Green, D. (2001). Injury and alcohol: a hospital emergency department study. *Drug and Alcohol Review, 20*(2), 155-166. doi: 10.1080/09595230120058542
- Rohsenow, D. J. (1983). Drinking habits and expectancies about alcohol's effects for self versus others. *Journal of Consulting and Clinical Psychology, 51*(5), 752-756. doi: 10.1037/0022-006x.51.5.752
- Rolando, S., Beccaria, F., Tigerstedt, C., & Törrönen, J. (2012). First drink: What does it mean? The alcohol socialization process in different drinking cultures. *Drugs: education, prevention and policy, 19*(3), 201-212. doi: 10.3109/09687637.2012.658105
- Room, R. (2010). The long reaction against the wowser: the prehistory of alcohol deregulation in Australia. *Health Sociology Review, 19*(2), 151-163. doi: 10.5172/hesr.2010.19.2.151
- Room, R., & Mäkelä, K. (2000). Typologies of the cultural position of drinking. *Journal of Studies on Alcohol, 61*(3), 475-483.
- Roumeliotis, F. (2010). Betydelsen av alkohol: en studie om meningen med alkohol för unga tjejer i Stockholms stad [The role of alcohol: a study of the meaning of alcohol among young girls in Stockholm city]. Stockholm: Preventionscentrum Stockholm.
- Rúðólfssdóttir, A. G., & Morgan, P. (2009). "Alcohol is my friend": Young middle class women discuss their relationship with alcohol. *Journal of Community & Applied Social Psychology, 19*, 492-505.
- Rundberg, J., Lidfeldt, J., Nebrand, C., Samsioe, G., Romelsjo, A., & Ojehagen, A. (2005). Few middle-aged women with severe mental symptoms use psychotropic drugs: The Women's Health in Lund Area (WHILA) Study. *Scandinavian Journal of Public Health, 33*(5), 384-391.
- Samsioe, G., Lidfeldt, J., Nerbrand, C., & Nilsson, P. (2010). The women's health in the Lund area (WHILA) study—an overview. *Maturitas, 65*(1), 37-45. doi: 10.1016/j.maturitas.2009.11.009
- Sánchez-López, M., Cuellar-Flores, I., & Dresch, V. (2012). The impact of gender roles on health. *Women and health, 52*(2), 182-196. doi: 0.1080/03630242.2011.652352
- Sandberg, S. (2012). Cannabis culture: a stable subculture in a changing world. *Criminology and criminal justice, 63*-79. doi: 10.1177/1748895812445620

- Sande, A. (2002). Intoxication and rite of passage to adulthood in Norway. *Contemporary Drug Problems: An Interdisciplinary Quarterly*, 29(2), 277-303. doi: 10.1177/009145090202900204
- Sannibale, C., & Hall, W. (2001). Gender-related symptoms and correlates of alcohol dependence among men and women with a lifetime diagnosis of alcohol use disorders. *Drug and Alcohol Review*, 20(4), 369-383. doi: 10.1080/09595230120092779
- Sato, T. (2005). The Eysenck personality questionnaire brief version: factor structure and reliability. *The Journal of psychology*, 139(6), 545-552. doi: 10.3200/JRLP.139.6.545-552
- Satre, D. D., & Knight, B. G. (2001). Alcohol expectancies and their relationship to alcohol use: age and sex differences. *Aging and Mental Health*, 5(1), 73-83. doi: 10.1080/13607860020020672
- Saunders, J. B., Aasland, O. G., Babor, T. F., Fuente, J., R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction*, 88(6), 791-804. doi: 10.1111/j.1360-0443.1993.tb02093.x
- Sayette, M. A., Dimoff, J. D., Levine, J. M., Moreland, R. L., & Votruba-Drzal, E. (2012). The effects of alcohol and dosage-set on risk-seeking behavior in groups and individuals. *Psychology of Addictive Behaviors*, 26(2), 194-200. doi: 10.1037/a0023903
- Scarscelli, D. (2007). Consumption patterns of alcoholic beverages in two cohorts of Italian men. *Contemporary Drug Problems*, 34(2), 313. doi: 10.1177/009145090703400210
- Schweinsburg, B. C., Alhassoon, O. M., Taylor, M. J., Gonzalez, R., Videen, J. S., Brown, G. G., . . . Grant, I. (2003). Effects of alcoholism and gender on brain metabolism. *The American Journal of Psychiatry*, 160(6), 1180-1183. doi: 10.1176/appi.ajp.160.6.1180
- Scott-Sheldon, L. A. J., Terry, D. L., Carey, K. B., Garey, L., & Carey, M. P. (2012). Efficacy of expectancy challenge interventions to reduce college student drinking: a meta-analytic review. *Psychology of Addictive Behaviors*. doi: 10.1037/a0027565
- Seaman, P., & Edgar, F. (2012). Creating better stories: Alcohol and gender in transitions to adulthood: Glasgow Centre for Population Health.
- Seaman, P., & Ikegwuonu, T. (2010). Drinking to belong: understanding young adults' alcohol use within social networks *Joseph Rowntree Foundation Report*. Accessed online at www.jrf.org.uk/sites/files/jrf/alcohol-young-adults-full.pdf.

- Seaman, P., & Ikegwuonu, T. (2011). 'I don't think old people should go to clubs': How universal is the alcohol transition amongst young adults in the United Kingdom? *Journal of Youth Studies, 14*(7), 745-759.
- Selin, K. H. (2006). Alcohol Use Disorder Identification Test (AUDIT): what does it screen? Performance of the AUDIT against four different criteria in a Swedish population sample. *Substance Use and Misuse, 41*(14), 1881-1899. doi: 10.1080/10826080601025532
- Seljamo, S., Aromaa, M., Koivusilta, L., Rautava, P., Sourander, A., Helenius, H., & Sillanpää, M. (2006). Alcohol use in families: a 15-year prospective follow-up study. *Addiction, 101*(7), 984-992. doi: 10.1111/j.1360-0443.2006.01443.x
- Sheehan, M., & Ridge, D. (2001). "You become really close...You talk about the silly things you did, and we laugh": the role of binge drinking in female secondary student's lives. *Substance Use & Misuse, 36*(3), 347. doi: 10.1081/JA-100102630
- Shell, D. F., Newman, I. M., & Xiaoyi, F. (2010). The influence of cultural orientation, alcohol expectancies and self-efficacy on adolescent drinking behavior in Beijing. *Addiction, 105*(9), 1608-1615. doi: 10.1111/j.1360-0443.2010.03006.x
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2), 63-75.
- Shepherd, C. B., & Rickard, K. M. (2012). Drive for muscularity and help-seeking: the mediational role of gender role conflict, self-stigma, and attitudes. *Psychology of Men and Masculinity, 13*(4), 379. doi: 10.1037/a0025923
- Shield, K. D., Gmel, G., Patra, J., & Rehm, J. (2012). Global burden of injuries attributable to alcohol consumption in 2004: a novel way of calculating the burden of injuries attributable to alcohol consumption. *Popul Health Metrics, 10*(9). doi: 10.1186/1478-7954-10-9
- Shield, K. D., Rylett, M., Gmel, G., Gmel, G., Kehoe-Chan, T. A. K., & Rehm, J. (2013). Global alcohol exposure estimates by country, territory and region for 2005—a contribution to the Comparative Risk Assessment for the 2010 Global Burden of Disease Study. *Addiction, 108*(5), 912-922. doi: 10.1111/add.12112
- Shields, A. L., & Caruso, J. C. (2003). Reliability generalization of the Alcohol Use Disorder Identification Test. *Educational and Psychological Measurement, 63*(3), 404-413. doi: 10.1177/0013164403063003004
- Simpura, J., & Karlsson, T. (2001). Trends in drinking patterns in fifteen European countries, 1950 to 2000: a collection of country reports. Helsinki: STAKES.
- Sklar, A. L., Gilbertson, R., Boissoneault, J., Prather, R., & Nixon, S. J. (2012). Differential effects of moderate alcohol consumption on performance among older and younger

- adults. *Alcoholism: Clinical and Experimental Research*, 36(12), 2150-2156. doi: 0.1111/j.1530-0277.2012.01833.x.
- Sloan, C., Conner, M., & Gough, B. (2014). How does masculinity impact on health? A quantitative study of masculinity and health behavior in a sample of UK men and women. doi: 10.1037/a0037261
- Smith, G. S., Branas, C. C., & Miller, T. R. (2006). Fatal nontraffic injuries involving alcohol: A metaanalysis. *American Journal of Infection Control*, 34(1), 659-668. doi: 10.1016/S0196-0644(99)80004-3
- Social Issues Research Centre. (1998). Social and cultural aspects of drinking: A report to the European Commission. Oxford: The Social Issues Research Centre.
- Socialstyrelsen [The National Board of Health and Welfare]. (2014a). Graviditeter, förlossningar och nyfödda barn [Pregnancies, deliveries and newborn infants. The Swedish Medical Birth Register 1973–2013. Assisted Reproduction, treatment 1991–2001]. Stockholm: Socialstyrelsen [The National Board of Health and Welfare].
- Socialstyrelsen [The National Board of Health and Welfare]. (2014b). Preventable health. Stockholm: Socialstyrelsen [The National Board of Health and Welfare].
- Socialstyrelsen [The National Board of Health and Welfare]. (n.d.-a). Statistikdatabas för dödsorsaker [Statistical database for cause of death] Retrieved from: <http://www.socialstyrelsen.se/statistik/statistikdatabas/dodsorsaker>.
- Socialstyrelsen [The National Board of Health and Welfare]. (n.d.-b). Statistikdatabas för läkemedel [Statistical database for pharmaceuticals].
- Song, E., Smiler, A. P., Wagoner, K. G., & Wolfson, M. (2012). Everyone says it's ok: adolescents' perceptions of peer, parent, and community alcohol norms, alcohol consumption, and alcohol-related consequences. *Substance Use and Misuse*, 47(1), 86-98. doi: 10.3109/10826084.2011.629704
- Sorell, G. T., Silvia, L. Y., & Busch-Rossnagel, N. A. (1993). Sex-role orientation and self-esteem in alcoholic and nonalcoholic women. *Journal of Studies on Alcohol*, 54(5), 566-573.
- Spence, J. T., & Heinreich, R. (1972). The Attitudes toward Women Scale: an objective instrument to measure attitudes toward the rights and roles of women in contemporary society. *JSAS Catalog of Selected Documents in Psychology*, 2, 667-668.
- Spradley, J. P. (1979). *The ethnographic interview*. New York: Holt, Rinehart and Winston.
- Spradley, J. P. (1980). *Participant observation*. New York: Holt, Rinehart and Winston.

- Spradley, J. P., & McCurdy, D. W. (1972). *The cultural experience: ethnography in complex society* Prospect Heights: Waveland Press.
- Starfelt, L. C., Young, R., White, K. M., & Palk, G. (2015). Explicating the role of sexual coercion and vulnerability alcohol expectancies in rape attributions. *Journal of interpersonal violence, 30*(11), 1965-1981. doi: 10.1177/0886260514549466
- Statistiska centralbyrån [Statistics Sweden]. (2015). Genomsnittlig månadslön efter ålder och kön, 2014[Average monthly salary by age and sex, 2014]. Retrieved from http://www.scb.se/sv_/Hitta-statistik/Statistik-efter-amne/Arbetsmarknad/Loner-och-arbetskostnader/Lonestrukturstatistik-privat-sektor-SLP/7531/7538/Tjansteman-2012/133639/.
- Stephens, N. (2007). Collecting data from elites and ultra elites: telephone and face-to-face interviews with macroeconomists. *Qualitative Research, 7*(2), 203-216. doi: 10.1177/1468794107076020
- Stevens, J. P. (2012). *Applied multivariate statistics for the social sciences* (5th Ed. ed.). New York: Taylor and Francis.
- Stewart, M. (1992). 'I can't drink beer, I've just drunk water': alcohol, bodily substance and commensality among Hungarian Rom. In D. Gefou-Madianou (Ed.), *Alcohol, gender, and culture* (pp. 137-156). London: Routledge.
- Stewart, S. H., Gavric, D., & Collins, P. (2009). Women, girls, and alcohol In K. T. Brady, S. E. Back & S. F. Greenfield (Eds.), *Women and addiction: a comprehensive handbook* (pp. 341-359). New York: The Guilford Press.
- Stockwell, T., McLeod, R., Stevens, M., Phillips, M., Webb, M., & Jelinek, G. (2002). Alcohol consumption, setting, gender and activity as predictors of injury: a population-based case-control study. *Journal of Studies on Alcohol, 63*(3), 372-379. doi: 10.15288/jsa.2002.63.372
- Stockwell, T., Zhao, J., Panwar, S., Roemer, A., Naimi, T., & Chikritzhs, T. (2016). Do “moderate” drinkers have reduced mortality risk? A systematic review and meta-analysis of alcohol consumption and all-cause mortality. *Journal of Studies on Alcohol and Drugs, 77*(2), 185-198. doi: 10.15288/jsad.2016.77.185
- Strahan, E. Y., Panayiotou, G., Clements, R., & Scott, J. (2011). Beer, wine, and social anxiety: testing the “self-medication hypothesis” in the US and Cyprus. *Addiction Research and Theory, 19*(4), 302-311. doi: 10.3109/16066359.2010.545152
- Sturges, J. E., & Hanrahan, K. J. (2004). Comparing telephone and face-to-face qualitative interviewing: a research note. *Qualitative Research, 4*(1), 107-118. doi: 10.1177/1468794104041110

- Stöber, J. (2001). The Social Desirability Scale-17 (SDS-17): convergent validity, discriminant validity, and relationship with age. *European Journal of Psychological Assessment, 17*(3), 222. doi: 10.1027//1015-5759.17.3.222
- Sugarman, D. E., DeMartini, K. S., & Carey, K. B. (2009). Are women at greater risk? An examination of alcohol-related consequences and gender. *The American Journal on Addictions, 18*(3), 194-197. doi: 10.1080/10550490902786991
- Sulander, T., Helakorpi, S., Rahkonen, O., Nissinen, A., & Uutela, A. (2004). Smoking and alcohol consumption among the elderly: Trends and associations, 1985–2001. *Preventive Medicine, 39*(2), 413-418. doi: 10.1016/j.ypmed.2004.02.049
- Suls, J., & Green, P. (2003). Pluralistic ignorance and college student perceptions of gender-specific alcohol norms. *Health Psychology, 22*(5), 479-486. doi: 10.1037/0278-6133.22.5.479
- Summers, A. (1975). *Damned whores and God's police: the colonization of women in Australia*. Ringwood: Penguin Books.
- Sundin, E., Jandberg, J., & Raninen, J. R., M. (2015). Negativa konsekvenser av alkohol, narkotika och tobak i Sverige—en ettårsuppföljning av beroende och utsatthet för närståendes bruk [Negative consequences of alcohol, illegal drugs, and tobacco in Sweden—a one year follow-up of dependency and vulnerability to others' use]. Stockholm: Centraförbundet för alkohol- och narkotikaupplysning [The Swedish Council for Information on Alcohol and Other Drugs].
- Swendsen, J. D., Conway, K. P., Degenhardt, L., Glantz, M., Jin, R., Merikangas, K. R., . . . Kessler, R. C. (2010). Mental disorders as risk factors for substance use, abuse and dependence: results from the 10-year follow-up of the National Comorbidity Survey. *Addiction, 105*(6), 1117-1128. doi: 10.1111/j.1360-0443.2010.02902.x
- Swendsen, J. D., Tennen, H., Carney, M. A., Affleck, G., Willard, A., & Hromi, A. (2000). Mood and alcohol consumption: an experience sampling test of the self-medication hypothesis. *Journal of Abnormal Psychology, 109*(2), 198. doi: 10.1037//0021-843X.109.2.198
- Syzdek, M. R., Addis, M. E., Green, J. D., Whorley, M. R., & Berger, J. L. (2014). A pilot trial of gender-based motivational interviewing for help-seeking and internalizing symptoms in men. *Psychology of Men and Masculinity, 15*(1), 90.
- Szmigin, I., Griffin, C., Mistral, W., Bengry-Howell, A., Weale, L., & Hackley, C. (2008). Re-framing 'binge drinking' as calculated hedonism: empirical evidence from the UK. *International journal of drug policy, 19*(5), 359-366. doi: 10.1016/j.drugpo.2007.08.009

- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (t. Ed. Ed.). Boston: Pearson.
- Talbott, L. L., Wilkinson, L. L., Moore, C. G., & Usdan, S. L. (2014). The role of injunctive norms and alcohol use during the first-semester of college. *Journal of Alcohol and Drug Education, 58*(1), 60-81.
- Taylor, A., Toner, P., Templeton, L., & Velleman, R. (2008). Parental alcohol misuse in complex families: the implications for engagement. *British Journal of Social Work, 38*(5), 843-864. doi: 10.1093/bjsw/bcl374
- Teesson, M., Hall, W., Slade, T., Mills, K., Grove, R., Mewton, L., . . . Haber, P. (2010). Prevalence and correlates of DSM-IV alcohol abuse and dependence in Australia: findings of the 2007 National Survey of Mental Health and Wellbeing. *Addiction, 105*(12), 2085-2094. doi: 10.1111/j.1360-0443.2010.03096.x
- Testa, M., Fillmore, M. T., Norris, J., Abbey, A., Curtin, J. J., Leonard, K. E., . . . Hayman, L. W., Jr. (2006). Understanding alcohol expectancy effects: revisiting the placebo condition. *Alcoholism: Clinical and Experimental Research, 30*(2), 339-348. doi: 10.1111/j.1530-0277.2006.00039.x
- Trafikanalys [Transport analysis]. (2014). Vägtrafikskador 2014 [Road traffic injuries 2014]. Retrieved from: http://trafa.se/globalassets/statistik/vagtrafik/vagtrafikskador/vaegtrafikskador_2014.pdf.
- Triandis, H. C. (1972). *The analysis of subjective culture*. New York: Wiley.
- Tripp, T. R., & Rich, P. J. (2012). The influence of video analysis on the process of teacher change. *Teaching and Teacher Education, 28*(5), 728-739. doi: 10.1016/j.tate.2012.01.011
- Tryggvesson, K. (2004). The ambiguous excuse: attributing violence to intoxication—young Swedes about the excuse value of alcohol. *Contemporary Drug Problems: An Interdisciplinary Quarterly, 31*(2), 231-261. doi: 10.1177/009145090403100204
- Tryggvesson, K., & Bullock, S. L. (2006). Is it a fight or are they just drunk? Attributions about drunken behaviour in a hypothetical male-to-male aggression scenario. *Journal of Scandinavian Studies in Criminology and Crime Prevention, 7*(1), 61-77. doi: 10.1080/14043850500404205
- Tupler, L. A., Hege, S., & Ellinwood Jr, E. H. (1995). Alcohol pharmacodynamics in young-elderly adults contrasted with young and middle-aged subjects. *Psychopharmacology, 118*(4), 460-470.

- Tutenges, S., & Rod, M. H. (2009). 'We got incredibly drunk... it was damned fun': drinking stories among Danish youth. *Journal of Youth Studies, 12*(4), 355-370. doi: 10.1080/13676260902866496
- Twenge, J., & Campbell, S. (2011). Generational differences in psychological traits and their impact on the workplace. *Journal of Managerial Psychology, 23*(8), 862-877. doi: 10.1108/02683940810904367
- Törnqvist, C. (1999). Att dricka på vardagen—hot, illusion och möjligheter [To drink during the weekdays—threat, illusion, and possibilities]. *Nordisk alkohol- & narkotikatidskrift [Nordic Studies on Alcohol and Drugs], 16*, 7-16.
- Törnqvist, C. (2007). Twenty then—today about thirty-five. The meaning of alcohol in a life course perspective. *Nordisk alkohol- & narkotikatidskrift [Nordic Studies on Alcohol and Drugs], 24*(6), 563-587.
- Törrönen, J., & Maunu, A. (2007). Light transgression and heavy sociability: alcohol in young adult Finns' narratives of a night out. *Addiction Research and Theory, 15*(4), 365-381. doi: 10.1080/16066350601179423
- Van Wersch, A., & Walker, W. (2009). Binge-drinking in Britain as a social and cultural phenomenon: the development of a grounded theoretical model. *Journal of Health Psychology, 14*(1), 124-134. doi: 10.1177/1359105308097952
- Verster, J. C. (2007). Alcohol hangover effects on driving and flying. *International Journal on Disability and Human Development, 6*(4), 361-368. doi: 10.1515/IJDHD.2007.6.4.361
- Vogel-Sprott, M., & Barrett, P. (1984). Age, drinking habits and the effects of alcohol. *Journal of Studies on Alcohol and Drugs, 45*(06), 517. doi: 10.15288/jsa.1984.45.517
- Von der Pahlen, B., Santtila, P., Witting, K., Varjonen, M., Jern, P., Johansson, A., & Sandnabba, N. K. (2008). Factor structure of the Alcohol Use Disorders Identification Test (AUDIT) for men and women in different age groups. *Journal of Studies on Alcohol and Drugs, 69*(4), 616-621. doi: 10.15288/jsad.2008.69.616
- Wacquant, L. (2002). Scrutinizing the street: poverty, morality, and the pitfalls of urban ethnography. *American Journal of Sociology, 107*(6), 1468-1532.
- Waern, M., Marlow, T., Morin, J., Östling, S., & Skoog, I. (2013). Secular changes in at-risk drinking in Sweden: birth cohort comparisons in 75-year-old men and women 1976–2006. *Age and ageing, aft136*. doi: 10.1093/ageing/aft136
- Walter, H., Dvorak, A., Gutierrez, K., Zitterl, W., & Lesch, O. M. (2005). Gender differences: does alcohol affect females more than males. *Neuropsychopharmacol Hungarica, 7*(2), 78-82.

- Webb, T. L., Sheeran, P., & Pepper, J. (2012). Gaining control over responses to implicit attitude tests: Implementation intentions engender fast responses on attitude-incongruent trials. *British Journal of Social Psychology, 51*(1), 13-32.
- Wennberg, P., Källmén, H., Hermansson, U., & Bergman, H. (2006). *The Alcohol Use Disorders Identification Test, AUDIT: manual*.
- Werner, M. J., Walker, L. S., & Greene, J. W. (1996). Concurrent and prospective screening for problem drinking among college students. *Journal of Adolescent Health, 18*(4), 276-285. doi: 10.1016/1054-139X(95)00207-9
- White, V., & Bariola, E. (2012). *Australian secondary school students' use of tobacco, alcohol, and over-the counter and illicit substances in 2011*. Melbourne: Cancer Council Victoria
- Widom, C. S., White, H. R., Czaja, S. J., & Marmorstein, N. R. (2007). Long-term effects of child abuse and neglect on alcohol use and excessive drinking in middle adulthood. *Journal of Studies on Alcohol and Drugs, 68*(3), 317-326. doi: 10.15288/jsad.2007.68.317
- Wild, T. C. (2002). Personal drinking and sociocultural drinking norms: a representative population study. *Journal of Studies on Alcohol, 63*(4), 469-475. doi: 10.15288/jsa.2002.63.469
- Williams, M., Mohsin, M., Weber, D., Jalaludin, B. I. N., & Crozier, J. (2011). Alcohol consumption and injury risk: a case-crossover study in Sydney, Australia. *Drug and Alcohol Review, 30*(4), 344-354. doi: 10.1111/j.1465-3362.2010.00226.x
- Willig, C. (2013). *Introducing qualitative research in psychology*. New York: McGraw-Hill Education
- Wilsnack, R. W., Wilsnack, S. C., Kristjanson, A. F., Vogeltanz-Holm, N. D., & Gmel, G. (2009). Gender and alcohol consumption: patterns from the multinational GENACIS project. *Addiction, 104*(9), 1487-1500. doi: 10.1111/j.1360-0443.2009.02696.x
- Wilson, W. J., & Chaddha, A. (2009). The role of theory in ethnographic research. *Ethnography, 10*(4), 549-564. doi: 10.1177/1466138109347009
- Wojnar, M., Wasilewski, D., Matsumoto, H., & Cedro, A. (1997). Differences in the course of alcohol withdrawal in women and men: a Polish sample. *Alcoholism: Clinical and Experimental Research, 21*(8), 1351-1355.
- Wood, M. D., Nagoshi, C. T., & Dennis, D. A. (1992). Alcohol norms and expectations as predictors of alcohol use and problems in a college student sample. *The American Journal of Drug and Alcohol Abuse, 18*(4), 461-476. doi: 10.3109/00952999209051042

- Wood, W., & Eagly, A. H. (2002). A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex differences. *Psychological Bulletin*, *128*(5), 699-727. doi: 10.1037/0033-2909.128.5.699
- World Economic Forum. (2014). The Global Gender Gap Report 2014. Geneva: World Economic Forum.
- World Health Organization. (2007). WHO collaborative study on alcohol and injuries: final report. Geneva: World Health Organization.
- World Health Organization. (2009). *Alcohol and injuries: emergency department studies in an international perspective*. Geneva: World Health Organization.
- World Health Organization. (2011). Global status report on alcohol 2011. Geneva: World Health Organization.
- World Health Organization. (2012). Alcohol in the European Union: Consumption harm and policy approaches. In P. Anderson, L. Møller & G. Galea (Eds.). Geneva: World Health Organization.
- World Health Organization. (2013). Status Report on Alcohol and Health in 35 European Countries, 2013. Geneva: World Health Organization,.
- World Health Organization. (2014). *Global status report on alcohol and health 2014*. Geneva: World Health Organization.
- Wright, C. (2003). 'Doing the beans': women, drinking and community in the ladies' lounge. *Journal of Australian Studies*, *27*(76), 5-16. doi: 10.1080/14443050309387819
- York, J. L., Welte, J., & Hirsch, J. (2003). Gender comparison of alcohol exposure on drinking occasions. *Journal of Studies on Alcohol*, *64*(6), 790-801. doi: 10.15288/jsa.2003.64.790
- Young, A. M., Morales, M., McCabe, S. E., Boyd, C. J., & D'Arcy, H. (2005). Drinking like a guy: Frequent binge drinking among undergraduate women. *Substance Use & Misuse*, *40*(2), 241-267.
- Young, N. K., Boles, S. M., & Otero, C. (2007). Parental substance use disorders and child maltreatment: overlap, gaps, and opportunities. *Child Maltreatment*, *12*(2), 137-149. doi: 10.1177/1077559507300322
- Zigmond, A. S., & Snaith, R. P. (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica*, *67*, 361-370.
- Zimmermann, F., & Sieverding, M. (2010). Young adults' social drinking as explained by an augmented theory of planned behaviour: the roles of prototypes, willingness, and gender. *British Journal of Health Psychology*, *15*(3), 561-581. doi: 10.1348/135910709x476558

- Zimmermann, F., & Sieverding, M. (2011). Do psychological variables mediate sex differences in young adults' alcohol use? *Substance Use & Misuse, 46*(4), 552-559. doi: 10.3109/10826084.2010.497179
- Zou, X., Tam, K., Morris, M. W., Lee, S., Lau, I. Y., & Chiu, C. (2009). Culture as common sense: perceived consensus versus personal beliefs as mechanisms of cultural influence. *Journal of Personality and Social Psychology, 97*(4), 579-597. doi: 10.1037/a0016399

Appendix A: Abstinence Rates and Total Consumption Volume Among Women

In Sweden, abstinence rates women are relatively similar between the ages of 16–64 years and in Australia, between the ages of 18–69 years. Yet, although abstinence remains stable, total consumption volume increases across age-groups. Figures from Sweden and Australia showing this relationship are included in this Appendix.

Sweden

In Sweden, the highest consumption volume is found among women aged 40–64 years, followed by the age-groups 30–39 years, 16–24 years, and 25–29 years (Figure A.1). As abstinence rates are relatively constant (Figure A.2), differences in total consumption across age-groups is likely due to changes in drinking patterns.

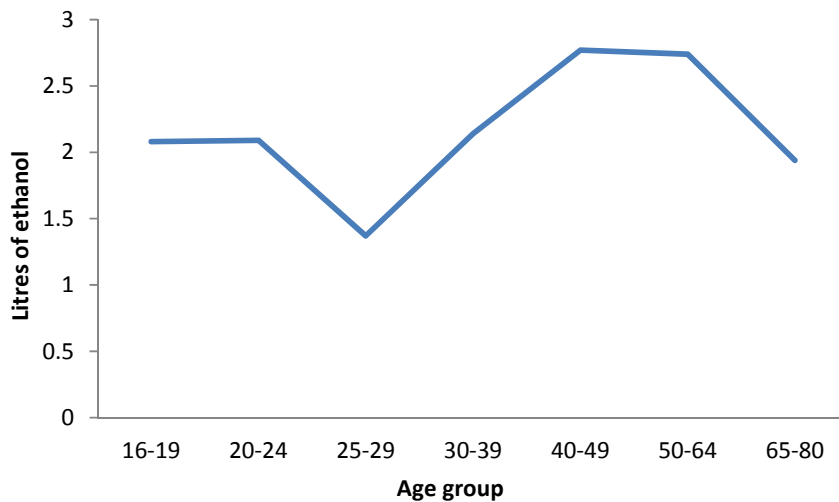


Figure A.1. Average yearly alcohol consumption among Swedish among women in 2012, by age (Ramstedt et al., 2013).

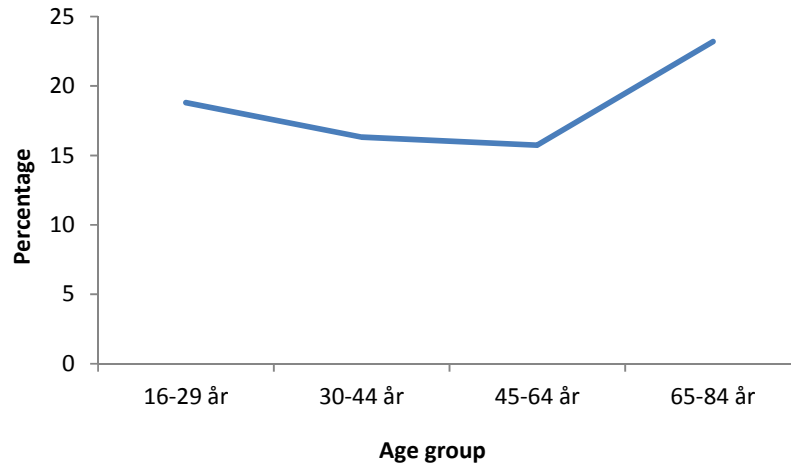


Figure A.2. 12-month abstinence rates among Swedish women in 2013, by age. Calculations based on data from the 2013 Nationella folkhälsoenkäten (National health survey) accessed from Folkhälsomyndigheten (Public Health Agency of Sweden) in 2014.

Australia

Among Australian women, total consumption is higher in each consecutive age-group from 19–70 years (Figure A.3), while abstinence is fairly stable (Figure A.4). Again, differences in consumption volume are likely due to changes in consumption patterns.

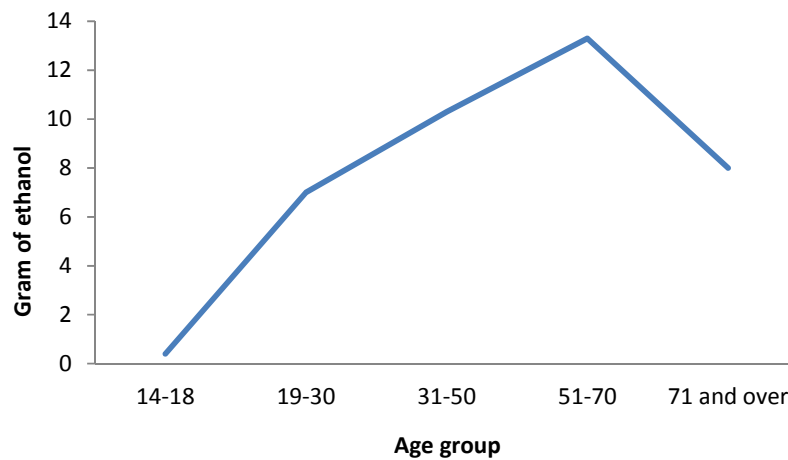


Figure A.3. Average daily alcohol intake among Australian women in 2011-12, by age (ABS, 2014).

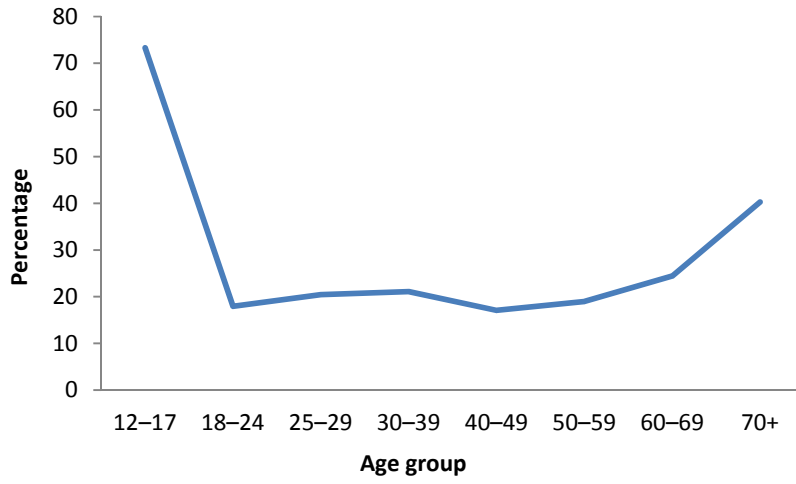


Figure A.4. 12-month abstinence rates among Australian women in 2013, by age (AIHW, 2014).

Appendix B: Observation Guide Matrix

	SPACE	OBJECT	ACT	ACTIVITY	EVENT	TIME	ACTOR	GOAL	FEELING
SPACE	(1) Describe in detail all the places	What are all the ways space is organised by objects?	What are all the ways space is organised by acts?	What are all the ways space is organised by activities?	What are all the ways spaces is organised by events?	What spatial changes occur over time?	What are all the ways space is sued by actors?	What are all the ways space is related to goals?	What places are associated with feelings?
OBJECT	Where are objects located?	(2) Describe in detail all the objects	What are all the ways objects are used in acts?	What are all the ways objects are used in activities?	What are all the ways that objects are sued in events?	How are objects used at different times?	What are all the ways objects are sued by actors?	Wow are objects used in seeking goals?	What are all the ways objects evoke feeling?
ACT	Where do the acts occur?	Wow do acts incorporate the use of objects?	(3) Describe in detail all the acts	How are acts part of activities?	How are acts a part of events?	How do acts vary over time?	What are the ways acts are performed by actors?	What are all the ways acts are related to goals?	What are all the ways act are linked to feelings?
ACTIVITY	What are all the places activities occur?	What are all the ways activities incorporate objects?	What are all the ways activities incorporate acts?	(4) Describe in detail all the activities	What are all the ways activities are part of events?	How do activates vary over time?	What are all the ways activities involve actors?	What are all the ways activities involve goals?	How do activities involve feelings?
EVENT	What are all the places events occur?	What are all the ways event incorporate objects?	What are all the ways event incorporate acts?	What are all the ways event incorporate activities?	(5) Describe in detail all the events	How do events occur over time?	How do events involve the various actors?	How are events related to goals?	How do events involve feelings?
TIME	Where do time periods occur?	What are the ways time affects objects?	How do act fall into time periods?	How do activities fall into time periods?	How do event fall into time periods?	(6) Describe in detail all the time periods	When are all the times when actors are on stage?	How are goals related to time periods?	What are the feelings experienced by the actors?
ACTOR	Where do actors place themselves?	What are all the ways actors use objects?	What are all the ways actors use acts?	How are actors involved in activities?	How are actors involved in events?	How do actors change over time or at different times?	(7) Describe in detail all the actors	Which actors are lined to which goals?	What are the feelings experienced by actors?
GOAL	Where are goals sought and achieved?	What are all the ways goals involve use of objects?	What are all the ways goals involve acts?	What activities are goal seeking or linked to goals?	What are all the ways events are linked to goals?	Which goals are scheduled for which times?	How do the various goals affect the various actors?	(8) Describe in detail all the goals	What are all the ways goals evoke feelings?
FEELING	Where do the various feeling states occur?	What feelings lead to the use of what objects?	What are all the ways feelings affects acts?	What are all the ways feelings affect activities?	What are all the ways feelings affect events?	How are feelings related to various time periods?	What are all the ways feelings involve actors?	What are the ways feelings influence goals?	(9) Describe in detail all the feeling

Adapted from Spradley (1980)

Appendix C: Observation Venues

Venue A (Sweden)



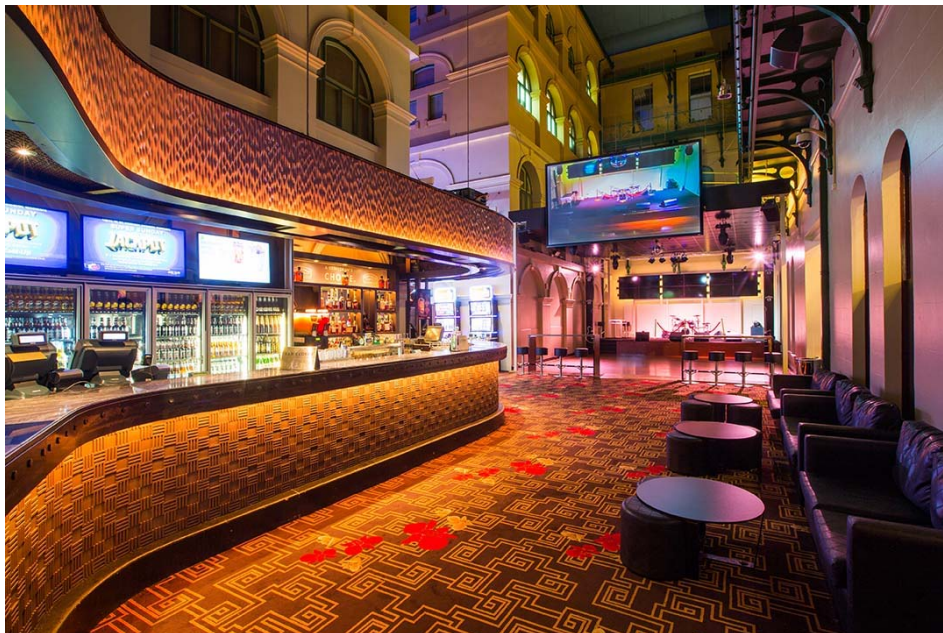
Venue B (Australia)



Venue C (Sweden)



Venue D (Australia)



Appendix D: Interview Schedule

1. I'd like to start by asking you a few general questions about your alcohol consumption.

Could start by describing the most common situations you find yourself in when you drink alcohol?

Prompt:

- Where do usually drink?
 - Who are you usually with (alone or with others)?
 - How much do you usually drink (does it vary or is it the same)?
 - What do you usually do while you are drinking?
 - What type of alcohol do you usually drink?
2. Does alcohol change the experience of these situations and if so, in what way?
 3. Can you tell me about the most important reason for why you choose to drink in these situations?
 4. You have mentioned a few situations in which you drink alcohol. Is there any one situation that you particularly enjoy? What is it about that situation that you particularly enjoy?
 5. Are there other situations when alcohol are used that you do not enjoy so much?
 6. In situations when you drink with other people, do you find that those around you try to influence the way you drink in some way (e.g., how much or how quickly)?
 7. I'm also a bit curious about the concept of intoxication itself, as it can mean different things for different people. In your mind, what are some signs in others that tell you that they have drunk too much?
 8. What about yourself; is there a point when you think to yourself that you have had too much to drink?
 9. If you feel that your alcohol habits have change over the years, could you describe in what way?

Prompt:

- Have the way you think about alcohol changed?
 - When you were younger, did you think much about the way you drank? Do you now?
 - Has your views on alcohol and health changed?
 - In what way did having children effect your alcohol consumption?
10. Do you believe that the way you drank when you were younger is similar or different to how young women drink today?
 11. I'd like to ask you a few questions about men and women's drinking, and I'm particularly interested in men and women that are approximately your age. Do you think that there is a difference in the way in which alcohol is used by men and women?
 12. Do men and women act differently or in similar ways when they have been drinking do you think?
 13. Do you believe there is a difference in how men and women think about alcohol?
 14. Do you think that a women your age that has drunk a bit too much is judged differently from a man your age that has drunk a bit too much?
 15. If you compare a woman your age that has drunk a bit too much with a woman in her early 20s that has drunk too much, do you think they would be judged differently?

Appendix E: Study 3 Questionnaire

WOMEN AND ALCOHOL

Do you consent to participate in this study?

- Yes, I give my consent
- No, I do not give my consent

If "No, I do not give my consent" → A.

A. You cannot take part in this survey without giving your consent.

Thank you for your time!

Thank you for choosing to take part in our study!

This survey consists of four different parts. Each part contains a number of questions and instructions on how to answer them.

It will take you approximately 30 minutes to complete the whole survey.

Before you start, we would like some information about you:

1. What is your current age?

If not 45–59 → B.

B. Unfortunately you're not part of our target group – the survey is about women aged between 45–59 years.

Thank you for your time!

2. Have you drunk alcohol at least once in the last 30 days?

- Yes
- No

If "No" → C.

C. Unfortunately you're not part of our target group—the survey is about women who have drunk alcohol at least once in the last 30 days

Thank you for your time!

3. Do you identify yourself as Australian?

Yes

No

4. Do you identify with any other nationality?

Yes, please specify _____

No

PART 1: ATTITUDES TOWARD WOMEN, ALCOHOL, AND DRINKING

In the first part of this survey, you will be asked to respond to a number of items about men, women, and drinking. In this part we are not only interested in your personal views, but also about the views you believe other people hold.

For each item, you will be asked to indicate your opinion. You will then be asked to think about either "the average Australian person" and estimate how they would respond to the same item. In terms of "the average Australian person" think of a person you feel represent the Australian way of being.

[Injunctive Norms]

Below a number of alcohol-related behaviours are described. We are interested in how people might react if a woman of your age used alcohol this way.

How acceptable is it for <u>women your age</u> to...	What do YOU think?					What would the AVERAGE AUSTRALIAN PERSON think?				
	Unacceptable					Acceptable				
1. ... drink to get intoxicated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. ...drink so much they fall asleep.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. ...drink a bottle of wine or equivalent on a single occasion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. ...drink moderately (e.g., one or two glasses of wine) most days of the week.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Social Roles Questionnaire]

Below are a number of statements about men and women. Please indicate how much you agree with these statements and how much you think "the average Australian person" would agree with these statements.

	What do YOU think?					What would the AVERAGE AUSTRALIAN PERSON think?				
	Strongly disagree				Strongly agree	Strongly disagree				Strongly agree
1. People can be both aggressive and nurturing regardless of sex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. People should be treated the same regardless of their sex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The freedom that children are given should be determined by their age and maturity level and not by their sex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Tasks around the house should not be assigned by sex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. We should stop thinking about whether people are male or female and focus on other characteristics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. A father's major responsibility is to provide financially for his children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Men are more sexual than women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Some types of work are just not appropriate for women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Mothers should make most decisions about how children are brought up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Mothers should work only if necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Girls should be protected and watched over more than boys.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Only some types of work are appropriate for both men and women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. For many important jobs, it is better to choose men instead of women.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[RMAQ–MW items]					
Below are a number of statements about drinking and about the role of alcohol; please indicate how much you agree with these statements.					
	Strongly disagree				Strongly agree
Alcohol is...					
1. ...a natural part of social gatherings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. ...something you should not drink in front of children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. ...something you should not drink <i>heavily</i> in front of children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. ...an important complement to fine food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. ...something you drink with food and never by itself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. ...above all a taste experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To have a drink...					
7. ...while you are cooking can make it feel less like a chore.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. ...can make everyday situations feel less dull.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. ...means that you can let go of your responsibilities for the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. ...means that the work day is over.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. ...means that the work week is over.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alcohol is something you drink...					
12. ...to be sociable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. ...to have conversations that are more interesting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. ...to have fun with your friends and family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. ...to enjoy a party.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. ...to make social gatherings more enjoyable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. ...to nurture friendships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. ...to create warmth or closeness with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. ...to feel romantic with someone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. ...to create a cosy atmosphere with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly disagree			Strongly agree		
21. ...to get the courage to open up to people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. ...to create intimacy with other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. ...to reduce anxiety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. ...to numb emotional pain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. ...to become more self-confident in social situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. ...to feel less shy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. ...to feel less lonely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. ...to enhance the taste of fine foods.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. ...to celebrate a special occasion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. ...to turn a situation into something special.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. ...to escape the routine of everyday life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. ...to enjoy a beautiful summers' day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. ...if you want to relax.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. ...to unwind at the end of the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. ...to unwind at the end of the week.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. ...if you want to treat yourself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. ...if you want to reward yourself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. ...if you want to indulge yourself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. ...if you want something refreshing on a hot day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. ...if you are stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. ...if you feel sad or depressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. ...if you have had a stressful day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. ...because it tastes good.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. ...so that you can be a part of a social situation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. ...primarily to get intoxicated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. ...for the enjoyment of feeling intoxicated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly disagree					Strongly agree				
Drinking to become purposefully intoxicated...										
47. ...is part of being young.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. ...is shameful for women my age.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. ...is a sign of immaturity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. ...is a sign of inexperience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. ...a rite of passage for young people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. ...is part of growing up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly disagree					Strongly agree				
53. You cannot make meaningful connections with other people if you drink to intoxication.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. Alcohol is the most important part of social situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. I stop enjoying the taste of alcohol if I have too much of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. Drinking too much ruins the social experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. Toasting someone with a drink of alcohol is a way to show them your appreciation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. To have a few drinks with someone is a sign of friendship.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. To give a host alcohol is a sign of appreciation of their hospitality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. I like to take my time and enjoy my drink.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. I often engage in other pleasurable activities, such as reading a book or listening to music, while I drink.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. I like to have my drink in a peaceful environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. I like to have a drink in a comfortable environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. I like to have a drink in relaxing surroundings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. To be motivated by the effects of alcohol is a sign of dependency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66. To drink during the work week is a sign of dependency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67. To drink when you are alone is a sign of dependency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following statements concern the effects of alcohol. Please indicate how much you agree with these statements by selecting the most relevant option.					
Drinking alcohol makes people...	Strongly disagree				Strongly agree
68. ...become angry and on edge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. ...fight more.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. ...lose their tempers more quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71. ...become hostile.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
72. ...become aggressive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73. ...do dangerous things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74. ...less able to control themselves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75. It is easy to become dependent on alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76. People cannot be held responsible for their behaviour when they drink.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You have now completed part **1** of **4** (the longest part)!

The rest of the survey will only ask about your personal opinions and experiences.

PART 2: ABOUT YOU

The questions in this part ask about different aspects of your life, but not about your alcohol habits.

[Demographics and control questions]	
Please answer the following questions by selecting the option or options that apply to you.	
<p>1. Which one of the following best describes your present marital status? (Please select one option)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Single, never married <input type="checkbox"/> In a relationship, but not living together <input type="checkbox"/> De facto/Married <input type="checkbox"/> Divorced/Separated <input type="checkbox"/> Widowed
<p>2. What is your current employment status? (Please select all that apply)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Part-time worker <input type="checkbox"/> Full time worker <input type="checkbox"/> Unemployed <input type="checkbox"/> Student <input type="checkbox"/> Maternity leave <input type="checkbox"/> Sick leave <input type="checkbox"/> Leave without pay <input type="checkbox"/> Retired <input type="checkbox"/> Other (please specify) _____
<p>3. In what country were you born?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Please specify _____
<p>4. What is your religious preference?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> None, atheist <input type="checkbox"/> Agnostic <input type="checkbox"/> Protestant Christian <input type="checkbox"/> Roman Catholic <input type="checkbox"/> Evangelical Christian <input type="checkbox"/> Jewish <input type="checkbox"/> Muslim <input type="checkbox"/> Hindu <input type="checkbox"/> Buddhist <input type="checkbox"/> Other (please specify) _____

5. What is the highest level of education you have completed? (please tick the box that applies <u>best</u> to you)	<input type="checkbox"/> Primary school <input type="checkbox"/> High school <input type="checkbox"/> University
6. What is your estimated combined <u>monthly</u> household income? 7. Approximately, what is your households combined <u>monthly</u> income? Include salary after tax and other income, such as investment interest. From this sum, exclude the Medicare levy and the Medicare levy surcharge.	<input type="checkbox"/> \$AU 0 - 40 000 <input type="checkbox"/> \$AU 40 001- 80 000 <input type="checkbox"/> \$AU 80 001-120 000 <input type="checkbox"/> \$AU 120 001-160 000 <input type="checkbox"/> \$AU 160 001-200 000 <input type="checkbox"/> \$AU 200 001- 240 000 <input type="checkbox"/> \$AU 240 000+
8. Do you have any children? (including stepchildren) [If 'No', skip logic →15]	<input type="checkbox"/> Yes <input type="checkbox"/> No
8b. Do you have any children under the age of 15 that are living with you? (including stepchildren)	<input type="checkbox"/> Yes (please specify how many) _____ <input type="checkbox"/> No
8c. Do you have any children aged 15 years or older that are living with you? (including stepchildren)	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Do you have a current drivers licence? [if no, skip logic →15]	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. How many hours do you drive per week, on average? ²⁷	Hours:_____ Minutes_____

²⁷ Data from this question has been published journals outside of the topic area of dissertation.

[Hospital Anxiety and Depression scale]

Read each item and underline the reply which comes closest to how you have been feeling in the past year. Don't take too long over your replies: your immediate reaction to each item will probably be more accurate than a long thought out response.

1. "I feel tense or 'wound up'".	Most of the time <input type="checkbox"/>	A lot of the time <input type="checkbox"/>	From time to time <input type="checkbox"/>	Not at all <input type="checkbox"/>
2. I still enjoy the things I used to enjoy.	Definitely as much <input type="checkbox"/>	Not quite so much <input type="checkbox"/>	Only a little <input type="checkbox"/>	Hardly at all <input type="checkbox"/>
3. I get a sort of frightened feeling as if something awful is about to happen.	Very definitely and quite badly <input type="checkbox"/>	Yes, but not too badly <input type="checkbox"/>	A little, but it doesn't worry me <input type="checkbox"/>	Not at all <input type="checkbox"/>
4. I can laugh and see the funny side of things.	As much as I always could <input type="checkbox"/>	Not quite so much now <input type="checkbox"/>	Definitely not so much now <input type="checkbox"/>	Not at all <input type="checkbox"/>
5. Worrying thoughts go through my mind.	A great deal of the time <input type="checkbox"/>	A lot of the time <input type="checkbox"/>	From time to time but not too often <input type="checkbox"/>	Only occasionally <input type="checkbox"/>
6. I feel cheerful.	Not at all <input type="checkbox"/>	Not often <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Most of the time <input type="checkbox"/>
7. I can sit at ease and feel relaxed.	Definitely <input type="checkbox"/>	Usually <input type="checkbox"/>	Not often <input type="checkbox"/>	Not at all <input type="checkbox"/>
8. I feel as if I am slowed down.	Nearly all the time <input type="checkbox"/>	Very often <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Not at all <input type="checkbox"/>
9. I get a sort of frightened feeling like "butterflies" in the stomach.	Not at all <input type="checkbox"/>	Occasionally <input type="checkbox"/>	Quite often <input type="checkbox"/>	Very often <input type="checkbox"/>
10. I have lost interest in my appearance.	Definitely <input type="checkbox"/>	I don't take so much care as I should <input type="checkbox"/>	I may not take quite as much care <input type="checkbox"/>	I take just as much care as ever <input type="checkbox"/>
11. I feel restless as if I have to be on the move.	Very much indeed <input type="checkbox"/>	Quite a lot <input type="checkbox"/>	Not very much <input type="checkbox"/>	Not at all <input type="checkbox"/>
12. I look forward with enjoyment to things.	As much as ever I did <input type="checkbox"/>	Rather less than I used to <input type="checkbox"/>	Definitely less than I used to <input type="checkbox"/>	Hardly at all <input type="checkbox"/>
13. I get sudden feelings of panic.	Very often indeed <input type="checkbox"/>	Quite often <input type="checkbox"/>	Not very often <input type="checkbox"/>	Not at all <input type="checkbox"/>
14. I can enjoy a good book or radio or TV programme.	Often <input type="checkbox"/>	Sometimes <input type="checkbox"/>	Not often <input type="checkbox"/>	Very seldom <input type="checkbox"/>

[Eysenck Personality Questionnaire–Revised short-form]

Please answer each of the following questions by selecting the "Yes" or "No" option following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the questions.

	Yes	No
1. If you say you will do something, do you always keep your promise no matter how inconvenient it might be?	<input type="checkbox"/>	<input type="checkbox"/>
2. Were you ever greedy by helping yourself to more than your share of anything?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you ever blamed someone for doing something you knew was really your fault?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are all your habits good and desirable ones?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you ever taken anything (even a pin or button) that belonged to someone else?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you ever broken or lost something belonging to someone else?	<input type="checkbox"/>	<input type="checkbox"/>
7. Have you ever said anything bad or nasty about anyone?	<input type="checkbox"/>	<input type="checkbox"/>
8. As a child were you ever cheeky to your parents?	<input type="checkbox"/>	<input type="checkbox"/>
9. Have you ever cheated at a game?	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you ever taken advantage of someone?	<input type="checkbox"/>	<input type="checkbox"/>
11. Do you always practice what you preach?	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you sometimes put off until tomorrow what you ought to do today?	<input type="checkbox"/>	<input type="checkbox"/>

You have now completed part 2 of 4!

PART 3: YOUR ALCOHOL HABITS

[Alcohol Use Disorder Identification Test]

The following questions are about your use of alcohol. Please answer the questions as carefully and as honestly as you can by selecting the option that best describes your answer.

Try to answer the questions in terms of 'standard drinks' (see below).

These beverages contain approximately one standard drink

A full strength can or stubbie contains approximately one and a half standard drinks.



1. How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times a month	2 - 3 times a week	4 or more times a week
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How many standard drinks do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How often do you have <u>six</u> or more standard drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How often do you have more than <u>four</u> standard drinks on one occasion?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. How often during the last year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you or someone else been injured because of your drinking?	No	Yes, but not in the last year	Yes, during the last year		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
11. Has a relative, friend, a doctor, or another health worker been concerned about your drinking or suggested you cut down?	No	Yes, but not in the last year	Yes, during the last year		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

[Beverage type]	
12. What type of alcohol do you drink most often? (Please select one option)	<input type="checkbox"/> Wine <input type="checkbox"/> Beer <input type="checkbox"/> Cider <input type="checkbox"/> Spirits (e.g., whisky, brandy, vodka) <input type="checkbox"/> Liqueurs (e.g., Kahlúa, Midori, Baileys) <input type="checkbox"/> Fortified wine (e.g., port, vermouth, sherry) <input type="checkbox"/> Pre-mixed spirits (e.g., Bacardi Breezer, Smirnoff Ice) <input type="checkbox"/> Other (please specify):_____

[Drink driving questions]²⁸	
13. How many times in the past 12 months have you driven a motor vehicle (e.g., a motorcycle or car) when you might have been over the legal blood alcohol limit for your licence?	Please specify number of times_____
14. How often in the past 12 months have you driven a motor vehicle within an hour after drinking two or more standard drinks?	Please specify number of times_____
15. How often in the past 12 months have you driven a motor vehicle after you have drunk <u>any amount</u> of alcohol?	Please specify number of times_____

You have now completed part 3 of 4!

²⁸ Data from this question has been published journals outside of the topic area of dissertation.

PART 4: THOUGHTS ABOUT ALCOHOL

The following statements ask about **other women's** drinking. Please choose the response option that you believe is correct.

Try to answer the questions in terms of 'standard drinks'.

These beverages contain approximately one standard drink

A full strength can or stubbie contains approximately one and a half standard drinks.

Full Strength Beer 285ml 4.8% Alcohol	Low Strength Beer 425ml 2.7% Alcohol	Pre-mix Spirits 275ml 5% Alcohol	Wine 100ml 13.5% Alcohol	Spirits 30ml 40% Alcohol	Full Strength Beer Can or Stubbie 375ml 4.8% Alcohol
					

1. How often do you think a typical woman your age has a drink containing alcohol?	Never <input type="checkbox"/>	Monthly or less <input type="checkbox"/>	2 - 4 times a month <input type="checkbox"/>	2 - 3 times a week <input type="checkbox"/>	4 or more times a week <input type="checkbox"/>
2. How often do you think a typical woman your age has more than four drinks on one occasion?	Never <input type="checkbox"/>	Less than monthly <input type="checkbox"/>	Monthly <input type="checkbox"/>	Weekly <input type="checkbox"/>	Daily or almost daily <input type="checkbox"/>

[Perceptions of Problems in Living Questionnaire]

People react in a number of different ways when they experience problems in life. Please read the following paragraph carefully and imagine that you are experiencing this problem:

During the past month you have started to drink more than your usual amount of alcohol. In fact, you have noticed that you need to drink twice as much as you used to, to get the same effect. Several times, you have tried to cut down, or stop drinking, but you can't. Each time you have tried to cut down you have become very agitated, sweaty and you couldn't sleep, so you took another drink. Your friends have complained that you are often hung-over, and have become unreliable - making plans one day, and canceling them the next.

	Strongly disagree				Strongly agree
1. I would be disappointed in myself for having this problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I would be ashamed to admit to having this problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If I had this problem it would make me a less worthy person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Others would think less of me if I had this problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Having a problem like this would mean I failed in some way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. If other people found out about this problem it could get me into trouble at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having this problem would mean that there was something seriously wrong with a part of myself I highly value.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. My family and friends might see me as a failure if I had this problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. A problem like this is not a measure of my personal value.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You have now completed part 4 of 4!

Thank you!

Appendix F: Overview of the Swedish Results

This appendix contains a description of the Swedish sample and the results of analyses conducted to address each of the three research questions of this dissertation. Readers should note the limitations associated with this sample as discussed in Section 8.3.2 when interpreting the findings presented here.

F.1 Participants

In Sweden, 110 participants accessed the survey. Of these, 25 were excluded due to insufficient responses, resulting in a sample size of 84. A missing data analysis was conducted for the remaining participants, revealing no systematic patterns among the missing values. Mean imputation was conducted on the data set due to the limited number of participants. Analyses were conducted to compare differences in mean values on the included scales before and after imputation. As only minor differences were found, the imputed values were retained.

F.1.1 Demographics

A large majority of the participants were born in Sweden (94.6%), with the remaining 3.57 and 1.79% being born in other European countries or in Asia. Full time employment was also reported by the majority of participants (85.71%), followed by part-time employment (7.14%), sick leave or leave without pay (5.36%), and retirement (1.79%). Wine was the typical drink of choice for 89.29% of the participants, followed by beer 8.92%. The mean age of participants was 51.17 years ($SD = 4.27$, range 45–59).

F.1.2 Control variables

An overview of participants' scores on the control and dependent variables are presented in Table F.1. As can be seen, the majority of the Swedish women had completed a university degree, were religious, identified as Swedish only, and were married or in a de

facto relationship. Moreover, all Swedish participants reported an income above median disposable household income in Sweden. Last, 17.86 and 1.79% of the sample scored above the cut-off for anxiety and depression, and 27.27% scored above the cut-off for risky drinking.

Table F.1. *Overview of Control and Dependent Variables*

Control and Dependent variables	
Education, <i>n</i> (%)	
Primary school	0 (0.00)
High school	10 (17.86)
University	46 (82.14)
Equalised disposable household income, <i>n</i> (%) ^a	
≤ P10	0 (0.00)
> P10–P20	0 (0.00)
> P20–P50	0 (0.00)
> P50–P80	5 (9.09)
> P80–P90	11 (20.00)
> P90–P100	55 (70.91)
Religious, <i>n</i> (%)	
Religious	34 (62.96)
Not religious	19 (35.19)
Spiritual	1 (1.85)
National Identity, <i>n</i> (%)	
Sweden/Australia only	76 (95.00)
Sweden/Australia and other	1 (1.25)
Other country only	3 (3.85)
Married, <i>n</i> (%)	
Single, never married	7 (12.50)
Divorced/Separated	6 (10.71)
Widowed	0 (0.00)
In a relationship, but not living together	2 (3.57)
De-facto/Married	41 (73.21)
HAD–Anxiety, <i>M</i> (<i>SD</i>)	5.23 (2.83)
> anxiety cut-off, <i>n</i> (%)	10 (17.86)
HAD–Depression, <i>M</i> (<i>SD</i>)	2.89 (2.40)
> depression cut-off, <i>n</i> (%)	1 (1.79)
AUDIT, <i>M</i> (<i>SD</i>)	4.73 (4.19)
> Risky drinking cut-off, <i>n</i> %	15 (27.27)

Note. Percentages totals might not equal 100 due to rounding. HAD = Hospital Anxiety and Depression, AUDIT = Alcohol Use Disorder Identification Test.

^aPercent of sample that fall within the different population percentile brackets for disposable household.

To enable further bivariate and multivariate analysis (see below), the response categories of several of the ordinal control variables had to be collapsed due to low cell counts. The new collapsed variables were Education (Primary school/high school vs.

University), Income (\leq P80 vs. $>$ P80–P90 vs. $>$ P90–P100), Religious (Not religious = Spiritual/non-religious vs Religious = Religious), National identity (Swedish only vs. Other country = Survey country and other/Other only), and Married (Married = De-facto/Married vs. Not married = Single, never married/In a relationship, but not living together/Divorced or Separated/Widowed).

F.1.3 Population comparisons

As documented in Section 8.4.2.1, previous studies have found mean HAD–Anxiety scale scores between 4.72 and 5.4 and mean HAD Depression scale scores between 3.67 and 5.0 among population samples of middle-aged women. These previous studies included non-drinkers and as such the current sample is not directly comparable. Nonetheless, these previous studies indicate that the anxiety or depression scores among the Swedish sample may be relatively representative. In terms of education and income, Swedish data show that women who are current drinkers are more likely than abstainers to have completed a university degree and to have a higher income (Folkhälsomyndigheten [Public Health Agency of Sweden], 2015). As the current sample consists of current drinkers, this could have biased the sample. Despite this, however, the educational attainment and income level of the current sample must be considered high. Last, representative data for typical consumption per drinking occasion and frequency of HED among drinkers is available in Sweden. Table F.2 presents this data against drinking frequency and HED frequency in the current sample. As can be seen from this table, the typical consumption of the Swedish sample appears to be consistent with the broader population; however, a greater proportion of the current sample reported having engaged in HED.

Table F.2. *Typical Consumption per Occasion and Frequency of HED*

	Study sample, %	Population sample, women aged 45–64 years, % ^a
Typical consumption, standard drinks (12 g ethanol)		
1-2	73.21	69.57
3-4	23.21	23.77
5-6	3.57	3.56
7-9	0.00	0.59
10+	0.00	0.08
Not sure	n.a.	2.43
HED (≥ 72 g) frequency		
Never	58.93	70.21
Less than monthly	33.93	23.87
Monthly	3.57	3.50
Weekly	3.57	2.15
Daily or almost daily	0.00	0.28

Note. The survey used to estimate typical consumption contained a *not sure* response alternative. This response alternative was not included in the survey used in this dissertation. n.a. = not applicable.

^aCalculations based on data from the 2013 Nationella folkhälsoenkäten (National health survey) accessed from Folkhälsomyndigheten (Public Health Agency of Sweden) (2014).

F.2 What Alcohol Beliefs do Middle-aged Swedish Women Share?

Table F.3 shows the proportion of participants who scored above the neutral 3 mid-point on the 5-point Likert scales used to measure the alcohol beliefs²⁹. As can be seen, more than 50% of the sample scored above 3 (i.e., agreed with) for the following four

²⁹ All scales with the exception of the Eysenck Personality Questionnaire–Revised short-form obtained acceptable (≥ .70) Cronbach alpha in the Swedish sample

RMAQ–MW subscales; Loss of Control and Aggression, Relaxation and Pleasure, Food and Taste, and De-emphasis of Intoxication.

Table F.3. *Proportion of the Sample With Scale Scores Above 3*

Independent Variables	% of sample with <i>M</i> > 3	% of sample with <i>M</i> ≥ 4
<i>RMAQ–MW subscales</i>		
Self-medication	19.35	1.61
Loss of Control and Aggression	67.86	37.50
Relaxation and Pleasure	61.40	42.11
Interpersonal Closeness	9.52	6.35
Unschooling Drinking	36.84	10.53
Coming of Age	22.81	8.77
Self-indulgence	21.43	8.93
Dependency	44.44	22.22
Social Enhancement	44.44	15.87
Hospitality and Friendship	33.33	21.05
Food and Taste	85.71	63.49
Work and Leisure	22.58	8.06
De-emphasis of Intoxication	89.47	74.44
<i>Attitudes toward women's roles</i>		
SRQ GT Actual	0.00	0.00
SRQ GT Perceived	7.69	0.00
SRQ GL Actual	2.90	0.00
SRQ GL Perceived	18.75	0.00
<i>Norms</i> ¹		
HED Actual Injunctive	66.67	41.33
HED Perceived Injunctive	71.21	42.42
MFD Actual Injunctive	77.38	48.81
MFD Perceived Injunctive	64.29	40.48
<i>Abuse self-stigma</i>		
PPLQ Self-stigma	83.93	39.29

Note. Agreement in ≥ 50% of the sample is in boldface. RMAQ–MW = Role and Meaning of Alcohol Questionnaire–Mature-aged Women, SRQ = Social Roles Questionnaire, HED = heavy episodic drinking, MFD = Moderate and Frequent drinking, PPLQ = Perceptions of Problems in Living Questionnaire.

¹% shows the proportion of participants that indicated that these drinking patterns are unacceptable.

Moreover, the majority of participants rejected both personal and perceived traditional gender roles; however, overall, perceived attitudes toward gender roles were more

traditional than personally held gender roles. In terms of norms, a majority of the women agreed that HED and MFD are unacceptable among same-aged women and believed that others shared this view. A similar majority of participants also believed that they would experience self-stigma as a result of alcohol abuse.

Perceived consumption patterns of same-aged women were calculated and compared against actual consumption patterns in a population sample of Swedish middle-aged women. As can be seen in Table F.4, the majority of the participants correctly classified the most common drinking frequency among same-aged women, but overestimated the frequency of HED.

Table F.4. *Overview Actual and Perceived Population Consumption Patterns*

Actual population consumption patterns, women aged 45–64 years ¹		Perceived consumption patterns (typical same-aged woman)	
	Most common (✓)		%
Drinking frequency		Drinking frequency	
Never		Never	0.00
Up to 4 times/month	✓	Up to 4 times/month	57.14
2–3 times/week		2–3 times/week	42.86
4 times/week or more		4 times/week or more	0.00
HED, ≥ 72 g ethanol		HED, ≥ 60 g ethanol	
Never	✓	Never	17.86
Less than monthly		Less than monthly	67.86
Monthly		Monthly	14.29
Weekly		Weekly	0.00
Daily/almost daily		Daily/almost daily	0.00

Note. The proportions of participants that have correctly estimated the most common population consumption pattern are in boldface.

¹National Population Health Survey [Nationella folkhälsundersökningen] (Folkhälsomyndigheten [Public Health Agency of Sweden], 2015).

F.3 Are Alcohol Beliefs Shared Across Sweden and Australia?

A series of *t* tests and Mann–Whitney *U* tests were conducted to compare mean, median, or rank scores on the measures that were used to capture the alcohol beliefs between the Swedish and Australian sample. Mann–Whitney *U* tests were used as a non-

parametric alternative to *t* tests in those instances when the assumption of normality was breached as there was a large difference in sample size between the Australian and Swedish data sets. For this test, median scores were reported for distributions judged to be of similar shape and mean rank scores for dissimilarly shaped distributions. The result of these analyses is displayed in Table F.5. As can be seen, statistically significant differences were found for all RMAQ–MW subscales, with the exception of the Loss of Control and Aggression subscale. Mean, median, or mean rank scores were significantly higher among Australian women on the subscales Self-medication, Relaxation and Pleasure, Interpersonal Closeness, Unschooled Drinking, Coming of Age, Self-indulgence, Social Enhancement, Hospitality and Friendship, and Work and Leisure. Significantly higher median scores were found for the Swedish women on the subscale Food and Taste.

Table F.6. *Bivariate Relationships between Study Variables*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. Education ^{1(a)}	–															
2. Income ^{2(b)}	.31	–														
3. Religious ^{3(a)}	.17	.18	–													
4. National identity ^{4(a)}	-.09	.22	-.14	–												
5. Marital status ^{5(a)}	-.24	.50**	.21	.03	–											
6. HAD–Anxiety	-.02	-.08	.09	.02	-.17	–										
7. HAD–Depression	.07	-.17	.13	-.01	.05	.53**	–									
8. HED Actual Injunctive	.18	.11	.20	.02	-.21	.07	.04	–								
9. HED Perceived Injunctive	-.14	-.13	-.30	.06	.21	-.15	-.09	-.40**	–							
10. HED Frequency Descriptive ^b	.01	.17	.08	.08	.13	.08	.10	-.12	-.23	–						
11. MFD Actual Injunctive	.23	.15	.19	.08	-.30	.07	-.12	-.40**	.15	-.22	–					
12. MFD Perceived Injunctive	.17	.07	.12	.08	-.10	.10	-.08	.08	.07	-.26	-.47**	–				
13. Drinking Frequency Descriptive ^b	-.26	-.15	.28	.07	.15	.20	.13	-.07	-.01	.25	-.28	-.24	–			
14. Self-medication	-.04	-.11	-.01	-.13	.05	.29	.37**	-.31	.15	.18	-.25	.07	-.01	–		
15. Loss Control and Aggression	-.06	-.08	.17	.17	-.05	.32	.18	-.03	-.18	.15	-.09	-.17	.01	.15	–	
16. Relaxation and Pleasasure	-.18	-.11	-.19	.18	.13	.02	-.03	-.25	.31*	.17	-.46**	-.26	.11	.34**	.17	–
17. Interpersonal Closeness	-.02	.18	.02	-.03	-.11	-.01	.02	-.20	-.01	.14	-.23	.01	-.08	.50**	.11	.31
18. Unschooled Drinking	.14	.06	.26	-.08	-.03	.10	.07	.48**	.14	.06	.22	-.02	-.23	.05	.29	-.11
19. Coming of Age	.04	.10	.08	.01	.08	.10	-.10	-.02	.09	.02	.16	-.04	-.18	.03	.20	.09
20. Self-indulgence	.06	-.13	.09	-.21	.26	-.07	.18	-.25	.11	.29	-.43**	-.25	.01	.60**	.12	.31
21. Dependency	.13	.05	.09	-.06	-.26	.58**	.28*	.09	-.15	.08	.28	.12	.23	.09	.33	-.03
22. Social Enhancement	-.02	.26	-.01	.00	-.13	.03	.04	-.20	.01	.20	-.18	.10	-.02	.53**	.14	.35**
23. Hospitality and Friendship	.22	.19	.13	-.13	-.08	-.04	-.03	-.23	-.20	.18	-.05	.05	-.16	.25	.05	.22
24. Food and Taste	.15	.19	.13	-.08	-.13	-.08	-.19	-.12	.03	.13	-.25*	-.03	-.25	.11	-.05	.39**
25. Work and Leisure	-.00	.01	-.15	-.18	.09	.13	.08	-.33**	.30*	.12	-.46**	-.02	.09	.72**	.10	.50**
26. De-emphasis of Intoxication	.19	.46**	-.01	.00	-.22	.06	-.06	.28	.17	-.09	.40**	.10	-.26	-.14	.14	-.21
27. SRQ GT Actual	.10	.14	.04	-.02	-.22	.09	-.24	.16	-.14	.21	.11	.07	.14	-.04	.07	-.06
28. SRQ GT Perceived	-.26	-.13	-.21	-.14	-.01	-.22	-.29*	-.23	-.00	.08	-.06	-.10	-.05	.16	-.06	.17
29. SRQ GL Actual	-.13	-.08	-.02	-.02	-.06	.27	-.12	.06	.04	.01	-.07	-.03	.14	-.04	.18	.13
30. SRQ GL Perceived	-.35	-.24	-.10	-.17	.22	-.17	-.29*	-.38**	-.03	-.08	-.11	.00	-.18	.07	.07	.13
31. PPLQ Self-stigma	.28	-.07	.13	.30*	.08	.19	.18	.30	.13	-.05	.17	.11	-.09	.20	.17	.14
32. AUDIT	-.07	-.10	-.41**	.01	.10	.28	.45**	-.30	.22	.06	-.48**	-.06	.05	.58**	.07	.42**

^adiscrete dichotomous variable ^bordinal variable. All other variable are measured with interval scales.

¹(0 = Primary/high school, 1 = University), ²(0 = ≤ P80, 1 = > P80–P90, 2 = > P90–P100), ³(0 = Not religious, 1 = religious), ⁴(0 = Swedish only, 1 = Other country), ⁵(0 = Married, 1 = Not married).

* $p < .05$, ** $p < .01$ (two-tailed)

In terms of drinking norms, significantly higher mean rank or median scores were found among the Swedish women for MFD Actual Injunctive and MFD Perceived Injunctive norms as well as Drinking Frequency Descriptive norms and HED Frequency Descriptive norms. Median and mean scores for HED Actual Injunctive and HED Actual Perceived Injunctive norms were not, however, significantly different for the two groups. Additionally, scores were significantly higher among Australian women on all the SRQ subscales, indicating that actual and perceived traditional gender role attitudes were higher in this sample. No significant difference in alcohol abuse self-stigma as measured by the PPLQ was, however, found between the two samples.

F.4 Do Swedish Middle-aged Women's Alcohol Beliefs Predict Increased Likelihood of Risky Drinking?

F.4.1 Bivariate analyses

A number of different tests of association were conducted to determine the relationship between the study variables (see Section 10.2), using an adjusted p value of $< .01$. The result of these calculations can be seen in Table F.6. HAD Depression and Religious were the only control variables that were significantly associated with the AUDIT. MFD Actual Injunctive was the only norm variable that was significantly associated with the outcome variable. Among the RMAQ–MW variables, Self-medication, Relaxation and Pleasure, Interpersonal Closeness, Self-indulgence, Social Enhancement, and Work and Leisure were significantly associated with the DV. None of the SRQ subscales or the PPLQ Self-stigma scale were, however, significantly associated with the outcome variable. In total, nine predictor variables (two control and seven independent variables) were significantly associated with AUDIT scores on the bivariate level. It should, however, be noted that Religious, HAD–Anxiety, HED Actual Injunctive, HED Perceived Injunctive, De-emphasis of

Intoxication, and SRQ GT Actual had non-significant correlations with AUDIT > .20; in a larger sample these correlations may have been significant.

Table F.6. *Bivariate Relationships between Study Variables*

	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32.
33. Education ^{1(a)}	–															
34. Income ^{2(b)}	.31	–														
35. Religious ^{3(a)}	.17	.18	–													
36. National identity ^{4(a)}	-.09	.22	-.14	–												
37. Marital status ^{5(a)}	-.24	.50**	.21	.03	–											
38. HAD–Anxiety	-.02	-.08	.09	.02	-.17	–										
39. HAD–Depression	.07	-.17	.13	-.01	.05	.53**	–									
40. HED Actual Injunctive	.18	.11	.20	.02	-.21	.07	.04	–								
41. HED Perceived Injunctive	-.14	-.13	-.30	.06	.21	-.15	-.09	-.40**	–							
42. HED Frequency Descriptive ^b	.01	.17	.08	.08	.13	.08	.10	-.12	-.23	–						
43. MFD Actual Injunctive	.23	.15	.19	.08	-.30	.07	-.12	-.40**	.15	-.22	–					
44. MFD Perceived Injunctive	.17	.07	.12	.08	-.10	.10	-.08	.08	.07	-.26	-.47**	–				
45. Drinking Frequency Descriptive ^b	-.26	-.15	.28	.07	.15	.20	.13	-.07	-.01	.25	-.28	-.24	–			
46. Self-medication	-.04	-.11	-.01	-.13	.05	.29	.37**	-.31	.15	.18	-.25	.07	-.01	–		
47. Loss Control and Aggression	-.06	-.08	.17	.17	-.05	.32	.18	-.03	-.18	.15	-.09	-.17	.01	.15	–	
48. Relaxation and Pleasasure	-.18	-.11	-.19	.18	.13	.02	-.03	-.25	.31*	.17	-.46**	-.26	.11	.34**	.17	–
49. Interpersonal Closeness	-.02	.18	.02	-.03	-.11	-.01	.02	-.20	-.01	.14	-.23	.01	-.08	.50**	.11	.31
50. Unschooled Drinking	.14	.06	.26	-.08	-.03	.10	.07	.48**	.14	.06	.22	-.02	-.23	.05	.29	-.11
51. Coming of Age	.04	.10	.08	.01	.08	.10	-.10	-.02	.09	.02	.16	-.04	-.18	.03	.20	.09
52. Self-indulgence	.06	-.13	.09	-.21	.26	-.07	.18	-.25	.11	.29	-.43**	-.25	.01	.60**	.12	.31
53. Dependency	.13	.05	.09	-.06	-.26	.58**	.28*	.09	-.15	.08	.28	.12	.23	.09	.33	-.03
54. Social Enhancement	-.02	.26	-.01	.00	-.13	.03	.04	-.20	.01	.20	-.18	.10	-.02	.53**	.14	.35**
55. Hospitality and Friendship	.22	.19	.13	-.13	-.08	-.04	-.03	-.23	-.20	.18	-.05	.05	-.16	.25	.05	.22
56. Food and Taste	.15	.19	.13	-.08	-.13	-.08	-.19	-.12	.03	.13	-.25*	-.03	-.25	.11	-.05	.39**
57. Work and Leisure	-.00	.01	-.15	-.18	.09	.13	.08	-.33**	.30*	.12	-.46**	-.02	.09	.72**	.10	.50**
58. De-emphasis of Intoxication	.19	.46**	-.01	.00	-.22	.06	-.06	.28	.17	-.09	.40**	.10	-.26	-.14	.14	-.21
59. SRQ GT Actual	.10	.14	.04	-.02	-.22	.09	-.24	.16	-.14	.21	.11	.07	.14	-.04	.07	-.06
60. SRQ GT Perceived	-.26	-.13	-.21	-.14	-.01	-.22	-.29*	-.23	-.00	.08	-.06	-.10	-.05	.16	-.06	.17
61. SRQ GL Actual	-.13	-.08	-.02	-.02	-.06	.27	-.12	.06	.04	.01	-.07	-.03	.14	-.04	.18	.13
62. SRQ GL Perceived	-.35	-.24	-.10	-.17	.22	-.17	-.29*	-.38**	-.03	-.08	-.11	.00	-.18	.07	.07	.13
63. PPLQ Self-stigma	.28	-.07	.13	.30*	.08	.19	.18	.30	.13	-.05	.17	.11	-.09	.20	.17	.14
64. AUDIT	-.07	-.10	-.41**	.01	.10	.28	.45**	-.30	.22	.06	-.48**	-.06	.05	.58**	.07	.42**

^adiscrete dichotomous variable ^bordinal variable. All other variable are measured with interval scales.

¹(0 = Primary/high school, 1 = University), ²(0 = ≤ P80, 1 = > P80–P90, 2 = > P90–P100), ³(0 = Not religious, 1 = religious), ⁴(0 = Swedish only, 1 = Other country), ⁵(0 = Married, 1 = Not married).

* $p < .05$, ** $p < .01$ (two-tailed)

Table F.6. *Bivariate Relationship between Study Variables (Continued)*

	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.
1. Education ^{1(a)}																
2. Income ^{2(b)}																
3. Religious ^{3(a)}																
4. National identity ^{4(a)}																
5. Marital status ^{5(a)}																
6. HAD–Anxiety																
7. HAD–Depression																
8. HED Actual Injunctive																
9. HED Perceived Injunctive																
10. HED Frequency Descriptive ^b																
11. MFD Actual Injunctive																
12. MFD Perceived Injunctive																
13. Drinking Frequency Descriptive ^b																
14. Self-medication																
15. Loss Control and Aggression																
16. Relaxation and Pleasure																
17. Interpersonal Closeness	–															
18. Unschooled Drinking	.16	–														
19. Coming of Age	.32	.38**	–													
20. Self-indulgence	.47**	.17	.15	–												
21. Dependency	-.04	.15	.20	-.25	–											
22. Social Enhancement	.68**	.10	.17	.54**	-.12	–										
23. Hospitality and Friendship	.43**	.14	.44**	.41**	-.04	.42**	–									
24. Food and Taste	.18	.10	.18	.33	-.22	.28	.32	–								
25. Work and Leisure	.51**	-.07	.01	.64**	-.06	.51**	.12	.19	–							
26. De-emphasis of Intoxication	-.07	.23	.23	-.28*	.12	.06	-.02	-.12	-.21	–						
27. SRQ GT Actual	.14	-.03	-.07	.13	.11	.04	.06	.08	.01	.02	–					
28. SRQ GT Perceived	.19	-.11	.10	.04	-.06	-.07	.08	-.14	.12	-.07	.09	–				
29. SRQ GL Actual	.00	-.05	.09	.04	.22	-.03	.05	.00	.05	-.04	.50**	-.01	–			
30. SRQ GL Perceived	.11	-.23	.16	.08	.07	-.05	.01	-.11	.15	-.21	.11	.63**	.42**	–		
31. PPLQ Self-stigma	.11	.41**	.21	.10	.29	.25	.14	-.09	.11	.16	.09	-.17	.21	-.15	–	
32. AUDIT	.35**	-.13	-.05	.45**	-.11	.45**	.12	.06	.62**	-.21	-.21	-.04	.03	-.00	-.01	–

^adiscrete dichotomous variable ^bordinal variable. All other variable are measured with interval scales.

¹(0 = Primary/high school, 1 = University), ²(0 = ≤ P80, 1 = > P80–P90, 2 = > P90–P100), ³(0 = Not religious, 1 = religious), ⁴(0 = Swedish only, 1 = Other country), ⁵(0 = Married, 1 = Not married).

**p* < .05, ** *p* < .01 (two-tailed)

F.4.2 Multivariate analyses

As in the Australian sample, the DV was dichotomised and a binomial logistic regression was used to evaluate the relationship between study variables. There were several reasons for this decision; first, the DV was also non-normally distributed in the Swedish sample (Skewness z-score = 5.69, Kurtosis z-score = 5.60) and, moreover, using a logistic regression would facilitated comparisons across the two samples. Last, this analysis technique allows for slightly smaller sample sizes compared to multiple regressions (Hsieh, Bloch, & Larsen, 1998).

However, despite the less strict requirements for sample size, the limited number of participant in the Swedish sample precludes the inclusion of all 11 predictors that were significant at the bivariate level. As such, it was decided to include the six significant RMAQ–MW variables only into the logistic regression. This decision was made based on a consideration of the Australian data. In this data set nine of the RMAQ–MW variables were significantly associated with AUDIT on the bivariate level but only four were significant on the multivariate level. This indicates that several of these variables did not share unique variance with AUDIT. Conversely, all norm variables that were significantly associated with the DV on the bivariate level were also significant predictors on the multivariate level. Thus, it was deemed prudent to examine the relationship between individual RMAQ–MW variables and the DV while adjusting for the influence of all other RMAQ–MW variables. The logistic regression including the six RMAQ–MW variables had a sample size of 54, which is close to the minimal suggested sample size of 10 participants per included variable (Field, 2013). For the remaining two norm variables that were significant on the bivariate level, individual tests of central tendency differences were conducted. As the control variables were not of theoretical interest to this investigation no further test were conducted with these variables.

F.4.2.1 Assumptions and suitability of the data for analysis.

Prior to analysis, the suitability of the data for logistic regression was further assessed, assumptions were checked, and cases for which the model fit poorly or which potentially exerted undue influence over model parameters were inspected. The assumption of linearity was met and no indication of multicollinearity was detected. VIF statistics were acceptable with an average value of 1.53 and no value exceeding 10. Moreover, no tolerance values under 0.2 were detected and no correlations above .8 were present in the correlation table. The model appeared to fit the data well. Standard and studentised residuals greater than ± 1.96 was only detected for 5.66% of cases, but no case had residuals exceeding ± 2.58 . Four cases with a Cooks value or DFBeta value of >1 were, however, identified. To determine their influences over the model parameters, analyses with and without these cases were run; some changes to the p values were detected, however, neither the overall model nor the individual predictors reached or fell below the cut-off for significance once tested in the model with no outliers. As such, these outliers were included in the final analysis. The result can be seen below in Table F.7.

F.4.2.2 Regression model

Table F.7. *Logistic Regression Predicting Likelihood of Risky Drinking, N = 53*

Variables	B	S.E.	Wald	Sign.	O.R.	95% C.I. for O.R.	
						Lower	Upper
Self-medication	0.13	0.07	3.73	.054	1.14	1.00	1.29
Relaxation and Pleasure	0.25	0.17	2.26	.133	1.29	0.93	1.78
Interpersonal Closeness	-0.09	0.13	0.51	.477	0.91	0.70	1.18
Self-Indulgence	0.02	0.11	0.03	.863	1.02	0.82	1.27
Social Enhancement	0.11	0.13	0.65	.422	1.11	0.86	1.44
Work and Leisure	0.09	0.13	0.46	.498	1.09	0.85	1.41
Constant	-9.39	3.45	7.38	.007	0.00		

The model containing the six RMAQ–MW variables was significantly associated with risky drinking $\chi^2(6) = 26.40, p < .001$, on average classifying 79.25% of cases correctly. The Hosmer and Lemeshow test was non-significant $\chi^2(8) = 7.42, p = .49$, further indicating

adequate classification. Overall, the model explained 56.35% of variance, however, none of the included predictors significantly predict increased likelihood of risky drinking by itself.

F.4.3. Test of Difference in Central Tendency

To assess for differences in HED Actual Injunctive and MFD Actual Injunctive scores among risky and non-risky drinkers, the AUDIT cut-off score for risky drinking was used to classify participants as either Low Risk ($n = 40$) or Risky ($n = 15$) drinkers. Given the different sample size of the two grouping variables, non-parametric tests (Mann–Whitney U) was used for MFD Actual Injunctive, as the assumption of normality was breached for this variable. Results showed no significant difference in HED scores for Risky ($M = 9.47$, $SD = 3.34$) and Low Risk ($M = 11.15$, $SD = 2.65$) drinkers, $t(53) = -1.96$, $p = .056$, $d = -0.59$. This test was, however, approaching significance. Median MFD scores were found to be significantly lower (i.e., higher acceptability) among Risky drinkers (4.0) compared to Low risk drinkers (5.0), $U = 155.5$, $z = -2.94$, $p = .003$, $r = .40$, with a medium effect size $r = .40$.

Appendix G: Factor Solutions with Two, Three, and Four Factors

Table G.1. *Factor Items and Factor Loadings for a Two-factor Solution*

Factor items	Factor loadings	
	1	2
Alcohol is something you drink to numb emotional pain.	.60	.09
Alcohol is something you drink to reduce anxiety.	.67	.14
Alcohol is something you drink if you feel sad or depressed.	.68	.08
Alcohol is something you drink if you are stressed.	.70	.04
Alcohol is something you drink to feel less shy.	.69	.12
Alcohol is something you drink to feel less lonely.	.63	.15
Alcohol is something you drink to become more self-confident in social situations.	.69	.12
Alcohol is something you drink if you have had a stressful day.	.73	.01
Alcohol is something you drink to escape the routine of everyday life.	.71	.08
Drinking alcohol makes people become aggressive.	.00	.91
Drinking alcohol makes people become hostile.	-.01	.91
Drinking alcohol makes people fight more.	-.02	.89
Drinking alcohol makes people lose their tempers more quickly.	.00	.89
Drinking alcohol makes people do dangerous things.	.03	.80
Drinking alcohol makes people become angry and on edge.	-.05	.82
Drinking alcohol makes people less able to control themselves.	.01	.74
I often engage in other pleasurable activities, such as reading a book or listening to music, while I drink.	.31	-.17
Alcohol is something you drink to create warmth or closeness with others.	.69	.11
Alcohol is something you drink to feel romantic with someone.	.62	.13
Alcohol is something you drink to create a cosy atmosphere with others.	.66	.11
Alcohol is something you drink to nurture friendships.	.68	.07
Alcohol is something you drink to create intimacy with other people.	.70	.15
Drinking to become purposefully intoxicated is part of growing up.	.41	.03
Drinking to become purposefully intoxicated is a rite of passage for young people.	.38	.02
Drinking to become purposefully intoxicated is part of being young.	.33	.05
Alcohol is something you drink if you want to treat yourself.	.60	-.04
Alcohol is something you drink if you want to indulge yourself.	.64	-.04
Alcohol is something you drink if you want to reward yourself.	.69	-.08
Alcohol is something you drink to enjoy a beautiful summers' day.	.56	-.09
Alcohol is something you drink if you want something refreshing on a hot day.	.44	-.05
To drink during the work week is a sign of dependency.	.10	.36
To drink when you are alone is a sign of dependency.	.09	.39
It is easy to become dependent on alcohol.	.17	.42

Table G.1. *Factor Items and Factor Loadings for a Two-factor Solution (Continued)*

Factor items	Factor loadings	
	1	2
Alcohol is something you drink to be sociable.	.51	.07
Alcohol is something you drink to enjoy a party.	.71	.06
Alcohol is something you drink to have fun with your friends and family.	.65	-.01
Alcohol is something you drink to make social gatherings more enjoyable.	.72	.04
Alcohol is something you drink so that you can be a part of a social situation.	.63	.06
Toasting someone with a drink of alcohol is a way to show them your appreciation.	.35	-.07
To give a host alcohol is a sign of appreciation of their hospitality.	.36	-.06
To have a few drinks with someone is a sign of friendship.	.50	-.09
Alcohol is an important complement to fine food.	.29	-.13
Alcohol is something you drink because it tastes good.	.29	-.19
To have a drink means that the work week is over.	.52	-.05
To have a drink means that the work day is over.	.62	-.09
To have a drink means that you can let go of your responsibilities for the day.	.59	.02
Alcohol is something you drink to unwind at the end of the week.	.67	-.13
To have a drink can make everyday situations feel less dull.	.65	.04
To have a drink while you are cooking can make it feel less like a chore.	.52	.01
To be motivated by the effects of alcohol is a sign of dependency.	-.06	.23
Alcohol is a natural part of social gatherings.	.48	-.19
Alcohol is something you drink to have conversations that are more interesting.	.64	.10
Alcohol is something you drink to get the courage to open up to people.	.66	.16
Alcohol is something you drink to celebrate a special occasion.	.41	-.05
Alcohol is something you drink to turn a situation into something special.	.55	-.04
Alcohol is something you drink to unwind at the end of the day.	.68	-.13
Alcohol is something you drink if you want to relax.	.72	-.03
Alcohol is something you drink primarily to get intoxicated.	-.39	-.11
Alcohol is something you drink for the enjoyment of feeling intoxicated.	-.43	-.12
Alcohol is the most important part of social situations.	-.47	-.04

Table G.2. *Factor Items and Factor Loadings for a Three-factor Solution*

Factor items	Factor loadings		
	1	2	3
Alcohol is something you drink to numb emotional pain.	.65	.02	-.25
Alcohol is something you drink to reduce anxiety.	.72	.03	-.26
Alcohol is something you drink if you feel sad or depressed.	.73	.00	-.23
Alcohol is something you drink if you are stressed.	.73	-.02	-.15
Alcohol is something you drink to feel less shy.	.76	.04	-.23
Alcohol is something you drink to feel less lonely.	.68	.07	-.23
Alcohol is something you drink to become more self-confident in social situations.	.76	.04	-.24
Alcohol is something you drink if you have had a stressful day.	.73	-.02	-.04
Alcohol is something you drink to escape the routine of everyday life.	.75	.01	-.17
Drinking alcohol makes people become aggressive.	-.01	.94	.06
Drinking alcohol makes people become hostile.	.00	.94	.06
Drinking alcohol makes people fight more.	-.02	.93	.06
Drinking alcohol makes people lose their tempers more quickly.	.00	.92	.05
Drinking alcohol makes people do dangerous things.	.03	.84	.07
Drinking alcohol makes people become angry and on edge.	-.06	.83	.02
Drinking alcohol makes people less able to control themselves.	.01	.75	.03
I like to have a drink in relaxing surroundings.	.06	.07	.64
I like to have a drink in a comfortable environment.	.08	.07	.62
I like to have my drink in a peaceful environment.	.05	.04	.54
Alcohol is something you drink to create warmth or closeness with others.	.68	.07	.07
Alcohol is something you drink to feel romantic with someone.	.61	.09	.05
Alcohol is something you drink to create a cosy atmosphere with others.	.65	.07	.10
Alcohol is something you drink to nurture friendships.	.67	.03	.09
Alcohol is something you drink to create intimacy with other people.	.72	.10	-.06
Drinking to become purposefully intoxicated is a sign of inexperience.	-.06	.12	.28
Drinking to become purposefully intoxicated is part of growing up.	.38	.05	.07
Drinking to become purposefully intoxicated is a rite of passage for young people.	.33	.05	.14
Drinking to become purposefully intoxicated is part of being young.	.32	.07	.01
Alcohol is something you drink if you want to treat yourself.	.55	-.02	.25
Alcohol is something you drink if you want to indulge yourself.	.59	-.02	.24
Alcohol is something you drink if you want to reward yourself.	.66	-.08	.14
Alcohol is something you drink to enjoy a beautiful summers' day.	.50	-.08	.26
Alcohol is something you drink if you want something refreshing on a hot day.	.42	-.06	.12
Alcohol is something you drink to be sociable.	.50	.05	.07
Alcohol is something you drink to enjoy a party.	.71	.02	.03

Table G.2. *Factor Items and Factor Loadings for a Three-factor Solution (Continued)*

Factor items	Factor loadings		
	1	2	3
Alcohol is something you drink to have fun with your friends and family.	.64	-.05	.06
Alcohol is something you drink to make social gatherings more enjoyable.	.72	-.02	.03
Alcohol is something you drink so that you can be a part of a social situation.	.62	.02	-.01
To have a few drinks with someone is a sign of friendship.	.44	-.06	.26
Alcohol is something you drink to enhance the taste of fine foods.	.10	-.02	.54
Alcohol is an important complement to fine food.	.20	-.08	.47
Alcohol is above all a taste experience.	-.13	.00	.57
Alcohol is something you drink because it tastes good.	.20	-.12	.47
To have a drink means that the work week is over.	.47	-.05	.20
To have a drink means that the work day is over.	.59	-.09	.15
To have a drink means that you can let go of your responsibilities for the day.	.58	-.03	.00
To have a drink can make everyday situations feel less dull.	.68	-.02	-.14
To have a drink while you are cooking can make it feel less like a chore.	.53	-.03	-.06
It is easy to become dependent on alcohol.	.20	.38	-.06
Alcohol is a natural part of social gatherings.	.42	-.14	.24
Alcohol is something you drink to have conversations that are more interesting.	.66	.03	-.06
Alcohol is something you drink to get the courage to open up to people.	.71	.08	-.19
Alcohol is something you drink to unwind at the end of the day.	.64	-.11	.15
Alcohol is something you drink if you want to relax.	.71	-.07	.06
Alcohol is the most important part of social situations.	-.47	-.02	-.02
I like to take my time and enjoy my drink.	-.29	-.04	.54

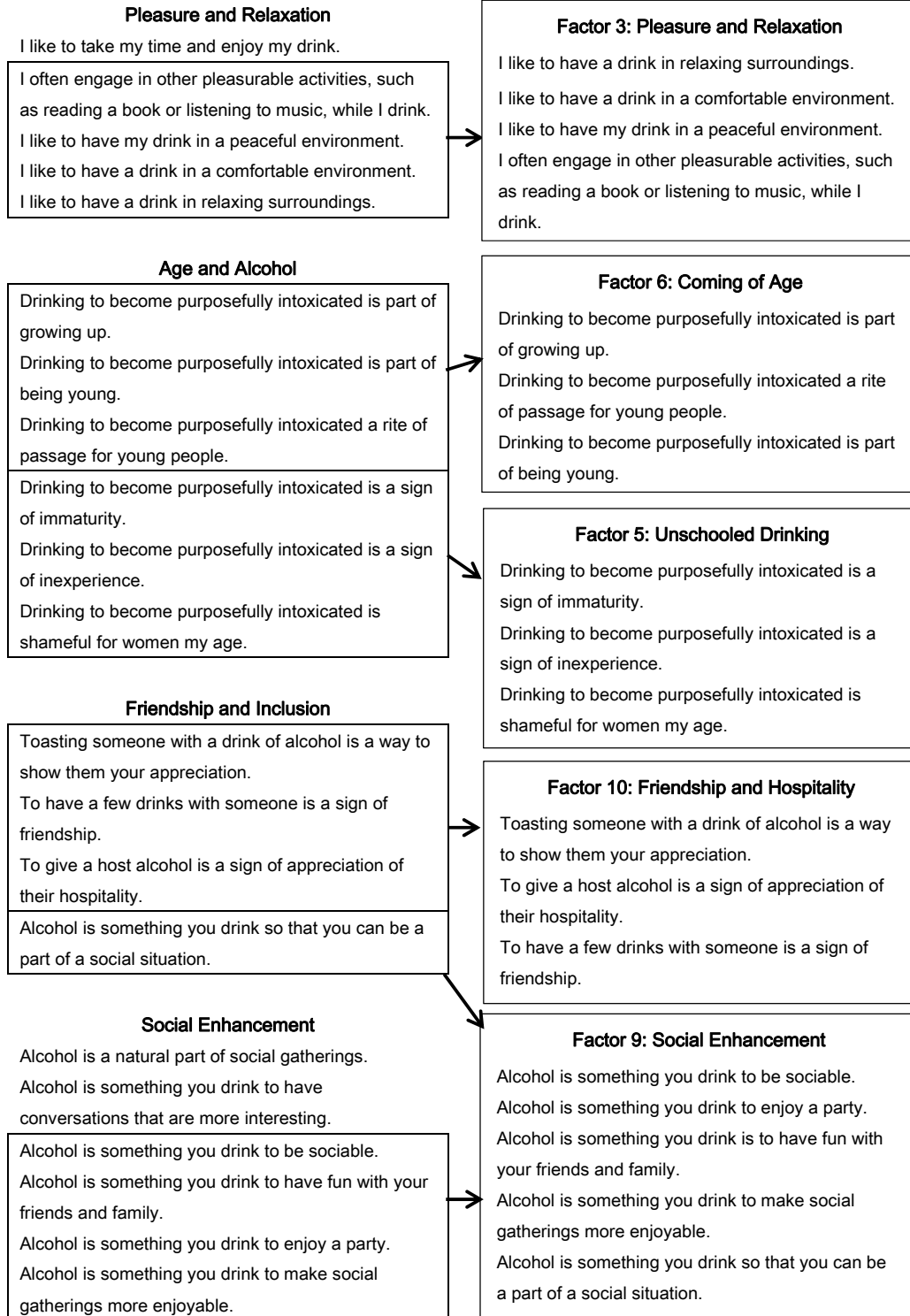
Table G.3. Factor Items and Factor Loadings for a Four-factor Solution

Factor items	Factor loadings			
	1	2	3	4
Alcohol is something you drink if you are stressed.	.04	.07	.73	-.19
Alcohol is something you drink if you have had a stressful day.	.09	.05	.75	-.13
Drinking alcohol makes people become aggressive.	.04	.94	-.07	.03
Drinking alcohol makes people become hostile.	.03	.93	-.07	.00
Drinking alcohol makes people fight more.	.03	.92	-.06	.00
Drinking alcohol makes people lose their tempers more quickly.	.03	.91	-.07	.00
Drinking alcohol makes people do dangerous things.	.06	.82	-.04	.03
Drinking alcohol makes people become angry and on edge.	-.02	.83	-.08	.00
Drinking alcohol makes people less able to control themselves.	.05	.75	-.02	.11
I often engage in other pleasurable activities, such as reading a book or listening to music, while I drink.	-.06	-.12	.50	.19
Alcohol is something you drink to create warmth or closeness with others.	.87	.03	-.10	.00
Alcohol is something you drink to feel romantic with someone.	.78	.04	-.07	.05
Alcohol is something you drink to create a cosy atmosphere with others.	.84	.04	-.06	.12
Alcohol is something you drink to nurture friendships.	.86	-.01	-.09	-.02
Alcohol is something you drink to create intimacy with other people.	.81	.07	-.05	-.02
Drinking to become purposefully intoxicated is a sign of inexperience.	.18	.03	-.02	.46
Drinking to become purposefully intoxicated is part of growing up.	.35	.04	.15	-.02
Drinking to become purposefully intoxicated is a rite of passage for young people.	.38	.02	.09	.04
Drinking to become purposefully intoxicated is part of being young.	.35	.04	.05	-.06
Alcohol is something you drink if you want something refreshing on a hot day.	.34	-.05	.16	.01
Alcohol is something you drink to be sociable.	.59	-.01	.02	.08
Alcohol is something you drink to enjoy a party.	.72	-.01	.09	-.04
Alcohol is something you drink to have fun with your friends and family.	.69	-.09	.07	-.01
Alcohol is something you drink to make social gatherings more enjoyable.	.70	-.02	.12	-.07
Alcohol is something you drink so that you can be a part of a social situation.	.64	-.01	.06	.01
To have a few drinks with someone is a sign of friendship.	.47	-.10	.15	.14
Alcohol is above all a taste experience.	.03	-.06	.09	.49
To have a drink means that the work week is over.	.11	-.01	.59	.08
To have a drink means that the work day is over.	.07	-.02	.74	.00
To have a drink means that you can let go of your responsibilities for the day.	.15	.04	.52	-.15
Alcohol is something you drink to unwind at the end of the week.	.11	-.07	.76	.07
To have a drink while you are cooking can make it feel less like a chore.	.22	.01	.38	-.08

Table G.3. *Factor Items and Factor Loadings for a Four-factor Solution (Continued)*

Factor items	Factor loadings			
	1	2	3	4
Drinking too much ruins the social experience.	-.17	.11	.10	.57
I stop enjoying the taste of alcohol if I have too much of it.	.05	.15	-.08	.49
You cannot make meaningful connections with other people if you drink to intoxication.	-.09	.07	.07	.46
It is easy to become dependent on alcohol.	-.07	.40	.25	-.06
To be motivated by the effects of alcohol is a sign of dependency.	-.07	.16	.07	.26
Alcohol is something you drink to have conversations that are more interesting.	.70	.02	-.02	-.13
Alcohol is something you drink to get the courage to open up to people.	.64	.07	.02	-.11
Alcohol is something you drink to unwind at the end of the day.	.02	-.04	.83	-.02
Alcohol is something you drink if you want to relax.	.16	.00	.68	-.08
Alcohol is something you drink primarily to get intoxicated.	-.05	-.10	-.19	.69
Alcohol is something you drink for the enjoyment of feeling intoxicated.	-.09	-.13	-.20	.67
Alcohol is the most important part of social situations.	-.40	.00	-.10	.18
I like to take my time and enjoy my drink.	-.01	-.13	-.05	.57

Appendix H: Item Pool and Final Factor Solution



Work and Rest

To have a drink to unwind at the end of the day.

To have a drink means that you can let go of your responsibilities for the day.

To have a drink means that the work day is over.

To have a drink means that the work week is over.

Alcohol is something you drink to unwind at the end of the week.

Factor 12: Work and Leisure

To have a drink means that the work week is over.

To have a drink means that the work day is over.

To have a drink means that you can let go of your responsibilities for the day.

Alcohol is something you drink to unwind at the end of the week.

To have a drink can make everyday situations feel less dull.

To have a drink while you are cooking can make it feel less like a chore.

Transforming Situations

To have a drink can make everyday situations feel less dull.

To have a drink while you are cooking can make it feel less like a chore.

Alcohol is something you drink to celebrate a special occasion.

Alcohol is something you drink to turn a situation into something special.

Factor 1: Self-Medication

Alcohol is something you drink to numb emotional pain.

Alcohol is something you drink to reduce anxiety.

Alcohol is something you drink if you feel sad or depressed.

Alcohol is something you drink if you are stressed.

Alcohol is something you drink to feel less shy.

Alcohol is something you drink to feel less lonely.

Alcohol is something you drink to become more self-confident in social situations.

Alcohol is something you drink if you have had a stressful day.

Alcohol is something you drink to escape the routine of everyday life.

Self-medication

Alcohol is something you drink to reduce anxiety.

Alcohol is something you drink to numb emotional pain.

Alcohol is something you drink to become more self-confident in social situations.

Alcohol is something you drink to feel less shy.

Alcohol is something you drink to feel less lonely.

Alcohol is something you drink if you are stressed.

Alcohol is something you drink if you feel sad or depressed.

Alcohol is something you drink if you have had a stressful day.

Self-indulgence

Alcohol is something you drink if you want to relax.

Alcohol is something you drink to enjoy a beautiful summers' day.

Alcohol is something you drink if you want to treat yourself.

Alcohol is something you drink if you want to reward yourself.

Alcohol is something you drink if you want to indulge yourself.

Alcohol is something you drink if you want something refreshing on a hot day.

Factor 7: Self-indulgence

Alcohol is something you drink if you want to treat yourself.

Alcohol is something you drink if you want to indulge yourself.

Alcohol is something you drink if you want to reward yourself.

Alcohol is something you drink to enjoy a beautiful summers' day.

Alcohol is something you drink if you want something refreshing on a hot day.

Interpersonal Closeness

Alcohol is something you drink to get the courage to open up to people.

Alcohol is something you drink to nurture friendships.
Alcohol is something you drink to create warmth or closeness with others.
Alcohol is something you drink to feel romantic with someone.
Alcohol is something you drink to create a cosy atmosphere with others.
Alcohol is something you drink to create intimacy with other people.

Factor 4: Interpersonal Closeness

Alcohol is something you drink to create warmth or closeness with others.
Alcohol is something you drink to feel romantic with someone.
Alcohol is something you drink to create a cosy atmosphere with others.
Alcohol is something you drink to nurture friendships.
Alcohol is something you drink to create intimacy with other people.

Food and Taste

Alcohol is something you drink with food and never by itself.

Alcohol is an important complement to fine food.
Alcohol is above all a taste experience.
Alcohol is something you drink to enhance the taste of fine foods.
Alcohol is something you drink because it tastes good.

Factor 11: Food and Taste

Alcohol is something you drink to enhance the taste of fine foods.
Alcohol is an important complement to fine food.
Alcohol is above all a taste experience.
Alcohol is something you drink because it tastes good.

De-emphasis of Intoxication

Alcohol is something you drink primarily to get intoxicated (reverse coded).

Alcohol is something you drink for the enjoyment of feeling intoxicated (reverse coded).

Alcohol is the most important part of social situations (reverse coded).

You cannot make meaningful connections with other people if you drink to intoxication.
I stop enjoying the taste of alcohol if I have too much of it.
Drinking too much ruins the social experience.

Factor 13: De-emphasis of Intoxication

Drinking too much ruins the social experience.
I stop enjoying the taste of alcohol if I have too much of it.
You cannot make meaningful connections with other people if you drink to intoxication.

Dependency and Danger

Alcohol is something you should not drink in front of children.
Alcohol is something you should not drink heavily in front of children.

To be motivated by the effects of alcohol is a sign of dependency.

To drink during the work week is a sign of dependency.
To drink when you are alone is a sign of dependency.
It is easy to become dependent on alcohol.

Factor 8: Dependency

To drink during the work week is a sign of dependency.

To drink when you are alone is a sign of dependency.

It is easy to become dependent on alcohol.

Alcohol Expectancies

People cannot be held responsible for their behaviour when they drink.

Alcohol makes people become angry and on edge.
Alcohol makes people fight more.
Alcohol makes people lose their tempers more quickly.
Alcohol makes people become hostile.
Alcohol makes people become aggressive.
Alcohol makes people do dangerous things.
Alcohol makes less able to control themselves.

Factor 2: Loss of Control and Aggression

Alcohol makes people become aggressive.

Alcohol makes people become hostile.

Alcohol makes people fight more.

Alcohol makes people lose their tempers more quickly.

Alcohol makes people do dangerous things.

Alcohol makes people become angry and on edge.

Alcohol makes less able to control themselves.