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Raciti, Maria, Russell-Bennett, Rebekah, & Letheren, Kate
(2022)
A strengths-based approach to eliciting deep insights from social marketing customers experiencing vulnerability.
Journal of Marketing Management, *38*(11-12), pp. 1137-1177.

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https://doi.org/10.1080/0267257X.2022.2092196

A strengths-based approach to eliciting deep insights from social marketing customers experiencing vulnerability

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Acknowledgements. We wish to acknowledge the assistance of Natalie Bowring, Kara Burns, Mackenzie Geeves, Natalie Sketcher and Rachel Hay. We would also like to acknowledge the support of the larger project's team being Ms Mary Kelley, Sandra Bridgeland, Kate Flynn, Gabrielle O'Brien, Laura Boer, Professor Sue Trinidad, Professor Lynne Eagle, Professor Judy Drennan, Professor Gayle Kerr, Dr Cathy Cupitt and Dr Diane Costello.

Funding. Funding for this project was provided by the Australian Government through the Higher Education Participation and Partnerships Program (HEPPP) National Priority Pool.

Ethics: Queensland University of Technology Ethics Approval Number 1500000847

Article type: Research article

A strengths-based approach to eliciting deep insights from social marketing customers/consumers experiencing vulnerability

The notion of vulnerability is relevant to much of social marketing as interventions often involve people seeking support or people experiencing disadvantage. However, the deficit-framing of people experiencing vulnerability is problematic. We propose that the alternate strengths-based approach will improve social marketing success and illustrate this with data from a project aimed at widening participation in tertiary education. Using data from interviews and co-design workshops with 87 school students and recent school leavers, we offer a new evidence-based definition of customer/consumer vulnerability that is strengths-based. We also present a five-step, evidence-based process for how social marketers can use a strengths-based approach (SA) to elicit deep insights (I) from the tacit knowledge of customers/consumers experiencing vulnerability (V). We term this process SAIV and demonstrate the value of tacit knowledge in intervention innovation and how a strengths-based approach can draw out tacit knowledge. We encourage social marketers to adopt a strengths-based approach, definition of vulnerability and process to enhance intervention efficacy.

Summary statement of contribution: We contribute a new evidence-based definition of customer/consumer vulnerability that is strengths-based, human-centred, process-oriented, solutions-focused and holistic. We also contribute the five-step SAIV process, which is a strengths-based process by which social marketers can elicit deep insights by drawing on the tacit knowledge of customers/consumers experiencing vulnerability. We encourage social marketers to rethink vulnerability, and our SAIV process equips social marketers with a much needed 'how to' guide to aid in the operationalisation of a strengths-based approach.

Keywords: vulnerability, social marketing, critical social marketing, education, co-design.

INTRODUCTION

Customer vulnerability is a core concept for social marketing as much of the field focuses on people experiencing disadvantage or people who need support in changing behaviour for societal and individual benefit. In 2005, Baker, Gentry and Rittenburg clarified the concept of consumer vulnerability and developed the first definition. Since then, social marketers and transformative service marketers have further developed this conceptual domain and broadened the application to include customers. The term customer is useful in social marketing as this includes not only the consumer of a good, service or idea but also the buyer/person who obtains the good, service or idea. In behaviour change interventions, either the customer or the consumer could be the target, and in contexts that involve groups, particularly households, interventions must involve customers and not just consumers to be effective. For instance, a healthy eating campaign needs to involve not just the person eating food but also the person who is buying the food. Sometimes this is the same person, but in many cases, this involves different people. Thus, this study adopts the hybrid term of customer/consumer.

While there have been hundreds of papers on the topic of customer/consumer vulnerability since 2005, calls for better definitions of the concept have continued (see Hill & Sharma, 2020). In a recent systematic literature review of 310 papers (Riedel et al., 2022), a comprehensive definition of vulnerability has been posed that synthesises the key elements of prior definitions. The one limitation of systematic reviews is the historical nature of the data, and thus the results critically present what IS rather than what SHOULD be. One such limitation is the deficit approach to vulnerability that is ingrained in prior research on vulnerability in the marketing literature.

A deficit lens focuses on the attributes a person lacks (e.g., powerless, helpless or low levels of control; Hutton, 2016) rather than on the circumstances that create vulnerability (Maton et al., 2004). Instead, we suggest an alternate approach that honours customers, supporting not only their experiences but their dignity (Lefebvre, 2012): the strengths-based approach. This approach is more effective in addressing social problems because frames people as capable of problem-solving and provides personal agency and empowerment (Maton et al., 2004). While the strengths-based approach is well-established in social science (see Hammond & Zimmerman, 2018), this approach has only just entered the marketing domain of customer vulnerability (Hutton, 2016; Glavas et al., 2020). The current definition of customer/consumer vulnerability, while more exhaustive than Baker et al. (2005), uses a deficit lens that poses vulnerability as a sense of powerlessness (Riedel et al., 2022) and those experiencing vulnerability as less able than "normal" consumers (Brenkert, 1998). This definition is also historically based, via a systematic review, on previous researchers definitions, reflecting the past rather than the future. Thus, this article responds to the recent call by Hill and Sharma (2020) for a new definition of customer/consumer vulnerability.

Social marketing interventions seek to support behaviour change for customers and consumers, who are often experiencing vulnerability, and this requires insights about how participants think, feel and behave. Experiences of vulnerability can be sensitive (Milner, 2007) and make eliciting insights more challenging than other marketing contexts, such as buying petrol or ordering a meal. Insights guide intervention design and are based on knowledge elicited from customers/consumers through research; thus, the ability of social marketers to elicit deep insights is critical to effective intervention design. There are two major types of knowledge—explicit knowledge that is easily articulated and shared with others, and implicit or tacit knowledge, which is more difficult to express and elicit (Polanyi, 1958). Tacit knowledge is drawn from experience, people are often not aware they possess

this knowledge, and the knowledge is difficult to share with people who do not have some form of shared experience and mutual understanding (Goffin & Koners, 2011; Lam, 2000). Eliciting tacit knowledge is critical to deep insights in marketing, and while tacit knowledge features in product development and sales fields (e.g., Arnett et al., 2021), its role in social marketing has yet to be explored.

This research aims to address the need to critique the ways of thinking about people experiencing vulnerability that guide social marketing and offer evidence-based solutions that develop the field (Dibb, 2014). We have identified two gaps in the customer/consumer vulnerability literature, the first is the lack of a strengths-based definition, and the second is the lack of a process to elicit deep insights from tacit knowledge about vulnerable experiences. To address these problems, our two research objectives are (RO1) to develop a new strengths-based definition of customer/consumer vulnerability; and (RO2) to develop a strengths-based process to elicit deep insights about experiences of vulnerability.

In addressing these research objectives, we are critical of the current approach to vulnerability in social marketing and recommend a shift from a deficit-based to a strengths-based approach. We present a new evidence-based strengths-based definition of vulnerability and a five-step, strengths-based approach (SA) process for eliciting deep insights (I) from the tacit knowledge of people experiencing vulnerability (V). We term this the SAIV process. Our new definition of vulnerability (RO1) and our SAIV process are strengths-based. Strengths-based approaches to vulnerability are relatively unknown in social marketing theory, and are inconsistently applied in social marketing practice , with no guidance for HOW to conduct this type of research. Our strengths-based definition of vulnerability and our SAIV process were developed with evidence from a large, national project aimed at widening participation (WP) in Australian tertiary education (i.e., universities and technical colleges)

involving qualitative research with 87 school students and recent school leaver participants from low socioeconomic (LSES) backgrounds.

Our article is structured as follows. We first present the background literature, outlining the need for strengths-based approaches to customer/consumer vulnerability. We then present our two research objectives. Following this, we detail our research design, including WP's social cause context, our participatory method comprising interactive interviews and co-design workshops, and our data analysis process. Next, the findings of our WP research are presented in accordance with the two research objectives, whereby we posit a new strengths-based definition of customer/consumer vulnerability (RO1) and our five-step SAIV process (RO1). In the subsequent discussion section, theoretical contributions and managerial implications are articulated before the paper is concluded.

BACKGROUND LITERATURE

What is a strengths-based approach to customer/consumer vulnerability and why does it matter in social marketing?

The etymology of the word vulnerability indicates the origins hail from the late Latin *vulnerabilis,* meaning to wound, hurt, injure or maim (Marcos, 2016). Vulnerability is an experience that affects all people at some point in their life; for some the experience is only temporary, such as divorce, while for others the experience is more permanent, such as physical disability (Baker et al., 2005). The experience of vulnerability has been investigated in more than 300 studies across a range of domains, different groups of people, and various countries (Riedel et al., 2022). The key themes across these studies assume that people experiencing vulnerability are powerless, have little control and are at a disadvantage in the exchange relationship (Riedel et al., 2022).

When examining customer/consumer vulnerability definitions, it is very apparent that the core approach is deficit framed. The original Baker et al. (2005, p.134) definition was "*Consumer vulnerability is a state of powerlessness that arises from an imbalance in marketplace interactions or from the consumption of marketing messages and products*". Subsequent definitions have described people experiencing vulnerability as 'likely to be brutalized' and people who 'do not have the capabilities to mitigate severities' (for a full list of definitions, see Riedel et al., 2022). There is little evidence in these definitions of a belief that people experiencing vulnerability have personal agency, control or capabilities.

So why should social marketers adopt a strengths-based approach to customer/consumer vulnerability? Well, the evidence on strengths-based approaches in fields ranging from mental health (Hammond & Zimmerman, 2018) to domestic violence (Cook et al., 2004) and the #MeToo movement (Veer, Zahrai & Stevens, 2020) shows that a deficit approach only focuses on what needs repairing and relies on prescribed and assumed resources. A strengths-based approach goes further and externalises the problem as separate from the person experiencing vulnerability; thus, allowing the person experiencing vulnerability to contribute to the solution.

In terms of intervention effectiveness, a strengths-based approach has demonstrated proven outcomes that exceed the deficit approach (e.g., Greenberg et al., 2001). Where a deficit approach often leads to 'simplistic and narrow solutions that rarely address the real issues in the long term' (Hammond & Zimmerman 2018, p.3), a strengths-based approach results in solutions that empower, provide opportunities and hope (Pulla & Francis, 2014). Given that social marketers aim also to empower, provide opportunities, and stimulate hope (MacFadyen et al., 1999), a strengths-based approach to customer vulnerability would appear to align better with these goals than a deficit approach.

From a deficit-based to a strengths-based approach to customer/consumer vulnerability

The deficit perspective inherent in the 300+ prior studies analysed by Riedel and colleagues (2022) represents a core assumption that people experiencing vulnerability need to be fixed and that they lack the capability to exert influence or control. While this may be the case for some people, there is considerable evidence from social science that people experiencing vulnerability are capable of exerting influence and have the ability to manage their circumstances (Maton et al., 2004). For instance, in the area of domestic violence, despite policies assuming women to be passive, resigned victims, the evidence shows that these women are resourceful and capable problem-solvers who need access to more diverse and responsive intervention points (Cook et al., 2004).

A strength frame that underpins research and social policy is characterised by a focus on the positive potential of individuals and communities. Those in need can be a source of solutions and can participate actively in creating these solutions, where capabilities rather than resources are leveraged (Maton et al., 2004; Day et al., 2016). The strengths-based frame is the antithesis of a deficit-based frame, whereby individuals or communities are deemed to lack resources (i.e., powerless, helpless and poverty). A deficit-based frame focuses on negatives, isolates and pathologises, shifts responsibility to the individual or community in need and reduces them to passive roles and privileges the expert voice (Maton et al., 2004; Baron & Stanley, 2019). Research also demonstrates that social initiatives are more successful when strengths-framed rather than deficits-framed. For instance, a bullying program driven actively by the community resulted in a 50% reduction of bullying and antisocial behaviours (Greenberg et al., 2001), and in the Seattle social development project, involving proactive teachers and parents increased student achievement and reduced misbehaviour (Hawkins et al., 1992).

Discussion in the marketing literature on a focused strengths-based perspective to customer/consumer vulnerability commenced in 2020 with an article by Glavas and colleagues who explored the resources associated with consumer vulnerability in the energy retail sector. In this article, the authors argue that it is time to consider the strengths that consumers bring to an experience of vulnerability rather than focusing on the deficiencies (deficits). A strengths-based approach commences with a focus on the positive potential of customers/consumers, and these can be in the form of internal capabilities and motivations or external access to opportunities (Maton et al., 2004). These strengths can be at the individual, household or community level. This approach does not ignore 'at-risk' customers/consumers or the very real danger that may be present. Rather the approach frames the *problem* as the problem rather than the problem being the *person* (Maton et al., 2004).

A strengths-based frame, while new to marketing, is not new to social science. While marketers were first conceptualising consumer vulnerability (i.e., Baker et al., 2005) using a deficit-based frame, fields such as education, energy and justice were well into publishing the merits of strengths-framing over deficits-framing to improve social conditions. For instance, Cook et al. (2004) identified the importance of avoiding terms such as 'helpless' to describe women experiencing domestic violence and using terms such as 'help-seeking' to develop policies. In Australia, the social marketing program of the *Women's Butterfly Project* reframed homelessness for mature women as home-seeking and deliberately avoided deficit language such as 'powerless' and 'lacking resources' (Russell-Bennett et al., 2021). Instead, they used terms such as 'experiencing change' and 'maintaining secure housing'.

Furthermore, widening participation (WP) in higher education is a social cause in Australia as it is in many other countries (Salmi, 2018) and is the focus of the project described in this article. WP focuses on increasing participation and success in tertiary education by people from identified equity groups who are likely to be experiencing

vulnerability. People from low socioeconomic (LSES) backgrounds typically have lower levels of post-compulsory education which ultimately impacts their quality of life (Bradley et al., 2008). We chose to abandon the existing deficits-framing of WP and adopt a strengths-frame. Table 1 shows our reframing process, which was modelled on that used by Warburton and Bredin (2019) and Maton et al. (2004).

Table 1: Comparison of deficit and strengths framing in WP agenda

	Deficit framed	**Strengths-based framed**
Social issue	Educational inequality	Widening participation in tertiary education
Sample description	Labelling the person as their condition: LSES student, disabled person.	People-first language that puts the person before a description of the person's condition: people from LSES backgrounds, people with a disability.
Focus	A problem best solved with a 'paternalistic intervention'.	An opportunity best solved by a 'social initiative' developed by those experiencing it (i.e., user-generated).
Emphasises	What people cannot do, emphasises weaknesses, the negative and that they do not have hopes and are apathetic, ignores student's voice, feedback, interests and capabilities, assumes inert and need to be pushed to change.	What people can do, builds upon strengths and emphasises the positive and what their hopes are and what they enjoy, emancipates student voices, feedback, interests and capabilities, encourages positive action, proactivity and confidence.
Attribution	Blame the individual; individual lacks aspiration and does not have social or cultural capital.	Remove the barriers preventing individuals from achieving their aspirations and leverage their social and cultural capital.
Solution	One-size-fits-all, seeks a population approach to minimise differences (generalised).	Personalised and tailored approaches that take differences into account (nuanced).
Data collection technique	Researcher-led, expert-led, quantitative, reductionist, (unfair) comparison to the mainstream population.	Participant-centred, participatory co-design, qualitative-dominant mixed methods, non-comparative.
Benefits of engagement	A lack of post-compulsory education will result in poorer job outcomes, lower-paid jobs and lower quality of life (risk focus).	The benefits of studying beyond school are increased job opportunities, higher-paid jobs and increased quality of life (reward focus).

A strengths-based frame recognises what people have (Warburton & Bredin, 2019) and leverages resilience rather than focusing on deficits (Hutton, 2016). For example, people from LSES backgrounds typically possess higher 'aspirational capital', the ability to hold onto hope and the resilience to pursue goals in the face of inequality and oppressive

conditions (Yosso, 2005). A strengths-based approach builds upon people's aspirations, hopes and resilience, emphasises the positive, leverages family and community social and cultural capital and builds confidence among participants by drawing on their past successes (Sykes, 2018; Warburton & Bredin, 2019).

RO1: The need for a strengths-based definition of customer/consumer vulnerability

Vulnerability is a condition that all humans experience (Baker et al., 2005) and as law scholar Fineman (2010, p. 177) stated, 'vulnerability is—and should be understood to be—universal and constant, inherent in the human condition'. While we acknowledge an important shift in terminology from 'vulnerable consumers' to 'consumers experiencing vulnerability' (Glavas et al., 2020), we argue that most of the seminal definitions perpetuate a deficit view of customers/consumers experiencing vulnerability by referring, for example, to 'being at a disadvantage' (Andreasen & Manning, 1990) or lacking control (Mason & Baker, 2014).

These definitions tend to problematise their behaviour as atypical, regarding them as unable to help themselves. These definitions also appear to convey the authors' gaze of customers/consumers experiencing vulnerability from a position of privilege and/or security, which amplifies the deficit intonations. For instance, Brennan et al.'s (2011, p.209) study of consumers experiencing debt found that consumers experiencing vulnerability '...did not fully understand that there might be a better way to manage their financial hardship and that they should seek help to make this happen'. Another more recent study focusing on resilience-building approaches reiterates the view of the relative powerlessness of consumers experiencing vulnerability (Kubacki et al., 2020). Marketing's deficit-based definition of customers/consumers experiencing vulnerability is widespread and problematic. In responding to the recent call by Hill and Sharma (2020) for a new definition of customer/consumer vulnerability and the prevalence of deficit-based framing of vulnerability,

in this article, we develop a new strengths-based definition of customer/consumer vulnerability (RO1).

RO2: The need for a strengths-based process to elicit deep insights about experiences of vulnerability

Insights guide social marketing intervention design and are based on knowledge elicited from customers/consumers experiencing vulnerability. Marketing literature about product development and sales shows that tacit knowledge is the key to deep insights (e.g., Arnett et al., 2021); however, its role in social marketing is relatively unexplored. Eliciting tacit knowledge requires a relationship (Arnett et al., 2021). Unlike explicit knowledge, which is easy to extract, store and communicate to others, tacit knowledge is intuitive, difficult to extract and not easily communicated to others (Lam, 2000). Tacit knowledge cannot be easily codified and expressed in written or verbal ways (Polanyi, 1958). Tacit knowledge includes skills and ideas acquired through practical experience, observation and imitation, is personal, contextual, cannot easily be aggregated, and people are often not aware they possess it (Polanyi, 1958; Chugh, 2015; Goffin & Koners, 2011). Based on experiential learning, tacit knowledge is rooted in actions, values and emotions, making it difficult to disseminate and challenging to elicit, requiring cooperative relationships and layered interactions (Arnett et al., 2021; Nonaka & von Krogh, 2009; Polanyi, 1958). Tacit knowledge is an essential and valued resource in many disciplines, including marketing (Arnett & Whittmann, 2014), where it is known to improve outcomes (e.g., Goffin & Koners, 2011).

Social marketing interventions share attributes with new product development (Dann 2010; Kotler & Zaltman, 1971). The new product development literature has long known the value of consumers tacit knowledge for innovation (Goffin & Koners, 2011), and the opportunity now exists for social marketing to also embrace the notion of tacit knowledge

and seek to elicit it from customers/consumers. In the social marketing literature, Wymer (2011) appears to be the first article to mention tacit knowledge. Wymer (2011) mentions tacit knowledge, describing the underlying assumptions of the social marketing discipline as tacit and that social marketers approach is based on mental models drawn from their tacit assumptions and this, over time, has translated into tacit professional norms and conceptual assumptions. This article expands on Wymer (2011) by exploring how a strengths-based approach can help unearth the tacit knowledge of customers/consumers experiencing vulnerability for deeper social marketing insights.

Since Wymer (2010), there have been mentions of tacit knowledge in social marketing but no extensive use or exploration of how to elicit and harness it to support behaviour change. For example, May and Previte (2016) mentioned that their approach to data collection aimed to include practitioners' tacit knowledge; however, they did not elaborate on how or if it was successful. Kamin and Anker (2014) briefly explained the role of tacit knowledge in health-related practices, its links to Bourdieu and Wacquant's (1992) cultural capital theory and that tacit assumptions impede behaviour change. Fry (2014) noted that impact of tacit knowledge underpinned the practices of participants. Kubacki and Siemieniako (2011) highlighted that the use of projective techniques made tacit ideas explicit and delivered previously unknown insights; and more recently, Spotswood et al. (2021) mentioned the role of tacit knowledge when researching practices in an educational context.

The social marketing literature that addresses tacit knowledge is sparse and within this literature there is some evidence of examination of the role or use of tacit knowledge for people experiencing vulnerability, although it is underdeveloped (e.g., May & Previte, 2016). Similarly, Kubacki and Siemieniako (2011) appear to be the only study to discuss an approach to eliciting tacit knowledge in a social marketing context, specifically focusing on the use of collages as a visual, projective technique. Art-based forms of inquiry using a

variety of visual techniques are known to "help get at tacit aspects of both understanding and process" by fleshing out different facets of a persons lived experience to generate deep insights (Butler-Kisber & Poldma 2010, n.p.). Visual techniques can be used with individuals and groups. Grouping like-minded participants together can generate a sense of camaraderie and energy as the group draws inspiration from each other (Butler-Kisber & Poldma, 2010). This view is mirrored in the new product development literature, where innovation is amplified when people work in collaborative, like-minded groups (Leonard & Sensiper, 1988).

Lastly, Brennan et al. (2016, p.224) make an important point stating that "social change organisations do not often have the skills, tools and methods to surface the tacit issues underlying social change and to use this knowledge explicitly". Hence, while valued, tacit knowledge may not be easy for organisations to access without a process to do so. In her seminal work, Lam (2000) characterises the elicitation and communication of tacit knowledge as requiring close interaction, cooperation and the build-up or layering of a shared understanding among people. There is an interplay between tacit and explicit knowledges and mobilising tacit knowledge and its interaction with explicit knowledge leads to innovative new knowledge to drive problem-solving activities (Lam, 2000). Narratives, or stories, can bridge tacit and explicit social knowledge, being how people interact with others, how they identify as members of particular groups and how different groups they belong to work (Linde, 2001). The problem of the lack of a process for eliciting deep insights highlights the need for social marketing to develop a strengths-based process to elicit tacit knowledge for deep insights about experiences of vulnerability to enhance interventions (RO2).

RESEARCH DESIGN

Social cause context: WP in low socio-economic (LSES) communities

Widening participation (WP) in tertiary education is a policy agenda for many countries, with different countries focusing on increasing representation based on race, class, and gender (Salmi, 2018). The Australian Government places a high priority on increasing tertiary participation levels amongst identified equity groups (Bradley et al., 2008), with people from LSES backgrounds the largest of these equity groups. People from LSES backgrounds are in the lowest income quartile and are often from culturally and linguistically diverse backgrounds (including refugees and new migrants), live with a disability or are Indigenous Australians (Cupitt et al., 2016).

This project, funded by the Australian Government, had a stated objective to research and design an appropriate, cost-effective national social marketing campaign targeted at LSES students and communities to increase awareness of and raise aspirations for tertiary education. Our article focuses on the results pertaining to secondary school students (Years 7 to 12) and recent school leavers (up to five years post-school not yet enrolled in tertiary education) from LSES backgrounds.

We adopted a segmentation-based layering approach. We used psychographic segmentation in addition to the Governments LSES-based demographic segmentation to generate a richer picture of the true diversity of this population while meeting the remit of the funding body.

Method

The data was collected in two qualitative studies; interviews and co-design workshops. The research team recruited a total of 65 secondary school students and 22 recent school leavers

across four Australian states. Interviewees comprised 11 males and 11 females, three of whom identified as Indigenous Australians and four who were from culturally and linguistically diverse backgrounds. Workshop participants comprised 37 males and 28 females, ten who identified as Indigenous Australians and 14 who were from culturally and linguistically diverse backgrounds. The research team included an Indigenous Australian and others with lived experience of low-socioeconomic backgrounds.

In recognition of the difficulty of encouraging those experiencing vulnerability to share their tacit knowledge (Kirby & McKenna, 1989) and the need to foreground their voices (Sellar & Gale, 2011), this project applied a tailored and stepped method which combined traditional qualitative techniques, co-design, and a strengths-based approach.

In WP, participatory co-designed approaches are increasingly superseding expert-led approaches (see Dollinger et al., 2020). Participatory design methodology seeks user-generated ideas to improve the design of existing WP services, resources or programs or to design new ones (Dollinger et al., 2020). The design aspect of participatory design methodology involves producing artefacts by tapping into participants tacit knowledge via a variety of research methods (e.g., interviews, artefact analysis) and in an iterative manner so that as the design emerges, it is co-interpreted by researchers and participants (Spinuzzi, 2005; Patrício & Fisk, 2013). Critically, participatory design methodology views knowledge-making as occurring in the interaction between people and artefacts (Mirel, 1998). Hence, it is user-centred—done *with* not on *behalf* of the users (Iivari, 2004). As such, it involves a process where participants and researchers continually work on synchronising their interpretations and understandings, unearthing tacit knowledge (Spinuzzi, 2005; Cornwall & Jewkes, 1995). The outputs of participatory design methodologies tend to have better acceptance with users due to more reliable and better-quality findings (Elberse et al., 2011). Our project used a participatory design methodology to generate insight-driven personas of

secondary school students (current or recently completed). Personas were prototyped from the interview data. These personas were then used in workshops to develop a persona-based WP national digital social marketing solution. Interviews and workshops were 60 to 90 minutes in duration, with all conducted face-to-face. A validation study was conducted in a fifth Australian state by members of the larger project team.

As part of the participatory design, the larger, multidisciplinary project team came together at the beginning of the project. The diverse educational experiences of the larger project team came to light through ad hoc conversations, and we came to know that each of us had experienced vulnerability in our youth when it came to education. As such, we recognised the value of our own tacit knowledge and that we may share or have somewhat overlapping experiences with our participants.

Data analysis

The interview data comprised transcripts based on audio recordings with the participants, while the data for the workshops was visual depictions of digital solution concepts. An inductive-deductive approach (Fereday & Muir-Cochrane, 2006) was used to code transcript data, with themes first emerging and then coded against relevant frameworks in an iterative process. A codebook was developed for the interviews and workshops to analyse the data using theoretical concepts and frameworks. Specifically, we applied Hammond and Zimmerman's (2018) research in strengths-based language to address RO1 and their strengths-based exploratory process to partially address RO2. Hammond and Zimmerman's (2018) strengths-based exploratory framework is robust, but it does not intentionally seek to elicit tacit knowledge. Hence, we also used ten elements of tacit knowledge derived from a composite of research discussed in the literature review (e.g., Arnett et al., 2021; Chugh, 2015; Goffin & Koners, 2011; Nonaka & von Krogh, 2009;

Polanyi, 1958) to address RO2. Coding of the visual data developed in the workshops followed a similar approach used with the interview transcript data, with coders examining visual artefacts for evidence of the need for different types of social support (Cutrona & Russell, 1990), different stages of change (Prochaska & Velicer, 1997) and different levels of technology interaction using the PIP (passive-interactive-proactive) typology (Letheren et al., 2019).

FINDINGS

This section draws together findings from the interviews (RO1, RO2) and workshops (RO2). We applied a theory-based, inductive-deductive analysis approach to generate a new definition of customer/consumer vulnerability through consideration of participants' experiences (RO1) and to develop a strengths-based process for eliciting tacit knowledge related to experiences of vulnerability (RO2).

RO1: Developing a new strengths-based definition of customer/consumer vulnerability

To address RO1 and develop a new strengths-based definition of customer/consumer vulnerability, we used Hammond and Zimmerman's (2018) strengths-based framework for first-level coding, which resulted in ten sub-themes emerging from the data. These sub-themes were further analysed, resulting in five final customer/consumer vulnerability themes (see Table 2).

Table 2: Strengths-based concepts and themes

Hammond and Zimmerman's (2018) strengths-based concepts (n=28)	First-level coding: subthemes of Hammond and Zimmerman (2018) (n=10)	Final coding: Customer/consumer vulnerability themes (n=5)
• Identifies and builds on strengths • Strengths • People are inherently social/good • People do the best they can • At-Potential • Focus on potential	• Strengths • Potential	Theme 1 - Strengths-based (Not deficit-based, 'strength' words that participants use)
• Client-centred • Professionals adapt to clients • Meet clients in their environment • Client-determined • Validates people's experience • Understand	• User-focused • Understand the experience and the context	Theme 2 - Human-centred (Not centred on commercial consumption, e.g., about improving quality of life)
• Flexible • Process-focused • Dynamic • Movement • Time-in • Persistent	• Change • Journeys	Theme 3 - Process-oriented (Not static, customer/consumer journeys)
• Empower • Opportunity • Celebrate (i.e., successes) • Adapt to • Unique • Avoids imposition	• User-led solutions • Future-focused action	Theme 4 - Solution-focused (Not source-focused, e.g., participants own help-seeking behaviours, actions they did to try to solve their situation)
• Engage (with community) • Support (from community) • Inclusive • People's context is primary	• Community connection • Community support	Theme 5 - Holistic (Not reductionist, focus on the whole person including their family and community, e.g., Indigenous students talk of 'giving back' as the benefits of tertiary education are shared with their family and the Indigenous community)

Five customer/consumer vulnerability themes emerged: strengths-based, human-centred, process-oriented, solution-focused and holistic. These customer/consumer vulnerability themes are best illustrated with quotes from the participants.

Theme 1: Strengths-based

The first customer/consumer vulnerability theme foregrounds participants language and use of "strength" words. The following quote highlights a participant honestly recognising their

own strengths while leveraging another strength (network connection) to address areas they feel they need additional support in:

> *"**I'm okay with business so I'll help someone out there**, where I'm very, very bad at English. I'd probably spell philanthropy wrong so I've got someone…and **someone really likes to help me with English but I could help her out with let's say something else like economics**..." (Student, Male)*

Other participants also showed self-awareness of strengths, including their abilities, likes, dislikes and self-knowledge, as illustrated in this quote:

> *"I've worked at the [social work] place…yeah I help out there and **I like looking after the kids and helping out** so I was like oh **I'd like to do social work.**"* (Student, Female)

Theme 2: Human-centred

The second theme is about customer/consumer vulnerability being about human experiences rather than being centred on commercial consumption experiences. Participants recognised variation in different peoples life circumstances. An awareness of the importance of considering other people's circumstances and their experiences *before* developing solutions is represented in this quote:

> *"…there are the good sides to it but then there are also the bad sides [to offering information on websites], for example the good side is when people actually go online and have a look but then **you have the ones that aren't privileged enough to have laptops and all that or they're out in the middle of nowhere and they have no reception** but they want to go to Uni and all that."* (Student, Male)

While another quote shows an awareness of how others who are genuinely invested in supporting other people can make an impact:

> *"I feel like it's just good to have that support [school counsellor] there because I know a lot of my friends said parents don't really pay attention to what their kids want to do when they're older and stuff so I guess to **have that person at school who really is um passionate about helping kids, that's…yeah I like that."*** (Student, Female)

Finally, this quote shows a negative response from a participant who felt others were questioning his choices without understanding him as a person first:

> *"Like when someone I don't exactly know says like **you should do this instead of joining the army** that gets me slightly **annoyed** because **they don't know me."*** (Student, Male)

Theme 3: Process-oriented

The third theme recognises that vulnerability is a process; that is, experiences of vulnerability change over time and support systems need to respond to this dynamic process with understanding and flexibility. The below exchange recognises the compounding impact of low resources across time – first lacking ability, then social support, then time, and finally financial resources. In this case, the persistence shown by the participant was met with resistance and an increasing experience of vulnerability:

> ***MALE***: *I've tried around a little bit with technology in the past and I've tried to create a product…**I'm not very good at codes** so that didn't work out too well but…well we got somewhere **but we found implications…my partner wasn't really putting his end in**…yeah, **I had school also.***
>
> ***INTERVIEWER***: *Well, it's a good time, the government has got their innovation focus on start-ups and **you can always outsource coding**.*
>
> ***MALE***: *Yeah exactly.*
>
> ***INTERVIEWER***: *There's other ways around that one.*
>
> ***MALE***: ***No money though**.*

Here, a participant is frustrated when processes are inflexible and do not recognise different customer/consumer journeys and the need for flexible pathways to accommodate these:

> *"I can't remember which ones [universities] but I know there are some where **there's only one way in** and if you don't get it then **tough luck**, go somewhere else."* (Student, Male)

Theme 4: Solutions-focused

The fourth theme foregrounds solutions, particularly solutions that the participant comes up with themselves to address their needs. This quote highlights the value a participant generates by starting his own business and entrepreneurship reading group as none existed. This participant created his own solution for social and intellectual stimulation and helped his peers in the process:

> "…I said, 'hey you know we like [business and entrepreneurship], we're wanting to become like this, how about we start reading about it?' And it was like 'yeah okay' so we all kind of read it…like read

the book for that week or maybe it's on two weeks. We'd create a summary and **see what ideas come out of that and what we could apply practically to our lives**." (Student, Male)

Further, this following exchange shows a student critical of existing options that she perceives as having low relevance for her needs, preferring instead solutions that empower her to be self-directed in her information-seeking:

> ***INTERVIEWER***: *Why is that, why don't you like [learning through games] online?*
>
> ***FEMALE***: *I think* ***they're so pointless****...Like just say I wrote in…up like in the internet "games to help me learn how to be a police officer" it would come up with the* ***most ridiculous things. Like that's not going to help me, it's so unrealistic.***
> …
> ***FEMALE***: *When they take you to the actual campus…they're really good….when you go there, knowing* ***what you want to look [at] and know about and what questions you want to ask****, it's really good…They always have the answers, like if one of them doesn't there's another person that does and I think that's what I like about them so much is like* ***when I went there I spoke to the beauty people as well as the people in the air force so I kind of got an insight from both things that I really want to do*** *when I'm older which is really good.* (Student, Female)

Theme 5: Holistic

The last theme recognises that the person is part of a 'whole' made up of their context, family, friends and community, so experiences are often shared. For instance, this exchange shows the strong interconnectedness and support between student, family and broader community as well as the student's context:

> ***INTERVIEWER***: *…When did you do first aid?*
>
> ***MALE***: *I did first aid when I was 13.*
>
> ***INTERVIEWER***: *And how did you get into that?*
>
> ***MALE:*** *A teacher here knew that I really wanted to be a paramedic and* ***knew that my Mum wasn't in the best spot to pay for things,*** *so she [the teacher] ended up* ***paying $153 for me to do a first aid course.***

Likewise, this quote illustrates the importance of community beyond school or family for a student making decisions about the future:

> *"… after school I would go home and I would get dressed because I go out every Friday.* ***I go down to Centrelink where my youth group is at so I [can] talk to all the leaders*** *[about my future]."* (Student, Male)

Together, these five themes offer a comprehensive view of how customer/consumer vulnerability is experienced by people. We bring these five themes together to offer a new definition of customer/consumer vulnerability that is strengths-based rather than deficit-based, human-centred rather than consumption-centred, process-oriented rather than static, solution-focused rather than source-focused and holistic rather than reductionist. Our definition of customer/consumer vulnerability follows: *"Experiences of vulnerability are subjective perceptions of susceptibility, which are part of the human condition that may come to pass with the passage of time, prompt introspection and give rise to greater strength and resilience"*.

RO2: Developing a strengths-based approach to eliciting deep insights about experiences of vulnerability process.

Both interview and workshop data were used to address RO2. First-level coding of this data used Hammond and Zimmerman's (2018) strengths-based exploratory research process comprised of the following sequence of elements: inviting people to share their stories and challenges → helping people picture the future → helping people explore their strengths and what happens when challenges are not present (exceptions) → helping people identify other resources that might help them → asking questions that help people make plans and specify their next steps. As Hammond and Zimmerman's (2018) strengths-based exploratory process did not focus on extracting tacit knowledge, our coding also included using ten components drawn from the tacit knowledge literature, being: a) practical experience/experiential learning, b) skills, c) ideas, d) observation and imitation, e) personal, f) contextual, g) not aware they possess tacit knowledge, h) actions, i) values and j) emotions. While we coded tacit knowledge, we did not associate its components to any of Hammond and Zimmerman's (2018) five elements of their strengths-based exploratory process. Instead, tacit knowledge

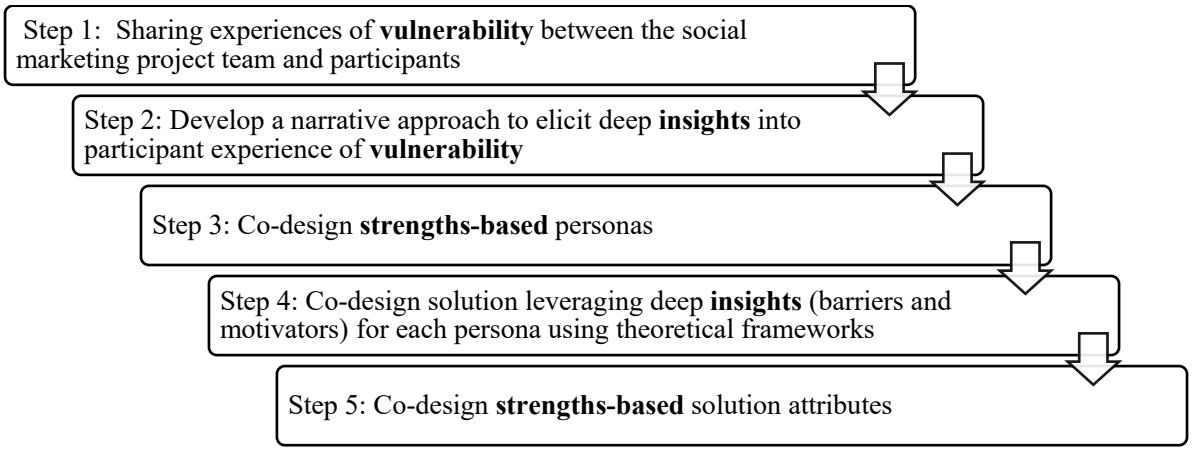
was elicited throughout the entire five-step process, with all steps being necessary to gain the required deep insights. Our findings are presented in Table 3.

Table 3: Strengths-based exploratory process and steps for eliciting tacit knowledge

Hammond and Zimmerman's (2018) strengths-based exploratory process	**Associated steps for eliciting tacit knowledge about experiences of vulnerability**
Inviting people to share their stories and challenges	Step 1: Sharing experiences of vulnerability between the social marketing project team and participants
Helping people picture the future	Step 2: Develop a narrative approach to elicit deep insights into participant experience of vulnerability
Helping people explore their strengths and what happens when challenges are not present (exceptions)	Step 3: Co-design strengths-based personas
Asking questions that help people make plans and specify their next steps.	Step 4: Co-design solution to address barriers and motivators for each persona using theoretical frameworks
Helping people identify other resources that might help them	Step 5: Co-design solution attributes

As presented in Table 3, a slightly different sequence of Hammond and Zimmerman's (2018) elements emerged from the data. Specifically, the last two elements were in the reverse order, with the identification of resources occurring after the planning step. In brief, we found that inviting people to share stories and challenges manifested as the sharing experiences of vulnerability between the research team and participants (Step 1), helping people picture the future manifested as the use of projective and visual design techniques that helped elicit the participants narrative (Step 2), helping people explore their strengths and exceptions was fundamental to the co-design of strengths-based personas (Step 3), helping people plan and specify their next steps were linked to codesign of solutions informed by theoretical frameworks (Step 4), and identifying other helpful resources was associated with the features of the co-designed solution. These five steps formed what we term the SAIV process (Figure 1), being a strengths-based approach (SA) process for eliciting deep insights (I) from the tacit knowledge of people experiencing vulnerability (V).

Figure 1: The SAIV process



The findings for each step in the SAIV process from the WP project follow.

Step 1: Sharing experiences of vulnerability between the social marketing project team and participants.

The foundation of the SAIV process is sharing stories and challenges. The research team verbally shared our stories in terms of our personal experiences of vulnerability in our higher education journeys. We shared our stories with participants at the outset of the interviews and participatory workshops to support our participatory methodology. We anticipated that our participants wanted to know not only who we were but what our motivations were in connection to the project. Scepticism about our motivations among our participants was anticipated because people from marginalised groups, such as Indigenous peoples, are often the target of deficit-based research that typically results in them being portrayed in ways that deepen stigma and offer little benefit to them, their families and communities (Walter & Anderson, 2013). Kirby and McKenna (1989, p. 64) and Milner (2007) emphasise that when 'researching at the margins', researchers should clearly position themselves to circumvent misrepresentation and to show overlap between our relevant experiences of vulnerability with those of our participants. We shared our experiences of vulnerability in higher education with

our participants in good faith and without expectations. In addition, researchers also shared experiences of vulnerability throughout the interviews to create a safe space for sharing. For instance, in the following exchange, where the participant goes from giving short factual answers to telling his story once the interviewer shares their own experience of vulnerability and tacit knowledge in this context:

> ***INTERVIEWER****: And you're in grade 12?*
> ***MALE****: Yeah.*
> ***INTERVIEWER****: And you were here last year?*
> ***MALE****: I was yeah.*
> ***INTERVIEWER****: And no-one in your family has gone on to Defence Force training or VET?*
> ***MALE****: No. [My parents] dropped out year 8 both of them.*
> ***INTERVIEWER****:* ***…my story is [that] my dad is Sicilian so I know exactly the early school finishing [cultural context]****. So, what are your plans? What are you going to do after school?*
> ***MALE****: Actually, it's a little bit of a surprise but I'm actually not going on to university after school. I'm looking at…****I'm kind of a little bit entrepreneurship so I'm interested that so I'm looking straight to go into business or maybe perhaps go into the real estate game*** *for a while so it's not really clear but as soon as we get past that barrier; as soon as we get into that we'll see what happens from there I suppose.*

The participants also spoke of the importance of sharing in other contexts. For example, this student recounts experiences where she always wants to hear the stories of others before accepting advice or mentoring. She also expresses the strong value she derives from practical experience and observation, being components of tacit knowledge:

> *"I'm definitely not shy but I don't know how to explain it, like sometimes* ***I don't want to take someone's advice that I don't necessarily know*** *or…so* ***everyone that has mentored me*** *when I did go to [university] camps,* ***they've always told me about them first*** *so I feel like that's* ***kind of an expectation for like they have to do that****." (Student, Female)*

Step 2: Develop a narrative approach to elicit deep insights into participant experiences of vulnerability.

In Step 2, we set out to hear participants narratives about their experiences of vulnerability. Storytelling has a particularly powerful role in understanding experiences of vulnerability and laying the foundation for transformation (Visconti, 2016). The unexpected repercussion of sharing our experiences of vulnerability in Step 1 was that participants reciprocated in Step 2, candidly revealing their personal histories. Through Step 1, we created a safe space for our

participants to tell their stories, and in Step 2, we listened deeply, empathetically and without judgement.

We used a variety of activities in both interviews (Technical Appendix 1) and workshops (Technical Appendix 2) to help elicit the tacit knowledge contained in participants narratives and to synchronise our understanding (Linde, 2001). Data at each site were collected across a few days. There were also time gaps between sites allowing for reflection and the iterative development of deep insights as the research team had time to 'digest' the data. Importantly, visual methods were used to support and extend the narrative approach by helping participants visualise or picture the future (Hammond & Zimmerman, 2018). We sequenced activities to build on the previous, and this helped our participants deeply reflect on their own experiences, attitudes, emotions and motivations. The below quote reveals several tacit knowledge components of experiential learning, skills, observation and imitation, personal/contextual factors, actions and emotions. This quote also shows how an experience of vulnerability is revealed through narrative and how the participant found their own way as a child (strength) to address their vulnerability by intuitively understanding the value of play to learn a new language as a recent immigrant:

> *"I've lived in Australia for like 13 years. My parents originated from South Sudan which is under Egypt. I only speak Danka but I grew up in Kenya most of my life due to the war. Coming to Australia was kind of hard, like shifting and learning the language but* ***I picked up pretty quick after a couple of weeks because… children, you play with them, it's easier than adults****. Like with my mum she still struggles [with the English language]."* (Student, Female)

Furthermore, the following exchange was recorded during the projective and visual activities, where participants drew representations of their current and future lives. The narrative below emerged from the visuals of their current life:

> ***INTERVIEWER****: And who lives with you in the house?*
>
> ***MALE****:* ***Three of my brothers, a foster child*** *and my Mum and Dad…and I have three pets.*
>
> ***INTERVIEWER****: …So now draw little stick figures of people that live with you. So, there's you and you've got three brothers you said. Are they older [or] younger?*
>
> ***MALE****: Two older, one younger.*

> ***INTERVIEWER****: And what do they do?*
>
> ***MALE****: They all go to high school and my* ***oldest one works on nights.***
>
> ***INTERVIEWER****: And what does he work as?*
>
> ***MALE****: He works at Dominos, same as my second oldest brother.*
>
> ***INTERVIEWER****: And you've got Mum and Dad [in this drawing], what do they do?*
>
> ***MALE****:* ***Dad is a full-time carer*** *for my Mum because* ***my Mum suffers from [significant health issues]****.*

Step 3: Co-design strengths-based personas.

It emerged from the data that Step 3 aligned with Hammond and Zimmerman's (2018) 'strengths and exceptions' element as helping people explore their strengths was fundamental to the co-design of strengths-based personas. The interviews were interactive with a variety of prompts and stimuli used and casual, uninterrupted conversation throughout the activities. The interviews aimed to develop personas for secondary school students as well as recent school leavers. However, we found over the course of the interviews that the same personas were emerging among both groups. The recent school leavers were less than five years from completing secondary schooling and had not engaged with tertiary education and they had similar psychographics to current secondary school students. Hence, we merged the two groups[1]. We found that our combined prototype personas were robust when used in workshops and secondary school and recent school leaver participants could self-identify with the four resulting student personas.

Personas offer a way of representing the voices of participants and highlighting their characteristics so as to better serve them (Miaskiewicz & Kozar, 2011). Personas have been previously recommended as the basis for WP interventions as they represent different journeys into tertiary education (Cupitt et al., 2016). Our personas centred on their

[1] Henceforth referred to these as 'student personas' to encompass both current and recent secondary school enrolment status.

psychographic qualities, meaning that our participants could identify with personas based on how they thought and felt, not based on their demographic characteristics. Thus, our personas were inclusive, allowing participants to recognise their inherent strengths and preferences as symbolised in the personas. Australian native animals were used to visualise our inclusive personas, with the care taken to select animals whose characteristics were symbolic of the persona (e.g., a Tasmanian Devil's tenacity or a Wallaby's flexibility). The animals were anthropomorphised to ensure a sense of connection (Tam et al., 2013) and the potential for attachment (Chandler & Schwarz, 2010) and identification with the personas.

There were many iterations of the personas as the interviews progressed, with the final personas reflecting participants psychological characteristics (e.g., motivations) and their preferred types of social support (Cutrona & Russell, 1990) and stages of change (Prochaska & Velicer, 1997). Four co-designed student personas emerged from the interview data—The Bowerbird, The Frill-Neck Lizard, The Tasmanian Devil and The Wallaby. As presented in Figure 2, our four personas also included key messaging for communicating the value of tertiary education.

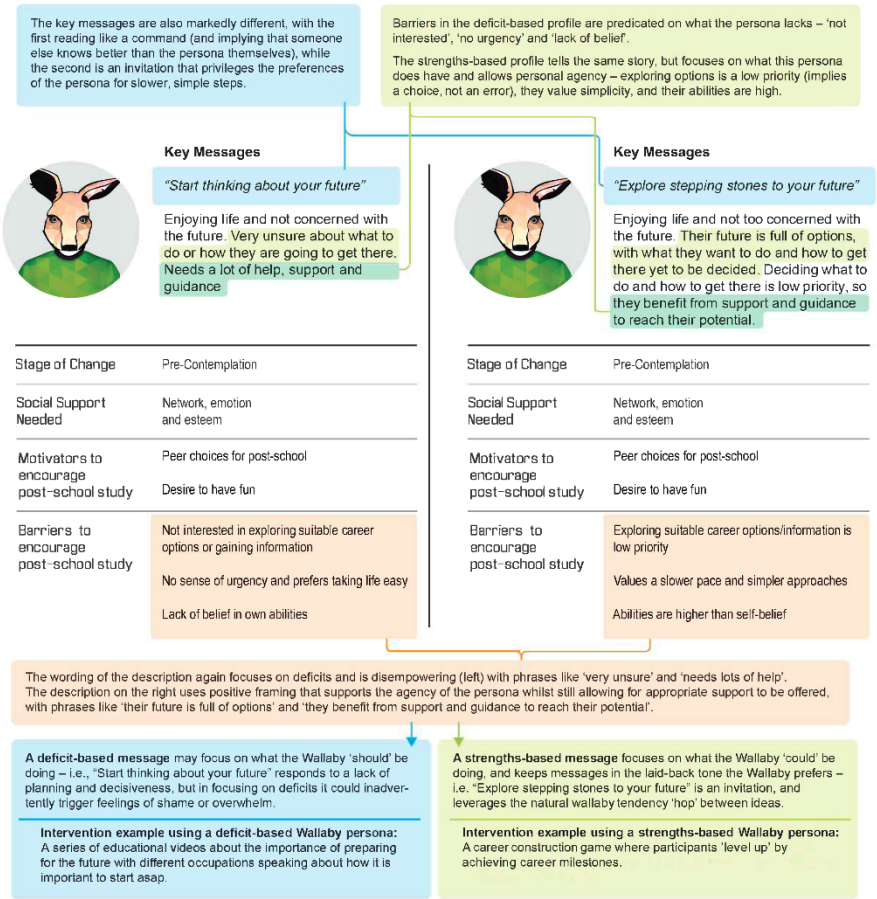
Figure 2: Four co-designed personas

In brief, the Bowerbird student persona wants to be successful but is unsure how to achieve this goal. They want to make money in their career and are cautious about tertiary study because they prefer to keep their options open. Bowerbirds tend to stroll through life,

rely on their networks for social support. The Frill-Neck Lizard student persona prefers to work on their own without too much planning. They tend to keep their options open and are reasonably confident about studying at a tertiary institution. Frill-Neck Lizards are at the contemplation stage of change with regard to applying for tertiary study. Frill-Neck Lizards are happy to explore multiple career options and perceive that they have plenty of time to make a career choice. The Tasmanian Devil student persona has a planned approach to their future career. They desire to work solo, sprint through life, are confident about going to study, have decided on a career path and are preparing to apply for tertiary study. Lastly, the Wallaby student persona views life as something to be enjoyed. They prefer to keep their options open with the perception that a career is a life journey. They are social beings who like to work with others. Wallabies tend to stroll through life and are cautious about going to tertiary study.

Importantly, these personas are strengths-based, focussing on what they have rather than what they are lacking. In Figure 3, we illustrate the difference between a deficit-based version (left) and a strengths-based version (right) of the Wallaby persona. Annotations explain the differences.

Figure 3: Deficit vs strengths-based persona profile – Annotated example

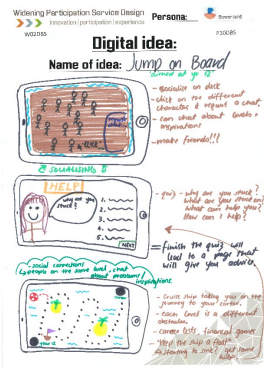
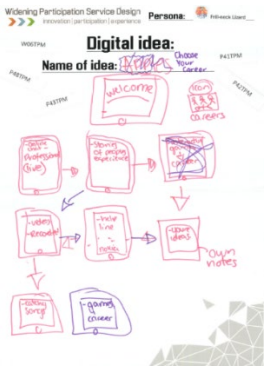
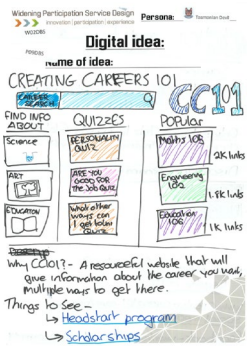
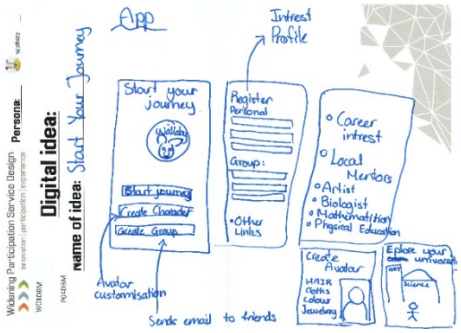


Step 4: Co-design solutions to leverage deep insights (barriers and motivators) for each persona using theoretical frameworks.

Hammond and Zimmerman's (2018) strengths-based process included helping people plan and specify their next steps, which we found manifested in our project as the codesign of solutions informed by theoretical frameworks. At the commencement of the workshops, participants self-identified which persona best reflected them and then sat together in persona-based groups. The activities that ensued were designed so that each persona group could generate service ideas to help themselves and people like them to make decisions about tertiary study. This empowered participants, providing them with creative freedom for a new WP service idea. Participants considered the barriers and motivators of their persona and set about planning a range of WP service improvements, including a new digital service solution.

Participants in each persona group were first paired to develop ideas, and then they shared these with others in their persona group. Figure 4 shows samples of participants artefacts created for each persona. We found that the artefacts developed by each persona group aligned with the four student personas. What was remarkable about this alignment is that groups were not provided with copies of their personas, only viewing posters of the personas briefly as they entered the workshop to allow them to self-identify. Hence, the unaided alignment between the artefacts messages and the persona validated the personas and the participatory research methodology used.

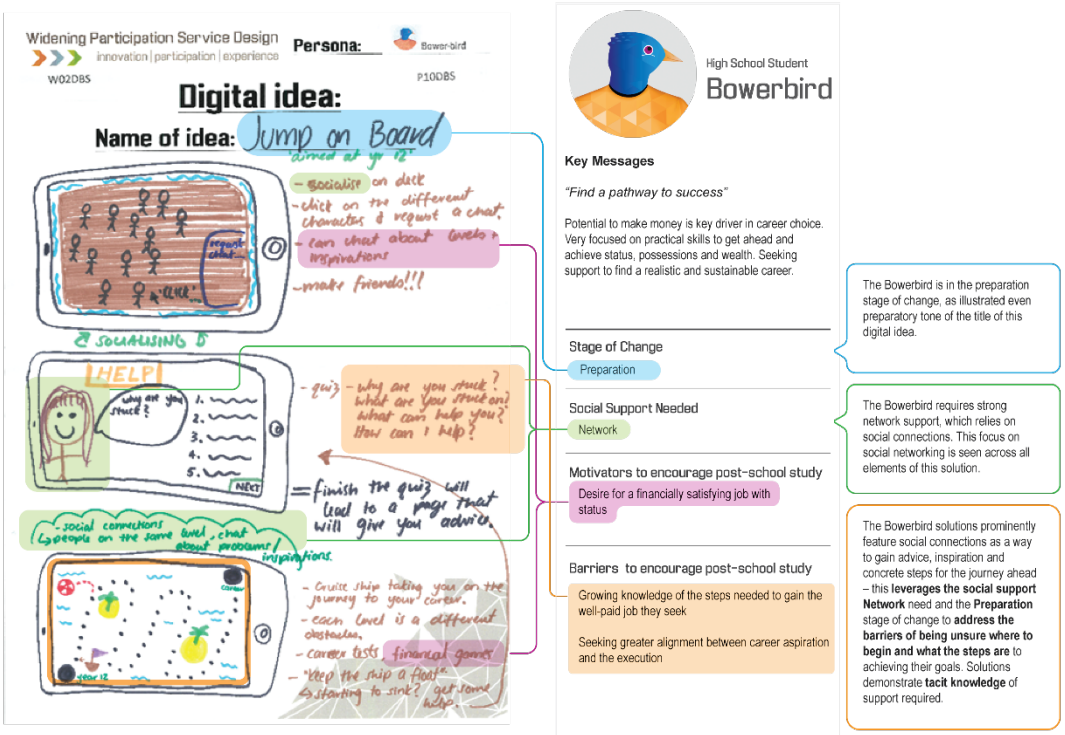
Figure 4: Sample of co-designed new digital service idea for each persona

The Bowerbird	The Frill-Neck Lizard
	
The Tasmanian Devil	The Wallaby
	

Providing further validation, the ideas generated in participants artefacts tended to apply theoretical frameworks as a way of addressing the barriers and motivators experienced

by their persona (see Figure 5). The presence of theoretical frameworks further reinforced the applicability of Cutrona and Russell's (1990) types of social support and Prochaska and Velicer's (1997) stages of change and their power in leveraging the strengths of the personas and overcoming identified obstacles.

Figure 5: Annotated example of Bowerbird solution demonstrating the application of theoretical frameworks

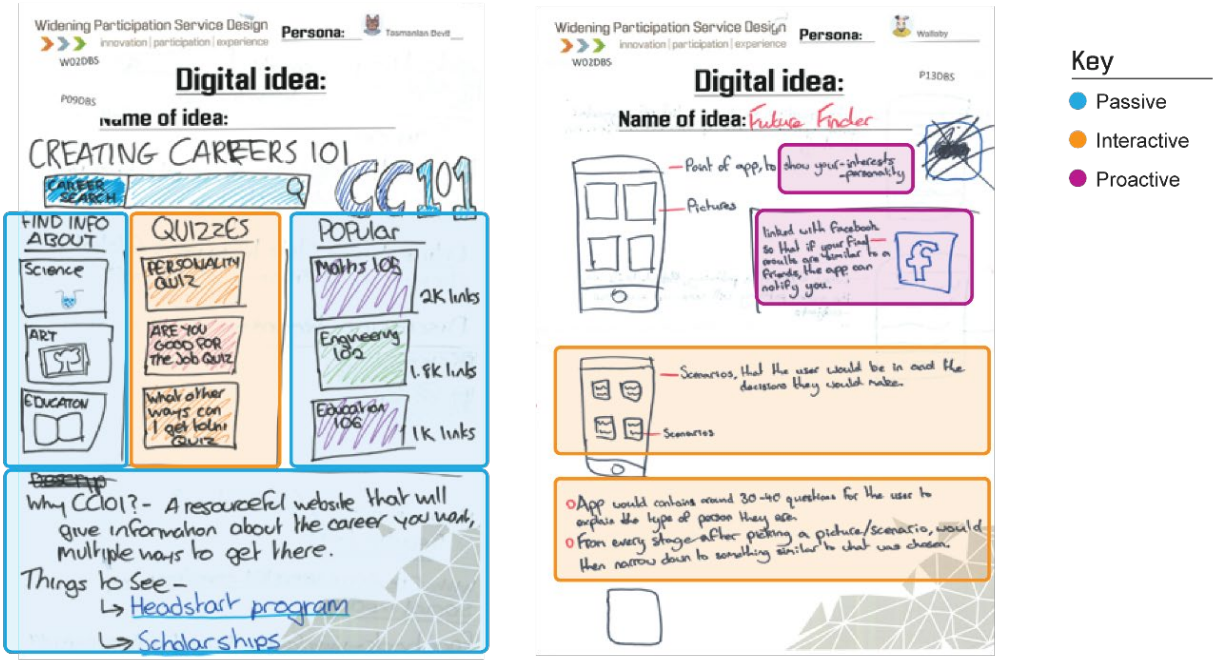


Although not conducted by the authors of this article, members of the larger project team validated the personas and their alignment with the new WP digital solution in another Australian state. A total of 27 school students (current and recent) were interviewed individually or in pairs by two members of the larger project team. This study validated the robustness of the personas, social support needs and stage of change.

Step 5: Co-design strengths-based solution attributes

Hammond and Zimmerman's (2018) strengths-based process included helping people identify other resources to assist them in achieving their goals. In our project, we found evidence of the identification of other resources in the workshops, following the co-design of a portal as a digital service solution. This portal recognises the importance of safe and personalised 'spaces' for those experiencing vulnerability (Saatcioglu & Corus, 2016), and applies this understanding by ensuring participants co-designed their own spaces. Our analysis for Step 5 focussed on the co-designed portal that could be tailored for each persona, examining the features proposed by participants and how interactive those features were. In applying the PIP (passive-interactive-proactive) framework (Letheren, 2019), we saw participants including a mix of passive, interactive and proactive portal features. As in Figure 6 below, interactivity levels aligned with individual personas.

Figure 6: Comparison of interactivity features for Tasmanian Devil and Wallaby



The Tasmanian Devil (left) favors a more hands-on approach, with a mix of passive and interactive tools, focusing on providing information for and quiz results – for the Tasmanian Devil to act on themselves. The Wallaby (right) on the other hand, has a more laid-back approach to future pathways and so wishes to 'delegate' more authority to the portal through use of proactive technology that pulls and processes information on their behalf. Though also accompanied with interactive features like click-through scenarios and quizzes.

A summary of the different personas and their preferences for social support and PIP features is provided in Table 4.

Table 4: Summary of social support and PIP preferences by persona

Personas	Key Message	Aspect	Example Features/Activities
	Fast track your dream job	Social Support	Network* – e.g., connection to a mentor
		PIP	Primarily interactive, passive – e.g., career quiz, webinars, calendar of events.
	Find a pathway to success	Social Support	Network – e.g., connect with experienced professionals
		PIP	Primarily interactive, some passive – e.g., avatar builder, SMS chat, links to university social media.
	Explore career avenues	Social Support	Network – e.g., 'job tinder' which matches applicants with organizations for direct contact.
		PIP	Primarily passive, some interactive – e.g., university location maps, a database of industry professionals.
	Explore stepping stones to your future	Social Support	Network, emotion, esteem – e.g., 'Future finder' app that matches personality to careers (also a proactive feature).
		PIP	Primarily interactive, some passive – only persona to select 'autopilot', the highest level of proactive technology.

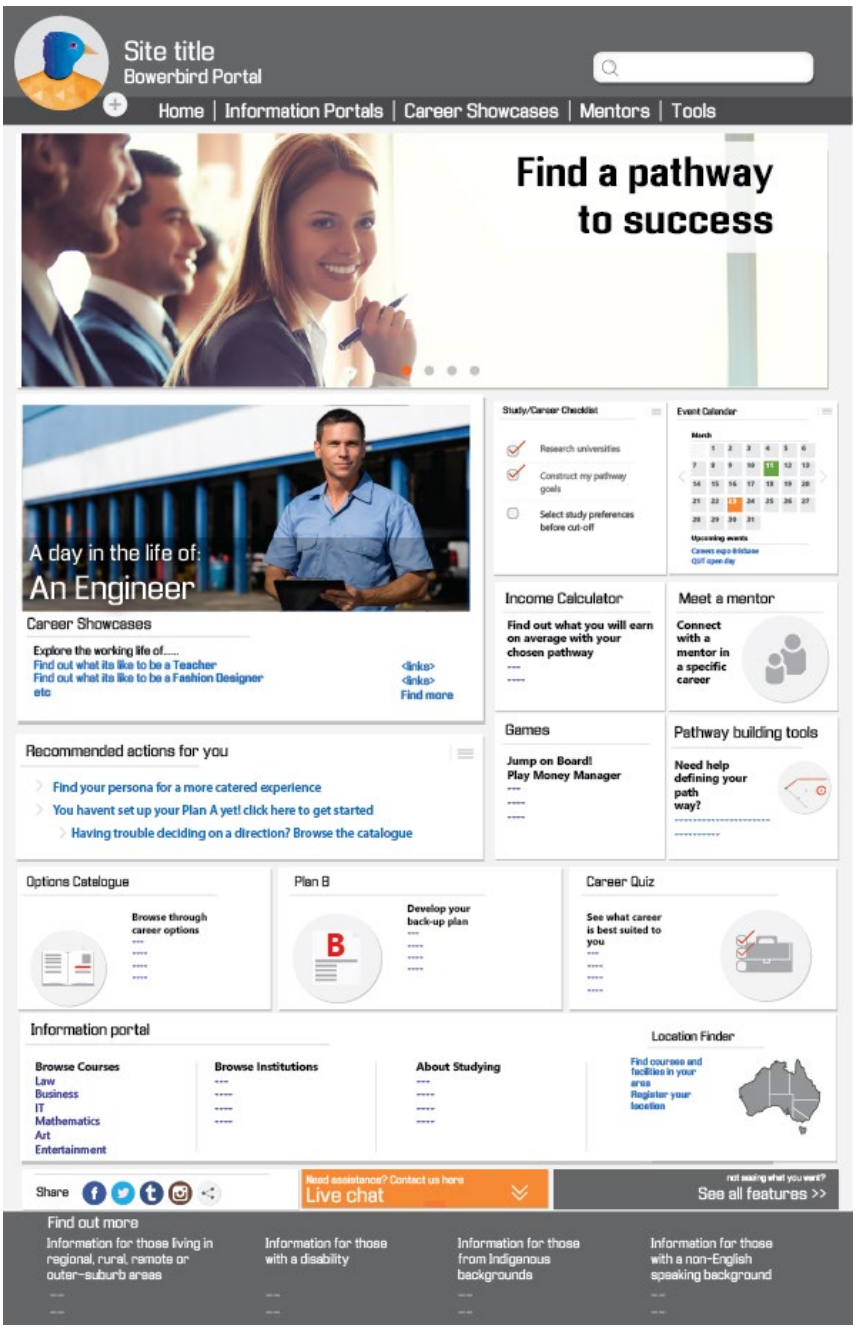
**Only key social support elements are listed here, as instrumental and informational needs are common across all personas.*

While all personas share commonality across social support and PIP (e.g., all personas value informational and instrumental support), there is variation in how these features operate within the digital solution portal based on deep insights surrounding each persona. For example, while the Tasmanian Devil and Bowerbird both value instrumental, informational and network support and a mix of interactive and passive PIP features, for the Tasmanian Devil, who is intrinsically motivated, portal features reflecting these elements are focused on connections with career mentors, tertiary education FAQs and career quizzes to ensure a good match between skill and career. However, the Bowerbird, who is extrinsically motivated, prefers connections with professionals looking to hire, information about financial assistance, and games that show how lucrative their chosen career will be.

Eliciting tacit knowledge from participants enabled deep insights about each persona. Without deep insights gained when co-designing these strengths-based personas, these important nuances would not have been uncovered. Building on these deep insights, a portal

mock-up was professionally created to reflect features tailored specifically to the personas (see Figure 7).

Figure 7: Professionally designed portal image for the Bowerbird persona



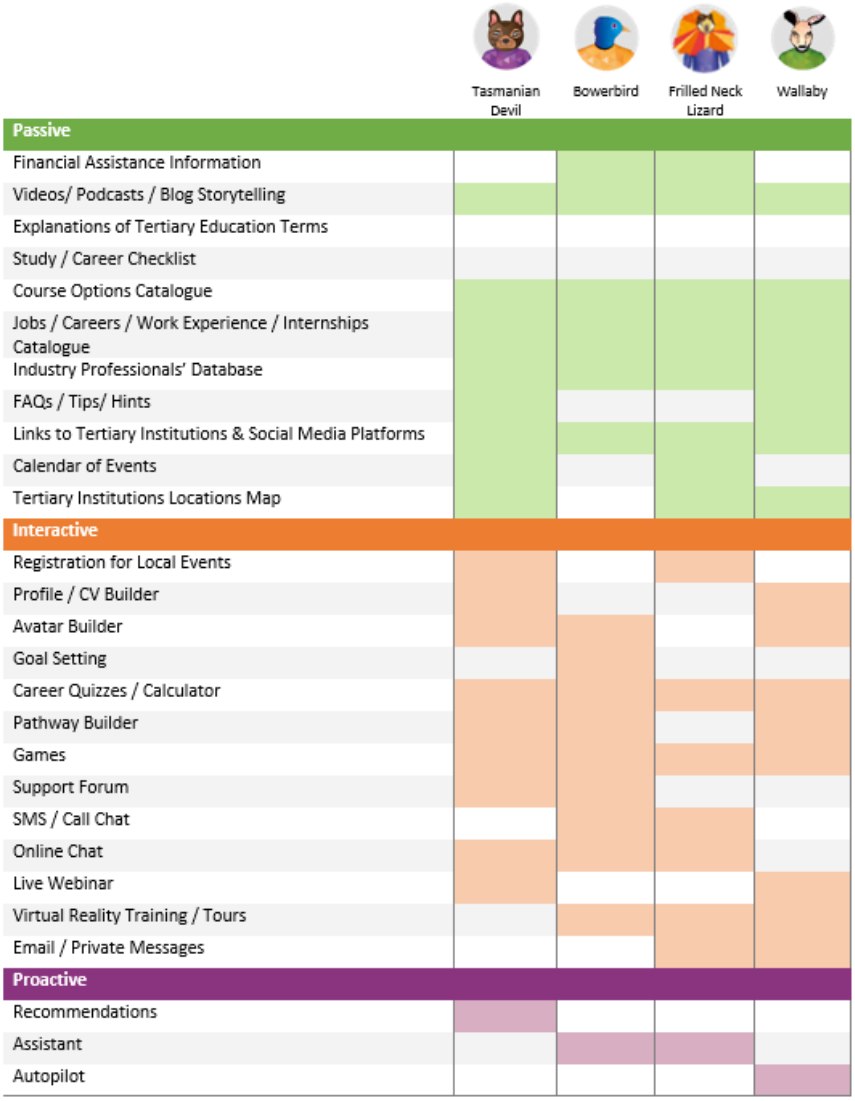
Importantly, the portal solution provided tailed information for each persona. For example, JobTinder ('Jinder'), a job and applicant matching app and career showcase (Figure 8) reflect the motivation, social support and PIP preferences of the Frill-Neck Lizard persona.

Figure 8: Portal features mapped to the social support preferences of each persona

Persona	Idea	Description	Emotional	Esteem	Network	Instrumental	Informational
Tassie Devil: School Students	Portal	Pathways to a dream job: An entertaining, engaging information portal that provides pathways, options, showcases careers, has quizzes and provides a fast track					
	App	Career Quiz: A career quiz app that confirms my career choices					
	People	Career Excursions: Seeing the careers in action and being able to ask questions of the professionals.					
Bowerbird: School Students	Portal	Pathways to Success: An entertaining, engaging information portal that provides pathways options, showcases careers, has quizzes and provides a fast track					
	App	Career Extension: A game that offers insight into careers, shows how careers can be transformed and confirms "my career choices to make money"					
	People	Success Stories: An opportunity to connect with successful professionals from around the world.					
Frilled Neck Lizard: School Students	Portal	Pathways to an Expert: An entertaining, engaging information portal that provides pathways, options, showcases career, has quizzes and provides a career plan					
	App	JobTinder (Jinder): Job and applicant matching app "which allows me to contact job professionals directly".					
	People	My Point of View: Direct contact with mentors and experts, with limited involvement of others or schools					
Wallaby: School Students	Portal	Pathways to a Pathway: An entertaining, engaging information portal that provides pathways, options, showcases career, has quizzes and provides a path					
	App	Future Finder: an app "that helps me find a career". User to explain the person they are, then career options are suggested. Links into social network to enable content sharing					
	People	Career Brainstorming: events that offer one-on-one career counselling.					

This persona-based portal solution is novel when compared to existing tertiary education information available in Australia. As existing solutions have not had the benefit of deep insights drawn from tacit knowledge, all digital offerings tend to be the same. Existing digital offerings do not reflect or respond to individual differences as our persona-based co-designed portal does and they continue to offer primarily passive, informational resources, neglecting other social support and PIP features valued by LSES communities who are unfamiliar with tertiary education. Figure 9 details the portals PIP features mapped to each student persona.

Figure 9: Portal PIP features mapped to the preferences of each persona



Overall, to address RO2, we developed the five-step SAIV process based on evidence from our WP social marketing project. The SAIV process is strengths-based, focusing on what social marketing customers/consumers have and using a variety of techniques to elicit all-important tacit knowledge from participants. Tacit knowledge drawn from experiences of vulnerability enabled deeper insights that led to psychographic-based personas and a comprehensive, co-designed portal solution tailored to different persona needs that is unlike any other WP tertiary education digital solution for people from LSES communities.

DISCUSSION

Critical social marketing seeks to challenge the way social marketers think and what they do so as to improve practices that generate positive outcomes that support behaviour change (Dibb, 2014). In critiquing social marketing, we identified the problematic issue of deficit-based framing of people experiencing vulnerability, resulting from previous definitions of customer/consumer vulnerability centred on powerlessness, helplessness, and what people were lacking (e.g., Baker et al., 2005). Also, we identified that supporting behaviour change requires deep insights about customers/consumers experiencing vulnerability. Tacit knowledge is the key to deep insights (e.g., Arnett et al., 2021); however, its role in social marketing is relatively unexplored. This article addressed two gaps in the literature, producing two theoretical contributions. The first theoretical contribution is a new strengths-based definition of customer/consumer vulnerability. The second theoretical contribution is the five-step SAIV process, which is a strengths-based approach (SA) process for eliciting deep insights (I) from the tacit knowledge of people experiencing vulnerability (V). Both theoretical contributions have managerial implications for social marketers.

Theoretical Contributions

A new strengths-based definition of customer/consumer vulnerability.

The notion of vulnerability is central to social marketing as interventions typically involve people seeking support or people experiencing disadvantage. Social marketing has adopted vulnerability definitions from the broader marketing literature, which is saturated with papers on the topic (see Riedel et al., 2022). Despite the abundance of definitions about consumer vulnerability, there are continued calls for better definitions (see Hill & Sharma, 2020), indicating that what is available is inaccurate or inadequate.

Systematic reviews, such as Riedel et al. (2022), have collated and analysed previous conceptualisations of consumer vulnerability. Our critique of the literature, including these systematic reviews, revealed a persistent deficit-based characterising of people experiencing vulnerability as powerless and lacking capabilities, personal agency and control (e.g., Baker et al., 2005). The opposite of a deficit-based perspective is a strengths-based perspective (Warburton & Bredin, 2019), and we found that a strengths-based perspective is largely absent from the social marketing literature even though it is used with much success in related areas like psychology, public health, social work, education and youth development for many decades (e.g., Maton et al., 2004; Greenberg et al., 2001; Hawkins et al. 1991).

We answered Hill and Sharma's (2020) call for a new definition of customer/consumer vulnerability and took the opportunity to address the gap in the social marketing literature by foregrounding the importance and relevance of a strengths-based approach. Using Hammond and Zimmerman's (2018) strengths-based framework to assist in coding data from our WP project, we identified five themes that needed to be reflected in our definition. Hence, we developed a strengths-based, human-centred, process-oriented, solutions-focused and holistic definition of customer/consumer. Our definition of customer/consumer vulnerability follows: *"Experiences of vulnerability are subjective perceptions of susceptibility, which are part of the human condition that may come to pass with the passage of time, prompt introspection and give rise to greater strength and resilience"*.

The five-step SAIV process to help social marketers elicit deep insights from tacit knowledge

More effective social marketing practices result from processes that lead to deep insights (Hammond & Zimmerman, 2018). Tacit knowledge is rarely mentioned in the social marketing literature, with the few articles including Wymer (2010), May and Previte (2016),

Karmin and Anker (2014), Fry (2014) and Kubacki and Siemieniako (2011). With the exception of Kubacki and Siemieniako (2011), these articles briefly mention tacit knowledge but do not provide details of how tactic knowledge was garnered from participants. Kubacki and Siemieniako (2011) described a projective technique they used to make tacit knowledge explicit. Hence, while there is a fleeting acknowledgement of the value of tacit knowledge for deep insights for more effective social marketing, it remains that there is no process for eliciting tacit knowledge for deeper insights to help guide the design of interventions and improve their success.

The power and value of tacit knowledge are well-known in the new product development literature (e.g., Goffin & Koners, 2011) and new product development shares attributes with social marketing interventions such as the need for novel and nuanced solutions and the presence of competition (Dann, 2010; Kotler and Zaltman, 1971). The potential of tacit knowledge to elicit deep insights that result in more effective and successful interventions cannot continue to be overlooked. What social marketers need is a process to tap into the tacit knowledge of people experiencing vulnerability. The tacit knowledge literature is extensive, with early work dating back to the 1950s (e.g. Polanyi, 1958). From our review of this literature, we identified ten tacit knowledge concepts (e.g., experiential learning) that we used in combination with Hammond and Zimmerman's (2018) strengths-based exploratory process as the basis for coding data from our co-design workshops to develop our five-step SAIV process for social marketers to elicit deep insights from tactic knowledge from participants experiencing vulnerability.

The SAIV process commences with the sharing of experience of vulnerability between the social marketing project team and participants (Step 1). This established a safe space and shared understanding that is necessary for the development of a narrative approach to elicit deep insights into participant experience of vulnerability using a variety of projective

and visual activities (Step 2). Tacit knowledge that surfaced during Step 2 provided deep insights into experiences of vulnerability that markedly enriched Step 3, being the co-design of strengths-based personas. The deep insights exposed important nuances, preferences, contexts, and previously unknown characteristics that improved the personas' fidelity. In Step 4, persona-based solutions were co-designed, empowering participants to help themselves and others like them. These solutions addressed the barriers and motivators for each persona and showed alignment with theoretical frameworks. Lastly, in Step 5, participants identified additional sources to help them achieve their goals, and these were embedded as features of the co-designed solution.

Managerial implications

These theoretical contributions have important managerial implications. Social marketers, for the most part, work with people experiencing vulnerability. The notion of vulnerability percolates throughout the day-to-day practices of social marketers, yet despite its prominence, it remains an ill-understood concept (Hill & Sharma, 2020) that is historically deficit in nature (see Riedel et al., 2022). Social marketers have drawn from the consumer vulnerability literature, and while dense, this literature has yet to posit a definition that more fully encapsulates the peoples' experiences (Hill & Sharma, 2020). Applying a critical lens to the issue, we identified the need for a strengths-based definition of customer/consumer vulnerability. Anecdotally, the practice of adopting strengths framing is gaining momentum among social marketers. This growing interest may be that strengths-based interventions are more effective and better received by social marketing customers/consumers experiencing vulnerability (Glavas et al., 2020; Greenberg et al., 2001). Our new strengths-based definition of customer/consumer vulnerability meets a need among practitioners who see current definitions as inadequate or ill-fitting. Our new strengths-based definition also has the

potential to accelerate practitioner uptake of strengths-based approaches leading to improved intervention efficacy and outcomes for people experiencing vulnerability.

Our five-step SAIV process also has the potential to advance social marketing practice. Deep insights are critical to intervention success and among practitioners there is widespread acknowledgement of the power and value of tacit knowledge, so much so that using it to guide interventions has become a professional norm (Wymer, 2010). Despite the use of tacit knowledge among practitioners, there exists no "how-to" guiding process to help practitioners capture and integrate tacit information in a systematic manner. Our evidence-based SAIV process addresses this need, and our comprehensive example provides a useful exemplar for practitioners.

Beyond our two core contributions, this article presents two ancillary contributions of value to practitioners. We demonstrated in this article our process of reframing a deficit to a strengths perspective (see Table 1) based on Warburton and Bredin (2019) and Maton et al. (2004) and anticipate that social marketing practitioners will also find value in this as a professional tool. Furthermore, the personas we developed in our WP project were psychographic-based rather than demographic-based. When we presented these personas to participants in our workshops, they were remarkably effective. We encourage practitioners to integrate more psychographic-focused elements into their work. Demographic descriptions of segments will remain important for governments and other funding bodies as psychographics are not easy to measure or monitor at the national level.

CONCLUSION

This article answers the call by critical social marketing for research that appraises the ways that social marketers think and offers evidence-based solutions that progress the field (Dibb,

2014). We identified flaws in how the fields of social marketing, and marketing in general, conceptualise and define the notion of vulnerability. We also identified issues with the deficit-based approach commonly used when working with people experiencing vulnerability. Furthermore, we identified a gap in the social marketing literature regarding the underuse of tacit knowledge as a source of deep insights that can improve social marketing interventions, particularly for people experiencing vulnerability. Hence, to address these identified problems, our two research objectives were (RO1) to develop a new strengths-based definition of customer/consumer vulnerability; and (RO2) to develop a strengths-based process to elicit deep insights about experiences of vulnerability.

We adopted the hybrid term customer/consumer vulnerability as our critique of social marketing interventions revealed that many interventions involve individuals (i.e., consumers of social marketing interventions) and their families, friends, and communities (i.e., customers of social marketing interventions) may be experiencing vulnerability. The two research objectives were addressed via our research project aimed at widening participation in Australian higher education. WP is a priority for countries around the world and is primarily focused on improving tertiary education participation and success by people from identified equity groups who are experiencing vulnerability (Salmi, 2018). Our WP project's participatory research design resulted in rich qualitative data from 87 Australian school students and recent school leavers that provided an evidence base for a new strengths-based definition of customer/consumer vulnerability as well as our five-step SAIV process to access valuable tacit knowledge for deeper social marketing insights and improved intervention efficacy.

We proposed a new evidence-based definition of customer/consumer vulnerability that was informed by five themes that emerged from the data, of which the first was strength. This focus on customer/consumer strengths continued with the creation of four evidence-

informed, co-designed student personas founded on deep insights drawn from our participants' tacit knowledge. Via workshops, a portal that could meet the nuanced needs and preferences for each of the four personas was co-designed by participants who drew from their tacit knowledge that included their lived experiences, observations, actions and emotions.

We chose to authentically embrace a strengths-based approach and to value the tacit knowledge of our participants as they are the experts in their own lives. Our SAIV process comprised of five steps: open sharing, narrative and visual approaches, leveraging strengths, applying theory to address barriers and motivators, and recognising useful resources. Social marketers are encouraged to adopt a strengths-based approach to eliciting deep insights informed by the tacit knowledge of people experiencing vulnerability. We propose that strengths-based approaches are underpinned by a philosophy towards human behaviour that is relevant across the breadth of social marketing influence, across both small and large programs, and act as a pillar of social marketing practice. We view strengths-based approaches in social marketing as a way to honour the customer (Lefebvre, 2012), and continue the important work instigated by positive psychology (Rashid, 2015; Seligman, 2012). Strengths-based approaches must, however, be applied and maintained with intent if the social marketer is to remain in the required mindset.

Indeed, even where personal agency cannot be assumed, there is always strength to be found– for example, elderly patients with memory loss contributing valuable additions and insights to a guidebook for the newly diagnosed (McCormick, Becker & Grabowski, 2011). We recognise too that strengths lie not only with programme participants, but with all members of the marketing ecosystem. In some instances, comparatively more strengths may be leveraged in social marketers, programme delivery partners, community members, NGOs

or governments – but the strengths of the programme recipient must still remain acknowledged.

Finally, future research may also consider a comparative review of deficit- and strengths-based approaches in social marketing, with a focus on implementation and outcomes, and should examine the resource implications of strengths-based approaches in social marketing. For those applying strengths-based approaches currently, we offer the following suggestions for applying SAIV with minimal resources:

1. The SAIV approach can be scaled up or down, depending on what is appropriate for the programme and/or research question.
2. While co-design can be resource-intensive, we encourage social marketers to focus on resourceful (not resourceFULL) approaches. For instance, using online collaborative tools, the Delphi approach, and even open-ended survey approaches to derive insights.
3. Strengths-based approaches can and should be applied to our own research. We should identify our own strengths and how we might leverage these (e.g., social marketers skilled in networking may leverage this strength to gain in-kind partnerships).

Our SAIV process led us to deeper insights resulting in a co-designed novel portal solution to support behaviour change. The overall strengths-based approach to this work led to deep insights into the nature of social marketing customer/consumer vulnerability and the need and value of the SAIV process to better support behaviour change.

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Figure and Table Captions

Figure 1: The SAIV process

Figure 2: Four co-designed personas

Figure 3: Deficit vs strengths-based persona profile – Annotated example

Figure 4: Sample of co-designed new digital service idea for each persona

Figure 5: Annotated example of Bowerbird solution demonstrating the application of theoretical frameworks

Figure 6: Comparison of interactivity features for Tasmanian Devil and Wallaby personas

Figure 7: Professionally designed portal image for the Bowerbird persona

Figure 8: Portal features mapped to the social support preferences of each persona

Figure 9: Portal PIP features mapped to the preferences of each persona

Table 1: Comparison of deficit and strengths framing in WP agenda

Table 2: Strengths-based concepts and themes

Table 3: Strengths-based exploratory process and steps for eliciting tacit knowledge

Table 4: Summary of social support and PIP preferences by persona

Technical Appendix 1: Interview activities

Technical Appendix 2: Workshop activities

Technical Appendix 1: Interview activities

Deficit-approach to WP	Strengths-based approach to WP (this project)		
Examples	**Name of activity**	**Sample instructions**	**Sample researcher prompts**
	Aim and outcome artefacts: Insight-driven personas of secondary school students (current and recent).		
Little if any questions about students overall worldview. Interest in future self is limited to perceived employability and career goals (e.g., Bennett et al., 2021)	Storyboard: 'The things that make me happy.' • Stimulus: Blank storyboard • Objectives: To better understand participants knowledge, attitudes, behaviours and motivators pertaining to tertiary education, including how our audiences self-identify.	• Current self: I would like you to draw yourself, draw where you live and draw the things that make you happy. • Future self: Now imagine you are grown up. Draw yourself, where you will live, and the things that you think will make you happy then.	• I notice you included/did not include anything about school/university/college. Why is that? • I noticed that in the future, you want to live at X/be an X. What do you think you need to do to get there? (Probe for notions of planned/unplanned pathways)
Exploration of friendship groups do not occur. Questions asked to current university students about the how many of their school friends when to university, and why some did not (e.g., Zacharias et al., 2017)	A day in the life: 'My friendship groups.' • Stimulus: Blank poster • Objective: To identify 'peer crowds'/sub-groups characteristics and how these value/engage in education and any patterns of social interaction.	• I would like you to close your eyes and think back to last [Wednesday]. Tell me about your day, starting with when you woke up. Please include the people you spoke to. • Now thinking about the people you spent time with last week, draw your friendship groups. Put the label of each group on each card (e.g., school friends, soccer friends).	• Probe activities, schoolwork and friendship groups • Which ones are your best friends? Other friends. What do your friends want to do when they leave school, and what do they want to be?
Questions about outreach activities typically centre on the number of activities the student participated in (e.g., Zacharias et al., 2017)	Card sort: 'Outreach that I like.' • Stimulus: Pack of cards with current tertiary education outreach initiatives; blank poster • Objective: a 'competitor analysis' to map counter campaigns/programs for our audiences' other options (i.e. travel, work, defence forces, police force, not working), including the value our cohorts place on these options.	• Here is a pack of cards that show different things that the Government, schools, community groups, universities and technical colleges have done to help people like you think about their study options when they finish school. I will explain each one, and then I would like you to stick them on the poster in the two sections – those that appeal to you and those that don't.	• For each card: who would be the organiser of this type of activity (school, Government, community group etc.) • Do you like this type of activity – why/why not? • Have you done something like this before when you were younger? Did you like it/why not? • What would your younger self have liked?

Technical Appendix 2: Workshop activities

Deficit-approach to WP	Strengths-based approach to WP (this project)		
Examples	**Name of activity**	**Sample instructions**	**Sample researcher prompts**
	Aim and outcome artefacts: User-generated, persona-based WP outreach service improvements and new digital service solution.		
Participants are organised demographics (e.g., age) or geographics (e.g., regional location) not by psychographic-based personas (e.g., Crawford and Emery 2021)	Welcome and group: 'Who are you?' • Stimulus: Prototype student personas on walls • Objective: To determine if the participant can self-identify the person that best reflects them; to garner feedback and iterative adjustments to personas; the ability of personas to distinguish between different psychographic qualities.	• As you come into the room, can you please look at the posters we have placed on the walls? These are called personas. Please look over each and identify the one the best reflects you. Once you have identified the persona that best reflects you, please make your way to the table for your identified persona. The remainder of the workshop will be conducted in persona groups.	• While students examined personas: I can see you are stuck deciding between two personas; why is that? How can we make it better/clearer? • Students who selected personas quickly: Why did you select that persona? Out of all the attributes for your persona, which one stood out the most or made it easy for you to make your decision?
Participants are consumers of outreach activities, not designers of new outreach activities (e.g., Geagea and MacCallum, 2020)	Sticky notes: 'Something more appealing' • Stimulus: Blank poster • Objective: Participants to design new, more appealing WP outreach initiatives.	• I want you to imagine that you are the boss of a company that is in charge of developing activities and programs to help students like you apply for tertiary study. You have as much money as you like. Now please sit in pairs. Each of you takes a pen and a blank poster. What better and more interesting activities would you do to help students like you apply for tertiary study?	• Now each pair is to tell the whole group their ideas (participants encouraged to ask questions of each) • Why did you pick that idea? Where would it be held (in your town or away), how often would you do it? How would you communicate it (e.g., TV ad, banner, email, funny video on YouTube, competition etc.)
Participants are consumers of outreach activities, not designers of new outreach programs with programs designed around demographics or geographics (e.g., Naylor et al., 2021)	Student journey map: 'When new initiatives work best.' • Stimulus: Journey map posters (Years 7 – 12), initiative cards • Objective: Participants to design a program of outreach for their persona using existing and new initiative ideas.	• You are going to design up a program for someone like you (persona) that involves the activities you think are good and some of the new ideas we came up with you. I would like you to place the activity (initiative) cards under each year level where you think it best belongs. I also have some blank cards for you; take some of the ideas we just talked about and put them where they belong.	• Now underneath each initiative, I would like you to put: a) a blue sticky note that shows the location of where this activity should take place; b) a pink sticky note for who should be in charge of organising this activity; c) a yellow sticky note for how you think the activity should be communicated; d) an orange sticky note for what the communication should be telling someone like you; e) a purple sticky note for what physical items would you like to see be taken home from the activity.

			• Prompts: That's interesting. Can you tell me a little more about it? I see you have a few communication/physical item options there. Why is that so?
People-rich WP programs tend to be popular of be used in combination with digital approaches that are tailored for different demographic or geographic segments or by general interest or profession such as in science, mathematics, nursing or teaching (e.g., Geagea et al., 2019)	Digital approach: 'A new digital service for you' • Stimulus: Posters blank or with the splash screen • Objective: Participants to design a digital solution (app, webpage, portal) to help their persona to make informed choices about tertiary education.	What if you could design an app, webpage or portal for your persona that could be used throughout the student journey from Year 7 to Year 12 to help people like you interact with tertiary education institutions and make an informed decision about tertiary education options. What would the digital solution look like? In pairs, draw the splash screen/web page, and talk through what would be on them and why/how they will help people like you.	• Now each pair is to tell another in the group their ideas (participants encouraged to ask questions of each other) • Probes: What colours would you use and why?; Could it be personalised – how?; Would it link to other apps/social media/websites?; Would there be any 'live data' in it?; Would there be any games in the app? What might they look like? What is the purpose of the app/webpage/portal?; Who would use it?