INVESTIGATING HOW TO IMPROVE CONSUMER ENGAGEMENT WITH TERMS AND CONDITIONS (T&C)

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Abstract

Online Terms and Conditions (T&C) are becoming much more prevalent in consumers' daily lives. There exists however poor readership and engagement with T&C, and combined with the associated risks of not reading often pro-seller-based terms, this presents a real problem which the current research aims to address. Research has investigated traditional methods for increasing engagement with T&C such as shortening, simplification, and presenting fairness cues; graphical symbols representing an external fairness valuation; however, no *behavioural* observations have been made with fairness cues. The current research first seeks to understand the extent of non-readership in T&C, followed by examining the presence of habituation (reduced behavioural responses across T&C encounters) to better understand the current climate of T&C behaviour. After this, fairness cues designed to act as a proxy for possible complex analysis software in a user-friendly package are introduced. The study presents two quantitative, experimental studies that aim to discover the effects of fairness cues on behavioural and perceptual outcomes in an experimental setting across multiple T&C encounters. Results demonstrate poor readership rates and confirm the presence of habituation across encounters of T&C by looking at time spent, acceptance rates, and expansion rates. Fairness cues delivered significant improvements in engagement when present. The real benefits were seen however when cues were reported to be relied on, with gains seen in engagement, perceived control, and confidence in fairness. This demonstrates the need for fairness cues to assist consumers, which will help progress the regulation of T&C by industry bodies or policymakers.

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List of Abbreviations

T&C – Terms and Conditions

AI – Artificial Intelligence

Full, fully presented – T&C which are presented in full to a user not by choice and require scrolling and accepting prior to proceeding.

Expand, expandable – T&C which are presented in an expandable format, typically with 1 – 2 preview lines, upon which a user has the choice to accept, or expand to view the full T&C prior to accepting and proceeding.

Statement of Original Authorship

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

Signature: QUT Verified Signature

Date: 22/07/2021

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I already look forward to my path crossing with academia again in the future.

Chapter 1: Introduction

Terms and conditions (T&C) are increasingly prevalent on online platforms, and along with this arises the need to understand better how to encourage consumers to engage with them. The current research aims to discover whether assistive T&C tools, in this instance graphical fairness cues, can increase behavioural engagement with T&C by looking at time spent per T&C, readership rates, and expansion rates. Graphical fairness cues representative of an external third-party's evaluation of the reasonableness of a set of T&C are used in the current research. Possible benefits of increased behavioural engagement with T&C are also considered, looking at the impact of graphical fairness cues on the awareness of T&C content, and subsequent acceptance and rejection behaviour of unreasonable T&C which consumers may have previously been unaware of. Perceptions of T&C when fairness cues are present are also sought to be understood, looking at engagement, perceived control, confidence in fairness, and helplessness. This chapter's background and context sections (section 1.1 and 1.2) reveal extremely low current T&C readership and high acceptance rates, with consumers missing critical conditions. This leads into the purpose (section 1.3) of the project to first understand the extent of T&C non-readership across different T&C presentation formats, that is, fully presented or expandable, and T&C reasonableness conditions, that is, unreasonable or reasonable. The purpose is also to discover the presence of any habituation in a T&C context; that is, decreases in behavioural responses across repeated stimuli (T&C). This is done by measuring the time spent reading each T&C encounter, after which introducing graphical fairness cues and observing behavioural and self-reported changes. This research's significance (section 1.4) lies in observing real behaviour across multiple T&C encounters and the effect of fairness cues on this, as well as perceptions of T&C. As such it becomes evident that work around consumer engagement with T&C can offer multiple benefits and application in the areas of increased engagement and in turn subsequent consumer satisfaction, and act as a substantial aid for regulatory fairness bodies in industry. Finally, section 1.5 includes an outline of the remaining chapters of the thesis.

1.1   BACKGROUND

Whilst it is accepted knowledge within literature that readership and engagement with online T&C is low (Bakos et al., 2014; Fiesler et al., 2016; Obar & Oeldorf-Hirsch, 2018;

Perrault & Keating, 2018; Plaut & Bartlett, 2012), the current research investigates how to better engage consumers in processing T&C. The current research aims to not only understand how consumers process information they are faced with online in a T&C environment, but also explores a possible method increase their engagement with them, using fairness cues.

T&C encompass any set of Terms and Conditions commonly found in a digital environment (for the context of the current research) which are required to be accepted before a user can advance (Elshout et al., 2016). Whilst generally found in online shopping, T&C can apply to many settings beyond this, including online contracts, software license agreements, social media accounts, memberships, and more. T&C include click-through agreements (CTA's), which is simply a way T&C are commonly presented, that is, an agreement presented in full which requires acceptance.

The extent of the current online T&C readership climate requires urgent academic and industry attention, with studies showing 98% of participants missing "gotcha" clauses (Obar & Oeldorf-Hirsch, 2020), beliefs of T&C being too long and time consuming (Olson & Olson, 2003; Plaut & Bartlett, 2012) and feelings of helplessness and lack of control (Elshout et al., 2016; Hillman & Rachlinski, 2002; Plaut & Bartlett, 2012; Rakoff, 1983). Even whilst writing the current research, the irony of blindly accepting JSTOR's terms and conditions (JSTOR, 2020) to download papers without even a momentary glance is not lost upon the author.

Adding urgency to this is the state of fairness, with findings showing many online T&C are pro-seller biased and contain unfair terms (Mann & Siebeneicher, 2008; Marotta-Wurgler, 2007), have questionable enforceability (O'Sullivan, 2014), and in Australia, are suggested to receive a thorough official inquiry (Esayas & Svantesson, 2018). Various contributions throughout marketing literature have been made to improve consumer engagement with T&C, ranging from adding perceptions of control to consumers (Plaut & Bartlett, 2012), simplification through the likes of bolding, shortening, and adding bullet points (Perrault & Keating, 2018), and fairness cues (Elshout et al., 2016) – with some even introducing artificial intelligence software designed to scan a set of T&C and detect unfair clauses (Lippi et al., 2019; Micklitz et al., 2017). Fairness cues introduced to T&C contexts by Elshout et al. (2016) were found to significantly increase trust and purchase intention.

Fairness cues in the context of T&C literature as well as this current research refer to any visual symbol or icon representative of the fairness or reasonableness of the T&C with which the cue is associated. In the current research cues are designed to stem from an external trusted

third-party who has evaluated a specific set of T&C for an individual and reflect one of the two possible dichotomous outcomes. Cues can be either green, with an associated thumbs up icon, and text stating that the T&C seem fair and reasonable, or red, with an associated thumbs down icon, and text stating that the T&C may be unfair or unreasonable. Cues are placed in the top corner of T&C presented to participants in the current research.

The current research aims to examine the bigger picture of T&C literature and does so by first observing individuals baseline behaviours when faced with multiple T&C encounters; and manipulating the presentation format (fully presented or expandable) and reasonableness (unreasonable or reasonable). This is followed by introducing fairness cues and looking into the effects of these, both behaviourally and perceptually.

1.2   CONTEXT

The contextual environment in which the current research sits is specifically within the online, T&C domain. There is a strong need for further research into engagement with T&C in a digital world; as despite in this instance being focused on privacy policies instead, McDonald and Cranor (2008) have calculated that for one consumer to read every single privacy policy they are faced with would take over 200 hours per consumer, per year, or 25 days. Generalised to the U.S. population in 2008, this was equivalent to 53.8 billion hours of time, representing $781 billion in lost productivity costs. Despite these findings' age, they remain one of the most heavily referenced works, with no new findings published yet, nor in the T&C domain. Without adequate protection and understanding, consumers are left vulnerable and exposed as businesses can use this knowledge to their advantage, creating T&C that may unjustly take advantage of consumers.

The current research concentrates on the use of fairness cues as the chosen method to attempt to increase and observe engagement with T&C, as opposed to other alternatives such as bolding, simplification and offering control. From a traditional method view, this reason stems from a longer-term policy view, with fairness cues, if successful, offering a simple, one-visual solution for a regulatory body to manage across a nation or industry, encouraging consistency and enforceability, as opposed to managing which key words to bold, agreeing on lengths and other intricacies.

Despite extensive literature searches, there does not appear to be another paper that aims to observe consumer behaviour when presented with graphical fairness cues; predominantly by recording the times spent on each T&C encounter, as well as allowing for qualitative feedback

on usage reasons. It also offers an opportunity for new insight, as despite Elshout et al. (2016) having utilised graphics cues to significantly improve trust and purchase intention, the observation of participant behaviour with cues was beyond the scope of their research at the time, instead relying only on self-reported increases for scale items. From a theoretical contribution perspective, the current research aims to observe the theory of habituation in practice within a T&C context, as well as examine the implementation of effortless awareness as a possible solution to consumer education. The effects of fairness cues on various perceptions associated with T&C are also examined.

Whilst parallel research has already entered the artificial intelligence domain, in discovering and developing ways in which complex T&C can be analysed automatically on a large-scale using computer science, the current research focuses specifically on fairness cues that represent being developed by a third-party, and their impacts on consumers. Consumer assistive software and AI technology has been developed to help consumers quickly analyse T&C by reading in T&C, highlighting unfair terms, and producing a fairness rating aligned with a personalised tolerance factor (Lippi et al., 2019; Micklitz et al., 2017), however no research has been conducted into the impact of such technology on consumers – only into the development of such tools and strategies. The current research uses fairness cues in a broad sense uses them to represent an external evaluation of the reasonableness. Participants are not made aware of how the cues are established. Two possible implementation methods would be that fairness ratings are allocated to each online business upon manual review of their T&C by a regulatory body (manual), or automatically displayed through a browser plugin which scans the T&C and produces a rating cue. These two implementation methods would ultimately be the decision of policymakers; and depend on the key outcome of this current research as to whether it is worthwhile pursuing in the interest of consumers. This allows the cues to highlight any potential for future AI research, as current artificial intelligence T&C software is a clunky and manual process, with cues therefore being the most user-friendly.

1.3   PURPOSE

Habituation was defined originally by Thompson and Spencer (1966) and later revised by Rankin et al. (2009, p. 136), and can be described as a "a behavioural response decrement that results from repeated stimulation and that does not involve sensory adaptation/sensory fatigue or motor fatigue". Despite not having been researched in this specific context, consumers in an online environment being faced with terms and conditions prior to being able

to proceed may be likened to these characteristics. A repeated application of stimulus, that is, consumers facing terms and conditions online as part of daily life, may result in progressive decreases in the response parameter, such as the level of time spent reading them. While not causal, the current research aims to first observe and define the nature of behavioural responses across T&C encounters, and then seek to address it.

As such, the following research aims have been developed.

Research Aims

Research Aim 1: To understand the extent of *non-readership* across various T&C encounters in the context of online T&Cs (Study 1).

Research Aim 2: To investigate the presence of *habituation* in the context of online T&Cs (Study 1).

Research Aim 3: To examine the effects of the use of *fairness cues* on engagement behavior and perceptions in the context of online T&Cs (Study 2).

1.4 SIGNIFICANCE, SCOPE AND DEFINITIONS

This research paper is significant as it directly observes participant behaviour to gain an understanding of the current habituation climate across a variety of T&C encounters and extends research into the utilisation of graphical fairness cues in exploring the effects on consumer beliefs such as engagement, perceived control, confidence in fairness, and feelings of helplessness. It also acts as an application of technology to solve the consumer issue of poor T&C readership and engagement and does so to investigate how real the need for further consumer-assistive technology development in the T&C domain is. Lastly, it also seeks to understand the impact of decision delegation to a cue, in which individuals rely on a fairness cues' decision of the reasonableness of a set of T&C to avoid having to make their own decision; and the effects this has on various variables as outlined above. This can have ramifications a real-world context for any goal outcome that proceeds a T&C situation.

A fundamental gap is that whilst authors such as Elshout et al. (2016) utilised fairness cues, time and behavioural based observations were beyond the scope of that research, instead measuring only self-reported scales. The current research is one of the first studies which records key time data for participant T&C encounters, as well as monitoring acceptance of T&C and expansion rates of T&C across encounters. This is of high significance as it serves as not only a baseline to which to compare the effects of the fairness cues, but also to allow for

a comparison between self-reported outcomes (i.e., perceptions), and actual behaviour, for example, a relationship between self-reported engagement and time spent per T&C.

Furthermore, the current research is significant as it aims to fill the void between research which aims to explain the currently poor T&C readership and engagement behaviour *reasons*, and the newer technology aids such as fairness cues and AI software which *assume* the need for them. This paper tests the middle-ground by placing participants in un-assuming experiments designed to observe their behaviour when presented with fairness cues.

Understanding consumers behavioural as well as perceptual responses to T&C with and without cues is important, with ramifications and implications for not only consumers, but also organisations, policymakers, and academia. The abovementioned research, if successful, would enable consumers to gain power when it comes to unreasonable or poor T&C. Additionally, by highlighting unreasonable terms, it would allow consumers to band together and boycott unreasonable terms and their companies and begin shifting the industry towards transparency. Knowing that organisations would no longer be able to hide unreasonable or exploitive terms within fine print could also help change the ethics around T&C, with consumers knowing they are protected.

Organisations and businesses would have the opportunity to see considerable potential gains, as increased engagement and trust in a vendor would improve not only customer satisfaction, but in turn a more positive consumer experience, ultimately leading to repeat and increased business. Increased competition between businesses would also be a potential outcome, as businesses would compete to show off and improve their fairness ratings, ultimately all things which benefit end-consumers. Policymakers would be empowered to build a regulatory framework around monitoring fairness within T&C, reducing complaints from customers against businesses, or conversely, highlighting previously unnoticed unethical businesses exploiting customers through terms. Fairness cues would also make enforcing punishments against businesses easier with an industry norm against which to compare to. In the interest of academia, this research has the potential to motivate and demonstrate the need for further research and development into artificial intelligence, and its optimisation for within specifically the T&C industry.

1.5 THESIS OUTLINE

This introduction has provided an outline of the research into existing T&C behaviour and the effects of fairness cues which is to follow in this paper. This included a background of

the current T&C landscape and summary of the context limited to T&C and traditional fairness cues. The overarching purpose of this paper is to understand current behaviours across T&C encounters in research aims 1 and 2, after which research aim 3 explores the effects of fairness cues on behaviour: time spent, acceptance rates, and readership; and effects on perceptions: including engagement, perceptions of control, confidence in fairness, and feelings of helplessness.

Following this chapter is the Literature Review, which is structured around first providing a synthesis of existing research in the T&C environment: outlining current statistics, non-readership reasons, and fairness regulations; and then concepts specific to individual research question development: including traditional and modern methods for improvement, as well as delving into psychology literature.

This paper is sub-divided into two primary studies along with a pretest prior to each. Each of these has its own chapter, within which the methods, results and discussion section can be found. Both pretests test the suitability of scales and stimulus used in each respective following study. Study 1 aims to understand how people respond to T&C based on current behaviours, by looking at time decline behaviours and showing the importance of considering habituation. It does so by looking at T&C behaviour across presentation style using no cues, and a base (standard) participant payment. Study 2 is designed to extend from Study 1, and introduces suggestions from literature such as fairness cues, and investigating the outcomes. Rounding out the paper is a general discussion and conclusion section, discussing implications, limitations, and directions for future research.

Chapter 2: Literature Review

In the following chapter, a review of existing literature relevant to the current research is presented, by reviewing and providing a synthesis of existing evidence, key findings, and discussing the gap in literature which the current research aims to address. Section 2.1 commences by looking at the current T&C landscape, by defining unfair clauses in T&C, outlining statistics for current T&C behaviour and presents literature on non-readership beliefs and their associated theorised reasons to assist in explaining why fairness cues are the most likely approach to succeed. Importantly, and to highlight the need for further research in this area, consequences of T&C non-readership are examined. Section 2.2 then presents literature relevant to each research question, justifying the development of each one. Section 2.2.1 within this looks at T&C non-readership theories, followed by section 2.2.2. which examines current habituation literature and explains how it can be generalised to a T&C environment. Section 2.2.3 presents some ways in which prior research has improved how consumers engage with T&C, as well as varied suggestions for future research, and non-readership beliefs. Section 2.2.4 examines various psychological constructs including engagement, control, confidence in fairness, and helplessness, which the current research endeavours to observe impacts on by adding fairness cues to T&C encounters.

2.1   CONTEXTUAL LITERATURE

2.1.1 T&C Readership

It is widely acknowledged in literature that consumers have fundamentally low readership, understanding and engagement in online terms and conditions (Fiesler et al., 2016; Obar & Oeldorf-Hirsch, 2018; Perrault & Keating, 2018; Plaut & Bartlett, 2012). The vast majority of participants report not reading T&C (Plaut & Bartlett, 2012), with Fiesler et al. (2016) finding self-reported T&C readership as low as 11%. In Plaut and Bartletts (2012) case, it was found that over 80% of participants reported "not reading at all" or "not really reading anything" – with the majority of the remaining 20% (17%) describing their reading as merely "skimming" (Plaut & Bartlett, 2012). In another study, less than 10% of respondents self-reported reading a consent form (Perrault & Keating, 2018).

Looking at these self-reported statistics as a whole reveals the importance of considering social desirability bias within participants who may feel the need to report their readership in an inflated manner to be viewed more favourably (Welsh, 2018). Considering the low rates to begin with, this was unlikely to have been a major influence in the above studies. Moving to actual readership measures, Obar and Oeldorf-Hirsch (2012) have shown that despite the inclusion of absurd "gotcha clauses" (such as giving up your first born-child), 98% of participants missed them, with a further 74% of participants skipping a privacy policy. Empirical results from Obar and Oeldorf-Hirsch (2020) who investigated the extent of skimming behaviour highlighted that participants in an experiment spent a mere average of 51 seconds when reading a 15 – 17-minute T&C. These figures of predicted reading time are based on the average reading speed of a human of between 250 – 280 words per minute (Taylor, 1965).

This has obvious ramifications for both consumers to be caught out by unfair terms which may harm them in the future, but also for organisations who wish to create consumer-exploitive T&C – showing the need to increase transparency, which the current research attempts to do. The depth of these ramifications of low readership are discussed in the following section.

2.1.2 Consequences/Impact of (Low-)Readership

Considering that it has been estimated that reading every single privacy policy a consumer is faced with would cost over 200 hours of time *per year* per consumer (McDonald & Cranor, 2008), the consequences and impacts of non-readership in not only privacy policies but also T&C are ones that cannot be ignored. Elshout et al. (2016) have outlined the obvious concerns of non-readership, primarily being the risk of agreeing to terms which, had the consumer read, could be perceived to be unfair in their eyes (not necessarily by law). These lesser-informed decisions can then also lead to regret, however more worryingly, can lead to organisations and businesses using this knowledge to their advantage, and creating the bare minimum in terms of legal protection for consumers within their T&C.

Adding to the impacts on businesses and online providers, is the suggestion that T&C in online environments act as a devil spiral with consumer behaviour – in that the implementation of T&C contributes to non-readership, and in turn lead to more T&C (Obar & Oeldorf-Hirsch, 2020). It is through this commercialisation and mindset that T&C by nature have been sculpted to be nothing more than a means to an end in a digital transaction flow and have even been

optimised to facilitate rapid completion to allow consumers access to their end service, purchase, or product. Supporting this notion is Bakos et al. (2014), who argue that since the cost of comparison shopping in an online T&C environment is so low, the real factor limiting consumers in becoming informed is the time and ability in reading and comprehending them.

In terms of specific implications for businesses that utilise T&C, Milne and Culnan (2004) discovered that, in the context of privacy policies, consumers viewed them as means to manage their personal risk tolerance and acceptable levels. It was also found that in cases where consumers had prior experience with a firm, they tended not to read them (Milne & Culnan, 2004). This strongly suggests the presence of habituation and supports the need for the current research to accurately understand T&C behaviour across encounters. This has the flow-on implication that privacy policies, and in this papers context, T&C, should be most important to businesses that are a new to consumers, or are not a well-established brand. One limitation to this study however was that these were all the results of self-reported measures only, and the authors suggest that future research includes controlled experimentation to understand the role privacy policies play in the decision-making process for consumers (Milne & Culnan, 2004).

2.1.3 Fairness Definitions

To better understand the differences between reasonable and unreasonable terms presented later in the current research, unfair clauses and terms must be defined. There are three key contributors to perspectives on fairness across relevant literature and are discussed below.

Part three of the Directive 93/13 on Unfair Terms in Consumer Contracts, implemented across the European Union, states that a contractual term is unfair if: it has not been individually negotiated, and contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations, to the detriment of the consumer (Lippi et al., 2019). Not explicitly listed in this paper, however readily available in the Directives' Annex is an indicative, yet non-exhaustive list of terms which may be regarded as unfair, as well as sample judgements by the Court of Justice in the EU (Micklitz & Reich, 2014).

Looking more specifically at clauses, Loos and Luzak (2016) identified five key characteristics common to unfair clauses and terms, which were characterised by being unlikely to pass the Unfair Contract Terms Directive. These are as follows: (1) establishing jurisdiction for disputes in a country different than consumer's residence, (2) choice of a foreign law governing the contract, (3) limitation of liability, (4) the provider's right to unilaterally

terminate the contract/access to the service, and (5) the provider's right to unilaterally modify the contract/the service (Loos & Luzak, 2016). Extending upon the five foundational categories or characteristics of unfair contract terms, Lippi et al. (2019) propose a further three: (6) requiring a consumer to undertake arbitration before the court proceedings can commence, (7) the provider retaining the right to unilaterally remove consumer content from the service, including in-app purchases, (8) having a consumer accept the agreement simply by using the service, not only without reading it, but even without having to click on "I agree/I accept" (Lippi et al., 2019).

Readership Responsibility. To make a set of T&C enforceable in transparent and legal manner, not only do they have to meet the fairness standards outline above, but they must also contain notice, and assent (O'Sullivan, 2014). Onus, that is, whose responsibility it is to read and understand all terms before assenting and thus binding a consumer to terms, dictates that whether or not parties read the terms does not matter (Katz, 1990). This is a strong driving force for why this research into how to better engage consumers with T&C is very important, as the onus falls on consumers, and as such any tools or stimuli (i.e., fairness cues) that aid consumers is a positive.

2.2   RESEARCH QUESTION DEVELOPMENT

2.2.1 Research Question 1 – Extent of Non-readership

Non-Readership Theories. Scholars throughout marketing literature have typically leaned towards explaining the non-readership phenomena with two primary concepts: the common privacy paradox (Nissenbaum, 2010; Norberg et al., 2007; Obar & Oeldorf-Hirsch, 2020), and the rational choice decision-making paradigm (Korobkin, 2003; Perrault & Keating, 2018).

The common privacy paradox – in which 'people appear to want and value privacy, yet simultaneously appear not to value or want it' (Nissenbaum, 2010) – can be equally applied in a T&C setting, where consumers desire protection, but appear not to value or want to work for it. A recent study by Bandara et al. (2020) investigated the privacy paradox in the context of learned helplessness and privacy empowerment. The authors outline learned helplessness as the opposite of empowerment (Bandara et al., 2020), with learned helplessness referring to the state in which despite possessing the skills to succeed in a situation, an individual's performance is sub-optimal due to attributing prior failures to uncontrollable outcomes. Bandara et al. (2020) further state privacy empowerment to be a level of how ineffective or

powerless an individual feels to prevent threats to privacy, and the resulting level of passiveness in protecting their privacy and not divulging information regardless of concerns. This is as despite consumers often voicing discontent, they do not take necessary T&C precautions. Semi-structured interviews were conducted designed to gauge participants knowledge levels of privacy issues and methods taken to protect themselves, as well as inquiring in what instances and why concerns over privacy are disregarded. Results showed that perceptions of knowledge, lack of awareness, feelings of limited choices, perceptions of ability, and lack of control form the foundation of learned helplessness and explain why consumers simply do not behave in accordance with their voiced concerns when it comes to T&C (Bandara et al., 2020).

Using the rational choice decision-making paradigm, Korobkin (2003) suggests that the expected costs of reading T&C are *perceived* to outweigh the expected benefits. Quite often the likelihood of consumers having had a negative experience resulting from T&C is quite low – prompting little concern for future T&C encounters (Korobkin, 2003). Another suggestion made is that consumers may often just blindly agree to T&C because of the strong assumption that they have all been vetted and approved by ethical and legal professionals (Perrault & Keating, 2018). What emerges from looking at the research conducted by Korobkin (2003) and Perrault and Keating (2018) is the strong implication of a deep-rooted systemic behaviour of helplessness within consumers encountering T&C, highlighting the strong need for the current research to examine the extent of non-readership behaviour, and attempt to improve.

Despite both theories and empirical studies suggesting clear T&C non-readership (Fiesler et al., 2016; Obar & Oeldorf-Hirsch, 2018; Perrault & Keating, 2018; Plaut & Bartlett, 2012), there has not been a clear examination in literature comparing differences in T&C presentation format and reasonableness on behavior including time spent, acceptance rates, and expansion rates. While Elshout et al. (2016) reported significantly improved readership from when participants were able to expand T&C if desired, to being forced to scroll through T&C (i.e., fully presented), it is important to acknowledge the way readership was reported. In the expandable condition, readership was reported by T&C expansion (9.4%), as opposed to self-reported readership in the fully presented condition (78% reported reading *any* portion). The current research aims to observe readership in an objective, time-based manner. Furthermore, while Obar and Oeldorf-Hirsch (2020) found that 98% of individuals missed key unreasonable clauses in a fully presented T&C format, an examination into the effect of T&C presentation format, and the interaction between detection of unreasonable clauses was beyond the scope of the research. Considering the privacy paradox (Nissenbaum, 2010) and its foundational

explanations of non-readership built on empowerment, the need to understand whether T&C presentation format can have an impact on empowerment, and as such increase engagement through readership, exists. Similarly, the rational choice decision-making paradigm outlines the expected costs of reading T&C to be perceived to outweigh the expected benefits; presenting the question of whether the presentation format (fully presented, or expandable) can affect the expected readership cost.

Therefore, while literature presents various T&C non-readership findings through time, self-reported measures, acceptance, and expansion rates, as well as theories for non-readership in parallel, there exists a gap in understanding the interaction between T&C presentation format, and T&C reasonableness (unreasonable or reasonable). Presentation format refers to T&C being presented in either an expandable format, displaying only a preview of the full conditions; or fully presented and requiring scrolling to get through to the next page. Reasonableness refers to whether the contained conditions are considered unreasonable or reasonable. Furthermore, the impacts of T&C presentation format and T&C reasonableness both alone and together on readership time, expansion, and acceptance behavior, are also not clearly understood. Hence, the below research question aims to not only validate existing literature concerning poor readership, but also seeks to understand how consistent existing findings and theories are across T&C reasonableness and T&C presentation.

It is from the research discussed above that Research Question 1 has been developed:

RQ1: Is the acceptance behaviour and time spent reading T&C significantly affected by the (a) reasonableness and (b) presentation format of T&C?

2.2.2 Research Question 2 - Habituation

Considerable literature exists in psychology around habituation; however, habituation has been scarcely investigated in a T&C specific context. Understanding habituation plays an important role in the current research to allow for insight into what this may look like across T&C encounters.

Defined originally by Thompson and Spencer (1966) and revised by Rankin et al. (2009, p. 136), habituation can be described as "a behavioural response decrement that results from repeated stimulation and that does not involve sensory adaptation/sensory fatigue or motor fatigue". Rankin et al. (2009) make a clearer distinction between habituation, and what is simply sensor adaption and motor fatigue. Traditionally, this distinction was proven by the process of dishabituation; recovery of the habituated response by encountering an alternative

stimulus, however, can also be shown by demonstrating "stimulus specificity (response also occurs to other stimuli), and frequency-dependent spontaneous recovery (faster recovery after high frequency stimulation than low frequency)" (Rankin et al., 2009, p. 136).

A key characteristic of habituation that is used as a foundation for the current research is that repeated application of a stimulus, in this instance repeated T&C encounters across multiple tasks, results in a progressive decrease in some parameter to an asymptotic level. In the case of the current research, this is predominantly the time spent reading each T&C encounter or expansion rates (Thompson & Spencer, 1966). Another key characteristic of habituation is that the rate of the behavioural response decrement, in this case time spent per T&C encounter, is inversely proportionate to the intensity of the stimulus (Thompson & Spencer, 1966). As such, the less intense a stimulus is, the quicker and pronounced the decrement is, that is, faster habituation; with very intense stimuli having the possibility to not yield any decrement at all (Thompson & Spencer, 1966). In the context of the current research, the concept of intensity can be applied to both the T&C reasonableness (reasonable or unreasonable), as well as T&C presentation (fully presented or expandable). Likening intensity to reasonableness, unreasonable T&C may be considered more intense due to their contents, as opposed to reasonable T&C being considered less intense, and as such a faster rate of habituation may be seen in instances where individuals are faced with unreasonable T&C. However, this is based on the key assumption that the T&C are read, which prior research has already demonstrated is often not the case.

Looking at the application of intensity to T&C presentation, based on readership slightly increasing when forced to scroll through T&Cs as opposed to ones in an expandable format, it may be inferred that fully presented T&C are perceived to be more intense, with expandable ones being less intense and therefore resulting in faster habituation. As such, the need to understand the extent of habituation behaviour across various stimuli conditions is necessary. This supports the need to examine both unreasonable and reasonable T&C, as well as expandable and fully presented T&C.

It is from the research discussed above that Research Question 2 has been developed:

RQ2: To what extent is habituation displayed in consumers' behavioral responses to T&C encounters in terms of (a) acceptance, expansion, and time spent reading; and is this impacted by (b) T&C presentation format, and (c) T&C reasonableness?

2.2.3 Research Question 3 - Behavioural Outcomes of Fairness Cues

Attempts to Improve T&C Behaviour. Literature has shown that consumer engagement through perceived empowerment in the context of online privacy plays a strong role in online trust (Dyke et al., 2007), and is consistent with consumer empowerment leading to increased outcome satisfaction (Wathieu et al., 2002). This section focuses on traditional methods to improve T&C behaviour.

There are three prominent papers in this space, with the most influential being that of Elshout et al. (2016), who tested a full spectrum of measures designed to improve T&C behaviour, namely shortening T&C, simplifying T&C, and introducing fairness cues. Plaut and Bartlett (2012) conducted something similar but presented an empirical study on T&C manipulating the element of control, allowing consumers to have some decision power over their T&C. Whilst not specifically related to T&C, research by Perrault and Keating (2018) focused on informed consent in a more general online social science research environment, and also attempted to improve readership behaviour.

Cues have been well-researched in a general online retailing context, utilising third-party assurance seals to represent overall quality of an online retailer (not T&C), including product quality, online security, and feedback (Ozpolat et al., 2013). Through 9000 shopping sessions with one retailer, *purchase intention* significantly increased from 2.9% to 5.3%. Considering the recommendations made by Elshout et al. (2016) for future research to include more visual representations, Perrault and Keating (2018) did so in their social science and informed consent research, an area that also is ripe with historically low readership. Manipulating the presentation of the consent forms using different visual aids such as line spacing, bullets, bolding and diagrams across seven variations (Perrault & Keating, 2018), resulted in a significantly greater number of participants who read or skimmed the form compared to a control form. Finally, the authors also found a significant positive correlation between the time spent on a consent form and comprehension.

A lot of the research of why consumers fail to read T&C falls from an underlying control belief; "that they cannot change the T&C anyway" (Elshout et al., 2016, p. 20); which is also indicative of a key characteristic of helplnessess in which outcomes are perceived to be uncontrollable, and as such actions futile (Thompson & Spencer, 1966). Elshout et al. manipulated T&C in two different experimental designs – the first of which focused on the shortening and simplification of T&C, and a second one which added fairness cues. Manipulating the length and difficulty of the content within T&C, the authors found that

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simplifying T&C resulted in better readership, a slight increase in understanding, and an improvement in attitude towards T&C (trust and satisfaction). It is important to note however that the way the authors measured this readership was in a self-report manner, which can be highly skewed. Furthermore, whilst *understanding* was measured using a comprehension test, it was also combined again with a self-reported difficulty survey. It was also found that when forced to scroll through a T&C before being able to click continue, readership increased. It could be argued here that any readership gains were simply the result of skim glancing sentences whilst scrolling and may not have been retained or properly processed in the consumer's mind (Elshout et al., 2016).

The first type of cue introduced by Elshout et al. (2016) was focused on being an indicator of the "reading cost", that is, the duration it would take to read a set of T&C – and was found to increase readership from 9% to 20% by breaking down some pre-conceived notions that consumers commonly have in the extreme length of T&C (Elshout et al., 2016). It is critical to note here that this increase in readership was not measured by time spent or comprehension, rather by the opening or expansion of T&C.

The second type of cue used was a fairness cue representing a verified third-party analysis on the reasonableness of a set of T&C. The authors design of the cue was one which was representative of a National Consumer Organization, along with the statement *"these terms and conditions are fair (or unfair)"* (Elshout et al., 2016, p. 7). The addition of these cues in a shopping environment was shown to significantly increase trust, as well as purchase intention A key limitation of this research was that it did not gather any time data when presenting participants with the cues, and as such all results being self-reported theoretical ones only. This is used as a motivator in the current research to observe the impact of fairness cues in a way which has previously not been done. Furthermore, the current research also aims to address the authors future recommendations of investigating the effect of cues on readership levels. Fairness cues are also used based on the previously mentioned rational choice decision-making paradigm (Korobkin, 2003), as an attempt to try and break the idea that the expected costs of reading T&C outweigh the expected benefits, by lowering the costs of reading T&C.

Non-Readership Beliefs. Many studies throughout T&C literature have found many common primary beliefs for non-readership by consumers. Ones relevant to the current research include:

1) T&C being too long and too time-consuming (Olson & Olson, 2003; Plaut & Bartlett, 2012)

2) T&C are written in incomprehensible legalese (Hartley, 2000; Masson & Waldron, 1994; Plaut & Bartlett, 2012; Stolle, 1998)

3) T&C all say the same thing (Plaut & Bartlett, 2012; Stark & Choplin, 2010)

4) Vendors T&C are generally fair and reasonable (Gillette, 2004; Plaut & Bartlett, 2012)

5) No-one reads T&C anyway so why should I (Ben-Shahar, 2009; Elshout et al., 2016; Plaut & Bartlett, 2012; Stark & Choplin, 2010)

6) Consumers often view T&C more as a disruptive nuisance over anything else, and often prefer to just get to the goal outcome on the platform (Obar & Oeldorf-Hirsch, 2018)

7) Cost-Benefit analysis, with many consumers knowingly taking the risk of detriment, if they do not have to read the T&C (Elshout et al., 2016)

What emerges from looking at these beliefs together is a clear picture of how problematically T&C are presented in online formats and the accumulated negative reputation, suggesting the idea of how consumers engage with online T&C needs to be drastically rethought, or else will remain a persistent ethical issue.

Cue Justification. Non-readership does not necessarily reflect "an implicit surrender to cognitive limitations" and "a preference not to care", rather as Ben-Shahar (2009) outlines, it is suggested that consumers and participants do in fact care about understanding T&C, evident by their actions in wanting to manipulate, and learn more about their T&C (Plaut & Bartlett, 2012). The above beliefs act as driving motivators for why fairness cues were chosen as the tool to attempt to improve customer engagement with T&C. Fairness cues can save time by providing a trustworthy overview at a quick glance (addressing non-readership beliefs 1, 6, 7 above), at no additional expense to consumers, but with a wealth to gain such as higher ethical standards, more satisfied customers, and less exploitive terms. Presentation in a simple green or red colour format, along with easy-to-read icons can act as simplification of complex legal terms (non-readership belief 2) and can also allow for an individual and transparent representation of each individual set of T&C. That way even if the beliefs (non-readership

belief 3) that they all say the same thing holds firm, and (non-readership belief 4) they are generally fair, fall through, there is nothing to lose from a cue indicating reasonableness.

While the use of fairness cues in a T&C context remains a relatively new area of research, graphic labels have been used quite successfully for news verification labels and content moderation purposes on social media and news sharing sites (Mena, 2020; Morrow et al., 2020; Oeldorf-Hirsch et al., 2020). The effectiveness of using graphical cues and labels to flag false news and successfully reduce the intention to share false news in an online experimental setting (Mena, 2020) suggests hope for use in a parallel T&C context. In another experimental fact checking study, Oeldorf-Hirsch et al. (2020) interestingly discovered that while fact-check labels did not directly affect credibility perceptions of individual posts on which they were found, their presence significantly increased overall judgement of a site's quality. This has strong implications to the current research suggesting that while fairness cues may not affect any direct perceptions of a set of T&C, a benefit may be seen in other overall perceptions towards graphics cues or the sites on which they are displayed. Furthermore, the labels used by Oeldorf-Hirsch et al. (2020) were of a green and red nature, which a visual accompanied by a label. The success of these is used to contribute to the development of fairness cues used in this paper. Further support for the current research is highlighted by Morrow et al. (2020), who suggest that there is a strong need for further research into the behavioural effects of labels (i.e. fairness cues) on consumers. It was found that while information labels affected consumption of the associated social media post in theory by acting as a nudge device, behavioural effects require further research. This is something the current research directly aims to observe.

Looking at both the common privacy paradox (Nissenbaum, 2010) and rational choice decision-making paradigm (Korobkin, 2003; Perrault & Keating, 2018) in conjunction, non-readership appears to boil down to ability, knowledge, and lack of care. Elshout et al. (2016) present a strong argument for their introduction of fairness cues; this being *effortless awareness*. Effortless awareness in the above study was the goal of increasing awareness of the content, that is, reasonableness, without spending any additional effort (Elshout et al., 2016). The motivating factor for Elshout et al. (2016) in using fairness cues was to attempt to increase trust and purchase intention through making consumers aware of the T&C contents. Nevertheless, there remains the need to investigate the effects of fairness cues on key behavioural variables which may also impact the overall consumer T&C experience such as time, acceptance, and expansion rates. An important consideration to the effortless awareness

concept is the effect and implication on genuine T&C readership, with the concept suggesting the purpose is to educate consumers through no extra effort (Elshout et al., 2016).

As Thompson and Spencer (1966) outline, any response decrement caused by habituation such as time must show some stimulus (T&C) specificity or generalisation. This is key for the current research which aims to introduce fairness cues; to intensify the original stimulus, attempt to lessen the behavioural response decrement, and break stimulus generalisation. Breaking habituation, that is, dishabituating, is achieved when presenting a different stimulus (fairness cues) results in an increase of the decremented response (time spent) to the original stimulus (T&C) (Thompson & Spencer, 1966).

It is this idea of dishabituation which is used as logic for the current research's argument in discovering habituation in consumer T&C encounters and using fairness cues to act as deviants to the regular stimuli (standard, complex online T&C). It is vital to acknowledge the possibility however of habituation remaining unbroken, with consumers also habituating across cue encounters as well due to stimulus generalisation. This is also acknowledged by Elshout et al. (2016), with future research suggesting investigating whether any improvements because of fairness cues still hold if it were to become the norm in every online T&C encounter. These stimulus generalisation issues are discussed in section 7.3.2. However, in such instances even if physical behaviour such as time spent and readership does not improve, consumers can still be made aware and informed at no extra cost – which may have alternate perceptual outcomes in engagement, control, confidence in fairness, and helplessness.

It is from the research discussed above that Research Question 3 has been developed:

RQ3: Do fairness cues impact behavioural engagement with T&C; as reflected in (a) the time spent reading T&C encounters, (b) self-reported readership, and (c) acceptance rates?

2.2.4 Research Question 4 – Perceptual Outcomes of Fairness Cues

The following section discusses various outcomes of which the effect of fairness cues on will be examined. These are perceptual self-reported engagement, perceived control, confidence in fairness, and helplessness. Engagement has been shown to be improved throughout literature using traditional methods, however, has never been examined specifically in the context of using fairness cues. Control and decision delegation are important to understand in how cues can assist consumers with difficult decisions which they may not know how to best approach, by delegating the decision process, that is, the evaluation of how

reasonable T&C are, to fairness cues. Confidence in fairness is essential in understanding the effects of fairness cues across multiple encounters, due to confidence being based off past experiences. Lastly, the effects of fairness cues on helplessness also need to be considered due to the prevalence of helpless non-readership beliefs.

Engagement. The current research aims to examine the effect of fairness cues on engagement (scale measure), as it has been widely shown that engagement with T&C is typically low (Bakos et al., 2014; Fiesler et al., 2016; Obar & Oeldorf-Hirsch, 2018; Perrault & Keating, 2018; Plaut & Bartlett, 2012). As discussed above in the traditional methods section, various research has successfully increased engagement with T&C by manipulating perceptions of control (Plaut & Bartlett, 2012), simplification of terms, bolding, and shortening (Perrault & Keating, 2018). However, despite Elshout et al. (2016) finding improvements in expansion rates, trust, and purchase intention, the impact of fairness cues on self-reported T&C engagement has not been reported in literature. The current research endeavours to improve engagement with fairness cues by building on research by Plaut and Bartlett (2012) which found that participants who were given the choice to choose a short version of T&C (as opposed to a long version) were more likely to engage in a deliberate assessment of the T&C. This suggests that speed and efficiency of any potential T&C review remains key (Plaut & Bartlett, 2012), and again supports the need for effortless awareness (Elshout et al., 2016) using fairness cues.

Control. Moving towards the idea of control, Wathieu et al. (2002) make the very valid claim that consumers, despite desiring control, may not always know what is best for them at the times of decision. This is demonstrated by a study done by Benartzi and Thaler (2002) whereby investors preferred the portfolio chosen by a professional investor over their own, as well as another study by Iyengar and Lepper (2000) which showed that reduced choice sets made it easier for consumers to make decisions; and more satisfying ones at that. Iyengar and Lepper (2000) put this to the test by using a real-life grocery store environment, offering sampling booths to shoppers with either six, or 24 flavours of jam. Confirming the authors hypothesis, shoppers were in fact more *attracted* to the stall with 24, however only 3% of those at the 24-choice booth resulted in a purchase, as oppose to a surprising 30% from the six-choice booth. Interestingly, those who opted to purchase from a smaller choice set also reported greater subsequent satisfaction. The authors justify these findings by explaining the consumers tend to avoid extreme cases, and when decisions are too overwhelming, will resort back to basics (Iyengar & Lepper, 2000). This is shown all throughout literature, in that difficult decisions

can lead to consumers often facing internal conflict, resulting in deferred decisions, no decision being made at all, defaulting, or renewed searches (Dhar, 1997; Shafir et al., 1993). This suggests the strong need for any form of T&C aids to be as simple as possible for consumers, by offering a basic solution to the otherwise complex and intensive task of reading T&C. In this instance, this is done using fairness cues in the current research.

Decision Delegation. Understanding decision delegation behaviour is vital to the foundations of understanding why fairness cues have the potential to manipulate perceived control. There exists a wide range of literature within the decision delegation space, however each paper presenting slightly different findings or theories on factors which encourage and impede decision delegation. Aggarwal and Mazumdar (2008) outlined the need for more comprehensive research in this space as the majority of consumer decision making literature is in fact focused on contexts in which consumers themselves have to not only acquire, but process information to make purchase decisions (Aggarwal & Mazumdar, 2008).

Looking towards real experimental examples of decision delegation, one of the oldest studies in this field is by Feldman and Spencer (1965), who found that of all newcomers to a neighbourhood, 75% chose a physician based on their neighbours' recommendations. This notion of recommendations is supported by research which found that the majority of participants chose their life insurance policy solely based on others' recommendations (Formisano et al., 1982). Moving from recommendations towards delegation, an old study by Price and Feick (1984) found that 15% of participants, when faced with an information search task for a decision, delegated to an expert to choose on their behalf. This is similar research to Benartzi and Thaler (2002) who found that the majority of investors, when presented with predictions for the performance on a portfolio chosen by themselves, as opposed to the median portfolio chosen by their peers, opted for the median portfolio chosen by others.

Looking at decision delegation on a whole, it becomes clear that by virtue of low current readership rates, introducing fairness cues could act as a form of delegation from consumers to the cues. This is also possible due to a key indicator of helplessness being a desire for individuals to delegate decisions to others (Peterson, 1993), which if found to be true in the current research, supports the need to test fairness cues.

Multiple authors outline the ever-increasing range of products available in today's retail market despite research clearly showing there is a consumer demand for decision *simplicity* (Botti & McGill, 2006; Broniarczyk & Griffin, 2014; Johnson et al., 2012; Spenner & Freeman,

2013); in turn creating the demand for tools and aids to assist consumers through decision environments. Supporting previous findings in control literature (Dhar, 1997; Iyenger & Lepper, 2000; Shafir et al., 1993), Morrin et al. (2012) warn to keep any decision aids simple for increased decision satisfaction amongst low knowledge consumers, for example with a simple overall star rating, yet excluding any further detailed information on each of the choices, as this reduces perceived task difficulty. This is a key driving force behind the current research for the use of fairness cues, as they allow for simple representation of a potentially very complex analysis (for example, AI), and do not disrupt consumers (Elshout et al., 2016).

Broniarczyk and Griffin (2014) outlined some of the most common decision aid tools to be: preference learning tools, product filtering and comparison tools, recommendations, defaults, and choice delegation. The tool most applicable to the current research in the context of T&C is choice delegation, with elements of a recommendation tool. This can be implemented in the form of fairness cues in the curet alrent research. Some of the key benefits as previously discussed is the alleviation of cognitive trade-offs and removal of a lot of the decision-making process – whilst consumers still must accept or decline T&C, the research process on the fairness is completed for them. A shared downfall of decision delegation which also applies in the specific T&C case of this paper, taken from the "recommendations" tool, is the possible conflict if a recommendation (or in this case evaluation of fairness cue) strongly conflicts with a consumer's pre-held views or opinion. This is outside the scope of the current research, however, would be very worthwhile for future research to investigate.

Confidence in Fairness. An important outcome of adding fairness cues which needs to be considered is an individual's confidence in trying to evaluate the fairness of a set of T&C resulting from the addition of a cue. It is important to distinguish confidence from trust, which is based on morality and involves a judgement of values and intentions (Fife-Schaw et al., 2008); for example, in how trustworthy the fairness cues are, or the third-party responsible for evaluating the T&C. Confidence, on the contrary focuses more on a degree of confidence or certainty over past decisions or perceptions (Morony et al., 2013). If trust can be said to be morally based, then confidence can be looked at as performance based, working on beliefs of past experiences (Fife-Schaw et al., 2008). For example, based on multiple T&C encounters, confidence could be said to stem not from a singular trust in the fairness cue, however from repeated positive experiences, in which cues successfully alert a user to unreasonable terms which may not have otherwise been detected, or providing comfort in confirming terms are reasonable and not requiring review. The current research does also not concentrate on self-

efficacy, which focuses more on an individual's "belief to organise and execute the courses of action required to produce given attainments" (Bandura, 1977, p. 477). This refers to future-based actions, that is, an individual's belief that they can analyse T&C effectively, and falls on their own judgement, as opposed to confidence, which looks more at performance in past decisions.

Therefore, in the current research it is important to examine what impact fairness cues have on confidence in fairness. If fairness cues accurately represent the reasonableness of T&C, which by design is their purpose, then across multiple T&C encounters regardless of reasonableness, confidence in ability to evaluate fairness due to the presence of fairness cues may change.

Helplessness. Looking at *helplessness*, it can be defined as "the perception that one's actions do not and will not affect one's outcomes; that actions are futile because outcomes are uncontrollable" (Ashforth & Saks, 2000, p. 317; Peterson et al., 1993). It is also linked with the idea of *learned helplessness*, which is built on the model that it comes from instances where attempts to regain *control* (through exposure to uncontrollable outcomes) are abandoned if they prove to be futile (i.e., helpless) (Silver et al., 1982; Teodorescu & Erev, 2014). In the context of the current research, this can be likened to the way people abandon attempts to interrogate T&C to control risk, since these risks are perceived to be uncontrollable if they want to use a service, as well as often having low historical losses from not interrogating T&C previously.

Teodorescu and Erey (2014) have shown that learned helplessness may be driven by the prevalence of exposure people have to rewarding outcomes, rather than just a lack of controllability per se. For example, in the context of T&C, individuals are not rewarded for reading T&C content; in that outcomes are constant when they click accept, whether they read or not, and as such a sense of helplessness develops. Accordingly, if a different outcome occasionally occurred as a result of reading or being exposed to T&C content, such as an obvious avoidance of risk upon clicking decline, or perhaps exposure to negative consequences as a result of click accept, lesser helplessness should be experienced.

The current research examines these issues further, including how to better engage consumers with T&C information. This is beneficial in guiding this research, as it may be that helplessness is reduced by fairness cues, because people are implicitly rewarded for clicking decline when they have been advised a risk is present (i.e., they know they have avoided risk), or for clicking accept when they have been advised there is no risk.

Peterson (1993, p. 292) outlines prototypical helpless behaviour to be quite social in nature; and due to the "psychological state in which individuals expect their efforts will be ineffective and become more passive", can have an overlap with interpersonal dependency. This is evident through some key behaviours such as: not doing things alone, delegating decisions to others and using other people as support crutches (Peterson, 1993). Given the dependent nature of helplessness, and a preference to delegate decisions, not only can a moderate to high cue reliance be expected, but also shows the need to explore how fairness cues impact feelings of helplessness.

As such, reviewing the above constructs presents strong support suggesting the suitability of fairness cues in alleviating and addressing current T&C non-readership beliefs and behaviours. This demonstrates the need to examine the effects of fairness cues on engagement, perceived control, confidence in fairness, and helplessness. It is from the research discussed above that Research Question 4 has been developed:

RQ4: Do fairness cues impact perceptions of T&C; namely (a) T&C engagement, (b) perceived control, (c) confidence in fairness, and (d) helplessness.

2.3   SUMMARY, CONCEPTUAL FRAMEWORK AND IMPLICATIONS

Reviewing the above literature review outlines several gaps and recommendations made within literature, which are used to outline aimed theoretical and practical contributions.

Habituation has been defined in psychology literature, however, has not been observed in a T&C specific environment before. The current research aims to observe and examine the presence of habituation in participants when faced with a simulated T&C environment. As Plaut and Bartlett (2012) identify, T&C beliefs can greatly impact readership, suggesting that in this paper the presence or absence of fairness cues may be used to manipulate various beliefs. Consumers often believe that the time necessary to fully understand T&C is overwhelming (Hartley, 2000; Masson & Waldron, 1994; Plaut & Bartlett, 2012; Stolle, 1998), supporting the need for effortless awareness through fairness cues. Therefore, Korobkin's (2003) rational choice decision-making paradigm is also used to support the use of fairness cues to attempt to lower the expected costs of reading T&C below the expected benefits. Despite the many calls for the inclusion of visual presentation formats of T&C (Elshout et al., 2016; Perrault & Keating, 2018), only one paper by Elshout et al. (2016) has studied the inclusion of visual graphics cues through self-reported measures. Furthermore, as Morrin et al. (2012) warn, decision aids should be kept as simple as possible for increased satisfaction amongst low

knowledge consumers – something that in the current research is done through using fairness cues as a proxy for more complex background analysis.

It is from this existing literature, that the current research aims to make a valid contribution by testing the above recommendations of focusing on manipulating consumers perceptions during online T&C experiences using fairness cues and investigating the effects this can have on readership and engagement. The current research also aims to contribute to literature by expanding literature surrounding the use of visual graphics in aiding consumers in T&C environments, by measuring observable outcomes such as times per T&C, self-reported readership, acceptance and rejection rates, and cue reliance; as well as subsequent levels of engagement, perceived control, confidence in fairness, and helplessness.

2.3.1 General Research Questions:

In summary this has led to the creation of the following research questions.

RQ1: Is the acceptance behaviour and time spent reading T&C significantly affected by the (a) reasonableness and (b) presentation format of T&C?

RQ2: To what extent is habituation displayed in consumers' behavioral responses to T&C encounters in terms of (a) acceptance, expansion, and time spent reading; and is this impacted by (b) T&C presentation format, and (c) T&C reasonableness?

RQ3: Do fairness cues impact behavioural engagement with T&C; as reflected in (a) the time spent reading T&C encounters, (b) self-reported readership, and (c) acceptance rates?

RQ4: Do fairness cues impact perceptions of T&C; namely (a) T&C engagement, (b) perceived control, (c) confidence in fairness, and (d) helplessness.

2.4 THE CURRENT RESEARCH

The following research presents two primary studies each prefaced with a respective pretest. Pretest 1 examines the suitability of stimulus items used in Study 1 and Study 2. This pretest looks at participants perceptions of 18 different clauses that may typically be found in T&C, of which ten were designed to be unreasonable, and the other eight reasonable. The purpose is to determine and verify that unreasonable clauses are significantly less reasonable than reasonable clauses; and is used to determine the four *most* unreasonable clauses. These are then used in any unreasonable conditions in Study 1 and Study 2. Unreasonable clauses

were developed to fit specific criteria of clauses which are described as problematic in a real-world scenario (de Jong et al., 2012).

Study 1 tests RQ1 as well as RQ2, by examining acceptance and readership behaviour on T&C with varying reasonableness, as well as observing patterns of habituation behaviours across multiple T&C encounters, manipulating both reasonableness and presentation format of T&C. Participants are asked to complete a series of seven tasks, each prefaced with a set of T&C. Participants either receive seven, all reasonable T&C, or four unreasonable T&C mixed in with three reasonable T&C.

The second pretest aims to confirm the suitability of another stimulus item used in Study 2. This is in the form of visual fairness cues, with participants asked to rank their perceptions of usefulness, clarity, and suitability. This is to confirm cues accurately communicate the reasonableness of T&C, due to being created bearing no resemblance to any easily identifiable logos.

Study 2 addresses RQ3 and RQ4, by examining the various impacts of adding fairness cues to T&C on engagement behaviour as well as perceptions of T&C. This is conducted in a similar fashion to Study 1, in which participants are asked to complete a series of seven tasks each prefaced with a set of T&C. Participants are either given fairness cues or not; and are also segregated by the reasonableness of the T&C they are faced with.

Chapter 3: Pretest 1 (Clauses)

This pretest was designed to test the suitability of various unreasonable and reasonable T&C clauses, for use in the primary studies. Unreasonable clauses were created in line with literature suggesting certain criteria (section 3.1.2) for what constitutes an unreasonable clause, specifically those problematic in a real-world scenario for existing companies (de Jong et al., 2012). The aim was to confirm whether perceptions of unreasonable clauses were significantly less reasonable than reasonable clauses, to allow for realistic T&C in later use.

3.1 METHODOLOGY AND RESEARCH DESIGN

3.1.1 Participants

Fifty MTurk participants completed a pretest, which was used to confirm the suitability of T&C material for use in the following studies. This was done to achieve a minimum sample after cleaning of 30, as recommended by Perneger et al. (2015) for pretests of psychometric questionnaires and instruments. Participants were required to be adults over the age of 18, living in the US and regular users of the internet. Participants took part in the online study using Qualtrics software. Participants received standard monetary incentives in line with MTurk payment protocols (i.e., US$0.50 for the completion of the pretest), and payment was made through the MTurk platform. Power analysis for matched pair t-tests was considered, assuming a confidence interval of 95%, that is, a problem prevalence of 5%; a power of .80, and a medium effect size (d = .50). Based on these assumptions, power analysis using G-POWER suggested a sample size of $n = 34$ (Cohen, 1988; Perneger et al., 2015). Therefore, in this instance a sample of 30 following data cleaning was deemed adequate.

3.1.2 Stimulus

Clauses. For the creation of "unreasonable" clauses, terms were derived to fit four specific criteria. These choices of clauses also align with those described as problematic in a real-world scenario for existing companies (de Jong et al., 2012). In total ten unreasonable clauses were created and tested; detailed in Appendix A, of which the four most "unreasonable" clauses were used in the final study. Eight reasonable clauses were also taken from the generic T&C template (Figure 4) to avoid demand effects, and not highlight to participants which

clauses were unreasonable by design. Only 8 reasonable clauses were tested as this was the limit of how many unique reasonable clauses the generic T&C template contained, and all clauses tested were to be contained to the realm of the full T&C set. This also allowed for the testing of significant differences between the unreasonable and reasonable clauses. This was important as later studies present participants with seven tasks, each prefaced with a set of T&C, in which manipulating reasonableness is a key factor.

The criteria for development were as follows:

a) Unfair/Unreasonable

b) Possible, but unrealistic for a research study

c) Not likely to be accepted

d) Typical of common clauses found in T&C of various web services, but which would be considered unreasonable for a research study

3.1.3 Measurements

General Demographic. Prior to each study, general demographics questions were asked including birth country, age, gender, highest level of education and primary language spoken at home. These questions were asked to ensure that all questions were accurately interpreted by participants as intended, and to avoid any language barriers to comprehension, which may ultimately skew results. Age was also asked to ensure that no minors participated. Participants were also asked what device was used to complete the survey, ensuring that only desktop or laptop computers were used due to formatting of the game tasks.

Reasonableness Perception. A three item 7-point semantic differential purpose-developed measure was asked in conjunction with viewing each individual T&C clause, detailed below in Figure 1.

Figure 1.

Clause Reasonableness Pretest Measures

1) Please review each of the following sample Terms & Conditions clause and indicate your perceptions.

   You should indicate your responses as if you encountered the clause as part of a simple research task like the current one, involving simple information rating tasks.

   Please read the following clause. Consider how you would perceive it if you encountered it as part of Terms & Conditions for a simple research task like the current one, involve a simple information ratings task.

   - Unfair / Fair

   - Unreasonable / Reasonable

   - Unrealistic / Realistic

Likelihood to Accept. A single item 7-point semantic differential purpose-developed measure was asked in conjunction with viewing each individual T&C clause, detailed in Figure 2 below.

Figure 2.

Clause Likelihood Pretest Measures

1) If you encountered this clause in the current research study (the one you are doing right now), how likely would you be to accept?

   - Unlikely / Likely

3.1.4 Procedure and Timeline

The pretest was conducted online using Qualtrics software. After ensuring participants were not on a mobile device, general demographic variables were measured. Participants were asked to rate 18 T&C clauses (in a randomised order) regarding fairness, reasonableness, and their likelihood to accept if encountered as part of T&Cs. Eight of these were ones the research team considered reasonable, and the other ten unreasonable. The goal of the pretest was to determine a) the four most unreasonable clauses, and b) whether they offered a significant difference between the reasonable and unreasonable clauses. This task took about 10 minutes, and the pretested materials were then used in the subsequent studies.

External Validity. One way in which external validity was upheld was by testing the entire paragraph containing an unreasonable clause in the pretest, rather than just the short phrase. This was done as in the primary studies; participants were also faced with a full paragraph.

3.2   ETHICS

All pretests and main studies were approved by the Office of Research Ethics and Integrity at Queensland University of Technology (QUT) and complied with the National Statement on Ethical Conduct in Human Research (Ethics Approval Statement number 2000000423).

In line with guidelines for conducting ethical research, consent was ensured by providing every participant with a Participant Information and Consent Form (PICF) at the beginning of their survey, which informed them of the nature of the study, as well as the way in which their information was to be processed and a summary of their upcoming tasks. For the main studies, participants were also advised that each task contained its own T&C page that they were expected to read, and that they could decline if they did not wish to take part (while still receiving their base payment). They were also alerted to the fact that they could withdraw at any point during the study by closing their browser or simply discontinuing, and that all tasks were optional. Informed consent was confirmed explicitly using a "next" button, with completion of the survey implying consent. Furthermore, at the end of the study participants received a page providing additional information about the study as a way of debriefing them and thanking them for their involvement. Participants also had the opportunity to withdraw before submitting, once they were informed about the research upon debriefing. Lastly,

feedback was offered to participants who contacted the research team, as was noted on the PICF. A summary of research outcomes was also provided to participants in lay language.

Another important ethical consideration that was addressed throughout this research was complying with data privacy rules. Data were completely anonymised, with no names or key identifying features recorded, or analysed. Confidentiality was also upheld using appropriate data storage methods, of which none were publicly accessible, such as QUT's Research Data Storage Service. A full copy of the PICF for Pretest 1 and ethics approval details can be found in Appendix B.

3.3   RESULTS

Data from the pretest was analysed using IBM's SPSS version 27. The follow section outlines basic cleaning and assumptions made, with results determining which "unreasonable" clauses were to be used for the following primary four studies. Data were reviewed for cleanliness, with several responses being found invalid. Factors that led to responses being rendered invalid, and done so in an ethical manner, included: spam sentences in open text boxes, identical repetitive answers – indicative of careless responses (Meade & Craig, 2012), primary spoken language not conforming to requirements, and the Qualtrics code not matching in MTURK – indicating they had stumbled onto the link through the wrong channel and were not targeted participants. The final sample size for this pretest study was 30 participants and followed a within-subjects design.

3.3.1 Assumption Testing and Descriptive Statistics

Means, standard deviations, and internal consistency measures for both dependent variables are reported below in Table 1. Cronbach's alpha (α) was calculated to allow for a measure of the internal consistency of the perceived reasonableness variable. The internal consistency of the reasonableness measure was good ($\alpha > .80$) (DeVellis, 2017), and as such the composite measure was created.

Table 1.

Means, Standard Deviations, and Internal Consistency of all Variables in Pretest 1

Variable	Mean (*SD*)	α
Likelihood to Accept	3.63 (.67)	--
Reasonableness[1]	3.83 (.76)	(.88)

Note. Cronbach α reported in parentheses. Double dash (--) represents single item measure.

Both variables were also tested for normality. Data were first explored by looking at the 95% confidence interval for the mean, as well as ensuring that critical values were within tolerance, such as skewness $\leq\pm2.00$ and kurtosis $\leq\pm7.00$ (Field, 2013). Q-Q plots also did not give any strong indications of non-normality (non-linearity), with plots following a straight line with no major deviations. Furthermore, Shapiro-Wilk tests, which are deemed more appropriate for small sample sizes (<50) than the Kolmogorov-Smirnov test (Ghasemi & Zahediasl, 2012), suggested normal univariate distributions in the greater parent population. It is important to note that normality tests usually have relatively low power in small sample sizes (<100, as with large samples, tests are much more likely to be normally distributed even with violations of normality – due to approaching the central limit theorem (Field, 2013)

3.3.2 Clause Results

Following reliability analysis, the composite reasonableness variable was used to rank the clauses with the highest and lowest reasonablness scores based on their means along with the likelihood to accept measure. As is seen below in Table 2, both return the same ranking of clauses.

---

[1] The mean reasonableness of all 18 clauses irrespective of individual "reasonableness"

Table 2.

Ranking of Clause Reasonableness Pretest 1

Likelihood to Accept Mean (*SD)*		Reasonableness Mean (*SD)*	
Best	**Worst**	**Best**	**Worst**
Clause 13 – 6.03 (1.56)	Clause 1 – 1.17 (0.53)	Clause 14 – 6.10 (1.34)	Clause 1 – 1.38 (0.71)
Clause 12 – 6.03 (1.40)	Clause 4 – 1.50 (0.90)	Clause 12 – 6.07 (1.24)	Clause 9 – 1.81 (1.71)
Clause 14 – 6.00 (1.49)	Clause 9 – 1.60 (1.50)	Clause 13 – 6.05 (1.50)	Clause 4 – 1.90 (1.26)
Clause 18 – 5.87 (1.31)	Clause 5 – 1.67 (1.09)	Clause 18 – 5.85 (1.33)	Clause 5 – 1.99 (1.35)
Clause 15 – 5.60 (1.59)	Clause 7 – 1.70 (1.56)	Clause 15 – 5.60 (1.55)	Clause 2 – 1.99 (1.54)
Clause 16 – 5.33 (1.63)	Clause 2 – 1.73 (1.53)	Clause 16 – 5.30 (1.65)	Clause 7 – 1.99 (1.65)

Results suggest that the unreasonable clauses to be used for the primary studies were clause 1, clause 4, clause 5, and clause 9. Reasonable clauses were not required to be chosen as they represented various sections of the reasonable T&C template, into which unreasonable clauses are added in the necessary conditions. Paired samples t-tests in Table 3 were used to confirm that each of the four lowest scoring clauses were significantly different in reasonableness compared to the mean reasonableness of the "reasonable clauses".

Table 3.

Paired Samples T-Tests Comparing Individual Unreasonable Clauses to Mean of Reasonable Clauses

Reasonableness	Mean (*SD)*	Mean (SD) Difference	t	*p*	Cohens d
Reasonable Clauses	5.49 (1.01)				
Unreasonable Clause 1	1.38 (0.71)	4.11 (1.18)	19.00	< .001***	1.18
Unreasonable Clause 4	1.90 (1.26)	3.59 (1.44)	13.69	< .001***	1.44
Unreasonable Clause 5	1.99 (1.35)	3.50 (1.75)	10.97	< .001***	1.75
Unreasonable Clause 9	1.81 (1.71)	3.68 (1.92)	10.53	< .001***	1.92

Note. Paired samples between Mean "Reasonable Clauses" Reasonableness, and Clauses 1, 4, 5, and 9

$* p < .05, ** p < .01, *** p < .001$

Results showed that perceptions of reasonableness for clauses 1, 4, 5, and 9 were all were significantly lower than the mean perception of all reasonable clauses, with large effect sizes

(>.80) (Cohen, 1988) suggesting suitability for Study 1. The final unreasonable clauses chosen are detailed below in Table 4.

Table 4.

Selected Unreasonable Clauses

1	Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), as part of the Research Task completion You agree that the Research Team may or may not require that You supply Your fully functional social media log-in details, including passwords, and provide access to Your stored personal photographs on any mobile devices You own, such as mobile phones and tablet computers. Any requested log-in details and photographs will be confirmed by the Research Team as valid and accurate. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.
4	Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), completion of the upcoming Research Task may or may not require You to uninstall any web browsers on Your computer and install an alternative web browser chosen by the Research Team. This may disrupt Your normal computer functioning. Prior to the uninstallation process You may be asked to back-up any personal data on Your computer to prevent loss. You should not commence this process until instructed. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.
5	Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), the Research Task completion may or may not involve You granting permission to the Research Team to access recent private messages sent via email communications to Your peers. The Research Team will not alter Your messages but may review them to evaluate Your information processing behaviours. This applies

	to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.
9	Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), the upcoming Research Task may or may not require that You load non-temporary web-traffic tracking software to Your computer or mobile device. This software may enable the Research Team to monitor websites You visit after Research Task completion to help form an understanding of Your information processing behaviours. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

3.4   DISCUSSION

The first study presented in this thesis acted as a pretest, examining survey instruments used in the later main studies; and included participant perceptions of various both reasonable and unreasonable clauses. Its purpose was to determine the four most unreasonably perceived clauses by validating a significant difference between these and the reasonable clauses.

Pretests are universally acknowledged to be one of the most important components to determine whether an instrument or questionnaire does what it is supposed to do and will work as desired (Collins, 2003; Presser et al., 2004). The questionnaire aimed to evaluate participants perceptions of clause reasonableness took form in a conventional pretest. A minor limitation to this was the sample size, which following cleaning was slightly underpowered (N = 30) when compared to the power analysis recommendation (N = 34) (Cohen, 1988; Perneger et al., 2015).

The results from comparing the clauses led to clauses 1, 4, 5 and 9 being chosen as the most significantly unreasonable ones, as well as least likely to be accepted. The reason this was important for the primary studies was that since Obar and Oeldorf-Hirsch (2018) showed that 98% of participants missed "gotcha-clauses", in the instance where a participant does in fact read it (due to variables introduced in Study 2 designed to increase readership), it is important that it is in fact perceived to be unreasonable. This consideration is critical to allow instances in later studies where reasonableness is the sole experimental manipulation in an otherwise

neutral environment, to serve as a baseline to support the argument that it is the valid reason for any changes seen in the dependent variables. Furthermore, significant differences were important as reasonable clauses may not be on the opposite end of the spectrum as unreasonable ones, that is, where an unreasonable clause benefits the service/goods provider, a reasonable clause may more so be tolerable and mutually beneficial, as opposed to benefiting only the end-user and causing the provider to be at a disadvantage.

Chapter 4: Study 1

Study 1 aims to understand the extent of non-readership behaviour in the context of online T&C, as well as test for the presence of habituation across T&C encounters, addressing RQ1 and RQ2, respectively. It follows a series of seven short tasks and games, each preceded with a set of T&C. To answer RQ1, results would expect to show whether any reasonableness (unreasonable, reasonable) or presentation (fully presented, expandable) condition leads to a difference in time spent per T&C encounter, as well as acceptance or rejection of the T&C. To answer RQ2, results would demonstrate whether time spent, expansion, and acceptance rate across T&C encounters follow any type of pattern, and whether the pattern is impacted by T&C presentation format or T&C reasonableness.

4.1 METHODOLOGY AND RESEARCH DESIGN

The research approach used for this study was quantitative and followed a 2 x 2 between-subjects design, using an experimental methodology. The independent variables were the T&C reasonableness and T&C presentation format. T&C reasonableness was operationalised by presenting participants with either seven reasonable T&C, or a randomised mixed set of seven T&C in which four contained unreasonable terms as verified in the pretest. A mixture of reasonable clauses was included in the unreasonable conditions to avoid demand effects stemming from 7 consecutive unreasonable T&C and maintaining external validity. A possible issue of having all 7 consecutive T&C as unreasonable is that discovery of an unreasonable T&C may lead to a full interrogation of all remaining T&C. T&C presentation was operationalised by presenting the terms either in full, requiring participants to scroll the entire length before being able to click to proceed, or in an expandable format, in which a preview of a few sentences is shown to participants, upon which the option to expand and view the full terms exists, or simply click and proceed. The dependent variables were self-reported readership, measured using post-test scale items, and acceptance rates, expansion rates, and times spent per encounter, measured through recording participant behaviour. Variables are outlined below in Table 5.

Table 5.

Variables Study 1

Independent	Dependent
- T&C reasonableness (reasonable vs unreasonable) - T&C presentation (expandable vs full)	- Self-reported readership - Acceptance rates - Expansion rates - Time spent per encounter

Figure 3 below details the factorial design of Study 1 manipulating the Presentation of T&C (Fully Presented vs Expandable), and Type of T&C (Reasonable vs Unreasonable).

Figure 3.

Factorial Design Study 1 (2 x 2)

T&C Presentation

		Fully Presented	Expandable
T&C Type	Reasonable	7 Reasonable, Fully Presented T&C	7 Reasonable Expandable T&C
	Unreasonable	4 Unreasonable and 3 Reasonable, Fully Presented T&C	4 Unreasonable and 3 Reasonable, Expandable T&C

4.1.1 Participants

Participation in Study 1 was on an incentivised, voluntary basis, and was conducted through the online platform Amazon MTurk. Participants were required to be adults over the age of 18, living in the US and regular users of the internet. 85 participants took part in the online study using Qualtrics software. They received a nominal incentive (US$2.50) in line with standard MTurk payment protocols. This sample was deemed appropriate since many

MTurk participants are likely to frequently encounter T&C pages as part of the online studies they complete. The last criterion for selection was that the study required completion on a desktop or laptop computer, due to incompatibility with mobile devices stemming from the nature of the psychological "game" tasks. Participants who completed the pre-test previously were unable to partake in Study 1. A full copy of the PICF for Study 1 can be found in Appendix C.

The primary reason for recruiting participants online through MTurk was due to its reputation of being a popular tool for scholars to recruit relatively large, yet representative samples for academic research, in a much cheaper manner than student samples or research firms (Loepp & Kelly, 2020). Despite there being concerns for the validity and integrity of using online strangers to complete research surveys, Loepp and Kelly (2020) found that project integrity is not compromised by using the wider pool of regular participants in academic studies. This confirms that the MTurk pool is at least equally representative as college student samples, but also confirms that there is no significant different between paying more for regular participants and *master* participant, who simply are more experienced on MTurk, have completed more tasks historically, and cost a premium (Loepp & Kelly, 2020)

The primary analysis conducted was paired samples t-tests for detection of habituation behaviour (across T&C encounters). Power analysis for paired-samples t-tests was considered, given an alpha of .05, power of .80, and a medium effect size (d = .5). Using G-POWER, based on these assumptions a sample size of $n = 34$ was suggested (Cohen, 1988). In this instance a sample of 77 is easily adequate and combined with an alpha of .01 achieves a power of .95. Power analysis for chi-squared tests was also considered, and assuming a medium effect size, alpha of .05, power of .80 and 1 degree of freedom, a sample size of 88 is suggested.

4.1.2 Stimulus

Participants were presented with a series of seven short psychology game tasks, each preceded by a T&C page. To fill in the space required for a task following each of the seven T&C participants were faced with, short 1–2-minute psychology-based game tasks were used, with the intention of ensuring participants remained attentive and alert. These were all tasks produced by Professor Gijsbert Stoet and distributed for free, in non-commercial and research purposes on https://www.psytoolkit.org/ (Stoet, 2020). The specific tasks chosen were: Stroop Task, Mental Rotation Task, Simon Task, N-Back Task, Corsi Task, Lexical Decision-Making Task, and a Go-NoGo Reaction Task. Results from these specific games were not recorded as

these were not of interest and were merely embedded into the survey. Games were not made skippable, with a timer determining when the "next" button became available.

Generic Terms and Conditions Template. Generic T&C were created and adapted using an online T&C generator to form the basis for these studies and was done so via https://app.termsfeed.com/wizard/terms-conditions (TermsFeed, 2020). The generic set of T&C (Figure 4 below) was tailored to each individual research task (Appendix D), to ensure that the T&C were slightly different for each task. This was done by including a paragraph that specifically references the task, giving participants a reason to read each T&C page even after having viewed previous ones earlier. References to "XXX" in the below T&C template in Figure 4 refers to task specific names which were replaced for each respective task.

Figure 4.

Generic T&C Template

TERMS AND CONDITIONS

The following Terms and Conditions apply to the upcoming individual Research Task only. The Participant Information and Consent Page provided at the outset of this project remains in effect and is the authoritative information source on the current research project. Please read the following Terms and Conditions carefully as they apply to the individual upcoming individual Research Task.

Definitions

For the purposes of these Terms and Conditions:

- **Agreement** refers to these Terms and Conditions.
- **Participant Information and Consent Page** refers to the information and consent summary provided at the outset of the project overviewing your general participation involvement, risks and benefits.
- **Researcher** (referred to as either "the Researcher", "Research Team", "We", "Us" or "Our" in this Agreement) refers to the research team responsible for this study.
- **Research Task** (also referred to as "Task") refers to the upcoming research activity to be completed.
- **Terms and Conditions** (also referred to as "Terms") are these Terms and Conditions that form the agreement between You and the Researcher regarding completion of the Research Task.
- **Third-party Social Media Service** means any services or content (including data, information, products or services) provided by a third-party that may be displayed, included or made available during the Research Task.
- **You** (with derivatives including "Your") refers to the individual accessing or taking part in the Research Task, or interacting with the Researcher.

Acknowledgement

These are the Terms and Conditions governing the intended completion of the upcoming Research Task only and the agreement that operates between You and the Researcher. These Terms and Conditions set out the rights and obligations of parties regarding the Research Task. Your access to and completion of the Research Task is conditioned on Your acceptance of and compliance with these Terms and Conditions. You should Decline this Agreement if You do not agree with these Terms and Conditions in full.

By accessing or completing the Research Task, You agree to be bound by these Terms and Conditions. If You disagree with any part of these Terms and Conditions then You may choose to not complete the Research Task and You should decline these Terms and Conditions.

Task Overview

The Research Task to be completed is known as a XXX Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves XXX. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming XXX Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Links to Other Websites

Our Research Tasks may be derived from and contain links to third-party web sites or services that are not owned or controlled by the Researcher. The Researcher has no control over, and assumes no responsibility for, the content, privacy policies, or practices of any third-party web sites or services. You further acknowledge and agree that the Researcher shall not be responsible or liable, directly or indirectly, for any damage or loss caused or alleged to be caused by or in connection with the use of or reliance on any such content, goods or services available on or through any such web sites or services. We strongly advise You to always read the terms and conditions and privacy policies of any third-party web sites or services that You visit.

Termination

We may terminate or suspend Your participation immediately, without prior notice or liability, and without limitation if You breach these Terms and Conditions. Upon termination, Your right to take part in further Research Tasks with the Researcher will cease. You will have no further obligations.

"AS IS" and "AS AVAILABLE" Disclaimer

Although every effort has been made to ensure a fully functioning Research Task, the Task is provided to You "AS IS" and "AS AVAILABLE" when accessed. Without limitation to the foregoing, the Researcher provides no warranty or undertaking, and makes no representation of any kind that the Research Task will meet Your functionality expectations, achieve any intended results, be compatible or work with any other software, applications, systems or services, operate without interruption, meet any performance or reliability standards or be error free or that any errors or defects can or will be corrected.

Severability

If any provision of these Terms is held to be unenforceable or invalid, such provision should be interpreted to accomplish the objectives of such provision to the greatest extent possible and the remaining provisions will continue in full effect.

Translation Interpretation

If these Terms and Conditions have been translated You agree that the original English text shall prevail in the case of a dispute.

Confirmation of Acceptance or Declination

If You do not agree to these Terms in full please click Decline. If You agree to these Terms in full please click Accept.

Reasonableness/Unreasonableness Manipulation. In instances where T&C were reasonable, the above generic T&C was displayed, with only changes made to specific task references (XXX). To manipulate the reasonableness variable to unreasonable, the above reasonable T&C were again used, however the "Accessibility" clause (heading four above in Figure 4) was replaced with the respective unreasonable clause, as outlined below.

Unreasonable Clauses. As discussed in the above pretest section, the final four clauses chosen were:

Figure 5.

Unreasonable Clause 1

Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), as part of the Research Task completion You agree that the Research Team may or may not require that You supply Your fully functional social media log-in details, including passwords, and provide access to Your stored personal photographs on any mobile devices You own, such as mobile phones and tablet computers. Any requested log-in details and photographs will be confirmed by the Research Team as valid and accurate. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Figure 6.

Unreasonable Clause 2

Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), completion of the upcoming Research Task may or may not require You to uninstall any web browsers on Your computer and install an alternative web browser chosen by the Research Team. This may disrupt Your normal computer functioning. Prior to the uninstallation process You may be asked to back-up any personal data on Your computer to prevent loss. You should not commence this process until instructed. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Figure 7.

Unreasonable Clause 3

Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), the Research Task completion may or may not involve You granting permission to the Research Team to access recent private messages sent via email communications to Your peers. The Research Team will not alter Your messages but may review them to evaluate Your information processing behaviours. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Figure 8.

Unreasonable Clause 3

> Depending on the research condition You are assigned to, and if allowable within terms and conditions of the platform you have been recruited through (e.g., Amazon Mechanical Turk), the upcoming Research Task may or may not require that You load non-temporary web-traffic tracking software to Your computer or mobile device. This software may enable the Research Team to monitor websites You visit after Research Task completion to help form an understanding of Your information processing behaviours. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

To counteract the possible case of deception towards participants, clauses were all worded in the hypothetical, and were also debriefed at the end of the study.

Randomisation of Unreasonable T&C. A key element of the studies was the condition in which certain participants faced seven TC&'s of which some were unreasonable (four). Four out of the seven T&C were unreasonable, using clauses outlined above. A potential confound to internal validity was order effect in the unreasonable group cases, due to the issue of a first observation possibly triggering a full interrogation of all remaining T&C. Order effect (Strack et al., 1991) was considered in the decision of whether the first T&C should be always unreasonable, or reasonable, due to the potential effects it can have for the remaining T&C. For unreasonable T&C conditions, task 1 always contained a reasonable T&C, with the remaining six tasks randomised in order, of which four were unreasonable.

4.1.3 Measurements

General Demographics. Prior to each study, general demographics questions were asked including birth country, age, gender, highest level of education and primary language spoken at home. Participants were also asked what device was used to complete the survey, ensuring that only desktop or laptop computers were used due to formatting of the game tasks.

Open-ended Decline Reasons: Prior to moving on to the next T&C after declining, participants were asked to state why they declined in an open-ended text form.

Acceptance Rates (DV). Acceptance rates were observed by measuring how many of the seven T&C encountered were accepted or rejected. Data were in binary format (declined/accepted) and tallied to give a summary out of seven per participant.

Expansion Rates (DV). Expansion rates were observed by recording whether any T&C presented to a participant in an expandable format, was expanded to view full conditions, or simply accepted or declined without expansion. Data were in a binary format (expanded/not expanded) and was tallied to give a summary out of seven for each participant in an expandable T&C presentation condition (half).

Time per Encounter (DV). Time was recorded for every T&C page participants encountered, and started from the time the T&C page was loaded, and finished when participants either accepted or declined to move forward. Time was measured in seconds.

Self-reported Readership (DV). The current research operationalised self-reported readership with a 1-item dichotomous Y/N measure. Wording was focused on whether participants had read *any* portion of any T&C they encountered.

4.1.4 Procedure and Timeline

Participants were presented with a QUT PICF at the start of the study. The study was composed of seven short simple information processing tasks/games from Psytoolkit (Stoet, 2020). The tasks were generally fun but challenging games that required people to focus. Each of the seven tasks were also preceded by a general T&C page that mimicked generic T&C-type content as outlined above. This enabled an examination of how participants processed T&Cs across the series of seven tasks. Participants were randomly assigned to one of the four experimental conditions (reasonableness x presentation). Half of all participants were presented T&C in a full-page display, whilst the other half saw a standard "click here to view T&C" type option. For half of each of these groups, the T&C for each of the seven tasks contained only reasonable clauses, whereas for the other half, the T&Cs for four of the seven tasks contained an unreasonable clause. This design was based on previous work by Obar and Oeldorf-Hirsch (2018), and all unreasonable clauses were hypothetical to avoid any concerns. Participants were also able to decline any of the T&C, whilst still receiving payment. Any T&C prefacing a task declined by a participant resulted in automatically skipping the associated task and moving on the next T&C associated to the following task. Prior to moving on to the next T&C after declining, participants were asked to state why they declined in an open ended text form.

After each of the seven short tasks, participants were asked to complete some items asking about their satisfaction with the task, as well as perceived difficulty, to maintain focus on the tasks themselves rather than the T&C.

4.2 RESULTS

Prior to results being analysed, basic data cleaning was conducted in the same fashion as in section 3.2 for the pretest results, however with a larger a focus on detecting content non-responsivity. A key feature that allowed this to happen was examining outliers within the times spent across encounters, with some abnormally large times suggesting participants left their computer for a while, and rendering their results invalid (Meade & Craig, 2012). After cleaning, the sample size for this study was 77 participants. Of the sample, 59% were male, with the average age of the sample recorded at 41.81 years ($SD = 11.31$). The highest level of education achieved was well represented, with the majority (40%) having completed a bachelor's degree.

The sample sizes as per cell in the 2x2 factorial design are outlined below in Table 6.

Table 6.

Sample Sizes Study 1

Condition (2x2)	Sample Size
Expand Reasonable	21
Expand Unreasonable	19
Full Reasonable	19
Full Unreasonable	18
Total	**77**

4.2.1 Assumption Testing and Descriptive Statistics

Means and standard deviations for each variable are reported below in Table 7. Internal consistency measures were not necessary as no composite scale items were used.

Table 7.

Means and Standard Deviations of all Variables

Variable	Mean (*SD*)
Time per Encounter (s)	16.33 (14.71)
Amount Accepted (/7)	5.74 (2.17)
Self-reported readership [a]	.75 (.43)
Amount Expanded (/7) [b]	4.43 (3.04)

[a] Dichotomous measure (1 – Yes, 0 – No). 75% of all participants reported reading any portion of any T&C. [b] Only relevant to applicable sub-groups with expandable T&C

All key variables which recorded continuous data were also tested for normality. Data were again explored by looking at the 95% confidence interval for the mean, as well as ensuring that critical values were within tolerance, such as skewness $\leq\pm2.00$ and kurtosis $\leq\pm7.00$ (Field, 2013). Q-Q plots also did not give any strong indications of non-normality (non-linearity), with plots following a straight line with no major deviations. Furthermore Kolmogorov-Smirnov tests suggested normal univariate distributions in the greater parent population (Ghasemi & Zahediasl, 2012).

4.2.2 Research Question Testing

RQ1: Is the acceptance behaviour and time spent reading T&C significantly affected by the (a) reasonableness and (b) presentation format of T&C?

Acceptance Rates. The mean T&C acceptance rate across all subgroups and encounters was 5.74 out of the 7 T&C encountered (*SD* = 2.17).

Table 8.

Means, and Standard Deviations of Acceptance out of Seven Encounters Across Conditions

	Unreasonable T&C	Reasonable T&C	Total
Expandable	5.95 (2.17)	5.53 (2.24)	5.73 (2.26)
Fully Presented	6.06 (1.83)	5.47 (2.34)	5.76 (2.10)
Total	6.00 (1.99)	5.50 (2.33)	5.74 (2.17)

To understand the T&C acceptance behaviour across the two independent variables (Reasonableness x Presentation), a two-way ANOVA test was conducted to examine the effect of presentation format and reasonableness on acceptance behaviour, presented above in Table 8. There was no statistically significant interaction between the effects of reasonableness or presentation on acceptance rates, $F(1,73) = .025$, $p = .875$. Looking at main effects, mean acceptance did not differ significantly across neither reasonableness ($p = .320$) nor presentation ($p = .954$).

Time Spent. To further understand the impact of T&C reasonableness and presentation format, the mean times spent on the T&C below in Table 9 were also examined. A two-way ANOVA test revealed no significant interaction effects between reasonableness and presentation on the mean time spent per T&C, $F(1,73) = 1.214$, $p = .274$.

Table 9.

Means, and Standard Deviations of Mean Time Spent Across Conditions

	Unreasonable T&C	Reasonable T&C	Total
Expandable	19.37 (23.28)	15.67 (10.86)	17.43 (17.73)
Fully Presented	13.20 (6.48)	16.97 (13.44)	15.14 (10.67)
Total	16.37 (17.34)	16.29 (12.01)	16.33 (14.71)

Looking at main effects, mean time spent per T&C did not differ significantly across neither reasonableness ($p = .991$) nor presentation ($p = .476$).

Self-reported Readership. Looking at self-reported readership levels, on average 75% of participants reported "reading *any* portion of the T&C" ($M = .75$, $SD = .43$). These results indicate that despite 25% of participants claiming to have not looked at a single portion of the T&C, most T&C encounters were still accepted (82%). Looking at reasons cited for why participants declined T&C, most stemmed from laziness (due to having a paid outcome regardless) (Loepp & Kelly, 2020); evident in reasons stated by participants such as "I've had enough of the tasks", or "because there is no penalty for declining, or skipping the task".

Summary of Results RQ1. Reviewing the above results show evidence that the reasonableness of T&C does not have an impact on acceptance rates, nor the time spent reading them. The presentation format also did not significantly impact the T&C acceptance rates and time spent. Possible reasons and implications are outlined below in the discussion.

RQ2: To what extent is habituation displayed in consumers' behavioral responses to T&C encounters in terms of (a) acceptance, expansion, and time spent reading; and is this impacted by (b) T&C presentation format, and (c) T&C reasonableness?

Time. Despite the presentation order of each task being randomised for participants, this order was tracked, and allowed for monitoring of the time spent per each T&C encounter, across all groups. As mentioned previously, the data set was cleaned first to remove any obvious outliers which may skew results. Prior to conducting the following analysis', the assumptions of independent observations and normality were met. The results indicate a mean difference in time spent between the first T&C encounter and seventh T&C encounter of -22.24 seconds ($SD = 25.63$) – representing a 71.1% reduction. There are however no significant differences between any reasonableness or presentation subgroups, with decline curves following the mean curve very closely (Figure 10).

Table 10.

Time per T&C Encounter (s)

Time spent reading each T&C Encounter (s)	Mean	Std. Deviation
Encounter 1	31.29	27.56
Encounter 2	16.97	15.89
Encounter 3	13.26	14.31
Encounter 4	11.66	10.72
Encounter 5	11.21	10.49
Encounter 6	9.61	7.80
Encounter 7	9.05	6.42

A repeated measures analysis of variance with a Greenhouse-Geisser correction determined that the mean time spent per T&C encounter differed statistically significantly between encounters, $F(2.47, 182.56) = 33.48$, $p < .001$. Post hoc comparisons using a Bonferroni correction revealed that compared to the first encounter ($M = 31.29$, $SD = 27.56$), participants spent significantly less time on encounter 2 ($p < .001$), 3 ($p < .001$), 4 ($p < .001$), 5 ($p < .001$), 6 ($p < .001$) and 7 ($p < .001$). Compared to the second encounter, participants also spent significantly less time on the fifth ($p = .019$), sixth ($p < .001$) and seventh ($p < .001$) encounter, however not any in between this.

To better understand the nature of the differences, Table 11 below outlines pairwise time comparisons sequentially across the seven T&C encounters.

Table 11.

Pairwise Comparisons Time Across Encounter

Time	Mean (*SD*)	Mean Difference	*p*
Encounter 1	31.29 (27.56)	14.32	< .001***
Encounter 2	16.97 (15.89)		
Encounter 2	16.97 (15.89)	3.71	.640
Encounter 3	13.26 (14.31)		
Encounter 3	13.26 (14.31)	1.60	1.000
Encounter 4	11.66 (10.72)		

Time	Mean (SD)	Mean Difference	p
Encounter 4	11.66 (10.72)	0.45	1.000
Encounter 5	11.21 (10.49)		
Encounter 5	11.21 (10.49)	1.60	1.000
Encounter 6	9.61 (7.80)		
Encounter 6	9.61 (7.80)	0.56	1.000
Encounter 7	9.05 (6.42)		

* $p < .05$, ** $p < .01$, *** $p < .001$

These results as seen in Figure 9 suggest a steep initial decline followed by a mellow plateau.

Figure 9.

Graph of Mean Time Spent Per T&C Encounter Study 1
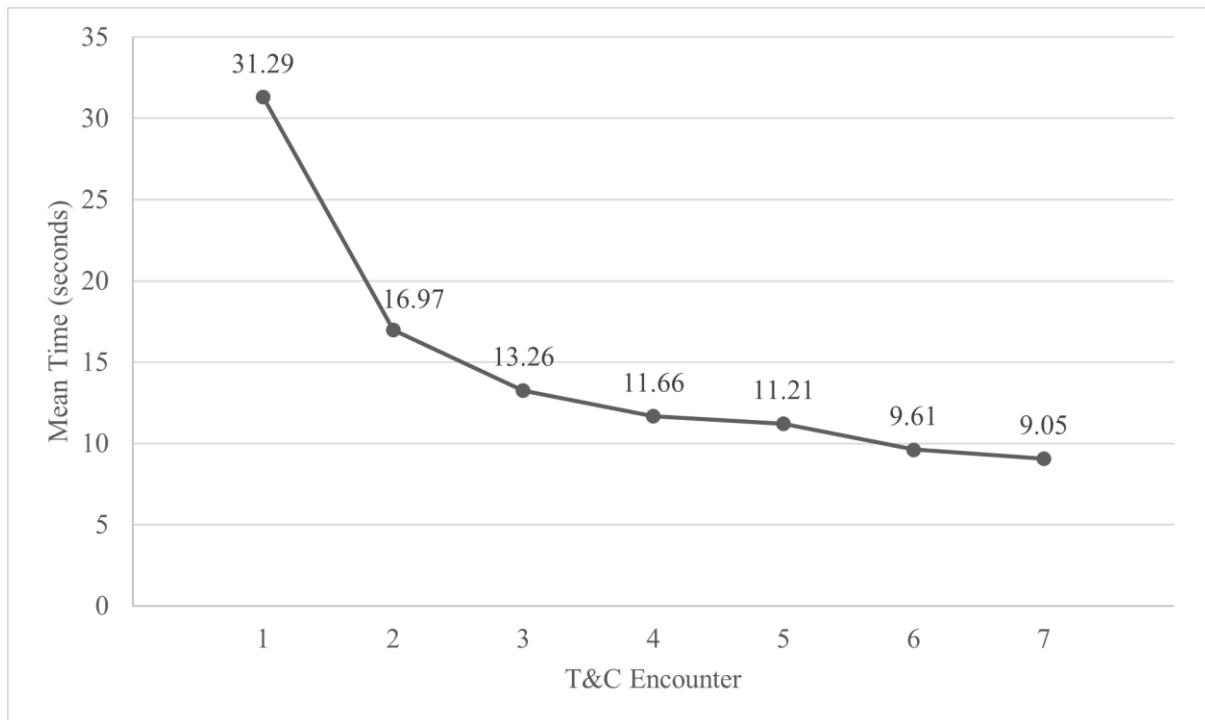
No significant differences were found between any T&C reasonableness or presentation conditions (Figure 10 below), with all time decline curves following a very similar mean curve. Regarding RQ2a, this suggests clear habituation in time spent across T&C encounters, however

no difference in the rate of habituation across presentation format (RQ2b) and reasonableness (RQ2c).

Figure 10.

Graph of Mean Time Spent per T&C Encounter Across Conditions Study 1
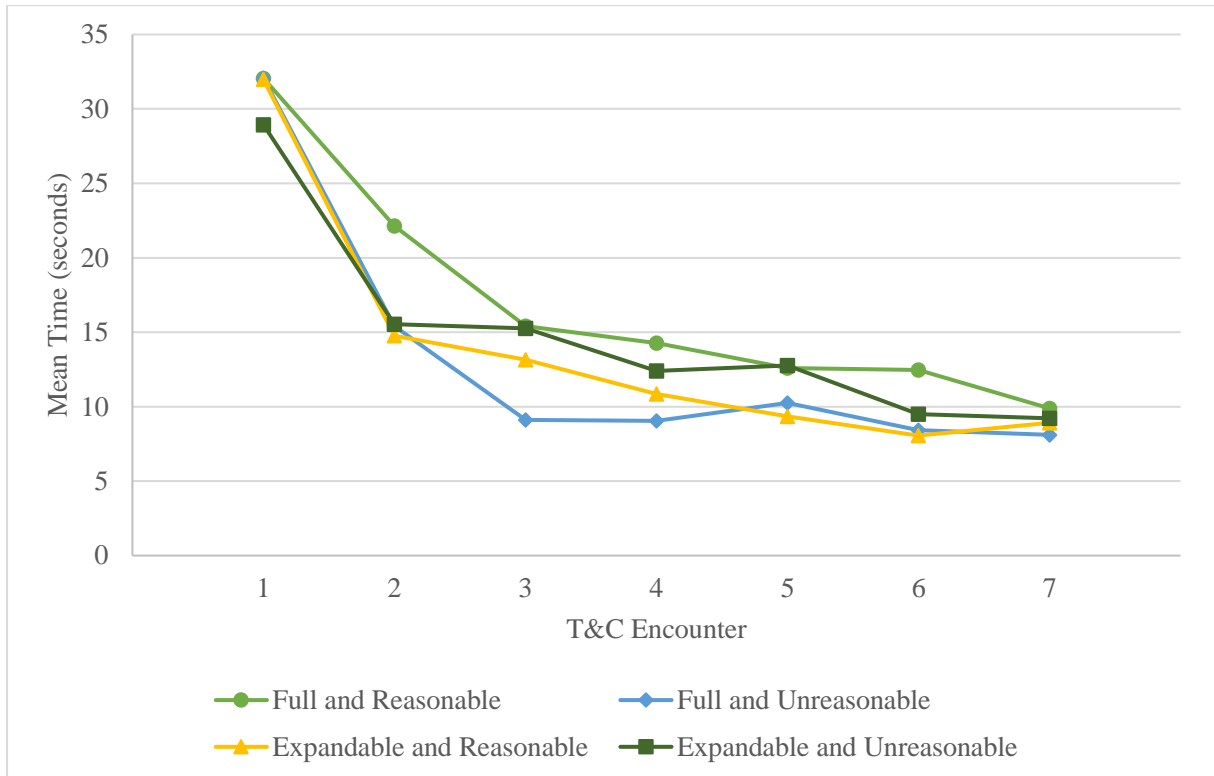
While the above results present strong evidence of habituation in time spent per T&C encounter, to consolidate the lack of interaction between T&C presentation format, T&C reasonableness, and T&C encounter, regression analysis was conducted. First, a multiple linear regression was done to examine the interaction effects of both T&C presentation format and T&C reasonableness on the relationship between T&C encounter and time spent. A significant linear regression was found, $F(5,519) = 16.21$, $p < .001$, SE = 15.35, with an R^2 of .14, however when looking at the predictors, whilst encounter was significant ($\beta = -3.01$, $p < .001$), neither T&C presentation ($\beta = .85$, $p = .528$) nor T&C reasonableness ($\beta = -1.39$, $p = .299$) were significant predictors. Furthermore, neither T&C presentation ($\beta = -.23$, $p = .731$) nor T&C reasonableness ($\beta = .30$, $p = .658$) showed significant interaction effects on the effect of T&C encounter on the time spent.

Non-linear regression analysis was then conducted to compare the mean habituation time decline against both reasonableness and presentation conditions to further demonstrate a lack of difference. It was used to estimate the curve with the best fit to the data points, in best describing the mean time spent reading a T&C based on the encounter. Non-linear regression was used due to the necessary starting values (encounter cannot be smaller than 1) and need to stay within bounds (time spent cannot be negative) for a realistic estimation in this instance, as any model which predicts values outside bounds may lose validity (Seber & Wild, 1989). As such a linear model was considered not appropriate, as not only does the above general pattern in Figure 10 suggest non-linearity, however non-linear models can also tail off asymptotically as bounds are approached. Considering the above need to stay within bounds for not only the best fit but also prediction, and based on comparing various models, the most suitable and significant regression was in the form of a power equation. A significant regression equation was found, $F(1,5) = 161.26$, $p < .001$, $SE = .08$, with an R^2 of .97, suggesting that this model is a significant predictor of the mean time spent reading a T&C based on encounter. When predicting time spent, the encounter ($\beta = -.99$, $p < .001$) was a significant predictor. Participants predicted time spent is equal to the following:

$$Time = 28.402 * encounter^{-.613}$$

The power model was the most appropriate, as a key characteristic of a power function in instances where p (-.613) is a rational number small than zero, and when expressed in lowest form (rational number in fraction form, and highest common factor of both r and s is 1) as r / s, and s is even[2], is that the domain (x-axis: T&C encounter) is all positive real numbers $(0,\infty)$ (Field, 2013). By virtue, y (time) will also never touch 0. Both exponential ($F(1,5) = 23.97$, $p < .001$, $R^2 = .83$, $SE = .19$) and logarithmic ($F(1,5) = 41.46$, $p < .001$, $R^2 = .89$, $SE = 2.79$) models also had similar if not larger standard errors and lower R^2 values and were also not appropriate. It should be noted however that the validity of this regression curve is limited to an experimental setting, or one in which exposure is repeated multiple times in a very short timeframe. Applying the above predicted regression model to actual recorded times across each of the four conditions revealed high goodness of fit levels across each condition below in Table 12, showing that all four habituation curves follow a very similar pattern.

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[2] For example, -0.613 expressed in lowest form is $\frac{-613}{1000}$ as the highest common factor of both r and s is 1. 1000 is even.

Table 12.

R^2 Goodness of Fit Values of Predicted Model Against Each Condition

Total	Full, Reasonable	Full, Unreasonable	Expandable, Reasonable	Expandable, Unreasonable
0.97	0.87	0.86	0.92	0.94

Hence, the results display strong evidence that habituation across T&C encounters in terms of time spent does not differ between conditions, and as such is not impacted by T&C presentation and T&C reasonableness. This was demonstrated through the strongest declines in time spent per T&C stemming from across encounters 1 and 2, and encounters 1 and 3, followed by consistently low remaining times with little further reductions.

Expansion Rates. Next, expansion rates of T&C were investigated for participants who were in an expandable T&C condition. As shown in Figure 11 below, there is a decline in T&C expansion across T&C encounters. This suggests that people tended to act in manners of habituation, similar to that of the time spent per encounter, with the most attention and care to the first encounter, after which following T&C get expanded less.

Cochran's Q test was first performed on expansion rates over the seven T&C encounters, to examine whether any one encounter's expansion rate differed significantly from another; and was suitable due to the repeated-measures nature of the independent encounter variable (Field, 2013). Cochran's Q test determined that there was a significant difference in the proportion of T&C expanded across T&C encounter, $X^2(6, N = 40) = 33.00$, $p < .001$.

Multiple post-hoc McNemar's tests were then conducted with Bonferroni corrections to examine where differences in expansion lie across T&C encounters. Table 13 outlines pairwise comparisons across sequential encounters.

Table 13.

Post-hoc McNemar's Tests Comparing Encounter Expansion Sequentially with Bonferroni Correction

Expansion	Mean	Std. Deviation	*p*
Encounter 1	.80	.41	.063
Encounter 2	.67	.47	
Encounter 2	.67	.47	1.000

Expansion	Mean	Std. Deviation	p
Encounter 3	.65	.48	
Encounter 3	.65	.48	.500
Encounter 4	.60	.50	
Encounter 4	.60	.50	1.000
Encounter 5	.60	.50	
Encounter 5	.60	.50	1.000
Encounter 6	.57	.50	
Encounter 6	.57	.50	.500
Encounter 7	.53	.51	

$* p < .05, ** p < .01, *** p < .001$
With Bonferroni correction (6 tests); $* p < .008, ** p < .002, *** p < .001$

Table 14 outlines pairwise comparisons of expansion rates between encounter 1, and all remaining encounters.

Table 14.

Post-hoc McNemar's Tests Comparing Expansion from Encounter 1 with Bonferroni Correction

Expansion	Mean	Std. Deviation	p
Encounter 1	.80	.41	.063
Encounter 2	.67	.47	
Encounter 1	.80	.41	.031
Encounter 3	.65	.48	
Encounter 1	.80	.41	.008*
Encounter 4	.60	.50	
Encounter 1	.80	.41	.008*
Encounter 5	.60	.50	
Encounter 1	.80	.41	.004*
Encounter 6	.57	.50	
Encounter 1	.80	.41	.001**
Encounter 7	.53	.51	

$* p < .05, ** p < .01, *** p < .001$
With Bonferroni correction (6 tests); $* p < .008, ** p < .002, *** p < .001$

The above results show that encounter 4, 5, 6, and 7 were all expanded significantly less than the first encounter, with the largest difference between the seventh (52%) and the first encounter (80%). This can be visualised below in Figure 11.

Figure 11.

Graph of Mean Percentage of Participants who Expanded the T&C Across T&C Encounter
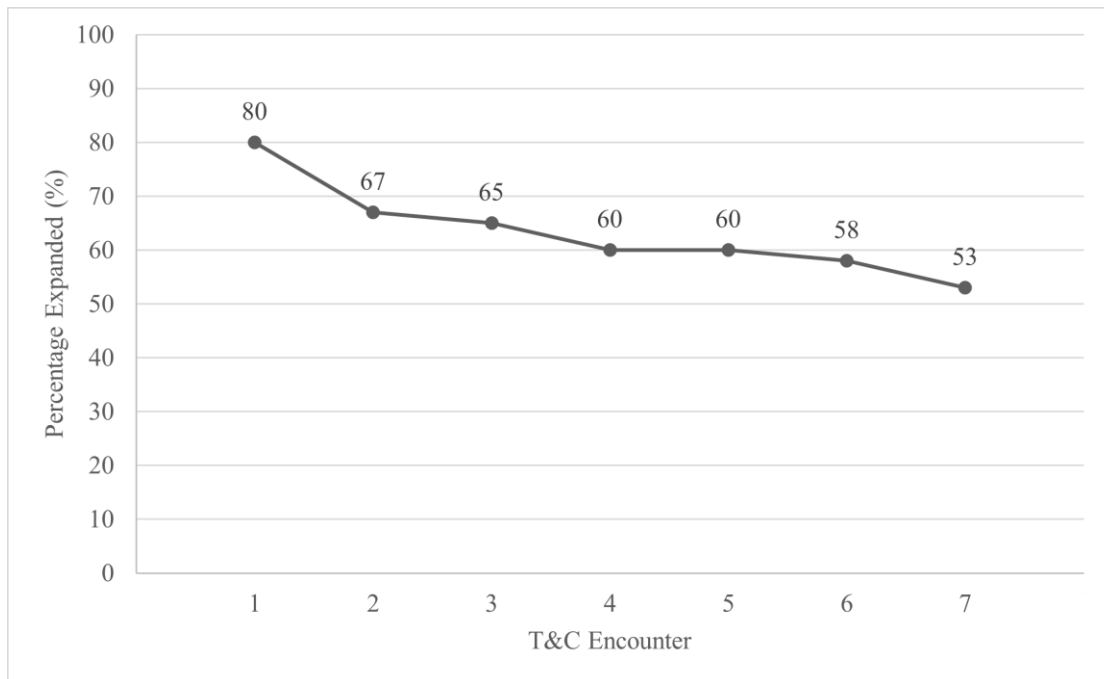
However, when investigating the mean expansion behaviour across the reasonableness variable, a chi-square test of independence did not find a significant difference in expansion rate between unreasonable and reasonable participant groups, $X^2(1, N = 280) = .00$, $p = .985$, $phi = -.001$. McNemar tests with Bonferroni corrections did also not find any significant differences in expansion rates between unreasonable and reasonable participant groups by comparing individual encounters. This can be visualised below in Figure 12, and while strengthening support for the presence of habituation across T&C encounters (RQ2a), suggests T&C reasonableness does not impact the effect of T&C encounter on expansion behaviour.

Figure 12.

Graph of Mean Percentage of Participants who Expanded the T&C Across T&C Encounter and Reasonableness
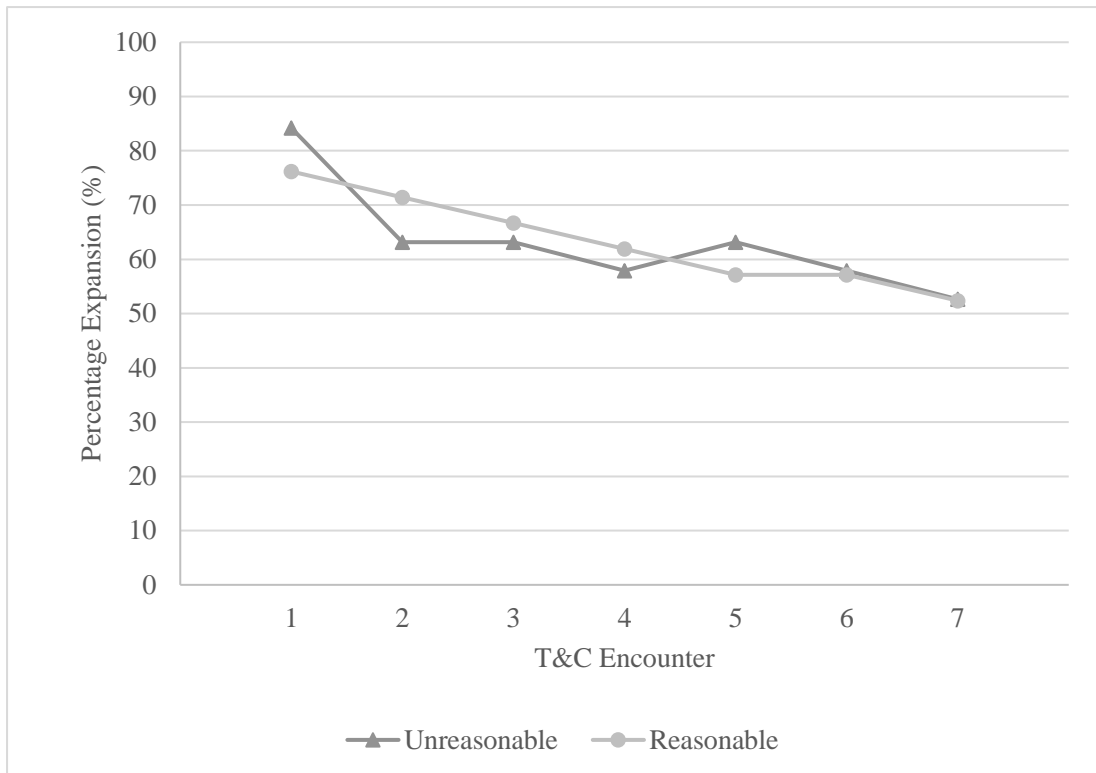
The above null-findings may stem from a limitation of the underpowered sample size of 77, compared to the recommended 88 (Cohen,1988). This underpowered sample size may be inadequate to appropriately answer the question of differences in expansion behaviour across reasonableness groups. Furthermore, the influence of this smaller sample size may allow genuine statistical effects to be missed, as well as an increased risk of false positives (Cohen, 1988).

As previously, despite strong evidence suggesting expansion behaviour across T&C encounters also follows a pattern of habituation, another linear regression including T&C encounter was run to first investigate whether T&C reasonableness significantly impacted the relationship between T&C encounter and expansion percentage. A significant linear regression was found, $F(3,10) = 12.17$, $p = .001$, SE = 4.75, with an R^2 of .79, however when looking at the predictors, whilst encounter was significant ($\beta = -3.91$, $p = .001$), T&C reasonableness ($\beta = -.72$, $p = .902$) was not. Furthermore, T&C reasonableness ($\beta = .15$, $p = .907$) did not significantly interact with the effect of T&C encounter on the expansion percentage.

Following this, another non-linear regression was conducted to compare the mean curve against reasonableness conditions. This was done by estimation the function of the data points for mean expansion rates on a T&C based on encounter. For reasons discussed above, the most suitable model was a power equation due to its' domain and range characteristics. A significant regression equation was found, $F(1,5) = 114.37$, $p < .001$, $SE = .03$, with an R^2 of .96 suggesting that this model is a significant predictor of expansion rates based on encounter. The equation is as below:

$$Percentage\ Expansion = 78.92 * encounter^{-.187}$$

As such, the encounter is a significant predictor ($\beta = -.98$, $p < .001$) of mean expansion percentage.

Applying the above predicted regression model to actual expansion rates across reasonableness revealed high goodness of fit levels below in Table 15, showing that expansion behaviours across T&C encounter follow similar patterns regardless of reasonableness. This demonstrates the presence of T&C encounter habituation across time and expansion (RQ2a), however with no significant interaction effects of T&C presentation format (RQ2b) or T&C reasonableness (RQ2c).

Table 15.

R^2 Goodness of Fit Values of Predicted Model Against Each Condition

Total	Expandable, Reasonable	Expandable, Unreasonable
0.96	0.93	0.83

Acceptance Rates. To better understand the T&C acceptance behaviour across encounters as depicted in Figure 13 below, a chi-square test of independence was conducted to compare whether T&C acceptance differed significantly across encounter and was chosen as the most appropriate analysis technique due to the relationship between two nominal (categorical) values – acceptance and encounter. No significant differences between encounter groups were found, $X^2(6, N = 539) = 5.18$, $p = .521$, *phi* = .10, suggesting T&C encounter does not significantly influence the acceptance percentage.

Figure 13.

Graph of Mean Acceptance Percentage Across T&C Encounter
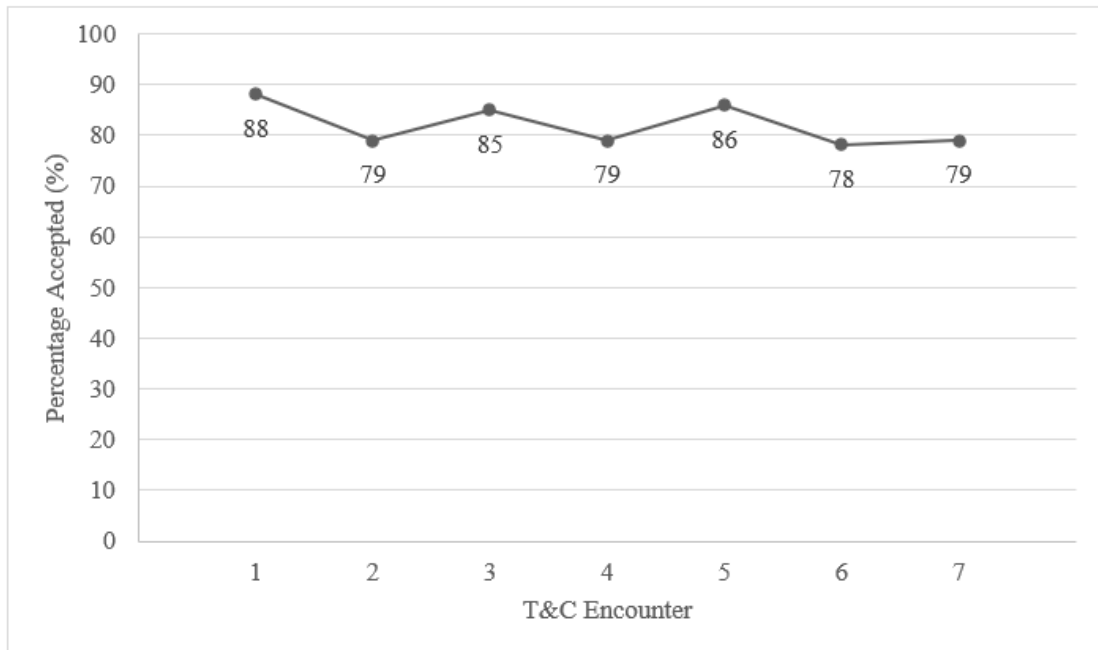
Summary of Results RQ2. Reviewing the above results show evidence for habituation across T&C encounters, looking at both the time spent, as well as expansion rates. Acceptance rates however did not significantly change between T&C encounters. Furthermore, both T&C reasonableness and T&C presentation did not significantly impact the habituation declines.

Results in Relation to Research Questions. Results for the research questions relevant to Study 1 can be seen summarised below in Table 16.

Table 16.

Results Summary in Relation to Research Questions

Research Question	Summary
RQ1	T&C acceptance rates and time spent reading each T&C encounter did not significantly differ across (a) T&C reasonableness or (b) T&C presentation format.
RQ2	Participants habituated across T&C encounters in terms of (a) time spent as well as expansion rates, however not across

Research Question	Summary
	acceptance; with no significant impact of either (b) T&C presentation format or (c) T&C reasonableness.

4.3   DISCUSSION

Study 1 examined the extent of non-readership behaviour across T&C in various presentation and reasonableness conditions, as well as the presence of habituation across T&C encounters. The purpose was to demonstrate how participants respond to multiple T&C encounters in terms of current behavioural patterns and declines in time spent per encounter. The results showed the importance of considering both the presence of habituation and helplessness in T&C research, with Study 1 demonstrating clear declines in time and expansion rates across T&C encounters. No differences were revealed across T&C reasonableness (reasonable vs unreasonable) nor presentation (full vs expandable). Therefore, this presented the need for Study 2, in which recommendations from literature, that is, fairness cues, were applied to determine what behavioural and perceptual impacts they have. A potential limitation to this study is the underpowered sample size of 77 as opposed to a recommended 88 for certain statistic tests following power analysis.

4.3.1 Research Question 1

RQ1 found that the reasonableness and presentation format of T&C presented to participants did not have a significant impact on either time spent reading or acceptance rates. Results showed that despite 82% of all T&C being accepted, only 75% of participants reported reading *any* portion of the T&C. As outlined by Welsh (2018), it is important to consider the high likelihood of social desirability bias in participants who may have felt the need to report higher than actual readership in order to be viewed more favourably. This highlights a gap of non-readership, which if read correctly, should have resulted in a much lower acceptance rate of unreasonable T&C. Furthermore, this is strengthened by the finding of a 16.33 second mean time spent per T&C encounter. Comparing this to the expected reading time of the T&C used in the current research, between 200 seconds (3.34 minutes) and 224 seconds (3.74 minutes) as per a normal reading rate of 250 – 280 words per minute (Taylor, 1965), highlights a very large difference. This suggests that despite the majority of participants reporting having read a

portion of the T&C, the mean time spent per T&C would have allowed for no more than 7% to 8% to be read.

The results found can act as a replication study, in that despite containing methodological differences, confirming prior research by Plaut and Bartlett (2012) that most participants did not read T&C. Prior research by Obar and Oeldorf-Hirsch (2018) finding that 98% of participants missed key unreasonable or "gotcha" clauses is also partially supported, with 86% of all unreasonable T&C in the current research being accepted. The extent to which the remaining 14% rejection rate was due to detection of unreasonable clauses or otherwise, such as laziness or lack of motivation, was not investigated in the current research.

Considering the consistently high acceptance rates and low mean time spent reading T&C, as well as lack of differences found between reasonableness, suggest a participant belief of futility in reading the T&C. This is supported by the finding presented in the results for RQ2 above, with expansion of T&C declining across encounters to only 53% by the seventh encounter. This aligns with the definition of helplessness, in the perception of futile actions and uncontrollable outcomes (Peterson et al., 1993). This could be generalised to participants not even expanding all T&C (futility of action) due to a perceived uncontrollable outcome (contents of T&C).

The results can also be linked with the idea of *learned helplessness*, which is a form of learned behaviour, and comes from repeated instances where attempts to regain *control* (through exposure to uncontrollable outcomes) are abandoned if they prove to be futile (i.e., helpless)(Silver et al., 1982; Teodorescu & Erev, 2014). In the context of the current research, this can be likened to the way people abandoned attempts to interrogate T&C (reading times and expansion rates, from possibly either perceiving the T&C encountered as uncontrollable and necessary to proceed to the target task or game, or having low historical losses from not interrogating T&C previously (Elshout et al, 2016; Plaut & Bartlett, 2012).

The above results highlighting the extent of T&C non-readership behaviour strongly support the need for Study 2, in examining whether behaviour and perceptions of T&C can be improved using fairness cues.

4.3.2 Research Question 2

RQ2a revealed not only a significant decline in the time spent between the first and last encounter (seven in total) of 71.1%, however also a significant decline curve in the form of a power equation ($R^2 = .97$), in which the strongest and significant drop-offs in time occurred

only between the first and second encounter, after which declines reduced and were no longer significant. This suggests that encounter of a T&C significantly influences the time spent. Further supporting this were the findings of a significant difference between expansion rates across T&C encounters, with the seventh significantly less than the first. Contrastingly however, when comparing expansion rates across reasonableness, there was no significant difference. This behaviour across T&C encounters aligns with the key characteristics of habituation, in that the repeated application of a stimulus, that is, the T&C, results in a progressive decrease in a parameter of a response, that is, time spent per encounter, to an asymptotic level (power curve model)(Thompson & Spencer, 1966). Addressing RQ2b, there were however no significant differences seen in expansion rates and time spent reading T&C regardless of reasonableness. Looking at RQ2c, there was also no significant difference in time spent reading T&C regardless of whether they were presented in an expandable or full manner (no difference in behavioural response decrement), suggesting that different T&C presentation formats did not sufficiently differ in stimulus intensity (Thompson & Spencer, 1966).

The lack of any interaction effects of T&C presentation format and T&C reasonableness on the strong habituation patterns in behaviour across T&C encounters suggests that pre-existing beliefs and habituation behaviours prevent any thorough examinations of T&C, resulting in any unreasonable terms being missed. In unison, these results represent a strong contribution to the T&C behaviour literature by not only consolidating non-readership data such as the above (Fiesler et al., 2016; Obar & Oeldorf-Hirsch, 2018; Perrault & Keating, 2018; Plaut & Bartlett, 2012), but also presents results proving the presence of habituation in a digital T&C environment.

Chapter 5: Pretest 2 (Fairness Cues)

The purpose of Pretest 2 is to test the suitability of a purpose-developed fairness cue and ensure it is viewed as suitable, useful, and clear by participants, and is used in Study 2. Study 2 is designed to test the impact of adding fairness cues to T&C, faced by participants across a series of seven short tasks and games as before. Both behavioural outcomes and perceptual outcomes were observed.

5.1 METHODOLOGY AND RESEARCH DESIGN

5.1.1 Participants

The same 50 MTurk participants completed the same pretest as in Pretest 1 (clauses), which was used to confirm the suitability of further T&C material for use in Study 2. The same final sample size of 30 was used following data cleaning. Participants completed the survey in the same sitting as part of Pretest 1, with identical conditions. After being asked to rate series of T&C clauses (Pretest 1), participants were then displayed both dichotomous version of the developed fairness cues and asked to provide a series of ratings. Participants were asked to rate their agreement that a set of icons used as "fairness cues" are suitable for indicating fairness, or lack of fairness (for example, thumbs-up icon, thumbs-down icon), as well as useful, clear, and how likely they would be to read a set of T&C if encountered with a cue. This task took about 10 minutes, and the pretested materials were then used in Study 2. Participants received standard monetary incentives in line with MTurk payment protocols (i.e., US$0.50 for the completion of the pretest), and payment was made through the MTurk platform. A full copy of the PICF for Pretest 2 can be found in Appendix B.

5.1.2 Stimulus

Fairness Cues – Suitability and Usefulness. The two below designed fairness cues (Figure 12, Figure 13) were shown to participants. The graphics cues were designed to be representative of a recognised, trusted organisation, with the intention to provoke a sense of authority. The graphics cues were dichotomous, with only a "*seem* fair and reasonable" (Figure 14), and "*may* be unfair or unreasonable" (Figure 15) classification for simplicity.

Figure 14.

Fair and Reasonable Graphics Cue

Figure 15.

Unfair or Unreasonable Graphics Cue
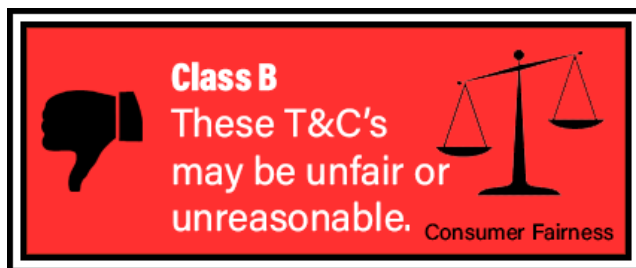
The graphics cues were designed in a similar manner to those of Elshout et al. (2016), utilizing "third-party information" as a way of building validity, through the form of "expert endorsement" and "national consumer authority endorsement".

5.1.3 Measurements

Based on the above fairness cues, participants were asked a series of questions to assess suitability, usefulness, and clarity, of which scales are outlined below.

Suitability. A purpose-developed four item, 7-point Likert measure asked once per fairness cue. Anchored at Extremely Useless and Extremely Useful.

Figure 16.

Cue Suitability Pretest Measures

1) The above graphic (green/red) has been developed to indicate that a set of Terms & Conditions is fair and reasonable.

   How would you rate this graphic in terms of:

   - Conveying the fairness level

   - Ease of interpretation

   - Appropriateness

   - Trust conveyed

Usefulness. A four-item, 7-point Likert measure asked once per cue utilised questions from the *Attitude Toward the Ad (Usefulness)* scale (Sheinin et al., 2011); using four out of five original items for relevancy. Anchored at Strongly Disagree and Strongly Agree.

Figure 17.

Cue Usefulness Pretest Measures

1) Please consider how useful the following graphic is. This graphic…

   - … is believable

   - … provides relevant information

   - … does a good job of representing positive/negative

   - … provides practical information

Clarity. A three-item, 7-point Likert measure asked once per cue utilised questions from the *Attitude Toward the Logo (Clarity)* scale (Hagtvedt, 2011), using all three original items. Anchored at Strongly Disagree and Strongly Agree.

Figure 18.

Cue Clarity Pretest Measures

2) Please consider the following graphic. This graphic…

- … is clear

- … is complete

- … is immediately readable

Qualitative Perceptions. A single-item free text entry question was also asked to gauge participants perceptions verbally.

Figure 19.

Cue Perceptions Pretest Measure

1) If you encountered this graphic at the top of a Terms & Conditions page, what would you feel it indicates?

5.1.4 Procedure and Timeline

After ensuring participants were not on a mobile device, by briefing them on the importance of properly formatted interactive tasks and closing the survey if the reported device was a mobile device, general demographic variables were measured. Following this, they were

asked to give their ratings for the fairness cues above, with each construct recorded separately based on the cue type (unreasonable or reasonable).

5.2   RESULTS

Data from the pretest was analysed using IBM's SPSS version 27 with the same data cleaning procedures conducted as outlined in Pretest 1 and Study 1.

5.2.1 Assumption Testing and Descriptive Statistics

Means, standard deviations, and internal consistency measures for all dependent variables are reported below in Table 17. Cronbach's alpha (α) was calculated to allow for a measure of the internal consistency of composite variables. The internal consistency of the usefulness and suitability measures were excellent ($\alpha > .90$), and clarity was good ($\alpha > .80$) (DeVellis, 2017). Variables were also found to conform to normality specifications as previously discussed in Pretest 1 and Study 1, looking at skewness, kurtosis, Q-Q plots, and Shapiro-Wilk tests.

5.2.2 Results

Results are presented with individual scores for each dependent variable to better reflect perceptions of each fairness cue.

Table 17.

Means, Standard Deviations, Internal Consistency and Paired Samples T-Tests of all Variables Pretest 2

Variable	α	Green Reasonable Cues Mean (SD)	Red Unreasonable Cues Mean (SD)	t	p
Suitability	(.87)	5.84 (1.18)	5.74 (1.47)	.48	.636
Usefulness	(.93)	5.63 (1.30)	5.63 (1.25)	.00	1.000
Clarity	(.87)	5.79 (.99)	5.80 (1.06)	-.14	.893

Note. Cronbach α reported in parentheses. Double dash (--) represents single item measure. Degrees of freedom = 29

* $p < .05$, ** $p < .01$, *** $p < .001$

Considering the above results for suitability, usefulness, and clarity, all means are above the midpoints (4.00), showing the purpose-developed fairness cues are valid for use in Study 2. Furthermore, paired samples t-tests found no significant differences between suitability, usefulness, or clarity, when comparing the type (reasonableness) of cue. This indicates consistency and suggests both fairness cues (unreasonable and reasonable) are equally valid and unlikely to confound results. Therefore, results show that both fairness cues are suitable to use in Study 2.

Qualitative Feedback. Respondents were also given the chance to offer insight into what they believed either of the icons represented if they were to encounter them in a T&C context, with results in Appendix F indicating clear consistency amongst responses, showing that the icons accurately communicate (un)/reasonableness.

When presented with the unfair icons, one participant suggested they felt they "indicate that the terms are bad and … should proceed with caution", with another stating "I would suspect that the terms and conditions contain some sort of language that is out of the ordinary and would be cause for additional review". On the contrary, when presented with the fair icons, participants felt that "the terms and conditions are beneficial to the person signing the agreement", with another stating that "I would hope it meant that an independent group was saying there were no hidden landmines in the terms of use" (Appendix F). These comments not only demonstrate suitability of using these cues in the following study, but suggest a high potential value in fairness cues, which the current research aims to investigate in the context of T&C.

5.3 DISCUSSION

This second pretest examined fairness cues to be used in Study 2 and included participants perceptions of fairness cues. Its purpose was to ensure that the fairness cues were perceived in the same way as their intent was. The results suggested that the cues were suitable for use, as outlined below.

Whilst existing literature has studied the effect of graphical fairness cues, trust indicators and fact verification labels on consumer behaviour (Elshout et al., 2016; Kim et al., 2008; Mena, 2020; Morrow et al., 2020; Oeldorf-Hirsch et al., 2020; Ozpolat et al., 2013), and the effect of *different* types of cues, these results tested specific perceptions of the cues. Some previous studies developed their own cues for experimental use (Elshout et al., 2016), whilst

others such as Kim et al. (2008) and Ozpolat et al. (2013) utilised existing trust icons/indicators taken from industry.

Results showed a medium to high score (on a 7-point scale) for perceived cue suitability, usefulness, and clarity, with no differences across the fairness cues developed to represent reasonable versus unreasonable T&C.

Chapter 6: Study 2

Study 2 aims to examine the various impacts of fairness cues in a T&C environment, by observing both behavioural engagement and measuring perceptual variables. To measure behavioural engagement (RQ3), the impact of fairness cues on the time spent per T&C encounter, self-reported readership, and acceptance rates are analysed. To observe the impact of fairness cues on perceptions of T&C (RQ4), T&C engagement, perceived control, confidence in fairness, and helplessness are measured.

6.1 METHODOLOGY AND RESEARCH DESIGN

Study 2 followed an almost identical experimental design as Study 1, with some key differences. Study 2 removed the manipulation of T&C presentation; from fully presented or expandable, to fully presented only. It also introduced bonus payments for task completion, as well as the absence or presence of fairness cues. Bonus payments were introduced to offer participants a greater incentive to complete tasks in the experimental setting, as opposed to easily declining them. This was done to increase ecological validity, in that in most T&C situations individuals are normally motivated to want to accept a set of T&C to achieve the goal activity, service, outcome, product, or otherwise. The rationalise was to demonstrate that people may be more inclined to ignore T&Cs and unreasonable clauses when motivated to reach their end goal (something common to almost all online services and potentially a major reason for why people ignore T&Cs). Study 2 was designed to answer RQ3 and RQ4, but also contribute further to RQ2.

Table 18.

Variables Study 2

Independent	Dependent
- Cue presence (absent vs present) - T&C reasonableness (reasonable vs unreasonable)	- Time spent per encounter - Self-reported readership - Acceptance rates - Engagement - Control - Confidence - Helplessness

The study used a 2 x 2 between-subjects design. The independent variables were T&C reasonableness and cue presence. Like in Study 1, T&C reasonableness was operationalised by presenting participants with either seven reasonable T&C, or a mixed set of seven containing four unreasonable, and three reasonable T&C. Cue presence was operationalised by participants either going through the series of seven tasks and T&C in a similar fashion at Study 1 (yet incentivised with bonuses and only seeing fully presented T&C), or with the addition of having fairness cues present to assist them in their decisions. Participants were briefly educated on the purpose of the study cues prior to commencing the study and were told they were designed to assist them in the T&C decision process. No references were made to the cues being a focal point of the study, nor were participants told how the fairness cues had been established (in terms of setting a baseline for what is considered unreasonable or reasonable). Following this, each T&C had a respective reasonableness cue present in the top right-hand corner, as shown in Figure 20 and Figure 21 below.

Figure 20.

Implementation of Reasonable Fairness Cues
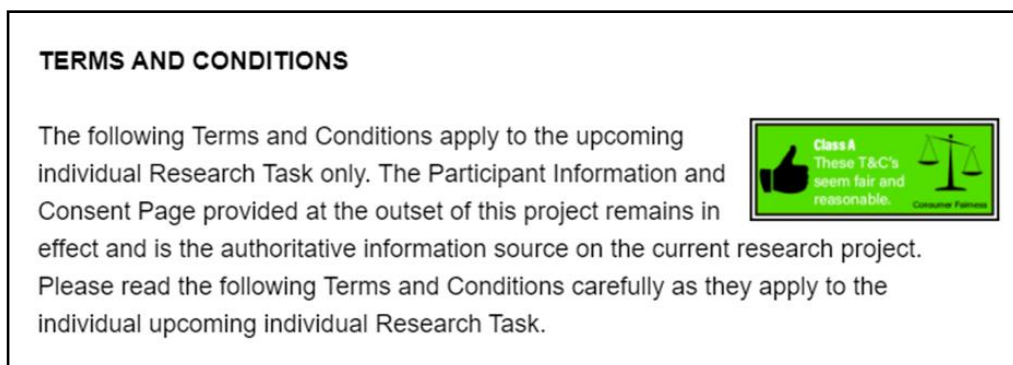
Figure 21.

Implementation of Unreasonable Fairness Cues
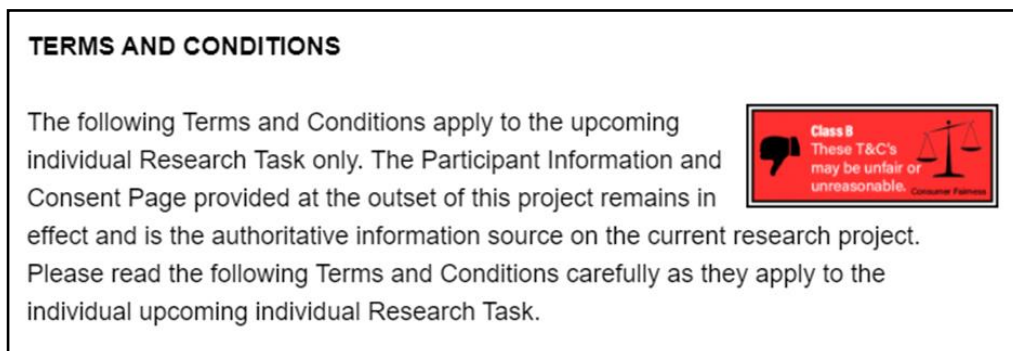
Dependent variables designed to answer RQ3 as outlined above in Table 18 were time spent per encounter, self-reported readership, and acceptance rates. Time was measured by recording the time each participant spent per T&C encounter, from the page loading until either accepted or declined. Readership was measured using a survey item after all seven tasks and T&C encounters were completed. Acceptance and rejection rates were observed by recording participant actions when faced with each T&C. Addressing RQ4 were the dependent variables of engagement, control, confidence in fairness, and helplessness. These were all measured using established scales, detailed further below.

Study 2 featured a base participant payment fee with the addition of a bonus per each task completed, manipulating only the type of T&C (Reasonable vs Unreasonable), and the absence or presence of the fairness cues.

Figure 22 below details the factorial design of Study 2.

Figure 22.

Factorial Design Study 2 (2 x 2)

Cue Type

		Absent	Present
T&C Type	Reasonable	7 Reasonable, Fully Presented T&C with *no* fairness cues	7 Reasonable, Fully Presented T&C with cues
	Unreasonable	4 Unreasonable and 3 Reasonable, Fully Presented T&C with *no* fairness cues	4 Unreasonable and 3 Reasonable, Fully Presented T&C with cues

The overarching research design of the two primary studies is a replication-extension format, in which each study contributes or manipulates something that the previous one did not, ultimately allowing for results to be combined and extended (Bonett, 2012).

6.1.1 Participants

One hundred and seventy participants took part in Study 2, which was very similar to Study 1. Participants were randomly allocated into one of the four experimental groups (cue presence x reasonableness). A key difference was that participants were given a nominal incentive to complete the study (US$2.50), with an additional amount (US$0.10) given for each of the sub-tasks completed. Like Study 1, Study 2 was expected to take 20 minutes for participants who chose to complete all tasks. It was shorter for those who declined some T&Cs. Participants who completed a pre-test or Study 1 previously were unable to partake in Study 2. A full copy of the PICF for Study 2 can be found in Appendix E. It was expected to show that people dismiss T&Cs when motivated to reach their end goal, and aimed to serve as a test of the literature-based recommendations of providing fairness cues in T&Cs as a way of better communicating with consumers.

For participants in a condition with cues present, each T&C encounter was sign-posted with a "fairness cue" (for example, a thumbs-up or thumbs-down icon). These were built on recommendations made in a directive for European web services accessibility, encompassing perceivability, operability, understandability, and robustness in interpretation, acting as assistive technology (EU Commission, 2016), and were also recommended by Elshout et al. (2016). Participants were instructed on the meaning of these fairness cues prior to the study.

Like Pretest 1 and Study 1, power analysis was conducted to assist with estimating sample sizes. Power analysis for matched pair t-tests was considered, assuming an alpha of .05, a power of .80, and a medium effect size (d = .50). Based on these assumptions a sample size of n = 34 is suggested. (Cohen, 1988; Perneger et al., 2015). Considering independent samples t-tests, and assuming an alpha of .05, a power of .80, a medium effect size (d = .50) and an even allocation ratio, G-POWER suggests a sample size of n = 128, or 64 participants per group. Looking at ANOVA and assuming an alpha of .05, a power of .80, a medium effect size (f^2 = .025) and four experimental conditions, a sample size of n = 180, or 45 participants per condition is suggested. It is this power analysis which was used to guide the sample size. Lastly, power analysis for chi-squared tests was also considered, and assuming a medium effect size, alpha of .05, power of .80 and 3 degrees of freedom (comparing across four subgroups), a sample size of 122 is suggested.

6.1.2 Stimulus

Randomisation of Unreasonable T&C. As described in the discussion of Study 1 (section 4.3), the time spent per T&C across both reasonableness groups showed heavy and significant decline rates in a power curve. From this it can be inferred that there is not enough readership, as the most significant drop-off comes after the first T&C encounter. Based on this, the first T&C encounter (for the *unreasonable* conditions) was changed to always be unreasonable, and the seventh (last) always to be reasonable, with the middle five being randomised (of which three were unreasonable). This ensured that still four out of the seven T&C were unreasonable, however just with a different *first* encounter to Study 1. The purpose of this manipulation was to test and validate whether the drop-off in readership after the first encounter was due to the first encounter being reasonable, or whether not even the first one was thoroughly read. The last encounter was set to always be reasonable to allow for a parallel comparison between encounter 1 and 7 in both reasonableness conditions, that is, both the first and last encounter are always reasonable regardless of the condition.

Presentation of T&C. Another manipulation that distinguishes Study 2 from Study 1 is the presentation of T&C. In Study 2 they are all changed to fully presented. The reasoning for this is based on the lack of substantial data and insights between expandable and fully presented T&C, and by doing so also allows for larger sample sizes per sub-group (reducing from four per study to two); increasing power.

Graphic Fairness Cues. The fairness cues used in Study 2 were designed to be representative of a recognised, trusted organisation. These were also tested in the pretest for suitability, with results outlined in the results section (section 3.3). The fairness cues were dichotomous, with only a "fair and reasonable" (Figure 23), and "may be unfair or unreasonable" (Figure 24) classification for simplicity.

Figure 23.

Fair and Reasonable Graphics Cue
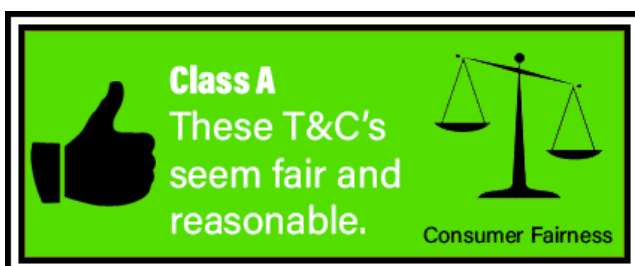
Figure 24.

Unfair or Unreasonable Graphics Cue
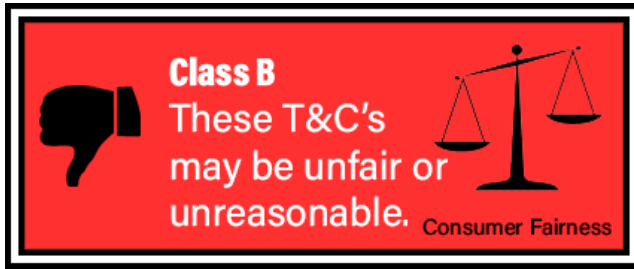
The fairness cues were designed in a similar manner to those of Elshout et al. (2016), utilizing "third-party information" as a way of building validity, through the form of "expert endorsement" and "national consumer authority endorsement".

6.1.3 Measurements

As outlined in section 2.2.4, the chosen scale measures for RQ4 were engagement, perceived control, confidence in fairness, and helplessness. These are outlined in detail below.

General Demographics. Prior to each study, general demographics questions were asked including birth country, age, gender, highest level of education and primary language spoken at home. Participants were also asked what device was used to complete the survey, ensuring that only desktop or laptop computers were used due to formatting of the game tasks.

Engagement. Engagement was operationalised using a validated *Engagement (General)* scale (Yim et al., 2012), designed to measure the extent to which a person is drawn into and focused on something. The scale features four, 7-point semantic differentials, and has been used to measure "attention to media" (Yim et al., 2012), as well as "focused attention" (Novak et al., 2000). All four original items were used without modification.

Figure 25.

Engagement Study 2 Measures

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1) When reviewing the Terms and Conditions prefacing a task, (I was):

- Not deeply engrossed / deeply engrossed

- Not absorbed intently / absorbed intently

- My attention was not focused / my attention was focused

- I did not concentrate fully / concentrated fully

      Perceived Control. Perceived control was operationalised using an existing four, 7-point Likert items, and was designed to measure the extent to which a person is in control of some process (Collier & Sherrell, 2010). All original items were used, modifying only the focus of each item to be on T&C.

Figure 26.

Perceived Control Study 2 Measures

---

1) Thinking about the Terms & Conditions…

- I felt in control using the Terms & Conditions

- The Terms & Conditions let me be in charge.

- While using the Terms & Conditions, I felt decisive.

- The Terms & Conditions gave me more control over my decisions.

Confidence in Fairness. Confidence in fairness was operationalised in the context of the fairness of a set of T&C, using all three out of the four[3] original, 7-point items from the *Confidence (General)* scale (Petty et al., 2002). The measure was changed from the original uni-polar format to semantic differentials.

Figure 27.

Confidence in Fairness Study 2 Measures

---

1) When trying to evaluate the fairness of the Terms & Conditions before the tasks, I felt:

- Unsure / Sure

- Uncertain / Certain

- Unconfident / Confident

Helplessness. Helplessness was operationalised using a combination of item subsets from *two* existing validated scales (Ashforth & Saks, 2000; Gelbrich, 2010). In total there were seven, 7-point Likert scales, consisting of four items from Ashforth and Saks (2000); of which three were reverse coded items, and a further three from Gelbrich (2010).

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[3] The excluded item ("valid") was not contextually relevant. The same selection of items has been used by Argo et al. (2010).

Figure 28.

Helplessness Study 2 Measures

1) When reviewing the Terms & Conditions prefacing a task:

- I felt I had control over the Terms & Conditions (R)

- I felt like I had enough power to make decisions (R)

- I felt I had enough influence over the Terms & Conditions (R)

- I felt there was nothing I could do except click Accept

- I felt helpless so I just accepted the Terms & Conditions

- I felt lost when reading the Terms & Conditions

- I felt defenceless against the Terms & Conditions

Cue Reliance. Study 2 also asked participants whether they *"utilised or relied on any of the provided fairness cues"* (dichotomous), and if so, how they felt these assisted them in the processing of evaluating the T&C; as well as why not (open ended question). To avoid demand effects, these questions were only placed after the other questions, to avoid participants realising that the focus of the T&C and their questions was about the fairness cues.

Figure 29.

Cue Reliance Study 2 Measure

1) Did you utilise or rely on any of the provided fairness cues?

- Yes: How do you feel these assisted you in the process of evaluating T&C?

- No: Why not?

6.1.4 Procedure and Timeline

This study followed the same procedure and timeline as Study 1 (section 4.1.4), however after all tasks were completed, participants were asked to indicate their perceptions of the above-mentioned dependent variables, including engagement, perceived control, confidence in fairness, and helplessness.

Conditional Questions. Participants who were in a subgroup condition that did not have cues present were only displayed questions regarding engagement, perceived control, confidence in fairness, and helplessness if they indicated that they read any portion of the T&C. Participants in conditions with cues present were still asked whether they read any portion of the T&C, however, were then asked all questions regardless; to ensure appropriateness. This was done by not skipping the above-mentioned items even if participants responded that they had not read any portion. In groups with no cues presence this made sense as there was little relevance to measure these if participants had not engaged or read the T&C. In groups with cues present however, there existed the possibility of cues introducing increased levels of engagement, perceived control, confidence in fairness, and reduced helplessness, as such perhaps some participants explicitly choosing not to read the T&C.

6.2   RESULTS

Like Study 1, data were cleaned prior to running analysis', including detecting content non-responsivity, reverse coding, and more. A key feature that allowed this to happen was examining the partly reverse-coded *helplessness* scale items, which allowed for easy interpretation of instances whereby participants simply chose the same columned answer throughout (Meade & Craig, 2012). After cleaning, the sample size for Study 2 was 154 participants. Of the sample, 64% were male, with a mean age of 39.21 years ($SD = 10.43$). There was also a relatively even distribution of education, with the most common highest level achieved being a bachelor's degree (48%).

As mentioned in section 6.1.4 (Procedure), the following composite questions were only displayed to participants in the *cue absent* group if they indicated reading *any* portion of the T&C: engagement, perceived control, confidence in fairness, and helplessness. For participants in the *cue present* group, the self-reported readership question was still asked, however did not skip any questions. The sample sizes as per cell in the 2x2 factorial design are outlined below in Table 19.

Table 19.

Sample Sizes Study 2

Route (2x2)	Conditionally Displayed Measures	All Other Displayed Measures
Cue Present and Reasonable	--	44
Cue Present and Unreasonable	--	39
Cue Absent and Reasonable	23	34
Cue Absent and Unreasonable	22	37
Total	**45**	**154**

6.2.1 Assumption Testing and Descriptive Statistics

Means, standard deviations, and internal consistency measures for each variable are reported below in Table 20. Cronbach's alpha (α) was calculated to allow for a measure of the internal consistency of all relevant composite variables. The internal consistency of composite measures such as engagement, perceived control and confidence in fairness were all excellent ($\alpha > .90$), and helplessness was good ($\alpha > .80$) (DeVellis, 2017). As such, composite measures were created.

Table 20.

Means, Standard Deviations, and Internal Consistency of all Variables

Variable	Mean (*SD*)	α
1. Time per Encounter (s)	13.88 (8.79)	--
2. Readership [a]	.73 (.45)	--
3. Amount Accepted (/7)	5.79 (2.16)	--
4. Cue Reliance [a]	.45 (.50)	--
5. Engagement	3.95 (1.87)	(.96)
6. Perceived Control	4.34 (1.60)	(.94)
7. Confidence in Fairness	4.71 (1.71)	(.98)
8. Helplessness	3.65 (1.27)	(.82)

Note. Cronbach α reported in parentheses. Double dash (--) represents single item measure.

[a] Dichotomous, and self-reported measures

As in Study 1, all key continuous variables were tested for normality. Data were first explored by looking at the 95% confidence interval for the mean, and all critical values such as skewness and kurtosis were within tolerance (Field, 2013). Q-Q plots also did not give any strong indications of non-normality (non-linearity), with plots following a straight line with no major deviations. Furthermore, Kolmogorov-Smirnov tests suggested normal univariate distributions in the greater parent population.

6.2.2 Research Question Testing

RQ3: Do fairness cues impact behavioural engagement with T&C; as reflected in (a) the time spent reading T&C encounters, (b) self-reported readership, and (c) acceptance rates?

Time Spent Reading. Prior to conducting the following analysis', the assumptions of independent observations and normality were met. A repeated measures analysis of variance with a Greenhouse-Geisser correction showed that the effect of T&C encounter significantly influenced the time spent reading the encounter, both when cues were absent; $F(4.45, 347.22) = 18.12, p < .001$, as well as present $F(2.29, 178.73) = 33.50, p < .001$. In the instance of cues being absent, post-hoc comparisons using a Bonferroni correction revealed that compared to the first encounter ($M = 23.02, SD = 17.68$), participants spent significantly less time on encounter 2, 3, 4, 5, 6 and 7 ($p < .001$).

In the instance of cues being present, post-hoc comparisons using a Bonferroni correction revealed that compared to the first encounter ($M = 30.46, SD = 23.51$), participants also spent significantly less time on encounter 2, 3, 4, 5, 6 and 7 ($p < .001$). Compared to the second encounter, participants also spent significantly less time on the fifth encounter ($p = .043$), sixth encounter ($p = .042$) and seventh encounter ($p = .006$), however none between these.

For participants who did not have any cues present, results indicated a mean difference in time spent between the first T&C encounter and seventh T&C encounter of 13.97 seconds ($SD = 19.16$) – representing a 61% reduction. For participants who had cues present, the results indicated a mean difference in time spent between the first T&C encounter and seventh T&C encounter of 22.16 seconds ($SD = 21.05$) – representing a 73% reduction. This shows a larger decline in time spent reading T&C when cues are present; suggesting participants perhaps habituate across cue encounter, or in fact use the cues to make quicker yet more educated decisions. To better understand this decline across individual encounters, Table 21 below outlines individual times (in seconds) spent on T&C encounters compared across whether or not a cue was present.

Table 21.

Time Spent Reading each T&C Encounter across Cue Presence/Absence

	Cue Absent	**Cue Present**	**Comparison**		
Time (s)	M(*SD*)	M(*SD*)	t	*p*	Cohens d
Encounter 1	23.02 (17.68)	30.46 (23.51)	-2.26	.027*	-.25
Encounter 2	12.94 (11.86)	15.74 (15.86)	-1.19	.236	-.13
Encounter 3	11.35 (11.23)	11.63 (11.41)	-.15	.883	-.02
Encounter 4	11.03 (10.41)	9.88 (8.83)	.82	.452	.09
Encounter 5	8.35 (5.78)	9.46 (7.56)	-1.04	.342	-.12
Encounter 6	9.73 (11.15)	9.27 (8.65)	.29	.784	.03
Encounter 7	9.05 (10.92)	8.30 (6.04)	.51	.600	.06

* *p* < .05, ** *p* < .01, *** *p* < .001

Independent samples t-tests (Table 21) were conducted to examine the effect of the fairness cue presence on the time spent per T&C encounter, revealing a significantly larger mean time on T&C encounter 1 when cues were present ($M = 30.46$, $SD = 23.51$) as opposed to cues being absent ($M = 23.02$, $SD = 17.68$), $t(78) = -2.26$, $p = .027$. Table 21 shows that the rest of encounters do not differ significantly when a cue is present versus absent. This suggests that cues can lead to longer viewing times when first initially encountered, however do not have a significant impact on time spent per T&C afterwards.

An independent samples t-test designed to examine the effect of the fairness cues combined with the reasonableness, revealed no significant differences in the time spent reading any T&C encounter when cues were present and unreasonable and when cues were present but reasonable. Results are shown below in Table 22.

Table 22.

Effect of Reasonableness on Time Spent per Encounter with Cues Present

	Unreasonable	Reasonable		Comparison	
Time (s)	M(*SD*)	M(*SD*)	t	*p*	Cohens d
Encounter 1	32.69 (24.52)	28.06 (22.46)	.87	.385	.20
Encounter 2	16.56 (15.72)	14.86 (16.18)	.48	.636	.11
Encounter 3	12.63 (9.83)	10.55 (12.96)	.81	.420	.18
Encounter 4	11.47 (10.23)	8.17 (6.75)	1.68	.097	.38
Encounter 5	10.67 (8.60)	8.15 (6.09)	1.49	.141	.34
Encounter 6	10.34 (8.29)	8.13 (9.00)	1.14	.259	.26
Encounter 7	8.59 (6.58)	7.98 (5.47)	.44	.659	.10

* $p < .05$, ** $p < .01$, *** $p < .001$

To better understand the nature of the differences, Table 23 below outlines pairwise time comparisons sequentially across the seven T&C encounters, with cues both absent and present. Results showed that when cues were absent, the only significant sequential decline in time spent reading the T&C encounter was between the first ($M = 23.03$, $SD = 17.68$) and second ($M = 12.94$, $SD = 11.86$), ($p < .001$). When cues were present, only the decline from the first ($M = 30.46$, $SD = 23.51$) to second ($M = 15.74$, $SD = 15.86$), ($p < .001$) was significant. This suggests as mentioned previously that the effects of the cue presence on time spent are most significant at the first encounter of cues, after which the effect wears off.

Table 23.

Pairwise Comparisons between Time Across T&C Encounter and Cue Presence/Absence

	Cues Absent		**Cues Present**	
Time (s)	*M(SD)*	*p*	*M(SD)*	*p*
Encounter 1	23.02 (17.68)	< .001***	30.46 (23.51)	< .001***
Encounter 2	12.94 (11.86)		15.74 (15.86)	
Encounter 2	12.94 (11.86)	1.000	15.74 (15.86)	1.000
Encounter 3	11.35 (11.23)		11.63 (11.41)	
Encounter 3	11.35 (11.23)	1.000	11.63 (11.41)	1.000
Encounter 4	11.03 (10.41)		9.88 (8.83)	
Encounter 4	11.03 (10.41)	.688	9.88 (8.83)	1.000
Encounter 5	8.35 (5.78)		9.46 (7.56)	
Encounter 5	8.35 (5.78)	1.000	9.46 (7.56)	1.000
Encounter 6	9.73 (11.15)		9.27 (8.65)	
Encounter 6	9.73 (11.15)	1.000	9.27 (8.65)	1.000
Encounter 7	9.05 (10.92)		8.30 (6.04)	

* *p* < .05, ** *p* < .01, *** *p* < .001

These above results, and as can be seen in Figure 30, suggest a steep initial decline followed by a mellow plateau regardless of cue presence.

Figure 30.

Time Spent per T&C Encounter Manipulating Cue Presence
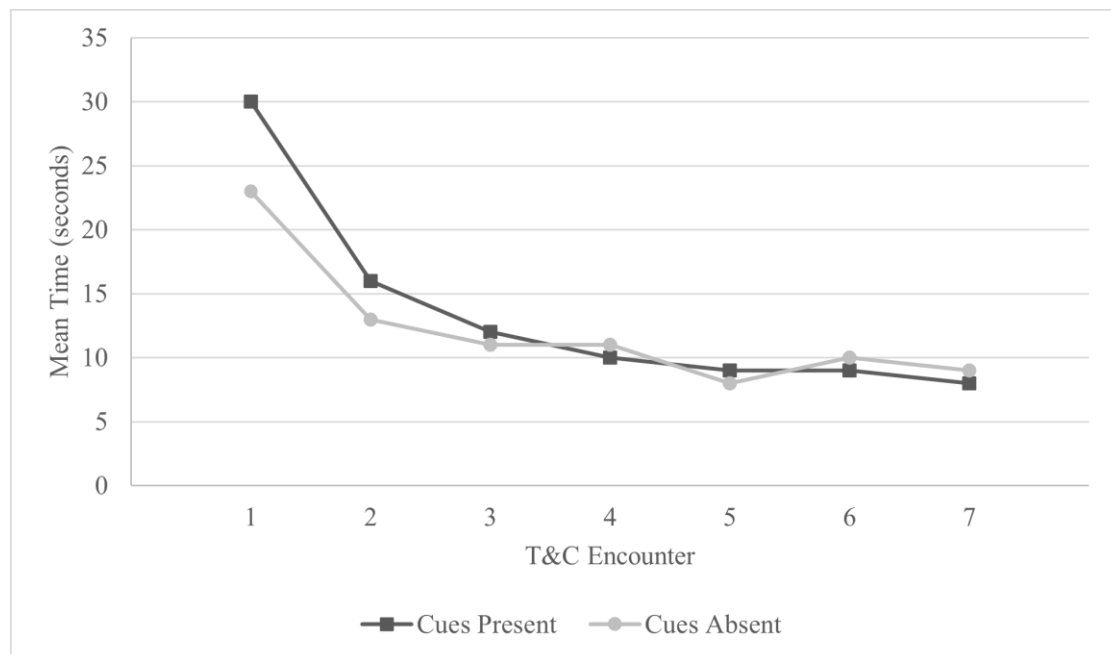
A linear regression was run to first investigate whether the presence or absence of fairness cues, and encounter were significant predictors in mean time spent, as well as the effect of fairness cues on the time spent per encounter. A significant linear regression was found, $F(3,10) = 5.96$, $p = .013$, SE = 4.35, with an R^2 of .64, however when looking at the predictors, whilst encounter was significant ($\beta = -1.83$, $p = .050$), the presence or absence of cues was not significant ($\beta = 5.65$, $p = .303$). Furthermore, cue presence did not significantly interact with the effect of T&C encounter on the mean time spent ($\beta = -1.08$, $p = .374$).

To further demonstrate that fairness cues do not significantly impact the time spent reading T&C, a non-linear regression was calculated to estimate the curve function for mean time spent reading a T&C based on the encounter (entire Study 2 sample regardless of cue presence). Based on comparing various models and the general data curve, the most suitable and significant regression was again in the form of a power equation. A significant regression equation was found, $F(1,5) = 71.00$, $p < .001$, SE = .11, with an R^2 of .93, suggesting that this model is a significant predictor of mean time spent reading a T&C based on encounter ($\beta = -.97$, $p < .001$). Participants predicted time spent is equal to the following:

$$Time = 23.524 * encounter^{-.560}$$

Applying the above predicted regression model to actual recorded times across cue presence or absence conditions revealed high goodness of fit levels below in Table 24, showing that the mean regression equation fits well to both instances where cues are absent, and present. This is useful to demonstrate, as it shows that both conditions essentially follow the same time decline pattern, and do not demonstrate any group differences in time per encounter.

Table 24.

R^2 Goodness of Fit Values of Predicted Time Model Against Each Cue Condition

Total	Cue Absent	Cue Present
.93	.90	.86

Reviewing the above results suggest that there is no real difference in time spent reading T&C when a cue is present as opposed to being absent (RQ3a); however, the lack of increased

time spent reading T&C from cues may be in unison with other benefits which are looked at in the following sections.

Readership. Looking at self-reported readership, 73% of participants ($M = .73$, $SD = .45$) reported reading *any* portion of the T&C. Comparing the readership differences across all four sub-groups using a chi-square test of independence, the group type was found to not be a significant impact on readership, $X^2(3, N = 154) = 6.46$, $p = .091$, suggesting a lack of a significant interaction effect between cue presence and reasonableness. Mean readership percentages across the four conditions are listed below in Table 25.

Table 25.

Means and Standard Deviations of Cue Presence and T&C Reasonableness on Readership Percentage

	Unreasonable T&C	Reasonable T&C
Cue Absent	59.46 (49.77)	67.65 (47.49)
Cue Present	79.49 (40.91)	81.82 (39.02)

Looking specifically at reasonableness only, the chi-square test makes evident that there is no significant difference between reasonableness groups on self-reported readership $X^2(1, N = 154) = .68$, $p = .411$. Comparing the effect of cue presence on self-reported readership using another chi-square test of independence reveals that fairness cues have a significant impact on self-reported readership, increasing the levels from 63% when cues are absent ($M = .63$, $SD = .49$) to 81% when cues are present ($M = .81$, $SD = .40$), $X^2(1, N = 154) = 5.80$, $p = .016$, *phi* = .19 with a small to moderate effect size.

The above readership results address RQ3b, showing that the presence of a cue increases self-reported readership. While this represents increased engagement with T&C, it must be considered in conjunction with the previous time results, which did not significantly increase with the addition of fairness cues. This represents an idealistic self-reported increase in readership, however even if not behavioural, self-reported readership increases may lead to other positive perceptions.

Acceptance Rates. A chi-square test of independence was next performed to examine any differences between the group type (reasonableness x cue presence) and acceptance behaviour. The means and standard deviations are outlined below in Table 26.

Table 26.

Means and Standard Deviations of Cue Presence and T&C Reasonableness on Acceptance Percentage

	Unreasonable T&C	**Reasonable T&C**
Cue Absent	86.90 (33.84)	83.46 (37.20)
Cue Present	72.73 (44.66)	87.62 (32.97)

The difference between these variables was significant with a small effect size (Cohen, 1988), $X^2(3,1154) = 21.56$, $p < .001$, $phi = .14$[4]. To investigate which group(s) disproportionately differed, adjusted standardized residuals were considered. The adjusted standardised residuals for both the *cue present and reasonable* group (±2.62) and *cue present and unreasonable* group (±4.34) were greater than the critical value (± 2.58, $\alpha = .001$), suggesting that both groups significantly contribute to the magnitude of the chi-square value, and differ significantly from the expected value for each cell.

However, to account for the risk of a type 1 error, post-hoc Bonferroni corrections were applied to correct for alpha inflation (Beasley & Schumacker, 1995), and residuals converted to be the respective *p* value. Considering the 8-cell design, the corrected *p* value became .006. As such as shown in Table 27, the only subgroup which differed significantly was in the instance when cues were present, and terms, unreasonable.

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[4] Chi-square assumption of no more than 20% of cells having an expected count less than five was satisfied.

Table 27.

Contingency Table for Group Type and Acceptance Behaviour

	Acceptance							
	No				*Yes*			
Group	N [a]	%	Adjusted Residual (z)	*p*	N	%	Adjusted Residual (z)	*p*
Cue Absent and Reasonable	66$_a$	35.3	.24	.810	333$_a$	34.4	-.24	.810
Cue Absent and Unreasonable	22$_a$	11.7	-1.18	.238	146$_a$	15.1	1.18	.238
Cue Present and Reasonable	51$_a$	27.3	-2.62	.009	361$_a$	37.3	2.62	.009
Cue Present and Unreasonable	48$_a$	25.7	4.34	< .001	128$_b$	13.2	-4.34	< .001

[a] Each subscript letter denotes a subset of acceptance categories whose column proportions do not differ significantly from each other at the .006 level (adjusted)

This suggests a dynamic interaction between cue presence and T&C reasonableness, with the only significant difference in acceptance behaviour being when cues are present, and terms are unreasonable. This can be visualised in Figure 31 below and provides strong support to show that fairness cues significantly impact acceptance rates and lead to greater rejection of unreasonable T&C (RQ3c).

Figure 31.

Interaction Effects of Cue Presence and Reasonableness
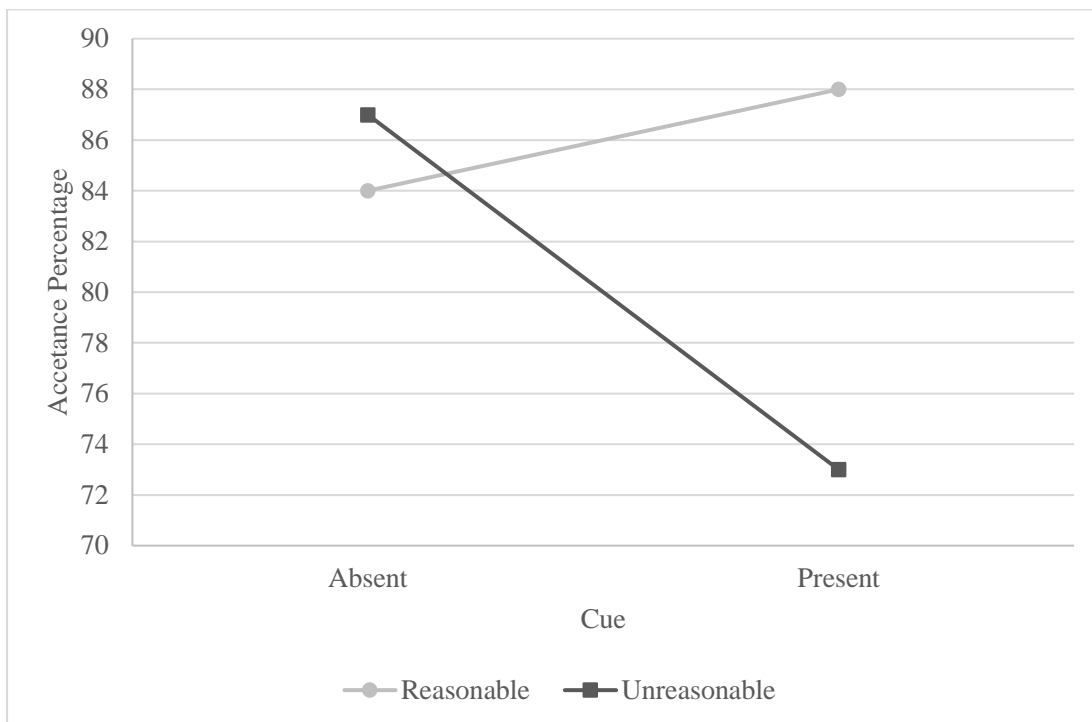
RQ4: Do fairness cues impact perceptions of T&C; namely (a) T&C engagement, (b) perceived control, (c) confidence in fairness, and (d) helplessness.

Cues vs No Cues Regardless of Use. To best understand the effect of adding a fairness cue on perceptions of T&C, independent samples t-tests were conducted. Results revealed that engagement with the T&C was significantly higher ($M = 4.20$, $SD = 1.96$) with a fairness cue present, as opposed to none ($M = 3.51$, $SD = 1.61$), $t(126) = -2.02$, $p < .05$. Whilst not significant, however approaching so, confidence in fairness differed non-significantly between participants with no cues present ($M = 4.33$, $SD = 1.67$) and those who had cues present ($M = 4.91$, $SD = 1.72$), $t(126) = -1.84$, $p = .068$. Furthermore, control did also not differ significantly between

no cues ($M = 4.58$, $SD = 1.43$) and cues present ($M = 4.21$, $SD = 1.69$), $t(126) = 1.24$, $p = .218$, as did helplessness between no cues ($M = 3.54$, $SD = 1.28$) and cues present ($M = 3.71$, $SD = 1.26$), $t(126) = -.76$, $p = .451$.

Table 28.

Variables when Cues Present (self-reported)

Variable	Cue Presence	*M* (*SD*)	t	*p*	Cohen's d
Engagement with T&C	Absent	3.51 (1.61)	-2.02	.046*	-.37
	Present	4.20 (1.96)			
Control	Absent	4.58 (1.43)	1.24	.218	.23
	Present	4.21 (1.68)			
Confidence in Fairness	Absent	4.33 (1.67)	-1.84	.068	-.34
	Present	4.91 (1.71)			
Helplessness	Absent	3.53 (1.28)	-.76	.212	-.14
	Present	3.71 (1.26)			

*$p < .05$, ** $p < .01$, *** $p < .001$

Cues Utilised vs Not Utilised. A mean of 45% of participants ($M = .45$, $SD = .50$) reported relying on or utilising the provided fairness cues, with a chi-square test of independence showing no significant difference between reasonable and unreasonable conditions, $X^2(1, N = 46) = .03$, $p = .865$. This prompts an analysis into the restricted subset of only participants who had fairness cues present and comparing those who reported utilising them against those who did not. The sample size of this reduced subset was 82 participants. The rationale for this additional analysis was to demonstrate whether any benefits seen stem from simply having a cue present, or genuine reliance on information provided by the cue. For example, if cues are not relied on, there cannot be any decision delegation or improved confidence by virtue.

When asked why participants relied on the cues, a common theme was trust in a third party, speed, and inquisitiveness. Trust was evident in feedback such as, "I feel like someone reviewed/read them for me", "They made me believe that what I was reading would not be unfair or weird", and "I think they made it easier for me to just accept them without thoroughly reading them. Another common them that arose was focused on speed, evident in feedback such as, "I feel like this let me skim faster", "decide faster" and "Saved me a lot of time reviewing them". The last theme which arose, albeit less commonly, was a desire to find the root cause of the rating, for example, "I used the fairness cues to know what to look for, and then found the section on each T&C that gave the information in the cue" and "When presented with the red unfair cue I immediately looked for something that would seem intrusive or unreasonable. When I saw the green fair cue I was a little more relaxed in how I viewed the T&C information".

Common themes for not using the fairness cues were primarily a focus on the goal (i.e., the task) and a lack of care. Goal focus was evident for example in participants who mentioned, "I just didn't pay much attention to them. I had to do whatever was needed anyway", "I didn't need them to complete the task", "I am concentrating only on game" and " I   made   my decision on the description of the task". Lack of care could be seen in participants who said, "The cues were just a guideline and had little effect on whether I accepted the terms", "I thought all of the terms and conditions were pretty similar", and "I did not pay much attention to it".

As such the need to better understand the behaviour of the restricted subset existed in the current research, as well as prompting a discussion into possible reasons for why cue reliance was not higher, as well as what could be done to improve it.

Independent samples t-tests were conducted comparing participants who explicitly reported using or relying on the provided fairness cues, with participants who did not rely on cues despite being provided. Results revealed that engagement, perceived control, and confidence in fairness all significantly differed, however not helplessness.

Results revealed engagement with the T&C was significantly higher ($M = 5.19$, $SD = 1.68$) in participants who used the cues, as opposed to not using them ($M = 3.40$, $SD = 1.81$), $t(81) = -4.62$, $p < .001$. Perceived control was also significantly higher in participants who relied on the cues ($M = 4.70$, $SD = 1.46$) than those who did not ($M = 3.82$, $SD = 1.767$), $t(81) = -2.42$, $p = .018$. Additionally, confidence in fairness was also significantly higher in participants who relied on the cues ($M = 5.45$, $SD = 1.63$) than those who did not ($M = 4.48$, $SD = 1.68$), $t(81) = -2.66$, $p = .009$. Lastly, helplessness was not significantly higher in participants who relied on the cues ($M = 3.62$, $SD = 1.21$) than those who did not ($M = 3.79$, $SD = 1.31$), $t(81) = .60$, $p = .553$. Looking at only participants who reported relying on cues and comparing helplessness levels across reasonableness also found no significant difference between reasonable T&C and cues ($M = 3.40$, $SD = 1.33$) and unreasonable T&C and cues ($M = 3.88$, $SD = 1.04$), $t(35) = -1.21$, $p = .233$.

Table 29.

Variable Comparison Between Cues – Provided but not Utilised, and Provided and Utilised (Self-reported)

Variable	Cue's Utilised	*M (SD)*	t	*p*	Cohen's d
Engagement	No	3.40 (1.81)	-4.62	<.001***	-1.02
	Yes	5.19 (1.68)			
Control	No	3.82 (1.77)	-2.42	.018*	-.53
	Yes	4.70 (1.46)			
Confidence in Fairness	No	4.48 (1.68)	-2.66	.009**	-.59
	Yes	5.45 (1.63)			
Helplessness	No	3.79 (1.31)	.60	.553	.13
	Yes	3.62 (1.21)			

* p < .05, ** p < .01, *** p < .001

As such strong support exists to suggest that when relied upon, fairness cues can significantly improve T&C engagement, perceived control and confidence in fairness, however not helplessness.

Results in Relation to Research Questions. Results for the research questions relevant to Study 2 can be seen summarised below in Table 30.

Table 30.

Results Summary in Relation to Research Questions

Research Question	Summary
RQ2	Even when presented with fairness cue aids, participants habituated across T&C encounters in terms of (a) the time spent reading, when (b) fully presented, (c) regardless of reasonableness.
RQ3	T&C with fairness cues present resulted in participants (a) spending longer on the first T&C they encountered with fairness cues, but not after that. (b) Self-reported readership also increased, and (c) rejection of unreasonable T&C significantly improved.
RQ4	T&C with fairness cues present resulted in a significant difference in (a) engagement, however not (b) perceived control, (c) confidence in fairness, or (d) helplessness. In instances where cues were not only provided, but also reported to be relied on, significant differences were found in (a) engagement, (b) perceived control, and (c) confidence in fairness, however not (d) helplessness.

6.3   DISCUSSION

Study 2 examined the impacts of graphical fairness cues on participants across T&C encounters, as well as in conjunction with manipulating the T&C reasonableness. Having demonstrated the presence of habituation in Study 1, the purpose was to understand how

participants respond to multiple T&C encounters when fairness cues were present; in terms of changes in time spent reading each T&C, readership behaviour and acceptance behaviour, as well as changes in perceptions of engagement, control, confidence in fairness, and helplessness.

6.3.1 Research Question 3

RQ3a showed mixed results. For participants who did not have fairness cues available to them, a similar decline in time spent per encounter occurred to that seen in Study 1, with a significant decline in time spent between the first and last encounter of 61%. For participants with fairness cues, there was a significant reduction (73%) in time spent between the first and last encounter. However, this was due to a significantly *longer* time spent reading the first encounter when participants had cues present versus absent (30.5 seconds vs 23.0 seconds). Furthermore, when cues were present, a significant decline in time spent reading was only seen between the first two encounters prior to plateauing. This was the same for the condition with no fairness cues, also taking only the first two encounters to significantly drop to the same baseline curve, after which the remainder were very similar in nature. This suggests that fairness cues did not represent a strong enough deviation to normal T&C to break habituation behaviour across encounters.

In instances where cues were present, there was also no significant difference in time spent reading a T&C regardless of reasonableness. Not only does this consolidate the presence of habituation in RQ2a, but it also suggests a novelty factor when participants are first faced with a fairness cue, which then quickly wears off again. However, while the novelty effect may apply to the time spent reading T&C, it must be examined in conjunction with RQ3b and RQ3c, looking at self-reported readership and acceptance behaviour too. As suggested by Plaut and Bartlett (2012), any T&C review tool such as fairness cues in the current research must prioritise speed and efficiency. This is also argued by Elshout et al. (2016) who find that effortless awareness, that is, making consumers aware of the T&C reasonableness at no extra cost to them, is key. Discussion of the following research questions outline whether the real value in fairness cues lies elsewhere than time spent per encounter.

RQ3b found a significant increase in self-reported readership from 63% to 80% with the introduction of fairness cues. Interestingly, there was no significant difference in self-reported readership across reasonableness. These findings consolidate research that manipulating T&C presentation using visual aids such as fairness cues can increase self-reported readership (Elshout et al., 2016; Perrault & Keating, 2018).

Furthermore, RQ3c found that cues played a significant role in T&C acceptance. Findings showed that when T&C were unreasonable, and cues alerted participants to this, the acceptance rates were significantly less than when no cue was present (87% vs 73%), whereas when reasonable, and alerted to this through cues, there was no significant difference in acceptance. These findings directly provide evidence for the effectiveness of effortless awareness in a T&C environment using fairness cues (Elshout et al., 2016), also confirming that speed and efficiency remain key (Plaut and Bartlett, 2012). Additionally, supported by the findings which showed that time spent per T&C did not improve with the addition of cues (RQ3a), yet acceptance and rejection behaviour of unreasonable T&C improving, it can be shown that individuals do indeed care about the contents of T&C. As Ben-Shahar (2009) outlined, non-readership does not reflect an acknowledgement of inability or lack of care, suggesting that individuals do in fact care about understanding T&C (Plaut & Bartlett, 2012), but do not for various reasons. As discussed previously, common beliefs are that T&C are too long and time-consuming (Olson & Olson, 2003; Plaut & Bartlett, 2012), and many consumers knowingly take the risk of possible non-readership implications if they do not have to read the T&C (Elshout et al., 2016). The findings of fairness cues significantly improve rejection of unreasonable clauses demonstrates the clear desire for awareness of the contents, yet a lack of interest in spending time and effort on reading T&C. Fairness cues have the ability to even out the cost-benefit analysis consumers face with T&C, by not increasing the cost of understanding T&C (effortless awareness using fairness cues), yet significantly increasing the possible benefit (protection from previously undetected unreasonable terms). Overall, these findings represent a minor contribution to literature by better understanding the effects of labels on behavioural outcomes (Morrow et al., 2020).

6.3.2 Research Question 4

RQ4 saw T&C perceptions changing with the addition of fairness cues. Considering first the full sample including participants who reported not relying on fairness cues despite having them present and comparing participants perceptions between having no cue present and having one present, found a significant increase in engagement, however no significant differences in perceived control, confidence in fairness or helplessness. Comparing the perceptions of only participants who reported *relying* on cues to those who did not rely on available cues, significant increases were seen in engagement, perceived control, and confidence in fairness, however not in helplessness.

Looking towards self-reported cue reliance and the need to examine the restricted subset mentioned above, 45% of participants reported using and relying on the fairness cues. It was found that the primary reasons for using them was the third-party analysis, speed in which it allowed a judgement to me made, and an inquisitiveness to then find out why the cue was deemed to be a particular rating. This supports literature on decision delegation by Iyengar and Lepper (2002), who found that when consumers face decisions that are too overwhelming, will often revert back to basics. In this instance offering consumers this escape to the current T&C complexity in the form of a simplistic, basic fairness cue can be highly beneficial. This study acts as a contribution to literature by using fairness cues as a recommendation tool design to aid decision delegation, as suggested by Broniarczyk and Griffin (2014), and supports findings that in difficult task environments, consumers often base decisions on the recommendations of others (Formisano et al., 1982), and in fact even prefer those (Benartzi & Thaler, 2002).

RQ4a represents a contribution to literature by investigating the impact of fairness cues on self-reported T&C engagement, a gap outlined by Elshout et al. (2016); also consolidating the need for decision simplicity (Botti & McGill, 2006; Broniarczyk & Griffin, 2014; Johnson et al., 2012; Spenner & Freeman, 2013). Interestingly, despite the strong presence of decision delegation through cue reliance outlined above, increased levels of perceived control were seen in RQ4b. This can be explained by Wathieu et al. (2002), who claim that despite desiring control, consumers may not always know what is best for them at the time. Therefore, despite delegating to fairness cues and simplifying the decision process, perceived control still increases, which can also have alternative positive outcomes such as satisfaction (Iyengar & Lepper, 2000). Confidence in fairness also significantly increased in RQ4c however only when cues were reported to be relied on. This makes sense as confidence is based on past performances (Morony et al., 2013); hence, if cues are not relied on then an increase in confidence in ability to evaluate the fairness of T&C is not seen. While there were no significant differences in helplessness regardless of cue absence or presence (RQ4d), a cue reliance of 45% also suggests the presence of helplessness. This is as Peterson (1993) suggested that depending on others as a crutch can a strong indicator, and as such can explain some of the cue reliance. Despite the lack of differences, there was also no significant difference in helplessness when participants had cues present, and reasonableness being manipulated. This is contrary to how Teodorescu and Erey (2014) explain helplessness; with helplessness being driven by exposure to rewarding outcomes rather than controllability. In the current research this could have been likened to cues alerting participants to reasonable T&C not rewarding

them, with no change in outcome, however cues which alerted participants to unreasonable T&C, and subsequently allowing for an avoidance of obvious risk by declining, could have eased feelings of helplessness. The lack of any significant changes in helplessness across conditions suggests the engrained nature of learned helplessness over time, and as such may also take longer periods of time as well as repeated exposure to *controllable* outcomes before reducing.

Chapter 7: Conclusions

7.1 DISCUSSION

Literature has consistently shown that consumers current readership and engagement with online T&C is poor (Bakos et al., 2014; Fiesler et al., 2016; Obar & Oeldorf-Hirsch, 2018; Perrault & Keating, 2018; Plaut & Bartlett, 2012), with critical clauses being missed (Obar & Oeldorf-Hirsch, 2018) and stemming primarily from underlying beliefs based on time, uselessness, lack of control, complexity and disruptive nuisances (Elshout et al., 2016; Hillman & Rachlinski, 2002; Plaut & Bartlett, 2012; Rakoff, 1983). Various attempts to improve this behaviour have been made, including adding perceptions of control, simplification, and fairness cues (Elshout et al., 2016). At the same time more progressive artificial intelligence software has also been developed in parallel literature designed to analyse T&C, however, have not been tested on consumers.

This thesis focused on measuring observable outcomes from adding fairness cues and gaining a clearer picture of the synergy between cues, their effects on behaviour, and their effects on perceptions of T&C. Its' originality and objectives were to contribute to habituation literature by observing and proving the presence of classic habituation behaviour specifically in a T&C context, as well contributing to T&C literature through measuring *behavioural* impacts of adding fairness cues. The current research demonstrated that the method of aiding consumers in T&C situations needs to be reconsidered in a simplistic, fairness cue style. Below is a summary of findings relevant to each research aim.

Research Aim 1: To understand the extent of *non-readership* across various T&C encounters in the context of online T&Cs (Study 1).

Study 1 found no significant differences in T&C readership or acceptance rates regardless of reasonableness or presentation format, showing that presently, T&C are not being read, with key unreasonable terms being missed. These results support previous findings by Obar & Oeldorf-Hirsch (2018) and Plaut & Bartlett (2012), consolidating poor T&C readership and reiterating common T&C readership beliefs. This suggested the presence of helplessness and demonstrated the need to examine the effects of fairness cues on readership behavior.

Research Aim 2: To investigate the presence of *habituation* in the context of online T&Cs (Study 1).

Study 1 provided evidence strongly supporting the presence of habituation across T&C encounters, aligning with key characteristics such as progressive decreases in the response parameter (time spent) across a repeated application of stimulus (T&C encounter) (Thompson & Spencer, 1966). Study 2 further supported the presence of habituation even with the addition of fairness cues. Reasonableness did not have a significant impact on habituation behaviour. These results suggest that the issue of habitation across T&C must take into consideration the possibility that habituation in this context cannot be broken, demonstrating the need for effortless awareness through fairness cues.

Research Aim 3: To examine the effects of the use of *fairness cues* on engagement behavior and perceptions in the context of online T&Cs (Study 2).

The introduction of fairness cues added a wealth of positive outcomes, both behavioural and perceptual. With a 45% self-reported reliance on cues, self-reported readership levels improved, as did acceptance behaviour, with unreasonable T&C being rejected significantly more once highlighted to consumers through cues, yet reasonable ones not significantly changing. This suggested that consumers do in fact desire the knowledge of when T&C are unreasonable, and whilst they may not spend any extra time on them, shows again the importance of the "effortless-awareness" concept (Elshout et al., 2016). The implementation of fairness cues represents an excellent application of decision delegation literature to a modern problem, by offering a basic solution when consumers are faced with overwhelming decisions or tasks (Iyengar & Lepper, 2000). Even with fairness cues available highlighting the reasonableness levels, results still showed habituation after a significantly higher first encounter. When cues were utilised, participants reported increased engagement, perceived control, and confidence in fairness, however no differences in helplessness. These results contribute to understanding behavioural effects of fairness cues and labels on consumers, an area previously highlighted as lacking by Morrow et al. (2020).

What emerges from the above results is that whilst attempts to increase readership failed, positive outcomes for participants who engaged with fairness cues were rife – ultimately demonstrating the need for effortless awareness through fairness cues. This was achieved by providing a large benefit to consumers in a pre-analysed set of T&C, with very little addition expense such as required reading time, delivering an efficient and simple cue. If habituation and helplessness are unable to be changed easily, cues should be implemented to make sure than when consumers do act in this very predictable manner in a T&C environment, that they have the power to do so in an informed manner, and still reap the positive perceptual outcomes.

7.2 IMPLICATIONS AND CONTRIBUTIONS

As a result of the various findings from the current research, several methodological, theoretical, and practical implications are presented below.

7.2.1 Methodological

Providing participants fairness cues in a similar format as Elshout et al. (2016) yet observing key behaviours such as times, acceptance and expansion rates is unique to the current research and can be used to examine the presence of habituation across encounters of any stimuli. Cues were also designed from scratch, with pretests determining the suitability for use. Researchers desiring to continue research into the effect of fairness cues in any applicable environment may wish to extend from the current developed cues, as they do not infringe on any existing copyrights or attempt to replicate any legitimate organisations.

7.2.2 Theoretical

Observing the use of fairness cues in the current research contributes newfound knowledge to literature by investigating the relationship between behavioural and perceptual outcomes. For example, despite no differences in times or readership, not only did cues lead to better, more educated acceptance decisions (i.e., rejecting T&C when unreasonable despite not spending longer on them), however also resulted in improved perceptions of T&C in terms of engagement, perceived control, and confidence in fairness. The current research's originality also lies in the observation and application of habituation (Thompson & Spencer, 1966) characteristics to an online T&C specific environment, and subsequently allowing for justification of why fairness cues are the most appropriate method to attempt to address it. Theory around decision delegation was used to justify cues, by offering a simple solution to situations where consumers be otherwise overwhelmed (Aggarwal & Mazumdar, 2008; Iyengar & Lepper, 2000). The success of the fairness cues in the T&C context suggests that they are a viable tool to aid decision difficulty.

7.2.3 Practical

Some of the pinnacle researchers in the field of artificial intelligence have created some very useful, yet still at early stages, software which allows consumers to scan T&C, for unfair clauses (de Jong et al., 2012; Lippi et al., 2019; Micklitz et al., 2017). In essence, this builds upon the reasoning that the power of AI is not limited to benefiting businesses and should be harnessed to empower consumers through tools and apps (Contissa et al., 2018). While presenting theoretical arguments for the need for T&C analysis software (de Jong et al., 2012;

Lippi et al., 2019), and progressive in a computing manner, research on the effectiveness and impacts of such modern consumer-assistive technologies on consumers is lacking. The results presented in the current research can be used to infer the potential of extending fairness cues, and in a broader sense assistive T&C tools, to an AI application.

The most progressive research is by Micklitz, et al. (2017), who designed software to automate the process of decisions when it comes to online consumer clause fairness, by loading in contracts and highlighting unfair terms. The authors argued that the need for their software was due to it being possible to "partly automate the process of abstract control of fairness in online contract clauses" (Micklitz et al., 2017, p. 367). Extending on this research, which is rather unfriendly to consumers, Lippi et al. (2019) utilised machine learning to develop CLAUDETTE, a software which highlights potentially unfair clauses. Lastly, a team of software developers worked together in 2012 to develop Terms of Service; Didn't Read (ToS;DR), one of the most user-friendly T&C reasonableness resources in the form of a crowd-sourced community rating base for various organisations T&C (de Jong et al., 2012). The key distinction from ToS;DR, and the assistive technology developed by Micklitz et al. (2017) and Lippi et al. (2019), is that ToS;DR is a peer-reviewed, crowed sourced platform. The creators (de Jong et al., 2012) developed a user rights initiative in the form of a website which allows the rating and labelling of various website T&C. Whilst the rating of a set of T&C is presented in a very user-friendly manner, by highlighting both key fair and unfair terms and summarising with a rating from Class A to Class E, it is only available for websites/T&C which have previously been community rated. Where Micklitz et al. (2017) and Lippi et al. (2019) extended from this was by developing software capable of learning and analysing T&C on the spot, using artificial intelligence to define what is fair, and unfair.

Looking at the above progressive technologies, the common characteristic is that they all require a visit to a specific, external website or software away from a consumers' target website in which they would realistically encounter T&C. Whilst technologically progressive, a key consideration is the level of user-friendliness, as there is little acknowledgement of the reality of consumers going out of their way in online purchases to visit an entirely separate website and copying across a set of T&C to analyse. Despite serving a functionally accurate purpose, it may be impractical to do so for every checkout. Where de Jong et al. (2012) present a very user-friendly webpage, its downside falls in the lack of AI, requiring crowd-sourced information to manually rate every set of T&C. In an ideal world, an integration between the

fairness cues of Elshout et al. (2016), the user interface of de Jong et al. (2012), and technology of Micklitz et al. (2017) and Lippi et al. (2019) could be a viable solution.

This thesis empirically supports the idea that consumers *do* care about unreasonable T&C, evident by significant decreases in acceptance of unreasonable T&C when made aware by fairness cues. This in conjunction with the remainder of results clearly demonstrates the need for better consumer protection, for which fairness cues could form the backbone of a real implementation. As such, the need arises for fairness cues to be made either mandated, or easily accessible. The first of the two possible implementation methods falls on policymakers; and while requiring a regulatory body, could be implemented in a more labour intensive, yet thorough manual review process, in which businesses are required to apply for a vetting or verification process of the T&C, and are subsequently required to display their respective cue. The second possible implementation method would require a consumer-driven approach, ideally combining the AI technology discussed above, with a browser plug-in automatically scanning T&C, and displaying a simplified fairness cue. This would make it optional, however theoretically would also allow for consumers to develop custom tolerance levels (see 7.3.2), and ultimately increase their own engagement.

The current research investigated the effects of simplistic fairness cues on T&C contexts and aimed to bridge the gap between traditional methods and more progressive AI technology, highlighting that an AI application of fairness cues, integrated into T&C, has the potential to greatly benefit consumers. Significant reductions in unreasonable T&C being accepted when made aware by fairness cues, as well as increased engagement, perceived control, and confidence in fairness provide a solid foundation for the integration of complex software, in a user-friendly, simplified cue format.

7.3 LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

7.3.1 Revealing Reasonableness Differences

The main limitation to Study 1 was the lack of differences seen across reasonableness, and from a critical perspective is insufficient to act as a baseline for development in Study 2, in which incentives and fairness cues were added. Future research should attempt to reveal a difference in behaviour across reasonableness, to demonstrate that unreasonable T&C *do* get declined when consumers are made aware of the unreasonableness. This would show whether a lack of decline is not just from a failure to read the T&C, due to results from Pretest 1 having confirmed perceptions of unreasonable terms. This could be done by explicitly flagging to

participants that some T&C will contain unreasonable terms. Another possible reason for why no differences were seen across reasonableness was that regardless of whether participants were allocated to the unreasonable or reasonable condition, the first T&C encounter was always reasonable. This was originally done to avoid demand effects, however without consideration of how severe the lack of readership is. Results from Study 1 suggest that if the first encounter is not unreasonable, then it will not trigger a full interrogation of the remainder of encounters. As such for the unreasonable group in Study 2, the first encounter was changed to be always unreasonable (previously reasonable), and the last (seventh) encounter always reasonable, with the remaining middle five encounters containing three randomised order unreasonable T&C.

7.3.2 Stimulus Generalisation and Improving Cue Reliance

Considering both positive and negative aspects of cue reliance, it presents positive benefits in terms of perceptions, as well as rejection of unreasonable T&C. Contrastingly, looking at the impact on time spent per encounter, also suggests the beginning of stimulus generalisation (Thompson & Spencer, 1966). Alternatively, experimental fatigue may also have been a strong contributing factor, the extent of which is unable to be accurately determined in an experimental artificial setting. As discussed previously, by virtue of the dependent nature of helplessness, cue reliance was expected (Peterson, 1993), and as such considerations need to be made to accommodate for this. A reliance on supplied fairness cues can be detrimental if it leads to consumers not engaging with content and not basing judgements on their own perceptions of reasonableness and fairness. This runs the risk of if being implemented in a wide-spread manner, over time consumers may again habituate across encounter of cues and pay less attention them; and is the same conclusion that Elshout et al. (2016) arrived at. Ultimately, the target outcome should be increasing cue reliance, whilst minimising generalisation.

A current limitation is a self-reported cue reliance rate of 45%. Considering why this may be so low, the two most common reasons for non-use were cited to be a focus on the goal task instead, and a lack of care, suggesting unbroken habituation behaviour. One possible theoretical explanation that emerges is that a need for control (a relatively enduring trait) can impede decision delegation likelihood (Aggarwal & Mazumdar, 2008). Looking at the above the most obvious challenge that emerges is the question of how to further increase cue reliance, given the improved effects on perceptions when they are relied on compared to not.

Based on the promising findings presented with cues (when utilised) and potential presented with AI software, the focus of the next stage of research should be on increasing cue reliance whilst keeping stimulus generalisation low, through an experimental confirmation of theory built upon control and decision delegation. As mentioned previously, Aggarwal and Mazumdar (2008) propose that the key impeding factor of decision delegation likelihood; need for control, can be reduced by providing a perception of control through consumer involvement. Furthermore, customisation ability also can encourage decision delegation Aggarwal and Mazumdar (2008). As such the proposed solution to mitigate generalisation and increase reliance are *customised tolerance fairness cues*.

A proposed framework for these would involve asking consumers a set of "tolerance" questions regarding various unreasonable and reasonable clauses designed to gauge their tolerance threshold to certain unfair terms. An AI software backend would then dictate the type of cues displayed. A proposed set of tolerance questions can be found in Appendix G. The rationale for this is that consumers are then not entirely oblivious to what an either "green or red" (reasonable or unreasonable) fairness cue means, due to having been involved themselves in the process and being given a sense of control.

7.3.3 Incentive Limitations

The design of Study 1 did not allow for a comparison between Study 2, to determine the effect of incentivising participants with a small bonus for each additional task completed. Furthermore, Study 2 did not investigate the impact of different levels of bonus incentives, and as such the impact of bonuses to mimic goal motivation were beyond the scope of the current research. This correlates with another possibility for the habituation seen, being that the incentivisation in the experimental environment may have caused some participants to decline, due to being paid the completion fee regardless of tasks completed. This poses an internal validity concern, as with a few comments for declining suggesting that the optional 10c bonus highlighted to some participants that they can in fact decline, whereas some may previously have not considered that. Despite this, it was only a small amount, and is evident by an overall consistent acceptance rate.

Whilst only artificial, this raises the question of whether the value of an outcome can influence consumers in T&C encounters; experimentally, in terms of a bonus feature to motivate T&C acceptance and task competition, but also investigating whether different outcomes that follow a T&C can influence habituation, engagement, control, confidence in

fairness and helplessness. Participants may react differently if the outcome related to the T&C is more financially valuable/expensive or may involve a higher level of intrinsic personal attachment. This is as outcomes and goals associated with T&C in a real-life context may be either more, or less valuable or desired than in the current research's experimental setting. Perhaps when incentivised, participants may be more likely to accept T&C even when explicitly told that they are unfair. By doing so, this highlights a limitation of Study 2, in which all combinations of cue presence and reasonableness were tested while offering bonus incentives. The only condition that was not examined was instances in which T&C were unreasonable, had a cue present, yet *no* incentive. This is something which future studies are suggested to investigate, while still utilising fairness cues.

7.3.4 Optionality of Aid Service

One question which remains unanswered is the effect of making the fairness cues optional, by presenting them in an opt-in versus opt-out format. In the present Study 2 participants were not given a choice whether cues were present. Extending this to the previous suggestion involving custom tolerance fairness cues, an example of this would be when participants are asked to answer the tolerance questions – accommodating the option that some participants would like to decline this perhaps or would not want to take part. This would provide an extra layer of insight to Study 2 alone, in which cues were present (not by choice) versus absent (not by choice). Implementing this experimentally would simply involve informing participants about the custom graphics cue service, however then getting to choose whether they have this available to themselves.

The justification for this limitation and future suggestion stems from the fact that throughout literature the most progressive technological and AI aids designed to assist consumers with T&C; such as ToS;DR, CLAUDETTE and contract analysis software (de Jong et al., 2012; Lippi et al., 2019; Micklitz et al., 2017), all share one common factor – being an "optional, opt-in" format. Whilst Study 2 attempted to mimic this technological assistance to consumers through fairness cues, the key differentiator was that graphics cues were not optional and were simply presented to participants. Contrary to this, the above-mentioned examples are all ones which consumers in a real-world scenario would have to go and seek out.

7.3.5 Artificial Setting

Considering the limitations that have stemmed from Study 2, it is strongly suggested that future research attempts to test fairness cues in practice. One risk to external validity throughout

these studies was the timeframe between the seven tasks participants faced, and as such the prefacing T&C. This was unlike in a real-world context where members of society may face T&C once every few days or weeks; not seven exposures in a row within a 15-minute timespan. It was anticipated that this may have had alternative or accelerated effects on habitation.

As also identified by Plaut and Bartlett (2012), an unavoidable threat to internal validity was the influence of novelty in each of the tasks and games due to the experimental setting. Game effects were also a possible risk, as it was unknown whether a game affected subsequent response behaviours to following T&C. A potential confound exists if participants wished to play the next game immediately after enjoying the previous one. This risk was minimised by adding randomisation across the ordering of tasks. Another potential external validity threat that stemmed from Study 2 was that all T&C were presented in a full manner only, and not expandable. The question can be raised of how contextually relevant this is to real-life T&C encounters, which are often structured more as expandable T&C.

The current research has acted as a foundation for the effects of fairness cues in an artificial situation, however results are not conclusive on the impact when consumers are in an unassuming real T&C environment. This demonstrates the need for the next step to involve moving to a real-life longitudinal study, by implementing a fairness cue system on a real shopping website and tracking results over a period.

7.3.6 Cue Dichotomy

A further avenue for consideration could be investigating the value of adding a moderate fairness icon too, opposed to the dichotomous (either unreasonable or reasonable) cues used in the current research. However, this is likely to not yield any further positive gains, as Iyengar and Lepper (2000) strongly recommend keeping choice sets as simple as possible to reduce internal conflict, decision delegation likelihood and satisfaction. A moderate cue may in fact even add decision difficulty, by not acting as a clear "black or white" recommendation, instead reintroducing a level of indecisiveness for consumers. A much more viable option would be utilising custom cues based on tolerance, after which a dichotomous cue would be presented.

7.3.7 Impact of Predisposed Views on Cue Effectiveness

An interesting point made in literature which cannot be ignored in light of Study 2 is a downfall of decision delegation, specifically recommendation-based tools, in which conflict can arise if a recommendation (i.e., fairness cue) strongly conflicts with a consumer's pre-held views (for example on an existing business). An example of this would be when a consumer

holds strong positive views on a company, however upon proceeding to purchase something is notified by the fairness cue that the T&C' are in fact unreasonable. This presents an avenue for future research to test scenarios with conflicting views and investigate the impact that cues can have.

7.4 CONCLUSION

The current research commenced by examining the extent of non-readership behaviour as well as habituation across T&C conditions and encounters, finding no impact of T&C reasonableness or presentation on readership behaviour and demonstrating that clear unreasonable terms were being missed. This supported existing research around non-readership rates and behaviour (Obar & Oeldorf-Hirsch, 2018; Plaut & Bartlett, 2012). Habituation was also observed across T&C encounters, with clear declines in time spent per encounter and expansion rates, aligning with key characteristics of habituation (Thompson & Spencer, 1966).

The primary contribution of the current research was the application of fairness cues to investigate both behavioural changes in T&C encounters, such as time, readership, and acceptance behaviour, yet also perceptual ones such as engagement, perceived control, confidence in fairness, and helplessness. Behavioural impacts of fairness cues in T&C had not been previously observed in literature. Fairness cues were used as means to create effortless awareness and acted as a decision delegation tool to simplify T&C encounters. Results found no increases in time spent when cues were present, however greater rejection of unreasonable T&C, as well as increased engagement, control and confidence when relied on. The current research highlighted the large potential of fairness cues to aid in T&C analysis, with positive benefits for consumers, as well as ethical benefits for businesses. Furthermore, the current research hopes to help progress T&C regulation by not only highlighting the need for industry policymakers to consider wide-spread fairness cue implementation, yet also suggesting the need for software to be developed in assisting a wide-spread implementation.

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Appendices

Appendix A

All Pretested Unreasonable Clauses

1. Third-Party Web Service Accessibility (as commonly requested by mobile apps)

Depending on the research condition You are assigned to, as part of the Research Task completion You agree that the Research Team may or may not require that You supply Your fully functional social media log-in details, including passwords, and provide access to Your stored personal photographs on any mobile devices You own, such as mobile phones and tablet computers. Any requested log-in details and photographs will be confirmed by the Research Team as valid and accurate. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

2. Participation Subscription Commitment (as commonly requested when joining trial subscriptions)

Depending on the research condition You are assigned to, You agree that at the Research Team's discretion You may or may not be subscribed to the research newsletter Information Monthly at a cost to You of US $29.99 per month for a period of one year. This subscription would be payable by You, deductable from Your nominated financial institution. This subscription will renew after one year unless cancelled. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

3. Recruitment Agreement (as required to get some offers such as ride-share discounts)

Depending on the research condition You are assigned to, to fulfill payment requirements the Research Team may or may not require that You recruit an additional ten (10) research participants for the Research Task within one week of Your own Task completion. Payment

may be withheld until each of Your recruited ten (10) participants have satisfactorily completed the Task and confirmed You as the source of recruitment. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

4. Web Browser Alternation (as required when installing a default web browser and toolbars)

Depending on the research condition You are assigned to, completion of the upcoming Research Task may or may not require You to uninstall any web browsers on Your computer and install an alternative web browser chosen by the Research Team. This may disrupt Your normal computer functioning. Prior to the uninstallation process You may be asked to back-up any personal data on Your computer to prevent loss. You should not commence this process until instructed. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

5. Web-Traffic Monitoring Agreement (as required when accessing online services/toolbars using cookies)

Depending on the research condition You are assigned to, the upcoming Research Task may or may not require that You load non-temporary web-traffic tracking software to Your computer or mobile device. This software may enable the Research Team to monitor websites You visit after Research Task completion to help form an understanding of Your information processing behaviours. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

6. Promotion via Personal Network (as done via online services such as Facebook)

Depending on the research condition You are assigned to, You agree that the Research Team may or may not request to use Your personal information, such as Your name and other personal demographics, to promote additional Research Tasks to Your peers via Your personal network. This may include, for example, a summary of Your results with Your name as part of

advertisements in Third-party Social Media Services. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

7. Third Party Sharing for Personal Surveillance (as required when accessing online services such as Facebook)

Depending on the research condition You are assigned to, for the upcoming Research Task, the Research Team may or may not choose to share Your personal data with third parties such as federal government surveillance agencies. This will assist with the implementation of personal surveillance of Your future information consumption activities. This may impact future eligibility in areas including employment, financial services, and international travel but will not prevent You undertaking future Research Tasks. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

8. Location Tracking Release (as done via online services such as LinkedIn)

Depending on the research condition You are assigned to, You agree that the Research Team may or may not track and share Your location data and other personal data with third parties, who will remain undisclosed to You. This may include Internet Protocol (IP) addresses and computer device fingerprints for the purposes of marketing products and services to You in the future. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

9. Web Communication Service Accessibility (as commonly requested by web services like Google)

Depending on the research condition You are assigned to, Research Task completion may or may not involve You granting permission to the Research Team to access recent private messages sent via email communications to Your peers. The Research Team will not alter Your messages but may review them to evaluate Your information processing behaviours. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

10. External Web Services Agreement (as commonly requested by web services like Trello)

Depending on the research condition You are assigned to, completion of the upcoming Research Task may or may not involve transfer of ownership of Your data to undisclosed external third-party web sites for external use. Your agreement with these Terms and Conditions automatically confers agreement with the Terms and Conditions of any external third-party web sites or services. This may apply regardless of the content and conditions contained in the Terms of the external third-party web sites or services, or the jurisdictions where they apply. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Participant Informed Consent Form Pretest

	PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT – Survey –
	Consumer Information Processing and Engagement **QUT Ethics Approval Number 2000000423**

Research team.

Mr Yannik Frank	yannik.frank@qut.edu.au	MPhil Candidate and Researcher
Dr Clinton Weeks	+61 7 3138 5349	clinton.weeks@qut.edu.au Principal Supervisor
Dr HS Jin	+61 7 3138 2645	hs.jin@qut.edu.au Associate Supervisor

School of Advertising, Marketing and Public Relations QUT Business School
Queensland University of Technology (QUT) - Australia

Why is the study being conducted?

This study is a research project being conducted by Yannik Frank (MPhil. Candidate) as part of a program of research supervised by Dr Clinton Weeks and Dr HS Jin.

The study is designed to test perceptions of sample Terms & Conditions clauses, as well as the evaluation of a set of icons (fairness cues) with respect to how appropriate they are for indicating fairness of Terms & Conditions.

You are invited to participate in this research project because you meet the eligibility criteria of living in the US, regularly using the internet and being over the age of 18 years old.

What does participation involve?

Participation will involve rating a series of Terms & Conditions clauses with regard to fairness, reasonableness, and your likelihood of accepting if you encountered them in real sets of Terms & Conditions. Participation will also involve rating a set of icons used as fairness cues. The tasks will take approximately 10 minutes of your time.

Questions will include:
- *Please indicate your perception of the clause (unfair-fair)*
- *How would you rate these graphics in terms of conveying the fairness level?*
- *How would you rate these graphics in terms of ease of interpretation?*

Your participation in this research project is entirely voluntary. If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or Qualtrics. If you do agree to participate you can withdraw from the research project during your participation at any time without comment or penalty, and your responses will **not** be used. However as the survey does not request any personal identifying information, once it has been submitted it will not be possible to withdraw.

What are the possible benefits for me if I take part?

It is expected that this research project will not directly benefit you. The outcomes of the research, however, may benefit businesses as they learn how to interact with consumer engagement, consumers

learning about task engagement, and policymakers with interest in funding future development of AI technologies. A report of the study's findings will be available to participants but to ensure anonymity of participants you are encouraged email the research team for a summary of results, available by the 30th of September 2020. These can be requested by contacting Yannik Frank, on yannik.frank@qut.edu.au.

To recognize your contribution should you choose to participate the research team is offering you monetary payment through the MTurk platform consisting of US$0.50.

What are the possible risks for me if I take part?
There are no risks beyond normal day-to-day living associated with your participation in this research project.

What about privacy and confidentiality?
All comments and responses are anonymous i.e. it will not be possible to identify you at any stage of the research, because personal identifying information is not sought in any of the responses.

Any data collected as part of this research project will be stored securely as per QUT's Management of research data policy. Data will be stored for a minimum of 5 years, and can be disclosed if it is to protect you or others from harm, if specifically required by law, or if a regulatory or monitoring body such as the ethics committee requests it.

How do I give my consent to participate?
The submission of the completed survey is accepted as an indication of your consent to participate in this research project.

What if I have questions about the research project?
If you have any questions or require further information please contact one of the listed researchers:

Yannik Frank   yannik.frank@qut.edu.au
Clinton Weeks   clinton.weeks@qut.edu.au   +61 07 3138 5349

What if I have a concern or complaint regarding the conduct of the research project?
QUT is committed to research integrity and the ethical conduct of research projects. If you wish to discuss the study with someone not directly involved, particularly in relation to matters concerning policies, information or complaints about the conduct of the study or your rights as a participant, you may contact the QUT Research Ethics Advisory Team on +61 7 3138 5123 or email humanethics@qut.edu.au.

Thank you for helping with this research project. Please print this sheet for your information.

Please click the button below if you wish to proceed.

Appendix C

Participant Informed Consent Form Study 1

	PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT – Survey –
	Consumer Information Processing and Engagement **QUT Ethics Approval Number 2000000423**

Research team.

Mr Yannik Frank   yannik.frank@qut.edu.au   MPhil Candidate and Researcher
Dr Clinton Weeks   +61 7 3138 5349   clinton.weeks@qut.edu.au Principal Supervisor
Dr HS Jin   +61 7 3138 2645   hs.jin@qut.edu.au   Associate Supervisor
School of Advertising, Marketing and Public Relations, QUT Business School
Queensland University of Technology (QUT) - Australia

Why is the study being conducted?

This study is a research project being conducted by Yannik Frank (MPhil. Candidate) as part of a program of research supervised by Dr Clinton Weeks and Dr HS Jin.

The study aims to investigate how to better engage consumers in processing informational tasks in the online environment.

You are invited to participate in this research project because you meet the eligibility criteria of living in the US, regularly using the internet and being over the age of 18 years old.

What does participation involve?

Participation will involve completing seven short simple psychology game-based tasks, followed by a series of survey-style questions (strongly agree – strongly disagree) that will take approximately 20 minutes of your time.

Questions will include:
- *The previous task was: simple – complicated*
- *The previous task was: dull – exciting*
- *The previous task was: not thrilling – thrilling*

Your participation in this research project is entirely voluntary. If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or Qualtrics. If you do agree to participate you can withdraw from the research project during your participation at any time without comment or penalty, and your responses will **not** be used. However as the survey does not request any personal identifying information, once it has been submitted it will not be possible to withdraw.

What are the possible benefits for me if I take part?

It is expected that this research project will not directly benefit you. The outcomes of the research, however, may benefit businesses in better engaging consumers with Terms & Conditions and information tasks. Outcomes may also assist policymakers with interest in effective presentation of Terms & Conditions information. A report of the study's findings will be available to you. To ensure anonymity, you are encouraged email the research team for a summary of results, available by the

30th of September 2020. These can be requested by contacting Yannik Frank, on
yannik.frank@qut.edu.au.
To recognize your contribution should you choose to participate the research team is offering you monetary payment through the MTurk platform, consisting of US$2.50.

What are the possible risks for me if I take part?
There are no risks beyond normal day-to-day living associated with your participation in this research project.

What about privacy and confidentiality?
All comments and responses are anonymous i.e. it will not be possible to identify you at any stage of the research, because personal identifying information is not sought in any of the responses.

Any data collected as part of this research project will be stored securely as per QUT's Management of research data policy. Data will be stored for a minimum of 5 years, and can be disclosed if it is to protect you or others from harm, if specifically required by law, or if a regulatory or monitoring body such as the ethics committee requests it.

How do I give my consent to participate?
The submission of the completed survey is accepted as an indication of your consent to participate in this research project.

What if I have questions about the research project?
If you have any questions or require further information please contact one of the listed researchers:

Yannik Frank	yannik.frank@qut.edu.au	
Clinton Weeks	clinton.weeks@qut.edu.au	+61 07 3138 5349

What if I have a concern or complaint regarding the conduct of the research project?
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Thank you for helping with this research project. Please print this sheet for your information.

Please click the button below if you wish to proceed.

Appendix D

Task Specific T&C Reasonable Clauses

Corsi

Task Overview

The Research Task to be completed is known as a Corsi Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves short term memory. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming Corsi Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

GoNoGo

Task Overview

The Research Task to be completed is known as a Go No-Go Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves You responding to some specific stimuli and not responding to others. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Accessibility

The upcoming Go No-Go Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team

and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Lexical Decision

Task Overview

The Research Task to be completed is known as a Lexical Decision Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves You providing a judgement about whether a series of letters represents a real word or not. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming Lexical Decision Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Mental Rotation

Task Overview

The Research Task to be completed is known as a Mental Rotation Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves You mentally imagining what various stimuli would look like if they were rotated. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming Mental Rotation Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

N-Back

Task Overview

The Research Task to be completed is known as a N-Back Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves You making a judgement about whether You previously saw a sequence of letters during the Task. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming N-Back Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Simon

Task Overview

The Research Task to be completed is known as a Simon Effect Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves You identifying stimuli presented on the same or opposite sides of Your computer screen. It is expected that You will complete the Task using a desktop computer or laptop computer. You

will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming Simon Effect Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Stroop

Task Overview

The Research Task to be completed is known as a Stroop Task. Detailed instructions are contained at the outset of the Task. The Task is a psychological activity which involves evaluating cognitive interference caused by stimulus match and mismatch. It is expected that You will complete the Task using a desktop computer or laptop computer. You will be required to enter responses using Your keyboard. The Research Task requires You to read instructions carefully prior to commencing.

Task Accessibility

The upcoming Stroop Task is provided to You as supported by a third-party web service. Its functionality is reliant upon Your Internet browser functionality and speed. The responses You provide as part of the Research Task will constitute Your responses to the Research Team and may serve to indicate information processing. This applies to the upcoming individual Research Task only. You should decline these Terms and Conditions to bypass this Research Task if You do not agree to these Terms.

Appendix E

Participant Informed Consent Form Study 2

	PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT **– Survey –**
	Consumer Information Processing and Engagement **QUT Ethics Approval Number 2000000423**

Research team.

Mr Yannik Frank	yannik.frank@qut.edu.au	MPhil Candidate and Researcher
Dr Clinton Weeks	+61 7 3138 5349	clinton.weeks@qut.edu.au	Principal Supervisor
Dr HS Jin	+61 7 3138 2645	hs.jin@qut.edu.au	Associate Supervisor

School of Advertising, Marketing and Public Relations, QUT Business School
Queensland University of Technology (QUT) - Australia

Why is the study being conducted?

This study is a research project being conducted by Yannik Frank (MPhil. Candidate) as part of a program of research supervised by Dr Clinton Weeks and Dr HS Jin.

The study aims to investigate how to better engage consumers in processing informational tasks in the online environment.

You are invited to participate in this research project because you meet the eligibility criteria of living in the US, regularly using the internet and being over the age of 18 years old.

What does participation involve?

Participation will involve completing seven short simple psychology game-based tasks, followed by a series of survey-style questions (strongly agree – strongly disagree) that will take approximately 20 minutes of your time.

Questions will include:
- *The previous task was: simple – complicated*
- *The previous task was: dull – exciting*
- *The previous task was: not thrilling – thrilling*

Your participation in this research project is entirely voluntary. If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or Qualtrics. If you do agree to participate you can withdraw from the research project during your participation at any time without comment or penalty, and your responses will **not** be used. However as the survey does not request any personal identifying information, once it has been submitted it will not be possible to withdraw.

What are the possible benefits for me if I take part?

It is expected that this research project will not directly benefit you. The outcomes of the research, however, may benefit businesses in better engaging consumers with Terms & Conditions and information tasks. Outcomes may also assist policymakers with interest in effective presentation of Terms & Conditions information. A report of the study's findings will be available to you. To ensure

anonymity, you are encouraged email the research team for a summary of results, available by the 30th of September 2020. These can be requested by contacting Yannik Frank, on yannik.frank@qut.edu.au.

To recognize your contribution should you choose to participate the research team is offering you monetary payment through the MTurk platform, consisting of US$2.50, with an additional US$0.10 per optional sub-task completed.

What are the possible risks for me if I take part?
There are no risks beyond normal day-to-day living associated with your participation in this research project.

What about privacy and confidentiality?
All comments and responses are anonymous i.e. it will not be possible to identify you at any stage of the research, because personal identifying information is not sought in any of the responses.

Any data collected as part of this research project will be stored securely as per QUT's Management of research data policy. Data will be stored for a minimum of 5 years, and can be disclosed if it is to protect you or others from harm, if specifically required by law, or if a regulatory or monitoring body such as the ethics committee requests it.

How do I give my consent to participate?
The submission of the completed survey is accepted as an indication of your consent to participate in this research project.

What if I have questions about the research project?
If you have any questions or require further information please contact one of the listed researchers:

Yannik Frank   yannik.frank@qut.edu.au
Dr Clinton Weeks   clinton.weeks@qut.edu.au   +61 07 3138 5349

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Thank you for helping with this research project. Please print this sheet for your information.

Please click the button below if you wish to proceed.

Appendix F

Perceptions of Fairness Cues

The below table outlines the 30 free-text responses from participants who were asked what they would think if a green or red reasonableness cue were present on a set of T&C.

Unreasonable Red Cue	Reasonable Green Cue
I would feel the terms were unfair for me.	I would feel that the terms were fair for me.
It would indicate that the terms are unreasonable and put the user in jeopardy.	I would hope it meant that an independent group was saying there were no hidden landmines in the terms of use.
Someone shifty	a reputable company
Indicates that the terms are bad and that I should proceed with caution.	No difference. I'd still like to know the full details before proceeding forward.
it better to stay away	its safe to continue
That these aren't fair.	That these are fair conditions.
that it cant work	The terms and conditions are beneficial to the person signing the agreement.
I would suspect that the terms and conditions contains some sort of language that is out of the ordinary and would be cause for additional review	I would feel that it indicates that there is no language in the terms and conditions that would cause it to be flagged. I would expect that I am reading a very standard terms and conditions agreement that is not out of the ordinary.
There is something in the terms that seems suspicious and I need to read them further	That there aren't any red flags in the terms and conditions but that doesn't mean there is absolutely nothing suspicious
It would indicate that there is a threat to my personal information and there is also unfair requests being made in the terms and conditions.	It would indicate that there is nothing unreasonable in the terms and conditions. It would signal to me that personal info is not at risk.
I shouldn't agree to it for some reason	It feels like it indicates the agreement is fair for the consumer
important information provided	fair information to the user
The agreement is extremely unfair to the one signing the agreement. This would spark me to read the terms and conditions.	The terms and conditions are beneficial to the person signing the agreement.
worried	mixed feelings
Data breach and misconduct.	Security and privacy.
shows how bad the terms are and what were wrong with them	not sure really
the t and c are not reasonable	that the T and Cs are fair
its's unfair and not safe	that the terms are fair and safe
That according to whatever consumer fairness organization that created the graphic, the terms and conditions seem to violate their standard of fairness and seem to be unfair either to the requester or worker or both.	That according to whatever consumer fairness organization that created the graphic, the terms and conditions seem to be typical, and fair to both the requester and the worker.
The terms and condition is unfair and unreasonable	It is effective and well represented
terms and conditions are unfair	terms and conditions are fair
I would think that the terms and conditions are bad and I would not do the survey.	That the terms and conditions are reasonable and fair.
t and c are unfair	that the T and C are fair
It would be best to avoid this site or survey in case of an unfavourable or questionable outcome. I assume there are hidden or detrimental effects of agreeing to the terms.	The terms and conditions are fairly generic and have little or no impact on the user.
I would feel that the terms and conditions are unreasonable and I should not agree to it.	It indicates that the terms and conditions are reasonable and realistic.
That the Terms & Conditions are unfair.	That the Terms & Conditions are fair.
a clear warning	declared a fair site
That an expert has warned me	That the T&Cs have been vetted by an expert
It indicates that the T&Cs are unreasonable	It would indicate that the T&Cs are fairly commonplace and reasonable.
that the terms and conditions have been reviewed and deemed inappropriate and unfair to the end user	that multiple people have gone through the terms and conditions and rated them for perceived fairness and reasonableness

Appendix G

Proposed Fairness Tolerance Questions

Please indicate how acceptable you consider each of the following activities that a company might engage in (as might typically be described in Terms & Conditions).

Items[5]

o   Consumer privacy protection

o   Confidentiality

o   Periodic updating of Terms and Conditions

o   Company taking ownership of consumer data

o   Company monitoring of unrelated web activity

o   Facial webcam monitoring

o   Personal details being protected

o   Sharing of personal information with other companies

o   Consumer subscription payments automatically renewed

o   Terms & Conditions can be upheld in court of law

o   Company not responsible for consumer mis-use of service

o   Service termination if consumers mis-use service

o   Company storing web-users IP address

o   Company forcing unrequested software installations

o   Apps requiring access to social media data

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[5] Response options: (7-point Likert scale, anchored at Very Unacceptable and Very Acceptable)