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A stitch in time saves nine: Facilitators and impediments of sustainable use.

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Abstract

In the past people mended goods and kept them in use, by darning socks and utilising skills of a cobbler, through sheer necessity. These behaviours have been lost in today's modern consumerist society. This throw-away mindset is both financially and environmentally expensive and therefore it is imperative it be revised (e.g., Jung & Jin, 2016). Academic literature has focused on factors that influence the sustainability of purchases. Less research has examined factors influencing how consumers might sustainably use a good, despite product usage and product life extension factors being crucial to sustainable consumption (Makri et al., 2020; Sheoran & Kumar, 2022; Den Hollander & Bakker, 2012; Cherrier, 2010; Sekhon & Armstrong Soule, 2020).

This research uses an experiment to reveal if more (vs. less) sustainable acquisition can impact more (vs. less) sustainable use of a good. It also investigates how differing levels of consumer wisdom could impact these behaviours. The study employed a 2 (product category: high-end vs. low-end) x 2 (durable framing vs. non-durable control framing) between-subjects factorial design. New Zealander participants were randomly assigned to one of four conditions and primed via an advertisement image of three consumer products (stick vacuum cleaner, boots, and duvet inner). Participants were asked a series of questions that included: product attitude evaluation, purchase intentions, product care tendency, product repair propensity, and attitudes toward product retention. Finally, consumer wisdom was measured, and respondents filled in general demographics. The thesis findings show that more sustainable acquisition does not necessarily lead to more sustainable use, and this holds true across all three consumer products tested. This is the first step to answering the first research question, 'How does sustainable acquisition of goods impact sustainable use?' In short, it doesn't. Yet, when addressing the second research question, 'How does consumer wisdom influence sustainable acquisition and sustainable use of goods?' it appears that consumer wisdom as a secondary mechanism can be responsible for altering sustainable usage behaviours.

This research has clear theoretical, methodological, and managerial contributions and implications. In terms of theory, this study offers more knowledge on the understudied consumption stage of usage and presents additional confirmation of the durability bias within a different consumer context. This thesis answers the call for more quantitative research on product usage (Ackermann et al., 2021). This is among the first studies to practically apply scales measuring consumer usage behaviours— the product care tendency scale (Ackermann et al., 2021) and product repair propensity (Scott & Weaver, 2014)— in relation to the consumer wisdom scale (Luchs, Mick & Haws, 2021). Secondly, this New Zealand-based study also has methodological contributions, as it increases the body of knowledge of consumer behaviour outside the heavily researched United Kingdom and United States contexts. Managerial implications of this thesis emphasise the value of target market identification for marketers. Of note, marketers with a target market who are likely to demonstrate higher levels of consumer wisdom have a heightened preference for purchasing higher-end products in some but not all product categories and more sustainable product usage behaviour.

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Attestation of Authorship

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

Signature **Date** 25/07/2023

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Chapter 1: Introduction

"You never actually own a Patek Philippe. You merely look after it for the next generation." -Patek Philippe Geneve watchmakers

1.1 Research problem

Historically people mended goods and kept them in use through sheer necessity. Mending or repair can be illustrated in many ways depending on product category and can be completed at home or by a service provider (i.e., Ackermann et al., 2018, 2019). Although more common in the past, behaviours such as darning socks and utilising skills of a shoe cobbler have been lost in a throw-away society. Running a cleaning cycle on your washing machine (Khalil, 2020) or taking your car to a mechanic when the engine light is on (Haaland, 2019) may be commonplace practices for some consumers but not all (Ackermannn et al., 2018). Having a preference to replace rather than repair products is both financially and environmentally expensive and therefore needs to be revisited. Todays' consumers are more empowered than ever before, however the resultant access to newly manufactured products and services generates potential issues.

Globally consumer waste is continuing to rise (Lucas, 2002). Considering the adage, "one man's trash is another man's treasure," waste is multifaceted, and perception based. Therefore, waste means different things to different individuals and cannot be easily defined. The connection between human behaviour and waste production is inseparable (Martinez, 2017). The expanse of waste creation and raw material consumption is not sustainable, resulting in the destruction of the environment (WBCSD 2010; WWF 2016), exemplified by landfills and subsequent greenhouse gas emissions (Rabl, Spadaro & Zoughaib, 2008) and plastic pollution. Therefore, the need for sustainability is undeniable, and it is ever more prevalent throughout the modern world, within government and legislation and across every business industry (i.e., Sheth, 2021; Rinaldi, 2020). An explicit example is the United Nations' creation of the 'Sustainability Development Goals' (SDGs) in 2015, in which the

twelfth goal specifically targets “responsible consumption and production” (United Nations, 2015).

In a consumer behaviour context, sustainable (or responsible) consumption is a phenomenon saturating the literature (e.g., Jung & Jin, 2016; White, Habib & Hardisty, 2019; Quoquab & Mohammad, 2020; Sheoran & Kumar, 2022). Sustainable consumption has been defined in many ways (Quoquab & Mohammad, 2020). Earlier definitions of sustainable consumption focused on “the consumption of goods and services that meet basic needs and quality of life without jeopardizing the needs of future generations” (Organisation for Economic Co-operation & Development, 2002). However, this definition is broad and doesn’t consider the three stages of consumption. Therefore, sustainable consumption warrants further discussion in more depth, from multiple perspectives in the literature review chapter.

1.2 Research rationale

Academics in consumer behaviour have heavily focused on the pre-purchase and purchase stages of consumption (i.e., acquisition). This also holds true for sustainable consumption, which is primarily examined from the lens of sustainable acquisition, or the factors that influence the sustainability of purchases (e.g., Jung & Jin, 2016). However, less literature has examined factors influencing how consumers might sustainably use goods. Ackermann et al. (2017) found studies investigating product care are primarily comprised of qualitative reports of consumers (e.g., Cox et al., 2013; Young, 2017; Godfrey et al., 2022) rather than quantitative studies. Additionally, repair has “received limited conceptual and empirical attention in marketing and consumer research” (Godfrey et al., 2022, pp. 230).

The full consumer cycle consists of acquisition, usage, and disposal. Many researchers show that there is not enough attention focused on what happens after initial acquisition (Wells, 1993; Trudel, Argo & Meng, 2016; Scott & Weaver, 2018; Prothero et al., 2011; MacInnis & Folks, 2010; Pieters, 1991). Martinez (2017) discusses the “diversity of current discard studies” (pp. 346), as a substantial body of literature on consumer behaviour

within the disposal stage that now exists (e.g., Dommer & Winterich, 2021; Evers et al., 2018, Donnelly et al., 2017; Sun & Trudel, 2017, Trudel et al., 2016). Conversely, the usage stage remains understudied. This gap persists even though product usage and product life extension factors are crucial to sustainable consumption (Makri et al., 2020; Sheoran & Kumar, 2022). By focusing on consumer use, the current study attempts to contribute to closing the enduring gap in consumer behaviour research.

In addition, understanding the usage stage becomes ever more important for developed nations intending to shift from the predominant linear economy to a circular model. The linear economy reflects a take-make-dispose model (MacArthur, 2013). The circular model is characterised by maintaining, repairing, refurbishing, and reusing products and materials to keep them in use for as long as possible (Webster 2017; MacArthur, 2013; Bocken et al. 2016). This in turn keeps items out of landfill, which has a major impact on the environment through greenhouse gas emissions (Rabl, Spadaro & Zoughaib, 2008) and land use costs (Dijkgraaf & Vollebergh, 2004).

Consumer behaviour researchers support the notion that product lifespan extension is an example of sustainable use as they decrease the speed of replacement (i.e., Den Hollander & Bakker, 2012; Cherrier, 2010; Sekhon & Armstrong Soule, 2020; MacArthur, 2013; Webster, 2017; Cline, 2012). Specifically, product care exemplified by product repair and maintenance behaviours, supports a longer product lifespan and is therefore an example of sustainable use (Ackermannn et al., 2018).

Given sustainable use is important, understanding the antecedents or factors that impede it is also necessary. Research completed in the United States makes a compelling argument that purchasing luxury or high-end products can be an example of sustainable acquisition (Sun et al., 2021). This is because these products are more durable in both functional and aesthetic contexts and therefore have more enduring lifespans.

Consumer wisdom influences consumer behaviour (i.e., Luchs & Mick, 2018; Luchs et al., 2021) and may influence engagement with sustainable consumption, anticonsumption, slow consumption, and alternative consumption. Surrounding factors such as product

durability and obsolescence, product care, and cognitive engagement can either impede or encourage consumer participation with the above consumption phenomena. The present study intends to contribute to this and other 'Transformative Consumer Research' as it focuses on understanding consumption-related phenomena that can evidently improve well-being (Mick et al. 2012).

To develop further understanding and grounding, this thesis will explore theoretical background in Chapter 2 literature review. In particular, this thesis unpacks theory and findings around the following topics: sustainable consumption with specific focus on acquisition and use, wise consumption and overlapping consumption behaviours, and product durability and obsolescence.

1.3 Research questions

This thesis seeks to examine if there are any connections or relationships between sustainable acquisition and sustainable use of products. It also investigates levels of consumer wisdom and how this can impact these behaviours.

- *RQ1: How does sustainable acquisition of goods impact sustainable use?*
- *RQ2: How does consumer wisdom influence sustainable acquisition and sustainable use of goods?*

This study has methodological, practical, and theoretical contributions. In particular, this thesis seeks to examine sustainable consumption, specifically sustainable use, within a New Zealand context. This study is one of the first to explore the usage stage among New Zealand consumers.

1.4 Methodology

This research employs a quantitative survey experiment to examine if more (vs. less) sustainable acquisition can impact more (vs. less) sustainable use of a good. It also explores how differing levels of consumer wisdom can impact these behaviours.

Experimental quantitative methodology is the foundation of scientific research in much consumer psychology and the best to address the two research questions and

hypotheses because it can scientifically determine cause and effect between variables (Hair et al., 2014; Kardes & Herr, 2019). This research uses a 2 (product category: high-end vs. low-end) x 2 (durable framing vs. non-durable control framing) between-subjects factorial design. The present data was collected using a survey of New Zealanders produced and hosted on design platform Qualtrics. CINT panel management was used to distribute the online survey experiment to New Zealand participants. Participants were randomly assigned to one of four conditions and primed via an advertisement image of three consumer products (stick vacuum cleaner, boots, and duvet inner). The advertisement image utilised a format that mimics well-known social media platform Instagram, as it reflects a realistic and common exposure to a consumer product. The consumer products were either high-end or low-end and framing was either more or less durable.

The study procedure is as follows. In part one, participants were asked to evaluate products shown on liking via their attitudes towards the products and purchase intentions. Participants were then asked about their product care tendency. In part two, participants were asked about their repair propensity for owned products and completed a scale measure of attitudes toward product retention with regards to wastefulness or attachment. Levels of consumer wisdom were also measured, and general demographics collected before respondents were thanked for their participation. Results are reported in Chapter 4, and more about on the method and can be found in Chapter 3.

1.5 Summary

This thesis is organised as follows: literature review; research design and methodology; data analysis; discussion and conclusion (see Figure 1).

To commence this thesis, an extensive literature review (Chapter 2) initially discussed the product life cycle and consumption stages to provide context for this thesis. Next, multiple interrelated consumption phenomena, notably consumer wisdom, are defined. Then, the surrounding factors that can influence these behaviours are explored as possible barriers and antecedents.

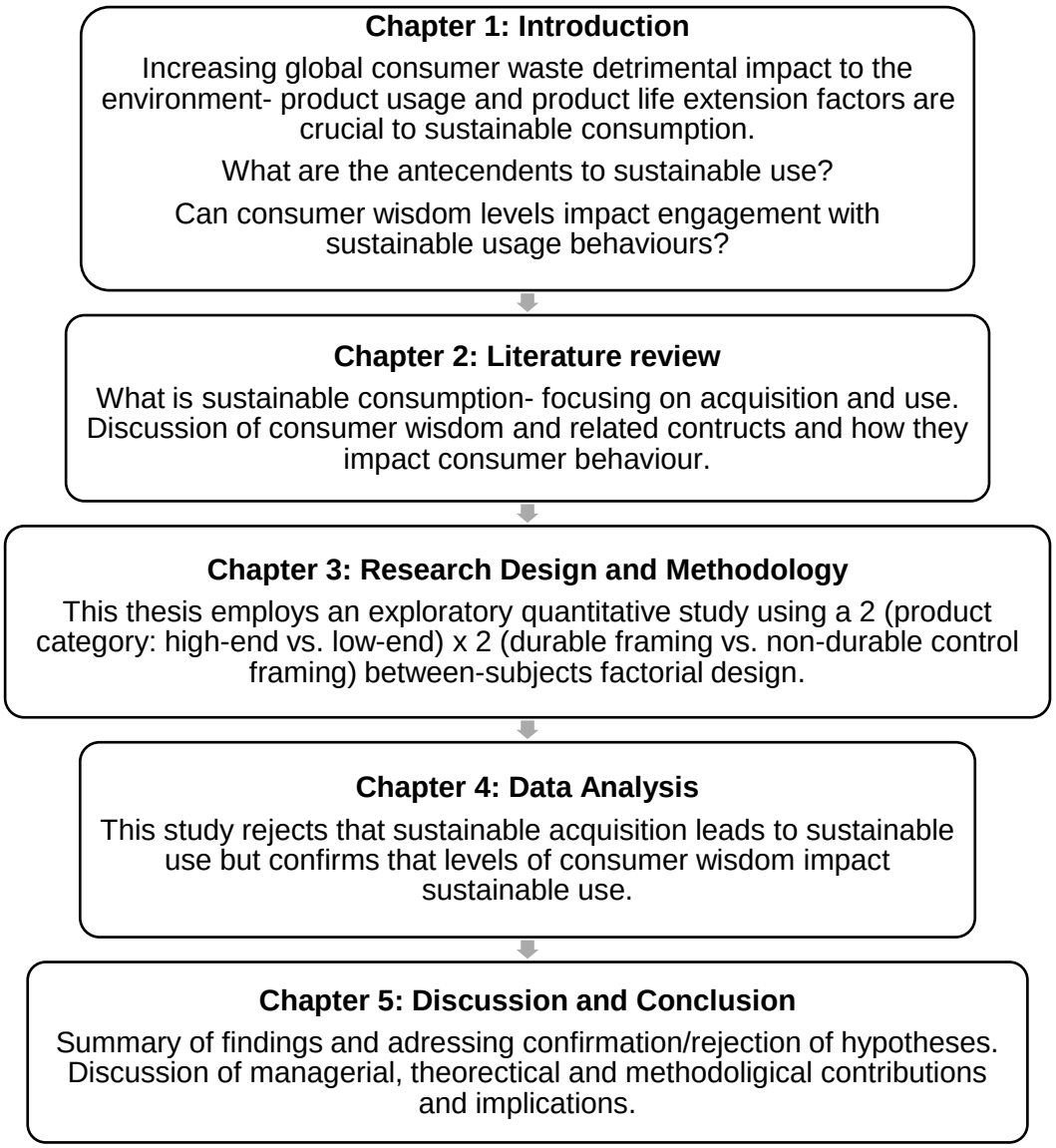
Research design and methodology for this study is outlined in Chapter 3. This chapter addresses the study sample, stimuli, and procedure for the experiment, as well as all the scales used to measure the independent variables.

Chapter 4 reports data and results based on statistical analysis and states whether the research hypotheses are supported or rejected.

In Chapter 5, a detailed discussion of findings allows conclusions to be drawn from results. Then, theoretical, methodological, and managerial contributions considered, and study limitations are noted. Finally, directions for future research are discussed.

Figure 1

Organisation of thesis



1.6 Ethical considerations

This research obtained Auckland University of Technology's Ethical Committee approval on 28th March 2023 (see Appendix 1).

Chapter 2: Literature review

2.1 Introduction

This thesis seeks to focus on the usage stage in consumer behaviour to better understand the antecedents and processes that create more versus less sustainable usage in consumption. To better understand these factors, this literature review examines current usage behaviours, what affects these behaviours, and how and when these usage behaviours are changing in response to calls for more sustainable behaviours in society.

Specifically, concepts such as the product life cycle and circular economy are discussed to understand how a paradigm shift could alter consumer behaviour and ultimately consumerism at its core. This interconnects with the broad concept of sustainable consumption. Sustainable consumption involves embracing wise consumption habits and forgoing excess consumption for the well-being of self, others, and the environment (Quoquab & Mohammad, 2020). This is then broken down into several interconnected phenomena: anticonsumption, slow consumption, and alternative consumption, which are outlined in relation to sustainable consumption. Product durability and obsolescence are further discussed because of their potential explanatory power for why sustainable consumption can be less attainable for consumers. Additionally, wise consumption is discussed as a way to measure how likely consumers are to engage in these behaviours. A discussion of cognitive engagement is then reviewed with regards to why wise consumption behaviours are not yet standard or mainstream behaviours.

2.2 The product life cycle and a circular economy

Since the 1980s, Porter's linear value chain (also known as 'take, make, dispose' or 'cradle to grave') has been the dominant social paradigm for consumers, marketers, and industrial production (MacArthur, 2013; Rinaldi, 2020; Wasieleski et al., 2020). Although sustainability is becoming a vital element for marketing strategy in today's business environment (Sheth, 2021), Wasieleski et al. (2020) identify the innate paradox between

industry and sustainability. This is reflected in ‘sustainable features’ in design of new goods that for the most part utilise virgin resources and ultimately still follow the linear chain. The consumption cycle stages are essential to consider with the ideal shift from the predominant linear economy to a circular model to achieve a sustainable economy. This circular economy is characterised by maintaining, repairing, refurbishing, and reusing products and materials to keep them in use for as long as possible (Webster 2017; MacArthur, 2013; Bocken et al. 2016). The important behaviours that are encouraged in this new paradigm reflect those of sustainable product use. This in turn keeps items out of landfill, which has a major impact on the environment through greenhouse gas emissions (Rabl, Spadaro & Zoughaib, 2008) and land use costs (Dijkgraaf & Vollebergh, 2004).

2.3 Consumption stages

Consumption covers three broad areas outlined as acquisition, use, and disposal. Acquisition is the first stage in the consumption cycle and explains how a consumer initially obtains products (i.e., purchasing, leasing, renting, and/or borrowing). Use involves how a consumer not only uses a product but also the nature of ownership and the degree of care for owned products (i.e., maintenance, servicing, mending, repairing, or repurposing). Therefore, use includes any behaviour or action that occurs before disposal. Lastly, disposal refers to the inevitable discarding of owned products or belongings (e.g., trashing or putting into rubbish/landfill, recycling or donating).

A vast sea of knowledge surrounds the initial acquisition stage as it has been the focus of consumer research. Therefore, research has overlooked the post-choice elements of the consumption cycle (Makri et al., 2020; Trudel, Argo, & Meng, 2016; Scott & Weaver, 2018; Prothero et al., 2011; MacInnis & Folks, 2010; Pieters, 1991). Previously, Wells (1993) called for research to ‘move to the right’ and focus on post-acquisition research in the consumption cycle. In recent years, the disposal stage has gained the interest of researchers (Martinez, 2017) and now a sizable body of literature exists on consumer disposal behaviour (e.g., Dommer & Winterich, 2021; Evers et al., 2018, Donnelly et al.,

2017; Sun & Trudel, 2017, Trudel et al., 2016). In contrast, the usage stage remains neglected in schloarship, despite product usage and product life extension factors being key to sustainable consumption (Makri et al., 2020; Sheoran & Kumar, 2022).

2.4 Sustainable consumption

Sustainable consumption has been defined in many different ways (Quoquab & Mohammad, 2020). It has been labelled a multidimensional construct that combines care for three elements: the environment, quality of life, and future generations (Quoquab et al., 2019). Sustainable consumption encourages wise consumption practice and forgoing excess consumption. It shows that consumption should not be focused on material gain, instead focusing on quality of life. Sustainable consumption also fosters care for the environment and future generations (Quoquab & Mohammad, 2020). The term “sustainable consumption” is regarded by some scholars as an oxymoron, because to “consume” something is the opposite of “sustaining” something (Peattie & Collins, 2009). White et al. (2019) define sustainable consumer behaviour “as actions that result in decreases in adverse environmental impacts as well as decreased utilization of natural resources across the lifecycle of the product, behaviour, or service” (pp. 24). Sustainable consumer behaviours have been categorised in varying ways (White, Habib & Hardisty, 2019). With regards to acquisition, sustainable behaviours may consist of simplifying or decreasing levels of consumption in the first place (Leonard-Barton, 1981; McDonald et al., 2006). It may, however, be reflected in selecting goods with sustainable features such as sourcing, production, or packaging (Luchs, Brower & Chitturi, 2012; Pickett-Baker & Ozaki, 2008). According to Gershoff and Frels (2015), consumer demand for sustainable options is increasing. Within the actual consumption or use stage, sustainable behaviours could be evidenced in conserving their owned products and resources such as energy and water (Lin & Chang, 2012; White, Simpson & Argo, 2014). During the final stage of disposal, it may be shown in utilizing more sustainable modes of discarding, for example alternatives to landfill such as recycling or donating options (White & Simpson, 2013).

Although it may be seen that anticonsumption is the only true way of being sustainable, widespread anticonsumption, as discussed later, seems to be currently out of reach for many. Collective sustainable consumption (i.e., Bamberg, Rees & Seebauer, 2015) can be seen as a step towards consumer behaviour that causes less devastation to the environment. Like anticonsumption, sustainable consumption can also have outcomes with positive consequences for the environment such as keeping consumer products and resources in use, increasing life cycles, and deferring waste from landfill, therefore lowering waste (Scott & Weaver, 2018). Slow consumption likewise falls under sustainable consumption because it aims to extend product life spans through continued use and repurposing (Scott & Weaver, 2018). However, slow consumption is underlined by quality and product durability which is an important dimension of sustainable consumption (Haws, Winterich & Naylor 2014; Luchs et al. 2010; White et al., 2019). These two factors are primarily determined by marketers, producers, and manufacturers (Ozanne et al., 2021).

Consumer wisdom is emphasised as being multidimensional (Ozanne et al., 2021). It is an extensive phenomenon that encompasses behaviours shared by sustainable consumption, slow consumption, anticonsumption, alternative consumption, ethical consumption, mindful consumption, voluntary consumption, green consumption, consumer expertise, and collaborative consumption or sharing economy. However, for consumers to become wise they must attain higher levels of cognitive engagement with decision making (i.e., self-transcendence, see Ganassali and Matysiewicz (2021)).

2.5. Anticonsumption

In the past, researchers have outlined anticonsumption as opposition to and resistance against consumption of particular goods or of consumption in general (i.e., Zavestoski, 2002; Lee et al. 2011). Zavestoski (2002) defines anticonsumption formally as “a resistance to, distaste of, or even resentment of consumption” (p. 121). Environmentally oriented anticonsumption is self-expressive anticonsumption behaviour specifically driven by a desire to conserve and protect the environment (García-de-Frutos et al., 2018). More

recently, Makri et al. (2020) specify that anticonsumption “is more than just the mere opposite of consumption” (pp.177). They comprehensively define anticonsumption “as intentionally and meaningfully excluding or cutting goods from one’s consumption routine or reusing once-acquired goods with the goal of avoiding consumption” (pp.178). This definition builds from earlier work by Lee et al. (2011), who classifies three types of anticonsumption behaviour: rejecting, restricting (or regulating levels when outright refusal is difficult), and reclaiming.

Across the anticonsumption literature, among its definitions and classifications, the key element of anticonsumption is rejection. That is, it is generally framed as “reasons against” rather than “reasons for” consumption (Makri et al., 2020). Anticonsumption can manifest as voluntary simplicity or alternative consumption driven by prosocial reasons or as consumer boycotts, and in its most extreme form consumer resistance (Makri et al., 2020). Anticonsumption has emerged in scholarship as attitudes, lifestyles, and behaviours driven by a set of motivations. It’s been treated as a defining attitude and preference, such as that manifested in consumer resistance (Galvagno, 2011). Consumer resistance involves cutting goods from a consumption pattern based on unsatisfactory value or experience and requires an antagonist of some kind (i.e., a brand/company) to bear the brunt of the resistance (Makri et al., 2020). Secondly, the concept has been viewed as a lifestyle and a set of practices via voluntary simplicity and frugality (Cherrier & Murray, 2007; Cherrier, 2009). Voluntary simplicity is motivated by outcomes such as enhancing well-being or limiting spending. It involves a consumer reducing or simplification of consumption routine by choice. Similarly, frugality is reflected in cautious use of finances and owned products and involves mindful acquisition and consumption of goods (Lastovicka et al., 1999). Frugality has been treated as a both a behaviour and an attitude. García-de-Frutos et al. (2015) studied country-based anticonsumption and found that consumers’ reluctance to buy foreign products was influenced by country-of-origin effects, as well as the normative influence of consumer ethnocentrism. Consumer ethnocentrism is prosocial behaviour reflected in favouring domestic goods and commonly rejecting foreign-made goods (Siamagka & Balabanis,

2015). In a similar vein, Sandikci and Ekici (2009) studied politically motivated brand rejection as a form of anti-consumption behaviour, however they frame it as a set of motivations.

Predominantly, anticonsumption has been framed as a set of motivations (Cherrier, Black, & Lee, 2011; Iyer & Muncy, 2009; Lee et al., 2009). Other related constructs include ethical and moral consumption, alternative consumption (i.e., collaborative consumption or buying second-hand), and green or sustainable consumption. These concepts are all similar in that they are prosocial consumption behaviours leading to reduced use of resources within routines or from choices made. An example of alternative consumption could be utilising standard community libraries to lend books or movies or alternate lending libraries, such as toy libraries (where people can borrow toys for their toddlers/children) or tool libraries (for borrowing items such as drills, hammers, sanders etc.). Symbolic consumption is also related and can be exemplified in rejecting consumption habits or of specific products for individual or normative reasons (Makri et al., 2020).

Anticonsumption, non-consumption, and consumer resistance are heavily intertwined concepts but with distinct differences (Cherrier, Black & Lee, 2011). These differences centre mostly on intentionality and planning. Makri et al. (2020) argue that intentionality and meaningfulness driving the restriction of consumption is what separates and clarifies anticonsumption behaviour. Anticonsumption also shares qualities with sustainable consumption. Scott and Weaver (2018) note that both concepts “overlap in the goal of keeping materials in circulation, expanding life spans, and decreasing waste, regardless of the motivation” (pp. 292). Sekhon and Amstrong Soule (2020) help to separate sustainable consumption and anticonsumption concepts. In practice, a consumer buying a product which is sustainably sourced and/or produced reflects sustainable consumption while mending an owned product in order to continue using it reflects anticonsumption.

But how does anticonsumption emerge in practice? Anticonsumption behaviours can be reflected in a consumer who mends a garment or repairs durable goods, who continues to utilise owned products beyond the intended lifespan and/or forgoes purchasing a

replacement good for non-financial and prosocial reasons. Another example is a consumer who forgoes device upgrades. That is, they continue to use a device that is still physically functional but may not be technically up to date (i.e., perceived obsolescence) in order to forgo a voluntary (versus involuntary, i.e., damaged to a state of disrepair) replacement. Any behaviour that involves reusing once-acquired goods with the goal of avoiding new consumption falls into this category. Other examples of anticonsumption include bringing a reusable coffee cup or takeaway container to a café to avoid single-use packaging or taking reusable bags to the supermarket. These actions reflect anticonsumption behaviours as they exclude the introduction of new and short-lived goods from one's consumption routine (Makri et al., 2020).

The literature is not unified in the antecedents and outcomes of anticonsumer behaviours. Specifically, anticonsumption has been seen as an unattainable extreme (Kozinets, 2002). Kozinets (2002) and Arnould (2007) propose that rejecting consumption in societies where capitalism dominates may not be achievable. Researchers have also found consumers appear to be noncommittal and inconsistent in their anticonsumption behaviours (e.g., Shaw, McMaster & Newholm, 2016; Sudbury-Riley & Kohlbacher, 2016). This means that consumers may engage in anticonsumption on a one-off basis, before returning to their standard consumption levels. Alternatively, anticonsumption behaviours may occur sporadically or only when consumers are primed. Anticonsumption priming can occur, for instance, when viewing marketing such as Patagonia's 'Don't buy this jacket' campaign or REI's #OptOutside campaign (Sekhon & Armstrong Soule, 2020). Ultimately this means that consumers return to normal consumption behaviours.

This follows a documented theme of inconsistency and need for prompting behaviour across broader sustainability contexts. Makri et al. (2020) discuss the sustainable consumer "attitude–behaviour gap" which is frequently observed in consumer cognition and behaviour. In practice, this gap is shown by consumers who proclaim to have positive attitudes of pro environmental behaviours (Trudel & Cotte, 2009), however are less likely to translate this attitude into actual behaviour (Auger & Devinney, 2007; Gatersleben, Steg & Vlek, 2002;

Kollmuss & Agyeman 2002; Young et al., 2010). White et al. (2012) explain the need of a primed mindset to increase inclination towards sustainable consumer behaviour (Arnocky, Stroink & DeCicco, 2007), which reflect existing attitudes.

Consumers can buy goods for symbolic benefits beyond the utilitarian purposes of each good. That points to one barrier of anticonsumption (Makri et al., 2020), as a lack of symbolism and the non-conspicuous nature of non-consumption can make it hard for people to signal status. Conversely, the lack of consumption and absent ownership of material items inherent with anticonsumption may signal lower income and therefore impact social status (Nelissen & Meijers, 2011). This is confirmed by Sekhon and Armstrong Soule (2020) who find “without any tangible signal, observers are unable to categorize an anticonsumption action as intentional and not due to a lack of financial resources” (pp. 285).

Continuous anticonsumption practices on a large scale will require a paradigm shift for most consumers. Sheth, Sethia, and Srinivas (2011) explain this is due to a standard mindset that forgoing consumption and resultant feelings of sacrifice ensues negative emotions as opposed to the positivity that it can offer instead. This echoes Belk (2001) who explained that even though materialism is widely perceived as a negative, it is integral to modern, everyday life (see Evers et al., 2018). Sustainable and wise consumption that in the long-term results in anticonsumption may be a helpful steppingstone (Ozanne et al., 2021). Kropfeld, Nepomuceno, and Dantas (2018) show that anticonsumers have lesser ecological impact compared with green consumers. In lieu of a paradigm shift, encouraging consumers to initially purchase more durable, longer lasting, and useful products may result in less future consumption.

Consuming luxury goods is one way to achieve sustainable consumption as people purchase goods that are more durable and last longer (Sun et al., 2021). Luxury has several benefits for consumers who may wish to purchase more wisely to support their anticonsumption motives. Luxury goods are highly conspicuous and identity-signalling (Kapferer, Klippert & Leproux, 2014; Wiedmann, Hennigs & Siebels, 2007). Yet purchasing luxury (or high-end) goods for their durability is also an indication of anticonsumer status.

This tangible signal overcomes the non-conspicuous nature of most anticonsumption actions (Sekhon & Armstrong Soule, 2020). And when used as a signal for anticonsumption values, luxury goods that last longer (i.e., take vintage garments as an example) and are more readily repaired and maintained further serve anticonsumer sentiment. A consumer's ability or inclination to maintain, mend, or repair and continue utilising owned products has an impact on product replacement (Cherrier, 2010). If consumers are more willing to take care of, maintain, and repair their luxury products compared to standard or cheaper products (i.e., throwaway products) this could lead to anticonsumption in the long-term.

2.6 Slow consumption

Consumer waste is continuing to rise globally (Lucas, 2002). Like anticonsumption, slow consumption offers an opportunity to slow down resource consumption and the inevitable disposal process, therefore decreasing the environmental degradation caused by existing consumption patterns (Van Nes & Cramer, 2006).

All aspects of human life, including production and consumption, began to speed up with the occurrence of the industrial revolution (Childs et al., 2021). In 1930s America, elevated consumption was crucial for the economic system. Streamlining, speed, and efficiency became popular elements of product design (Whiteley, 1987). After the Second World War ended, America embraced a consumerist society characterised by mass-consumption which was further enabled by the introduction of short-term consumer credit (i.e., loans the credit card). Additionally, pop culture and lifestyles of the 1960s brought about "endless change and constant stimulation: whether of things or sensations" (Whiteley, 1987, pp. 23). By the end of the 1960s, there was a higher level of awareness of environmental damage. This awareness was linked to the 'consciousness-raising' publications and conferences and ensued with a rise in rejection of the fast-paced capitalist and industrial way of life (Whiteley, 1987).

The slow consumer movement began within the food industry and dates back to the 1980s. It originated in Italy and arose when Carlo Petrini revolted against fast food with the

introduction of the first McDonald's in Rome (Childs et al., 2021). This slow movement is not driven by government and instead is driven by consumers, businesses, and industry and is in reaction to the acceleration and stimulation offered by modern-day living. It involves the slowing down of all aspects of day-to-day life including consumption and production, instead focusing on meaningful connections with people, the environment, food, and culture. Slow consumption extends product life cycles by slowing the rate goods are used up and therefore disposed of (Cooper, 2005). Slowness is thus characterised by both reusing and reclaiming goods. Specifically, slow food production is characterised by quality foods that are produced sustainably on a small-scale (Slow Food International, 2020). Although the movement was increasing in popularity before the global COVID-19 pandemic, the dramatic halt that occurred with lockdowns and stay-in-place sanctions further expanded acceptance and adoption (Childs et al., 2021). Pandemic lockdowns helped further cultivate the slow movement, as lockdowns discouraged non-essential travelling, errands, commuting, and work which then allowed for creative and reflective thinking (Stroller, 2020).

Beyond the food industry, the fashion industry is another that has adopted the slow movement. The term slow fashion was coined by fashion writer Angela Murrills and is arguably more suitable than the term 'eco fashion'. Slow fashion can be seen in opposition to the now dominant fast-fashion structure and emphasises quality as opposed to quantity and speed (Fletcher, 2010). Slow fashion apparel is designed to be season-less, made with more durable and longer-lasting designs. Slow fashion can be exemplified by handcrafted goods, clothing that is made with locally sourced fabrics, sustainable materials and transparent production methods that may include cultural traditions and be more authentic (Fletcher, 2010; Clark, 2008). More recently, academics and industry-leaders have noticed a shift with luxury or high-end brands slowing down their pace of new-season collections and fashion cycles and increasing their sustainability (Sun et al., 2021; Indvik, 2020; Childs et al., 2021; Amatulli et al., 2017). Examples of heritage brands engaging in these behaviours include, but are not limited to, Gucci, Louis Vuitton, Dries Van Noten, and Levis. These brands promote the notion of "buy less, buy better" (Cline, 2016), alongside some celebrities

who are jumping on the bandwagon by re-wearing garments to multiple events (Cantor, 2020). Taken together this may create more encouragement for consumers to join in on the slow fashion movement and “value the long lastingness of the products” (Sun et al., 2021, pp. 39).

Expanding the life span of clothing apparel is crucial in minimising the impact on the environment and is a key outcome of the slow fashion movement (Childs et al., 2021). The characteristics of slow fashion, along with the justified higher price, provokes not only economic but also emotional investment (Clark, 2008) and subsequent emotional durability (Bakker et al., 2014). This is in line with Belk’s (1988) work illustrating the connection between self-identity and product consumption, as consumers’ belongings become extensions of themselves. In connection to emotional investment, identity-linked products are more likely to be better taken care of (Trudel, Argo & Meng, 2016). Additionally, Dommer and Winterich (2021) find that “when objects are relevant to an identity, individuals satiate more slowly, which results in continued use of objects” (pp. 43). Moreover, attachment can increase when the product is adapted or repurposed further resulting in slow consumption (Scott & Weaver, 2018).

Overall “fundamentally, slow is considered a mindset of high quality” (Childs et al., 2021, pp. 433). However, a key barrier to slow consumption is that product life cycles are continually decreasing in consumer durables. For example, shorter lifespans are now evidenced for household appliances, furniture, personal devices and technology, cars, and clothing (Kostecki, 1998). This is occurring due to a focus on quantity and transient style, as opposed to quality (Guiltinan, 2009).

2.7 Durability and Obsolescence

In the Second World War Era and prior, consumer society was limited. In a climate guided by frugality, a “make do and mend” mentality (Whiteley, 1987, pp. 8), and rationing of basics such as clothing, was ongoing until the mid-1950s. However, industrialisation and a return to prosperity after the war meant rationing began to ease. By the end of the 1950s,

households became more affluent and mass-produced consumer goods became more available and accessible (Whiteley, 1987).

Planned obsolescence was created by the intersection of the industrial revolution and a consumer reliant economy within the U.S. The system evolved to include planned obsolescence, in which functionally inferior goods were designed and intentionally built to eventually fail, resulting in resource wastage (Bulow, 1986). The 1960s was characterised by the rise of pop culture oriented around consumer goods. Whiteley (1987) saw that “the 'meaning' of Pop - in which expendability was integral - was determined by your outlook on life” (pp. 22). While the younger generation embraced trendy disposable products brought about by Pop design, the more conservative, older generation were less pleased at the focus on visual aesthetics and disregard of quality (i.e., Whiteley, 1987). Additionally, this system was challenged by some as ethically, politically, and ecologically wrong (Whiteley, 1987). Writer Vance Packard (1960) condemned planned obsolescence as unethical. Most notably, Lippincott (1947, 1960) who had originally published a guide for business to encourage consumer purchases through obsolescence in 1947 had, according to Whiteley (1987), “discovered his moral conscious”. Lippincott became frustrated by the “emotional intensity of a high-consumption society, and fed up with products whose performance had been sacrificed to appearance and which could not be repaired” (pp. 8).

However, to this day this system still thrives. Planned obsolescence is an ethical issue that was rife in the 1960s (Guiltinan, 2009). It returned to the forefront again due to the devastating environmental consequences caused by consumer durables being ironically increasingly less durable. This means the products are going through the product lifecycle more quickly than what they had originally and are therefore replaced and disposed of far more frequently and earlier than they had been in the pre-Second World War’s era of resource thrift (Guiltinan, 2009). The characteristics of the materials that are standard in the modern production of durable goods and the increased turnover caused by product upgrading have caused negative environmental effects for society (Calcott & Walls, 2005).

Of note, older products occasionally have superior designs that are more functional, durable, and repairable, when compared to current or newer products (Luchs & Mick, 2018).

Durability and obsolescence can be viewed through a few different lenses as addressed by multiple academics and researchers. In the simplest explanation obsolescence and durability can take two different forms (Cooper, 2010; Levinthal & Purohit, 1989). Planned obsolescence can be seen as impacting functional durability. It can also be seen in the Apple iOS update scandal in 2012 and via shorter product warranties as consumers may rely on warranties as an indicator of product quality, and their diagnostic value can be accurate (Wiener, 1985). This echoes Slade's (2006) death date concept, which illustrates when manufacturers intentionally make products designed to break after a certain period of time.

There is a secondary form of obsolescence referred to as perceived obsolescence which is more relevant to aesthetic (i.e., appearance) and emotional durability (Bakker et al., 2014), for example, stylistic, season, and trend or identity based. Packard (1960) argued that this form of obsolescence triggered "voluntary" disposal of fully functioning products. This is especially relevant to the fashion industry among other product categories that help to reflect identity. This is because these types of products are more effective at communicating and signalling self-identity (Berger & Heath, 2007; White & Argo, 2011) due to the inherent symbolic benefits they provide (i.e., Bhat & Reddy, 1998). This is in line with Trudel, Argo, and Meng (2016) who found that consumers take better care of identity-linked products. Some product categories combine the two methods, designing products to have a limited functional life, requiring new product features and upgrades, minimal repair options, and transient design aesthetics that date quickly (Guiltnan, 2009).

Joy et al. (2012) identify fashion and consumer technologies as the worst offenders for obsolescence, with elements of both lower aesthetic and functional durability. Thus, for fashion and consumer tech products, both perceived and planned obsolescence are typically present. Fast fashion brands, in particular, prosper with quicker cycles and intrinsically promote disposability (Fletcher, 2008). These faster fashion cycles reflect perceived

obsolescence in that items may become “out of fashion” before the end of a garment’s functional life. However, fast fashion manufacturers also extrinsically promote disposability through lower quality production which reflects functional durability and therefore planned obsolescence. Innovation saturates “virtually every durable goods category” (Guiltinan, 2009 pp. 19). Planned obsolescence is likewise nearly universal within durable goods manufacturers. Smartphone versions are constantly released to encourage upgrade and purchase for consumers. New versions are released with marginal improvements in technical capabilities alongside aesthetic design changes such as new shapes and colours. However, other product categories within consumer durables such as household goods and cars are also subject to obsolescence (Kostecki, 1998). Cars are suggested to be one of the first consumer durables that began to place fashion and appearance over a functional durable life span, as in the case of General Motors (Slade, 2006).

This discussion shows that consumers are still limited to what options marketers and producers provide to them within the current system (Ozanne et al., 2021). Similarly, marketers and brands play a key role in how rapidly products are consumed, as they control the rate at which releases of new products occur, therefore affecting the trendiness and disposal of existing goods (Bellezza, Ackermann & Gino 2017).

2.8 Consumer wisdom

Despite the access to goods and services being higher than ever before, there remains a dispute as to whether the well-being of consumers is too frequently being impeded by marketers (Ozanne et al., 2021). In a profit-centric system, marketers are more often focused on short-term profitability enabled by unsustainable production and subsequent consumption systems. Marketers hold a focus on new products (Okada, 2006), rather than alternative means of value for consumers (Ozanne et al., 2021). The vastness of the consumer product market causes both “choice overload” (Schwartz, 2004) exemplified by incessant cognitive processing and “robust satisficing” (Schwartz, 2015). This is when consumers choose a product that can be considered “good enough” within a broad set of

circumstances instead of more thoroughly calculating which option will lead to the absolute greatest utility (Schwartz, 2015).

A focus on lower costs to enable lower prices means relying on short-term consumer value over long-term positive experiences. This has further encouraged production outsourcing to developing countries “that often have inferior environmental standards and unhealthy working conditions” (Ozanne et al., 2021, pp. 234). Producers and marketers then conceal the ongoing cost of ownership to consumers (Ozanne et al., 2021) and undermine consumers ability to repair products (i.e., Svensson et al., 2018). Congruent with a throwaway culture, landfills are congested with masses of deteriorated consumer products (e.g., e-waste, see Balde et al., 2017) which should have been kept in use by being repaired instead of thrown out (Ozanne et al., 2021).

Wisdom can be seen as the apex of human functioning (Assmann et al., 1994), and is a domain-specific concept (Fowers, 2003; Grossmann, 2017). The concept of consumer wisdom has been developing over the last decade (Ozanne et al., 2021; Luchs, Mick & Haws 2021; Luchs & Mick 2018; Mick & Schwartz 2012; Mick, Spiller & Baglioni 2012). This concept suitably fits into the broader field of Transformative Consumer Research which focuses on exploration of consumption-related phenomena that can improve well-being (Mick et al. 2012). Mick and Schwartz (2012) were the first to bring wisdom into a consumer behaviour context, posing the question “Can consumers be wise?”

Consumer wisdom draws from Schwartz and Sharpe’s (2011) discussion of “practical wisdom”. Luchs and Mick (2018) first defined consumer wisdom as “the pursuit of well-being for oneself and for others through mindful management of consumption-related choices and behaviours, as realized through the integrated application of Intentionality, Contemplation, Emotional Mastery, Openness, and Transcendence” (pp. 384). In this context, intentionality reflects ongoing awareness and responsibility, while contemplation considers both thoughtful prospective and retrospective consideration. Emotional mastery relates to mindful management of consumption-related emotions (i.e., cognitive dissonance) and “reflects the balance theme in theories of wisdom (e.g., Schwartz & Sharpe, 2011; Sternberg, 1998) that

emphasizes a middle ground between the hedonism of materialism and the asceticism of denial" (Luchs & Mick, 2018, pp. 378). Openness conveys a "consumption-mediated growth mindset," (Luchs & Mick, 2018, pp. 380), while transcendence is reflective of compassion and interconnectedness between self, others, and nature (Luchs & Mick, 2018). In their most recent study, the definition of consumer wisdom was updated to include integrated application of responsibility, purpose, flexibility, perspective, reasoning, and sustainability to reflect the six dimensions identified in their consumer wisdom scale. Each of the dimensions are interconnected but distinct from each other, broadly apparent in everyday consumer behaviour activities such as lifestyles, goals, values, preferences, and purchases (Luchs, Mick & Haws, 2021).

Consumer wisdom has been depicted in various ways, consisting of being "a skill, trait, state, attitude, style, or process" (Ozanne et al., 2021, pp. 228). Wisdom is emphasised as a multidimensional process as opposed to a particular outcome (Ozanne et al., 2021; Tetlock, 1992; Vlek 1984) and is therefore context dependent. Wise consumers employ comprehensive consideration, utilise more prepurchase information search and are prudent thinkers and effective decision-makers (Luchs & Mick, 2018; Mick, Spiller & Baglioni, 2012). This is reflected in Luchs and Mick's (2018) retrospection, prospection, and reasoning consumer wisdom dimensions. These wise consumers usually prefer intentional consumption that is in moderation and practice good levels of self-restraint (Luchs & Mick, 2018; Mick, Spiller & Baglioni, 2012; Ozanne et al., 2021). They consider product use benefits (Mick, Spiller & Baglioni, 2012), as well as the other costs beyond initial purchase such as ongoing usage, upkeep, and repair as they generally will assume these consequent responsibilities (Ozanne et al., 2021). Wise consumers purposefully extend the value of owned products (Luchs & Mick, 2018).

This may be because wise consumers are more likely to use products for as long as possible, through a mentality of care with an aim to prolong the benefits (Luchs & Mick, 2018). This is motivated by a desire to have products fully utilised by themselves and/or others in order to be environmentally, socially, and financially responsible (Luchs, Mick &

Haws, 2021). Additionally, wise consumers have a better ability to manage their emotions, are more self-aware (Ozanne et al., 2021) and seek to consume in a way that produces positive emotions and fulfils personal goals (Mick & Schwartz, 2012). Likewise, consumer wisdom integrates elements of agency (i.e., Baumeister et al., 2008) in that wise consumers are perceived to have both cognitive and emotional intelligence (Ozanne et al., 2021). Luchs, Mick and Haws (2021) identify responsibility as a fundamental element of consumer wisdom. Additionally, wise consumers exhibit higher levels of prosocial attitudes and behaviour (Ozanne et al., 2021). Particularly, they acknowledge the value of carefully managing both personal and communal resources (Mick & Schwartz, 2012), and frequently choose alternatives that lessen the environmental impacts of production, help local communities, and support well-being (Luchs & Mick, 2018).

Luchs and Mick (2018) have differentiated consumer wisdom from similar concepts including consumer expertise, voluntary simplicity, being smart shopper (see Schindler, 1998), or a market maven, among many others that are not as holistic or all-encompassing. Similarly, consumer wisdom can be distinguished from the traditional concept of the economic man as it considers the well-being of a wider range of stakeholders (including nonhuman) and values qualities such as intuition, heuristics, and humility. Unlike the economic man model, consumer wisdom also accepts constraints and failings in consumer information resources and processing (Luchs & Mick, 2018; Sternberg, 2005). Consumer wisdom has also been suggested as being similar to mindful consumption (see Sheth et al., 2011). However, the two concepts differ in that where mindful consumption is limited to a focus of sustainability, consumer wisdom encompasses mindfulness, consumer expertise and an environmental perspective.

As shown below (see Figure 2), this thesis positions wise consumption as the broadest concept interconnected to all the concepts included in the figure. Sustainable consumption is the next broadest concept, while slow consumption, anticonsumption, and alternative consumption are three interconnected, more specific, and less extensive concepts. Ethical and moral consumption, mindful consumption, and voluntary consumption

are more loosely connected and even more specific. The outliers are green consumption, consumer expertise, and collaborative consumption (see Table 1 for definitions). These are important to note as they are still incorporated within the all-encompassing wise consumption phenomenon.

Figure 2

Wise consumption and other interrelated consumption behaviours

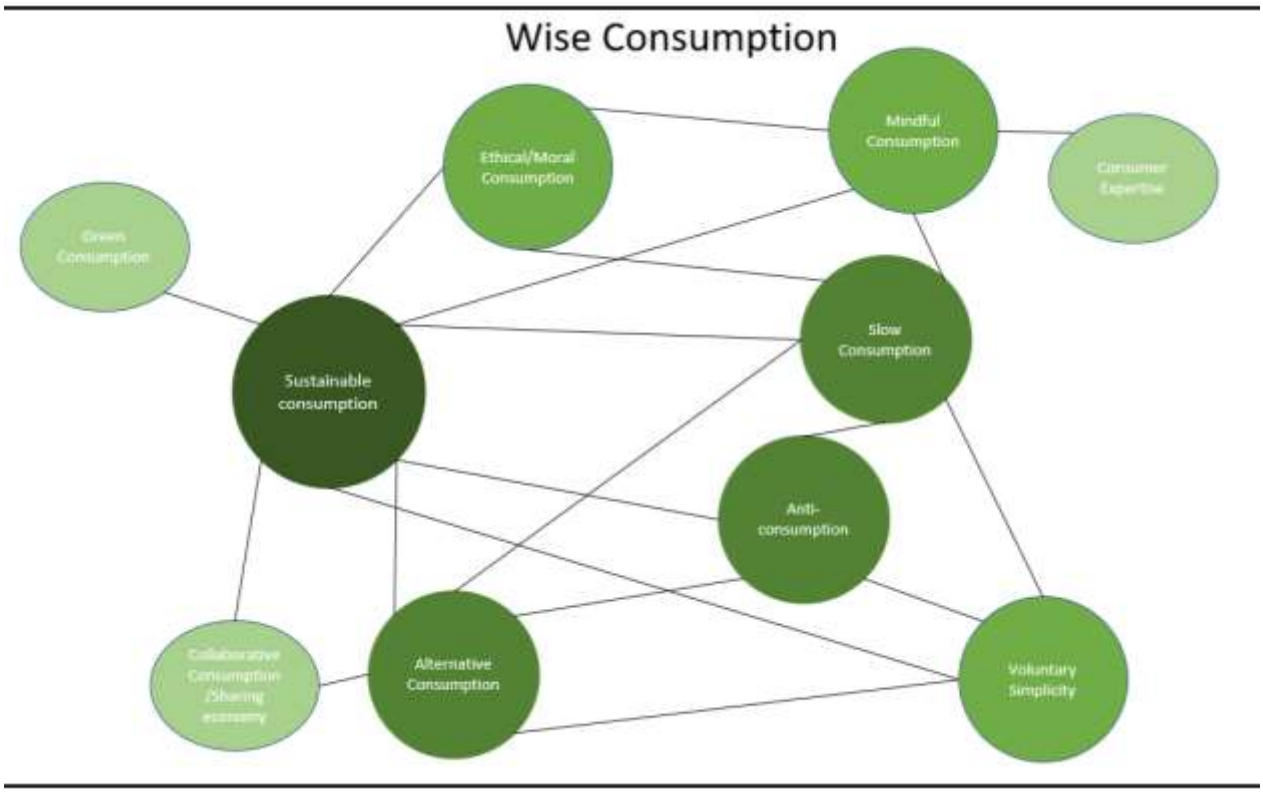


Table 1

Key concepts and definitions

Sustainable consumption	Adopting consumption habits that are mindful of the environmental impacts and forgoing excess consumption. Insisting consumption should be about sustaining broader quality of life rather than material gain. Sustainable consumption promotes care for the environment and future generations (Quoquab & Mohammad, 2020).
Anticonsumption	"Intentionally and meaningfully excluding or cutting goods from one's consumption routine or reusing once-acquired goods with the goal of avoiding consumption" (Makri et al., pp.178).
Consumer resistance	Cutting goods from a consumption pattern based on unsatisfactory value or experience and requires an antagonist of some kind (i.e., a brand/company) to bear the brunt of the resistance (Makri et al., 2020).

Voluntary simplicity	Reducing or simplification of consumption routine by choice and is motivated by outcomes such as enhancing well-being or limiting spending (Cherrier & Murray, 2007; Cherrier, 2009).
Frugality	Reflected in cautious use of finances and owned products and involves mindful acquisition and consumption of goods (Lastovicka et al., 1999).
Consumer ethnocentrism	Consumer ethnocentrism is prosocial behaviour reflected in favouring domestic goods and commonly rejecting foreign-made goods (Siamagka & Balabanis, 2015).
Ethical consumption	Ethical consumption is any consumption practice that is influenced by ethical obligation or concern (Cooper-Martin & Holbrook, 1993; Oh & Yoon, 2014). Ethical consumption can be affected by social mechanisms, self-identity, and altruism and is often synonymous with 'sustainable' consumption (Cervellon & Wernerfelt, 2012; Lundblad & Davies, 2016).
Slow consumption	Slow consumption extends product life cycles by slowing the rate goods are used up and therefore disposed of (Cooper, 2005). Includes consumption of quality goods produced on a small scale (see Childs et al., 2021).
Wise consumption	"…the pursuit of well-being for oneself and for others through mindful management of consumption-related choices and behaviours, as realized through the integrated application of Intentionality, Contemplation, Emotional Mastery, Openness, and Transcendence" (Luchs & Mick, 2018, pp. 384). Updated to- the pursuit of well-being for oneself and for others through mindful management of consumption-related choices and behaviours, as realized through the integrated application of responsibility, purpose, flexibility, perspective, reasoning, and sustainability (i.e., Luchs, Mick & Haws, 2021).
Mindful consumption	"Mindful consumption is premised on consciousness in thought and behaviour about consequences of consumption" (Sheth et al., 2011, pp. 27), and has been likened to wise consumption (Sheth et al., 2011).
Alternative consumption	Alternate ways to retrieve value (not mass-market) for example: consumer production (C2C), collaborative consumption, or purchasing 'one-off' customised products or those produced locally and in small batches, sharing, borrowing/leasing, swapping, renting (as substitutes to individual ownership), and reusing or shopping second-hand (Luchs, Mick & Haws, 2021; Brosius et al., 2013).

Consumer wisdom can be viewed as falling into a continuum whereby the level of wisdom can fluctuate across different consumption situations and throughout each step in their consumption process (Ozanne et al., 2021). Mick and Schwartz (2012) conclude, however, that higher levels consumer wisdom can be demanding and is therefore an ambitious standard (Ozanne et al., 2021). This means wisdom in consumption has aspirational elements that are not achievable by all or even most consumers. Ozanne et al. (2021) argue that it cannot be "easily accomplished and sustained by most people across

the multitude of situations they face on a daily basis" (pp. 228). Despite the focus on broader and wiser consumption, then, this is still not a practice adopted by most consumers. Conversely, Ganassali and Matysiewicz (2021) propose that consumer wisdom is more easily achieved than the more radical phenomenon of anticonsumption. This shows a need for scholars and marketers alike to find ways to integrate aspects of wise consumption into product design and product promotion for more sustainable and durable consumer options.

2.8.1 Barriers to Consumer Wisdom

A study by Ganassali and Matysiewicz (2021) explores the relationships between consumption satiation, self-transcendence, and consumer wisdom. In their study they view consumption satiation through a much broader ("global") lens, "not focused on a specific single product category" (Ganassali & Matysiewicz, 2021, pp., 544). Therefore, they define global consumer satiation as "a significant reduction in consumption enjoyment after repeated or prolonged exposure to consumption activities over time, and resulting in some different consumption behaviours, namely, wisdom" (Ganassali & Matysiewicz, 2021, pp., 544). Global consumer satiation is mirrored in the theorisation of the Kuznets curve. Materialistic lifestyles sit in opposition to simplistic lifestyles (Eckhardt & Mahi, 2012). The prevalence of materialism in western countries and its related impact on environmental and social wellbeing, however, has also made way for anticonsumption ideals and sentiments to arise in these western societies (Khan & Lee, 2014). This is reflective of the environmental Kuznets curve, which shows a relationship between economic growth and the degradation of the environment (Purcel, 2020). Specifically, the bell-shaped curve proposes that there will be more environmental degradation in a developing country versus developed countries where pollution lessens, and the environment begins to be restored.

Consumer wisdom is a relatively new phenomenon that has numerous benefits for both consumers and the environment. Expanding research on consumer wisdom is therefore consequential. Luchs, Mick, and Haws (2021) call for future research on consumer wisdom within a context of evolving production and consumption systems that are predominantly

linear but are shifting to become more circular. Like Ozanne et al. (2021) this study will have a western, educated, industrialized, rich, and democratic societal context (aka WEIRD societies, see Henrich, Heine & Norenzayan (2010)). As theorised by the Kuznets curve, these societies are more likely to be making attempts to “close the loop” and eliminate waste in the current, linear system (Geissdoerfer et al., 2017).

Self-transcendence is a developmental process that leads to wisdom (Levenson, Aldwin & Cupertino, 2001) and is therefore a key condition of wisdom (Curnow, 1999). Findings of Ganassali and Matysiewicz (2021) indicate that consumption satiation is an antecedent of self-transcendence. More importantly they confirm, self-transcendence is a precursor to consumer wisdom. Consequently, they validate “consumption satiation” as being a key factor in the development progression to wise and responsible consumer attitudes and behaviours (Ganassali & Matysiewicz, 2021).

Therefore, in order to create more wise consumers, a deeper level of thinking and cognitive engagement in consumer decision making will be required. Wasieleski et al. (2020) discuss the importance of people striving to attain a growth focused (or “unchained”) “ecologising” mindset. Kegan (1994) argues that humans will sink (as opposed to swim) if higher cognitive development doesn’t occur in today’s society. An “ecologising” mindset will allow us to survive because we will have the capability to think at postconventional stages both cognitively and morally, and this is required due to the intrinsically paradoxical nature of the many problems global society is facing (Wasieleski et al., 2020).

Kegan (1982, 1994) demonstrated five stages of human cognitive development. These are coined the impulsive, the imperial, the socialised, the self-authoring, and the self-transforming mind stages. At each stage the human mind has a broader ability to think and see more, and multiple, dynamic perspectives. According to Kegan (1982, 1994), 58 percent of adults reach the third stage, gaining the socialised mind. Additionally, only 35 percent of the adult population reach one of the higher development stages (i.e., the self-authoring or self-transforming minds), therefore deeming the others “stuck” in the earlier development stages. This is in line with Torbert (2004) and Rooke and Torbert (2005) who found only 4

percent of adults develop from ego to ecosystem awareness. This group, called strategists, view the world from a broader ecosystem perspective, similar to the sustainability mindset (Rimanoczy, 2014). Dual cognitive processing which occurs at these higher cognitive levels is necessary for an “ecologising” mindset. Wasieleski et al. (2020) considers dual processing in the scope of System 1 and System 2 cognitive processing framework (McGilchrist, 2009). System 1 refers to quick and automatic responses which use intuitive judgement based on previous behaviour and actions. In contrast, System 2 requires cognitive expenditure (Street et al., 2001) and consists of comprehensive thinking and conscious processing. It is frequently linked with the “subjective experience of agency, choice, and concentration” (McGilchrist, 2009, pp. 236). Both System 1 and 2 (i.e., dual processing) is required for an ecologising mindset, which find commonalities with consumer wisdom.

Taken together, the need for higher cognitive engagement in consumer decisions helps explain why there may be some barriers to widespread consumer wisdom and resultant sustainable consumption behaviours. Marketers should be conscious that the consumerism that traditional marketing promotes is a significant contributor of negative environmental occurrences (Csikszentmihalyi, 2000; Peattie & Peattie, 2009). Additionally, this paired with current societal structures, governmental policies, and lifestyles stunt higher levels of cognitive processing and therefore consumer wisdom which may be key to reducing consumer waste. As suggested, consumer wisdom impacts both sustainable acquisition and use, as wise consumers utilise owned product for longer, delaying replacement and are more likely to seek out alternative ways of consumption (acquisition). Likewise, wise consumers show a higher degree of care for their owned items (use).

2.9 Alternative consumption

One way that wise consumption and anticonsumption concepts interact is through the motivation to participate in non-traditional consumption. Consumers who participate in alternative consumption are less likely to purchase mass-market products by default, instead being perceived as a last option. Examples of alternative consumption may be consumer

production (C2C), collaborative consumption, or purchasing ‘one-off’ customised products or those produced locally and in small batches. Wise consumers show a higher level of openness (Ozanne et al., 2021) and flexibility, which enables them to seek out alternate ways to retrieve value, for example, sharing, borrowing, leasing, swapping, renting (as substitutes to individual ownership), and reusing or shopping second-hand (Luchs, Mick, & Haws, 2021; Brosius et al., 2013). These are all examples of alternative consumption.

2.10 Sustainable acquisition

Sun et al. (2021) and Joy et al. (2012) contend luxury (high end) products offer a distinct way of consuming more sustainably through their innate durability. Luxury products express higher status and uniqueness, as well as offer longer life spans and durability (Kapferer, 2010; Wiedmann et al., 2007). Product durability is a key dimension of sustainable consumption (Haws, Winterich & Naylor, 2014; Luchs et al. 2010; White et al., 2019). Continuing to use owned products impacts product replacement (Cherrier, 2010), with the potential to decrease the turnover of consumer products ending up in landfill. A garment (or apparel) is durable if it delivers extended functional benefits (e.g., it does not deteriorate after a few washes), or stylistic (i.e., emotional) benefits (e.g., it does not quickly go out of style, indicating its timelessness). Therefore, this forms the theoretical basis for Sun et al. (2021), who argue that purchasing fewer, high-end (i.e., luxury) products is a previously unexplored form of sustainable consumption.

White et al. (2019) proposed that creating a link between affluence and sustainable products may make sustainable consumption more aspirational and promote higher levels to occur. This link would more easily be processed by consumers when considering luxury or high-end products as a way of consuming sustainably.

2.11 Sustainable use

Sun et al. (2021) propose that overall product sustainability can be impacted across the product cycle (Cronin et al. 2011; Seuring & Muller, 2008). There are two elements of sustainability in the initial product cycle, “(1) sourcing of materials in the supply chain; (2)

production and manufacturing processes, including labour practices" (Sun et al., 2021, pp. 29). The third element which Sun et al. (2021) and this thesis focus on, occurs within an area of the product cycle that overlaps with the consumption cycle. This is the "durability and life span of products, including use and disposal" (Sun et al., 2021, pp. 29), as there continues to be a gap in research within this area of interest (Sun et al. (2021).

Even sustainably produced apparel can be unsustainable, if the garments are thrown out after being worn on a few occasions (LeBlanc, 2012). Therefore, sustainable use is important. Consumer use can mean many things depending on the product category. Likewise, product care, maintenance, and repair will also be exhibited differently. With regards to clothing, delicate washes in cold water (or even hand washing) and line drying would be examples of maintenance and running descaling or cleaning cycle or cleaning out a filter on a household appliance would be another example of maintenance. Additionally, mending or repairing may also look different such as stitching up a hole in a garment, taking shoes to a cobbler, and servicing or ordering a replacement part for an owned product or appliance. According to Godfrey et al. (2022), repair, cleaning, and maintenance, although not necessarily interchangeable due to levels of complication, are difficult to conceptually separate. Generally, these behaviours reflect product lifespan extension as they are activities and behaviours that increase the amount of time that a product can be used, which lowers the need for replacement purchases (i.e., Den Hollander & Bakker, 2017; Cherrier, 2010; Sekhon & Armstrong Soule, 2020). Therefore, these behaviours are reflective of sustainable use (i.e., Godfrey, Price & Lusch, 2022; MacArthur, 2013; Webster, 2017; Cline, 2012). In a more general sense sustainable use can be reflected in the conservation of water and energy during the usage stage (Lin & Chang 2012; White, Simpson & Argo 2014). Thus, sustainable use can be exemplified by reusing a product, using it for the whole of its potential life, preservation of owned products through maintenance and repair, as well as consideration of energy and water conservation.

Product repair practices have been overlooked in marketing and consumer behaviour studies (Godfrey et al., 2022). By developing a repair propensity scale and studying

surrounding circumstances associated to product repair behaviour among consumers with differing levels of repair propensity, Scott and Weaver (2014) found (initial product) cost, attachment (to the product), perceived convenience, stewardship, and innovativeness predicted repair propensity.

Product care has been defined as “any activity initiated by the consumer that helps to prolong the lifetime of a product” (Ackermannn et al., 2018). It encompasses repair and maintenance (“active”) activities and preventive care (“passive”) behaviours (Ackermannn et al., 2021). Product care behaviour tendencies considerably differ between consumers (Ackermannn et al., 2018). Consumer motivation to perform product care behaviours are influenced by personal attributes, the relationship with and connection to the product, and general product characteristics (Ackermannn et al., 2018). In accordance, product care tendency is determined by ease, positive experience, and relevance (Ackermannn et al., 2021).

Godfrey et al. (2022) notes the neglect of research on product repair practices, similarly, Ackermann et al. (2021) calls for more quantitative research on product usage. Product usage and product life extension are crucial to sustainable consumption (Makri et al., 2020; Sheoran & Kumar, 2022) and therefore consumer product usage requires more research.

This research paper proposes consumers would be more likely to sustainably use (i.e., willing to take care of through maintenance, and repair) their luxury or high-end products than they would be with their standard or cheaper products. Table 2 draws from the literature to illustrate what are viewed as more versus less sustainable actions and behaviours during the consumption cycle, including acquisition, use, and disposal.

Table 2

Sustainability across the consumption cycle

	Not sustainable	More sustainable	Sustainable
Acquisition	Purchasing new products (consumer "durables" i.e., homewares, décor, apparel and/or technology) on a regular basis (made from virgin resources), mass and cheaply made that are designed to have a short lifespan and not easily repaired (e.g., 'durability neglect' Sun et al. (2021)).	Selecting goods with sustainable features such as sourcing, production, or packaging (Luchs, Brower, & Chitturi, 2012; Pickett-Baker & Ozaki, 2008). -e.g., buying an electric car vs. petrol/gas/diesel vehicle and/or purchasing household appliances with water/electricity use efficiency (Scott & Weaver, 2018). Buying quality products that last longer (Sun et al., 2021), therefore delaying product replacement and keeping the resource(s) out of landfill and in the loop (Cherrier, 2010).	Anticonsumption, repurposing, sharing economy, collaborative consumption and/or second-hand shopping (Scott & Weaver, 2018).
Use	Completely skipping maintenance activities such as cleaning or running cleaning or descaling cycles. Excessive or incorrect washing methods (i.e., not using delicate cycle when instructed on label), washing in hot water, and utilising the dryer (Joy et al., 2012). Deliberately being reckless or less careful with owned products (i.e., the 'upgrade effect' Bellezza, Ackermann, and Gino (2017)).	Minimal maintenance activities for owned products or following care labels.	Conservation of water and energy (Lin & Chang 2012; White, Simpson, & Argo 2014). Extend the value of owned products for as long as possible by caring for, maintaining, mending, and repairing products (Luchs & Mick, 2018). -e.g., washing in cold water, line-drying your laundry or stitching up holes in garments
Disposal	Trashing (i.e., landfill) and littering and/or dumping	Recycling, social recycling or donating (i.e., Dommer et al., 2021; Donnelly & Winterich, 2017)	Repurposing, upcycling, mending and/or repairing to delay disposal stage only recycling and donating as a last resort.

2.12 Quantity vs. Quality and Product care

Joy et al. (2012) found that fast fashion consumers compromise on quality, which is the factor central to undermining sustainability, for fleeting on-trend style. In a more recent study Sun et al. (2021) found what they call a “durability bias” which reflects this compromise. Put simply, consumers would rather buy a higher number of low-quality products more frequently than invest in one higher quality and more expensive product that is purchased with long-term use in mind. Product categories studied included shoes, handbags, and clothing (Sun et al., 2021).

However, these authors also theorise that the durability bias would hold true across other durables such as household furniture (Sun et al., 2021). Furniture is another category that has had durability lowered and obsolescence altered by manufacturers and marketers. Sun et al. (2021) proposed that consumers expecting long-term use of a product at the time of purchase will be less likely to overlook a product’s durability and therefore more likely to choose to invest in a high-end option.

The related upgrade effect illustrates that consumers are more likely to behave recklessly and show less care with possessions when there are newer versions (or upgrades) available (Bellezza, Ackermann & Gino, 2017). Moreover, upgrades are marketed and readily available and affordable in today’s marketplace prevalent in every product category.

Taken together these researchers point to two key phenomena, the durability bias (Sun et al., 2021) and the upgrade effect (Bellezza et al., 2017) that impede sustainable use.

2.13 Hypothesis Development

As established, product durability is a crucial element of sustainable consumption (Haws, Winterich & Naylor, 2014; Luchs et al. 2010; White et al., 2019). Consuming luxury goods, which are more durable and last longer than cheaper goods, is one way to consume more sustainably (Sun et al., 2021).

Slow consumption lowers the speed of consumption, therefore increasing the products' lifespan and delaying product disposal (Cooper, 2005). Luxury and high-end brands, particularly in fashion, have been reported as adopting practices that facilitate slower consumption (i.e., slow fashion). Practices such as reducing speed of their collection releases and lowering fashion trend turnover, combined with increasing inherent product durability, further exemplifies how the acquisition of high-end, luxury and slow fashion garments can be more sustainable than consumption of cheaper fast fashion garments (Sun et al., 2021; Indvik, 2020; Childs et al., 2021; Amatulli et al., 2017).

These qualities of slow fashion, in conjunction with a justifiable higher price (also seen in high-end or luxury products), incites economic investment along with more emotional investment (Clark, 2008). Emotional investment is important because identity-linked products are more likely to be used with care (Trudel, Argo & Meng, 2016). This is predicted to change consumer usage intentions, or the way they treat and care for a product while they own it. Likewise, consumers who care for their goods are gratified for longer and therefore tend to keep the product in use for longer durations (Dommer & Winterich, 2021). Luxury goods are more linked to identity (Kapferer, Klippert & Leproux 2014; Wiedmann, Hennigs & Siebels 2007). This theorisation indicates that consumers of luxury or high-end products are more likely to have emotional investment, therefore caring for and utilising their products for longer.

Luxury goods not only last longer with higher durability (Sun et al., 2021), but are more readily repaired than cheaper and more cheaply made products (Joy et al., 2012). According to Cherrier (2010), a consumer's ability or inclination to maintain, mend, or repair and continue utilising owned products has an impact on product replacement.

Therefore, consumers who are more willing to take care of, maintain, and repair their luxury products might subsequently utilise them for longer compared to standard or cheaper products (i.e., throwaway products). In this theorisation, consumption of luxury or high-end is not only an example of sustainable acquisition (Sun et al., 2021) but also an exemplar that points to more sustainable use.

This research proposes consumers would be more likely to sustainably use (i.e., willing to take care of, through proper maintenance, storage, and repair) goods that are more durable and sustainable at the point of acquisition. For instance, consumers are predicted to show greater sustainable usage intentions for more sustainable acquisitions such as luxury or high-end products (and therefore own them for a longer time, increasing lifespan, and satiate more slowly) versus fast fashion, standard or cheaper products. Formally I predict that:

H1: Consumer acquisition of a more (vs. less) sustainable good yields more (vs. less) sustainable usage intentions.

For marketing scholarship, testing of traditional variables such as how these variables impact product attitudes and willingness to purchase are also important. This research proposes that consumers will rate more durable and sustainable products with (1) higher evaluations and attitudes towards these products and (2) show a higher willingness to purchase the products. Thus, the formal hypotheses follow.

H2a: Exposure to a more (vs. less) sustainable good yields higher consumer attitudes towards products.

H2b: Exposure to a more (vs. less) sustainable good yields greater willingness to purchase products.

Higher pre-purchase intentionality, thorough deliberation and more information search, are characteristics of wiser acquisition (Mick, Spiller & Baglioni, 2012). Pre-purchase deliberation of wise consumption uses both retrospection and prospection, reflected in envisioning the value sought versus what is provided from a given product, as well as careful reasoning (Luchs & Mick, 2018). Wise consumption also utilises human qualities and capabilities of successfully utilised heuristics and intuition, resilience, and humility (Mick & Luchs, 2018). Responsibility is a key aspect of wise consumption (Luchs, Mick & Haws, 2020), as wise consumers desire to sensibly manage not only their personal but also communal resources (Mick & Schwartz, 2012). This encompasses care for the environment, as wiser consumers generally aim to acquire products responsibly. Acquiring responsibly in

this way means that goods they acquire, have less environmental impacts, support localism (purchasing goods made locally rather than outsourced, imported, or mass-produced goods), and foster well-being for themselves and others (Luchs & Mick, 2018). In addition to these sustainable acquisition behaviours, wise consumers are more flexible regarding how they attain value and therefore are more likely to participate in non-traditional consumption and seek alternatives to individual ownership, such as reusing, repurposing, sharing, swapping, or renting items (Brosius et al. 2013; Luchs, Mick & Haws 2020). These are some of the important ways wise consumers are more likely to participate in sustainable acquisition.

Wise consumers are generally better at exercising restraint for acquisition of new products. However, when they do decide to acquire something new, they focus on a long-term satisfaction perspective (i.e., through prospection), instead of narrowly focusing on the short-term. Wise consumption, much like slow consumption, prioritises quality over quantity. A wise consumer during the acquisition stage is "skeptical of exaggerated claims of value, intolerant of poor quality, appreciative of great design" and will have a "willingness to trade off quantity of goods for quality" (Luchs & Mick, 2018, pp. 371). Specifically, this trade off (quality vs. quantity) behaviour is reflective of acting in opposition to the durability bias proposed by Sun et al. (2021). That is, wise consumers are less likely to have a durability bias when purchasing products. They are more likely to factor durability into their purchase decisions. Therefore, this is another way that wise consumers are more likely to sustainably acquire products.

H3a: Consumers with more (vs. less) wisdom are more (vs. less) likely to sustainably acquire products.

The core elements of responsibility and long-term thinking within consumer wisdom (Luchs, Mick & Haws, 2020) not only impact more sustainable acquisition but also more sustainable use. Wise consumers regard short-term consideration of initial product costs (i.e., purchase price) but also long-term, ongoing costs of ownership (i.e., product maintenance, storage, and repair) which they are more likely to take responsibility for. Wiser

consumers purposefully extend the value of their owned products for as long as they can throughout use by caring for and repairing their products (Luchs & Mick, 2018). As established above, these behaviours exemplify sustainable use. This level of responsibility and care shown by wiser consumers may also mean they are less likely to be susceptible to the upgrade effect (Bellezza, Ackermannn & Gino, 2017) which is reflective of unsustainable use as mistreatment of owned products increases unnecessary product replacement (Cherrier, 2010). I anticipate that wise consumers thus are more likely to enact sustainable use behaviours. Formally, I predict:

H3b: Consumers with more (vs. less) wisdom are more (vs. less) likely to demonstrate sustainable usage intentions.

In the following chapters of this thesis, I next describe my approach to method and design of the study to test H1, H2a, H2b, H3a, and H3b.

Chapter 3: Research Design and Methodology

3.1 Ethical considerations

Ethics approval for this research was obtained from Auckland University of Technology's Ethical Committee on 28th March 2023 (Ethics application: 23/75 - see Appendix 1) before any data was collected. This approval included the information sheet and survey (see Appendix 2). The researchers ensured that participants were adequately informed about their participant rights by providing the participant information page and instructions at the beginning of the survey. This was to provide details of the research and what was required from participants if they wished to take part. Although the final section of the survey experiment included general demographic questions such as gender and age, no specific information such as names, contact details or addresses were included as part of the survey, therefore allowing data to be collected anonymously and eliminating any risk of identifying the participants at any point. As this research data was anonymous it qualified for minimal assessment.

3.2 Methodology

This research employs an experiment to examine if more (vs. less) sustainable acquisition can impact more (vs. less) sustainable use of a good. It also explores how differing levels of consumer wisdom might impact these behaviours.

Qualitative research is well known amongst consumer psychologists for its ability to reveal exploratory insights. This exploratory knowledge is then used to assist in proposing theories, hypothesis development, and experimental stimuli design. It may also produce data that allows for subsequent confirmatory research (Chakravarti & Crabbe, 2019). Confirmatory research, or quantitative research, uses a scientific method to test hypotheses that propose relationships between variables to determine cause and effect. Experimental methodology, according to multiple researchers, helps determine more clear causality and forms an important piece of scientific research in consumer psychology (Kardes & Herr,

2019; Hair et al., 2014). Therefore, the current study takes a quantitative and experimental approach.

Experiments are underscored by random assignment to different stimuli conditions that represent different aspects of a theoretically specified variable. Random assignment of subjects to conditions enables the researcher to control for extraneous variables, including those not considered by the researcher (Kardes & Herr, 2019). The objective is to isolate and evaluate the causal effect, if any, of the manipulated independent variable on the dependent variable. The key strength of this method is that it is more effective at displaying causal inferences than via correlational methods (Aronson, Ellsworth & Carlsmith, 1990), therefore ensuring internal validity. High internal validity allows a researcher to determine that the independent variable solely (i.e., no extraneous variable) influenced the dependent variable (Aronson et al., 1990; Campbell, 1957; Wilson et al., 2010).

An empirical quantitative online study is used as it will be the best approach to address the two research questions and three hypotheses. Specifically, this research answers the research questions and proposed hypotheses through an experiment.

Survey experiments are characterised by experimental manipulations administered in a survey or questionnaire format (Schwartz, 2019). The present data was collected using a survey produced and hosted on Qualtrics. CINT panel management was used to distribute the online survey experiment to New Zealand participants. Finally, data was exported to and analysed utilising SPSS software. Analysis of variance (ANOVA) is used as it is an effective means for analysing the results of experiments (Hair et al., 2014). Regression analysis and Hayes process models are also used for moderation analysis.

3.3 Research Method

The independent variables in this experimental design are (1) sustainable acquisition (framing of more durable good vs. control good; adapted from Sun et al., 2021) and (2) high-end vs. low-end products. Sun et al. (2021) show that level of durability and level of luxury good status impacts perceptions of sustainability of an acquisition. The key

dependent variable is sustainable usage (measured via product care tendency scale as adapted from Ackermannn et al., 2021). As confirmed in previous literature, mending and maintenance of products exemplifies sustainable use (Makri et al., 2021). These variables will be described more in the following sections.

3.4 Priming

This research uses a 2 (product category: high-end vs. low-end) x 2 (durable framing vs. non-durable control framing) between-subjects factorial design. Between-subjects design with random assignment of participants was used as it can determine a causal relationship (Lieberman, Morales & Amir, 2019). Participants were randomly assigned to one of four conditions and primed via an advertisement image of three consumer products (stick vacuum cleaner, boots, and duvet inner). The advertisement image utilised a format that mimics well-known social media platform Instagram, as it reflects a realistic and common exposure to a consumer product. The consumer product was either high-end or low-end and framing was more, or less, durable (Sun et al., 2021).

Specifically, high-end products were operationalised through a reputable manufacturer branded product of each category (i.e., Dyson vacuum, Dr Martens boots, and Natura (Bambi) duvet inner). In contrast, low-end products were operationalised via private-label products (i.e., Kmart's 'Anko' branded vacuum, The Warehouse's 'H&H' branded boots, and Bed Bath & Beyond's 'My Microfibre' duvet inner). These stimuli are inspired by that used in Sun et al. (2021). High-end vs. low-end was solely manipulated through brand, with price excluded across all stimuli (see Figures 3, 4 and 5 for details).

Sourcing of materials, and the production and manufacturing processes are two dimensions of sustainable products (Sun et al., 2021). With specific regard to the duvet inner, Natura is made by Bambi, a manufacturer brand which produces high quality, sustainable bedding. The Natura duvet inner itself is made with bamboo (as opposed to microfibre) which is sustainable and durable (Silva et al., 2023) also encased in a higher thread count japara cotton outer than the low-end Bed Bath & Beyond duvet inner.

As Figures 3, 4 and 5 indicate, product durability was manipulated through the words used in the image description and the social media-oriented hashtag. For example, the control, non-durable framing vacuum stimuli read “Cordless stick cleaner #convenience,” while the durable-framed vacuum reads “Dust-busting for many years to come #durable.” The control, non-durable boots stimuli read “Lace Up Combat Boots #on trend,” in contrast to the durable-framed boots stimuli, which read “Designed to be worn to shreds #durable,” which is taken from a real Dr Martens advertisement. Finally, the duvet inner control description and hashtag reads “All-seasons duvet inner #machine washable.” Conversely, the durable-framed duvet condition reads “Comfort that lasts for many seasons to come #durable.”

Figure 3

Vacuum cleaner stimuli across the four conditions.

Vacuum	High-end	Low-end
Durable	 Dyson Dust-busting for many years to come #durable	 Kmart Dust-busting for many years to come #durable
Control	 Dyson Cordless stick cleaner #convenience	 Kmart Cordless stick cleaner #convenience

Figure 4

Boots stimuli across the four conditions.

Boots	High-end	Low-end
Durable	 Dr Martens Designed to be worn to shreds #durable	 The Warehouse Designed to be worn to shreds #durable
Control	 Dr Martens Lace Up Combat Boots #on trend	 The Warehouse Lace Up Combat Boots #on trend

Figure 5

Duvet inner stimuli across the four conditions.

Duvet Inner	High-end	Low-end
Durable	 Harvey Norman Comfort that lasts for many seasons to come #durable	 BB&B Comfort that lasts for many seasons to come #durable
Control	 Harvey Norman All seasons duvet inner #machine washable	 BB&B All seasons duvet inner #machine washable

3.5 Procedure

In part one, participants will be asked to evaluate the products shown on liking via their attitudes towards the products and purchase intentions. Product attitude is measured using 7-point Likert-scales (1= Strongly disagree, 7= Strongly agree) via 5 items (i.e., “I like this <product>”, “I desire this <product>”, “This <product> is attractive”, “I would use a <product> like this”, “I would be interested in buying this <product>”).The product name was replaced for each product shown, i.e., vacuum, boots, or duvet inner. The product attitudes scale was reliable for all three consumer products, shown by the Cronbach’s alpha score greater than a value of .7 (Kline, 1999). Specifically, reliability was shown for attitudes toward the vacuum (α = .903), attitudes toward the boots (α = .973), and attitudes toward the duvet inner (α = .933), respectively.

Purchase intention was measured via a single item (i.e., “I would be willing to purchase this <product>”) using 7-point Likert-scale (where “1” = “Would never buy” and “7” = “Would definitely buy”). The product name was again replaced for each consumer product shown (vacuum, boots, or duvet inner).

Participants were then asked about their product care tendency (adapted from Ackermannn et al., 2021; see Table 3) measured using 7-point Likert-scales (1= Strongly disagree, 7= Strongly agree) via 10 items separated across three categories: (1) easiness (i.e., “I am experienced in looking after my <product>,” “I can look after my <product> well,” “I have the necessary equipment to maintain my <product>,”) (2) relevance (“It is important for me to take care of my <product>,” “I look after my <product>,” “I try to prevent my <product> from failure,” “I clean my <product>,”) and (3) positive experience (“Taking care of my <product> gives me a good feeling,” “It makes me proud that I am able to take care of my <product>,” “In general, looking after my <product> is a positive experience”). The reliability of the product care tendency scale was sound across all three consumer products. Cronbach’s alpha for the 10 items confirms the reliability for the vacuum (α=.933), boots (α=.956), and duvet inner (α=.953), respectively.

Table 3

Sustainable use measure: Product care tendency scale (Ackermannn et al., 2021).

Product care tendency scale	
Easiness	1.) I am experienced in looking after my <product>. 2.) I can look after my <product> well. 3.) I have the necessary equipment to maintain my <product>.
Relevance	4.) It is important for me to take care of my <product>. 5.) I look after my <product>. 6.) I try to prevent my <product> from failure. 7.) I clean my <product>.
Positive experience	8.) Taking care of my <product> gives me a good feeling. 9.) It makes me proud that I am able to take care of my <product>. 10.) In general, looking after my <product> is a positive experience.
	vacuum (α=.933), boots (α=.956), and duvet inner (α=.953)

In part two, participants were next asked about their repair propensity for owned products (adapted from Scott & Weaver, 2014) measured using 7-point Likert-scales (1= Strongly disagree, 7= Strongly agree) containing 22 items (see Table 4 below for these items). Cronbach's alpha (α= .917) confirms the reliability of this scale.

Table 4

Sustainable use measure: Repair propensity scale (adapted from Scott & Weaver, 2014).

Dimensions and items	
Repair propensity	1.) If a product can be fixed, I feel obligated to repair it instead of replace it. 2.) I am more likely to have a product repaired than to replace it. 3.) It is important to try to fix a product before getting rid of it. 4.) I always try to fix a product myself or have someone else fix it.
Stewardship	5.) If you take good care of your possessions, you will definitely save money in the long run. 6.) There are many things that are normally thrown away that are still quite useful. 7.) Making better use of my resources make me feel good. 8.) If you can re-use an item you already have, there's no sense in buying something new.
Product retention tendency	9.) Getting rid of stuff is difficult for me. 10.) I tend to hold onto my possessions. 11.) Unless I have a really good reason to throw something away, I keep it. 12.) I do not like to dispose of my possessions.
Innovativeness	13.) Even if I don't have the right tool for the job, I can usually improvise. 14.) I never throw something away that I might use later. 15.) In general, I would rather alter an old product to work in a new situation than purchase a new product specifically for that purpose.

	16.) After the useful life of a product, I can often think of ways to use its parts for other purposes. 17.) I do not enjoy a product unless I can use it to its full capacity. 18.) I use products in more ways than most people.
Product care	19.) I work hard to protect my material possessions. 20.) Keeping my material possessions in good working order is very important to me. 21.) Material things should be guarded from harm. 22.) I am very conscious about keeping my material possessions safe.
	α = .917

Respondents were then asked to complete a scale measure of attitudes toward product retention with regards to wastefulness or attachment (adapted from Haws et al., 2012). The six-item scale asked two questions across the three product categories- appliance, shoes, and bedding (i.e., “how wasteful do you think it would be to throw away <product>?” and “how attached do you think you felt to <product> before it broke?”. Cronbach’s alpha confirms reliability of this adapted measure (α=.742).

Consumer wisdom (Luchs et al., 2021) was also measured as a potential moderator. The scale taken from Luchs et al. (2021) proved to be a reliable scale with the 24 items (see Table 5) having a Cronbach’s alpha of (α=.884). Finally, respondents filled in general demographics before they were thanked for their participation and the survey was closed.

Table 5

Consumer wisdom scale (Luchs et al., 2021).

Dimensions and items	
Responsibility	1.) I have a realistic sense of the lifestyle that I can afford. 2.) I spend my money responsibly. 3.) I find it easy to focus on buying only what I really need without getting tempted by things that others have. 4.) I am able to resist temptation in order to achieve my budget and lifestyle goals.
Purpose	5.) I manage my budget so that I can spend some money on experiences that give me a lot of pleasure and joy. 6.) I prioritise spending some money on unique experiences that help me develop my full potential. 7.) I manage my budget so that I can spend some money on experiences that help me learn new things. 8.) I prioritise spending money on products and experiences that help me build and strengthen relationships with others.
Flexibility	9.) I borrow or rent products to try them out before deciding if I want to buy them. 10.) Before I buy something that I might not use very often, I try to rent it or borrow from someone instead. 11.) My purchases incudes used products or clothing even though I could just purchase new things if I wanted to. 12.) I like to share, swap, or trade for things with my friends and neighbours.
Perspective	13.) Before I buy something, I consider my previous experiences with similar purchases. 14.) Before spending money on something, I visualise what the experience of owning and using it is likely to be. 15.) Before I buy something, I consider the possible costs and benefits over time. 16.) Before I buy something, I make an effort to consider my options from multiple perspectives.
Reasoning	17.) I understand which product features are the most important. 18.) I know when I've done enough research to make a good purchase decision. 19.) I know where and how to buy things so that I get the best value. 20.) Before buying something, I know how to get the information that I need to make great choices.
Sustainability	21.) I buy products from companies that promote environmental responsibility, even when they cost more. 22.) My consumption behaviours consistently reflect my concern for the natural environment. 23.) I buy products from companies that demonstrate that they share my ethical values. 24.) I spend time thinking about how we, as a global community, affect each other through our individual consumption choices.
	α = .884

3.6 Participants

The research participants were 191 New Zealand consumers over the age of 18 recruited using panel management CINT to complete an anonymous online survey generated through Qualtrics (see Appendix 2). Participants were randomly assigned to one of four conditions.

Collecting data from New Zealand consumers will provide insights into consumer culture uniquely different from consumer culture that would be found in other well-studied western consumer data from the United States or the United Kingdom. Many studies on sustainable consumption behaviour are run with respondents solely from the UK or U.S. and this impacts research outcomes as the norms around sustainable use differ. For example, Americans shun use of the clothesline to line dry clothing (a key facet of sustainable use) as it is often outlawed by Homeowner's Associations (making it a codified violation) while clothesline use is generally commonplace in New Zealand (Nautiyal, Hunting, Joseph, & Cleveland, 2023). That type of behaviour may impact results if we recruit from a respondent pool that views sustainable use (such as line drying to extend the lifetime of your clothing) as against social norms and even rules in their neighbourhoods.

Sampling that is adequately heterogeneous, permits "an exploration of how the influence of the experimental manipulation is moderated by participant characteristics; if the sample is representative, it also allows for estimates of how the experimental manipulation would affect the population" (Kardes & Herr, 2019, pp. 30). This would improve external validity, more specifically, the generalisability of results (Kardes & Herr, 2019). Within the sample size of 191, participants are randomly assigned to one of four conditions (see Figures 6, 7, 8 and 9).

Figure 6

Stimuli visuals for Condition 1

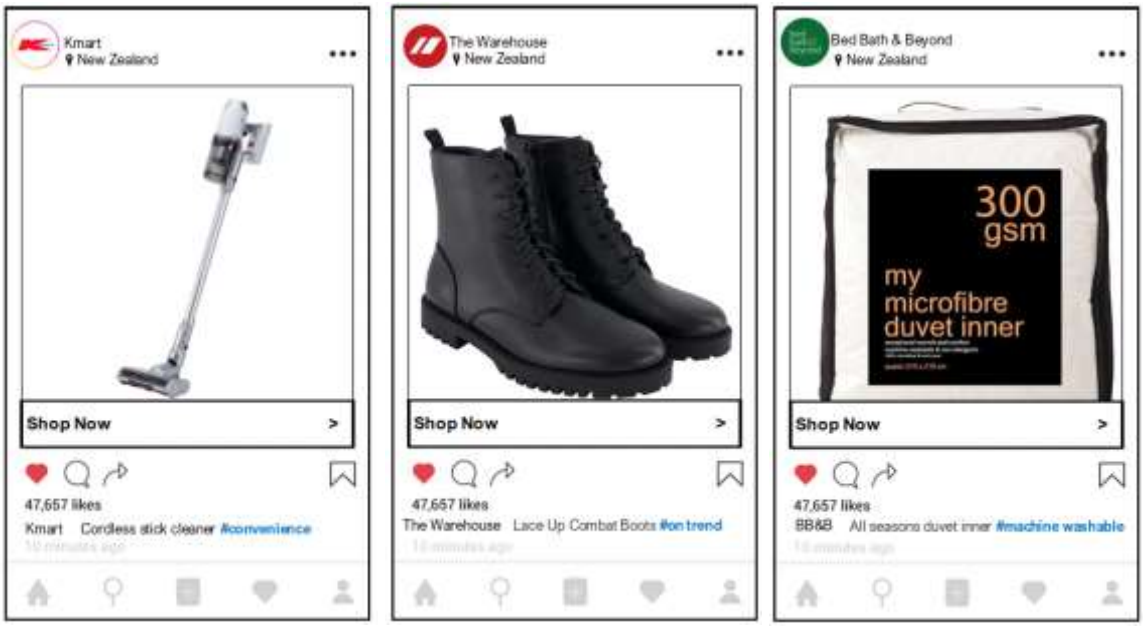


Figure 7

Stimuli visuals for Condition 2

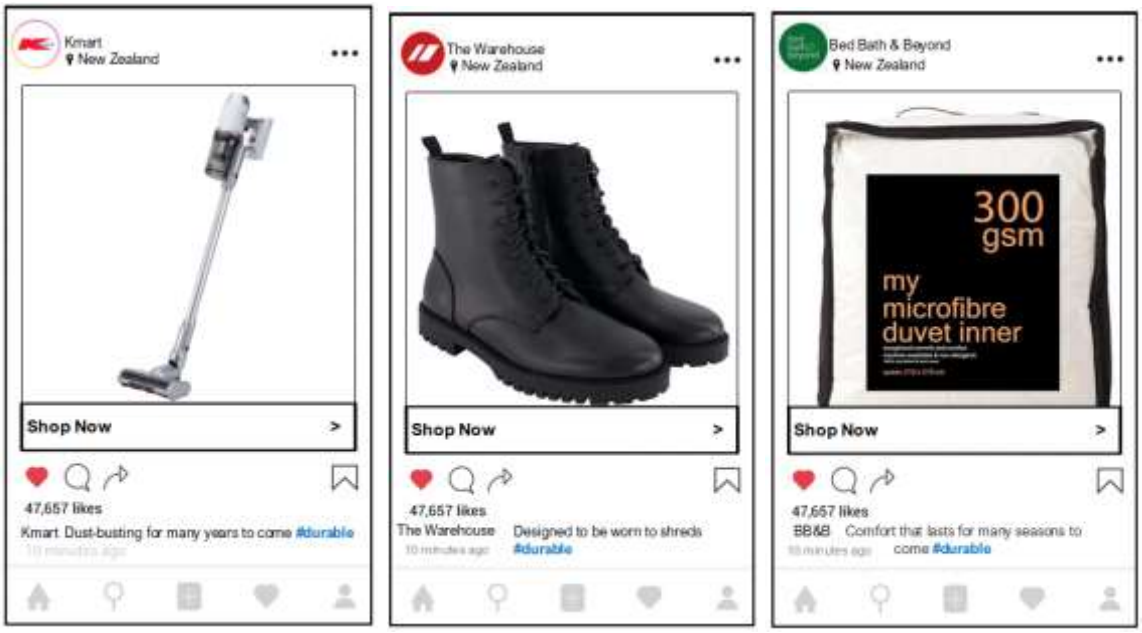


Figure 8

Stimuli visuals for Condition 3

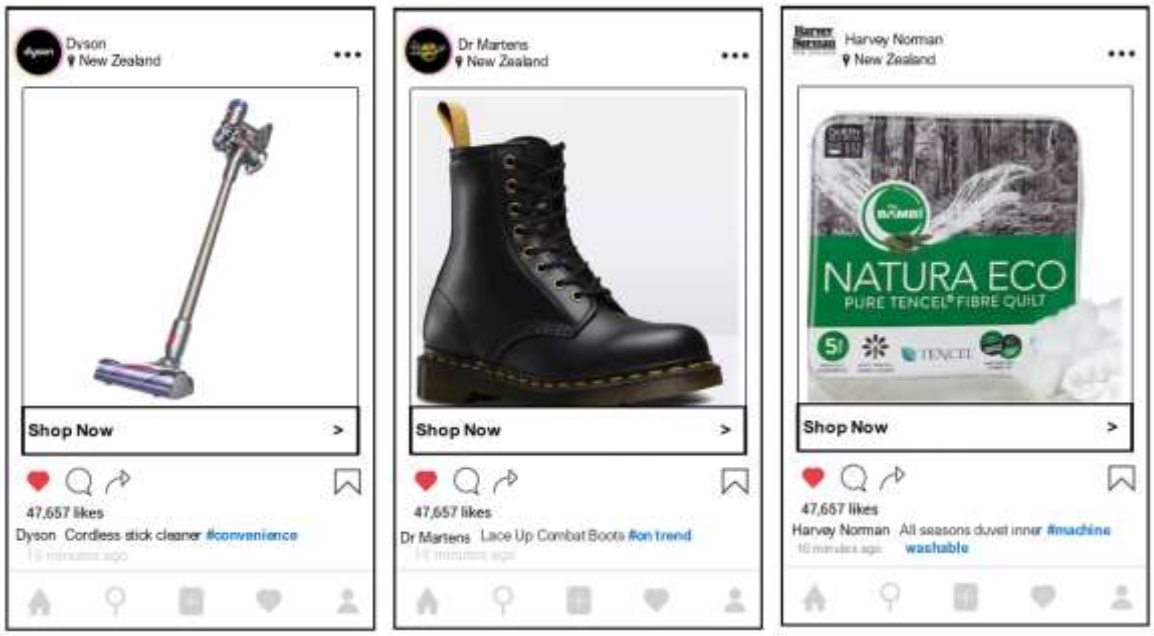
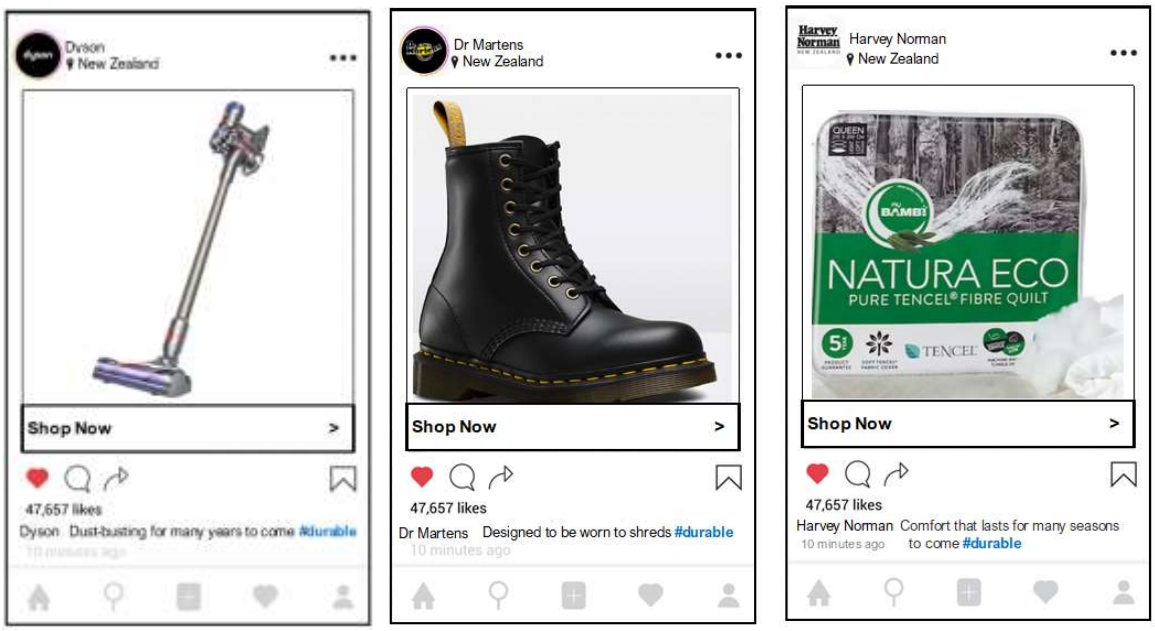


Figure 9

Stimuli visuals for Condition 4



3.6.1 Population statistics and demographics

The study garnered 233 participants total, however 42 failed attention checks and were therefore removed from the dataset (*N*=191). Including attention checks and eliminating those who failed to pass these attention checks is becoming standard practice to control for participant quality in experiments that rely on online panel samples, as not all participants pay full attention to online surveys (Abbey & Meloy, 2017). In particular, studies that do not validate attention may inadvertently increase their Type 1 error rate, making it imperative to eliminate those who fail attention checks placed in the questionnaire (Abbey & Meloy, 2017).

Participants were somewhat evenly divided between the four conditions: condition one 27.2 percent (*n*=52), condition two 24.6 percent (*n*=47), condition three 25.7 percent (*n*=49), and condition four 22.5 percent (*n*=43).

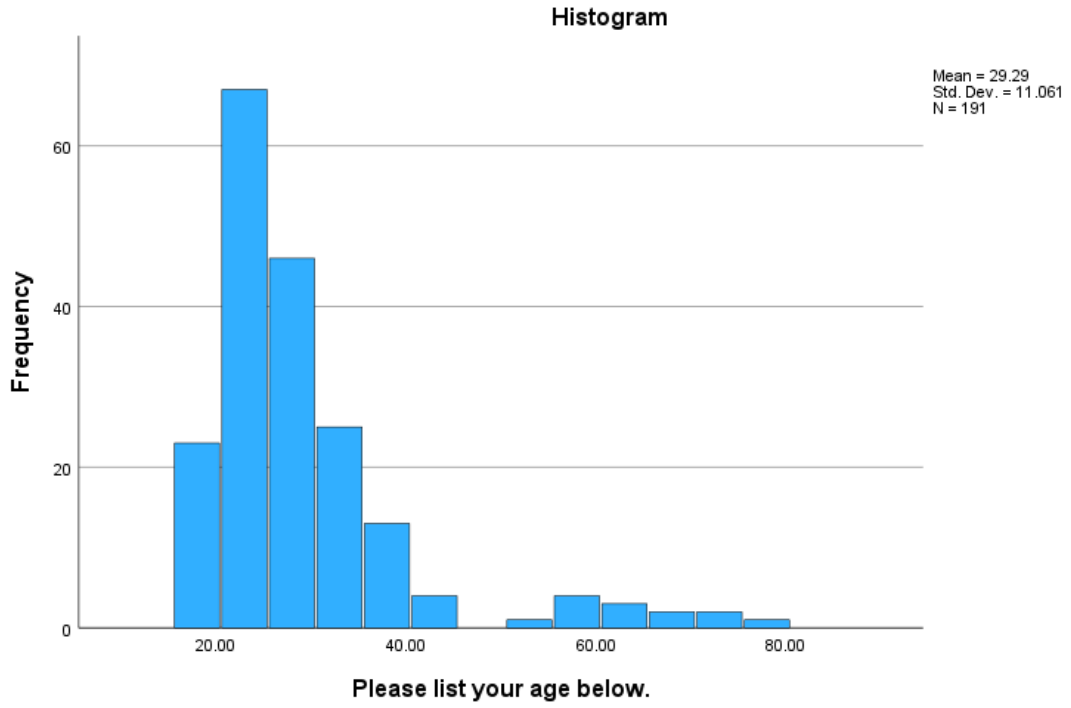
General demographic questions included gender, age, and ethnicity. Gender was posed as a multichoice question, the five answers included: 1-Male, 2-Female, 3-Non-binary, 4-Another gender or, 5-Prefer not to say. Males represented only 19.4% of the sample (*n*= 37), while women made up 80.6% (*n*=154). According to Battaglia (2008) it is generally harder to acquire male respondents. This is in-line with findings of Porter and Whitcomb (2005) who also found that survey respondents are more likely to be female and Smith (2008) who show that women disproportionately respond at a higher rate than men to online instruments. Smith (2008, p. 12) theorizes that differences in response rates “could be viewed as coming from differences in the way males and females make decisions and value actions in the online environment." Some researchers suggest women respondents are more willing to engage in online activity characterized by communication and exchanging of information (Tu & Liao, 2007). However, the possible links explored here by other researchers are correlational but not causal.

Age was an open-ended question, requiring participants to type two numbers, with the minimum being 18, as this was the minimum age requirement for participating in the

study and 99 being the maximum. The respondents age ranged from 18 to 80 (see Figure 10), with a mean of 29 years (*SD*= 11.06).

Figure 10

Histogram of respondent ages



Ethnicity was a multichoice question, answers included: 1- European, 2-Maori, 3-Asian, 4-Pacific Peoples, 5-Middle Eastern, Latin American, and African (MELAA), and 6-Other (where participants could type an answer). The majority of respondents were European (68.1%), followed by Māori (15.7%), Pacific Peoples (7.9%), Asian (3.7%), Other (2.6%) and MELAA (2.1%).

The next chapter will present result analyses of results to test the hypotheses.

Chapter 4: Findings

Chapter 4 considers the results of data analysis. A quantitative research approach was used to address research questions and proposed hypotheses (see Table 6) through a survey experiment. The data was gathered through an online survey produced on Qualtrics and distributed to participants by CINT panel management. Data was exported to and analysed using SPSS software. Specifically, analysis of variance (ANOVA), regression analysis, and HAYES process models for moderation analysis were run.

Table 6

Hypotheses table.

H1	Consumer acquisition of a more (vs. less) sustainable good yields more (vs. less) sustainable usage intentions.
H2a	Exposure to a more (vs. less) sustainable good yields higher consumer attitudes towards products.
H2b	Exposure to a more (vs. less) sustainable good yields greater willingness to purchase products.
H3a	Consumers with more (vs. less) wisdom are more (vs. less) likely to sustainably acquire products.
H3b	Consumers with more (vs. less) wisdom are more (vs. less) likely to demonstrate sustainable usage intentions.

Next, I test these hypotheses via the following methods. ANOVAs were used to test H1, as they were able to probe for any significant differences between acquisition type (more vs. less sustainable) and usage intentions. ANOVAs and Bonferroni's comparison was used to test both H2a and H2b. A series of hierarchal linear regressions were used to test H3a. Three separate bivariate regression analyses were run to test H3b.

4.1 Testing H1

H1: Consumer acquisition of a more (vs. less) sustainable good yields more (vs. less) sustainable usage intentions.

In this thesis, I operationalise sustainable usage via product care tendency (as shown in chapter 3 methodology, please see Table 3), measured for each product shown. H1 is therefore tested on each product participants evaluated: (1) vacuum cleaner, (2) boots, and (3) duvet inner.

Vacuum cleaner. To test H1, an ANOVA was run on both product status (high vs. low) and durability (durable vs. control) and showed that these independent variables were nonsignificant in impacting participants' product care tendency for the vacuum cleaner (F (3, 189) = 1.12, p = .344).

Boots. An ANOVA run with condition (low-end vs. high-end) x (control vs. durable) as the independent variable and boots product care tendency as the dependent variable - reflected similar results to that of the vacuum cleaner. Both product status (high vs. low) and durability (durable vs. control) yielded nonsignificant difference in participants' product care tendency for the boots (F(3, 190) = .537, p = .658).

Duvet inner. Consistent with the previous two ANOVAs for the vacuum cleaner and boots, analyses on the dependent variable product care tendency for the duvet inner again showed that product status (high vs. low) and durability (durable vs. control) resulted in a nonsignificant difference in participants' product care tendency for the duvet inner (F(3, 190) = 1.637, p = .182).

The results show that across all three products (vacuum, boots, and duvet), product status and durability had no significant impact on participants' product care tendency. Product care tendency (Ackermannn et al., 2021) is a key operationalisation of sustainable use tendency in this thesis. This thesis proposed consumers would be more likely to sustainably use high-end products and be more willing to take care of products through maintenance and repair. Yet H1 did not achieve support.

4.2 Testing H2a

H2a: Exposure to a more (vs. less) sustainable good yields higher consumer attitudes towards products.

Vacuum cleaner. An ANOVA showed a significant effect of durability and high-end product status on attitudes towards the vacuum cleaner (F(3, 190) = 8.14, p <.001). The pairwise comparison using Bonferonni shows that the results are driven by differences in the low-end product range, with the control vacuum (M= 4.86) preferred over the more durably

positioned vacuum (M=4.09, p = .019). This initial result is interesting since participants here preferred the control condition's 'convenience' framing over durability framing. This confirms participants can neglect durability in their preferences.

Bonferonni's comparison reveals a further key difference between low-end and high-end products. That is, the low-end durable vacuum yielded lower attitudes than the high-end control vacuum ($M_{low\text{-}end\_durable}$= 4.09 vs. $M_{high\text{-}end\_control}$= 5.34, p =.003) and high-end durable ($M_{low\text{-}end\_durable}$= 4.09 vs. $M_{high\text{-}end\_durable}$= 5.05, p =.003). To note, the high-end durable vacuum yielded significantly higher attitudes (M = 5.05) than the low-end durable vacuum (M = 4.09, p =.003). This indicates a main effect of luxury product status drives results.

Boots. In a second test of H2a for the boots, an ANOVA showed a significant effect of durability and high-end product status on attitudes towards the boots (F(3, 190) = 11.25, p <.001). Bonferonni's comparison between the low-end control condition (M = 3.12) and the low-end durable condition (M = 2.93) is nonsignificant (p = 1.00), which indicates that durability framing does not impact attitudes toward boots if they are low end. A Bonferonni's comparison between the high-end control condition (M = 4.74) and the high-end durable condition (M = 4.54) is also nonsignificant (p =1.000), which indicates that durability framing does not impact attitudes toward boots if they are high end either. However, a Bonferonni's comparison between the low-end control (M = 3.15) versus the high-end control (M = 4.57) is significant and different (p <.001). This indicates that high-end status (vs. low-end) of a brand drives product attitudes.

Further, a Bonferonni's comparison between the low-end durable (M = 3.24) and the high-end durable (M = 4.51) is again significant (p = .003). In this analysis, it is clear that high-end product garners higher product attitudes than low end, even when both are framed with durability. Again, this indicates that luxury perceptions are driving any effects. Finally, a Bonferonni's comparison between the low-end control (M = 3.15) and the high-end durable (M= 4.51) reveals a significant difference (p = .002). Taking all the evidence together, this appears to still be driven by the luxury status of the product and its effect on product attitudes for the boots and not on durability framing.

Duvet inner. Analysis of H2a for product attitudes towards the duvet inner contrasted to previous results found with both the vacuum and boots. An ANOVA revealed only a marginally significant effect of durability and high-end product status on attitudes towards the duvet inner ($F(3, 190) = 2.119$, $p = .099$). Bonferroni's comparison finds no significant difference between condition (low-end vs. high-end) x (control vs. durable) and product attitudes ($M_{low\text{-}end\_control} = 4.73$ vs. $M_{low\text{-}end\_durable} = 4.70$, $p = 1.00$), ($M_{low\text{-}end\_control} = 4.73$ vs. $M_{high\text{-}end\_control} = 4.17$, $p = .267$), ($M_{low\text{-}end\_control} = 4.73$ vs. $M_{high\text{-}end\_durable} = 4.26$, $p = .627$), ($M_{low\text{-}end\_durable} = 4.70$ vs. $M_{high\text{-}end\_control} = 4.73$, $p = .376$), ($M_{low\text{-}end\_durable} = 4.70$ vs. $M_{high\text{-}end\_durable} = 4.26$, $p = .818$) and ($M_{high\text{-}end\_control} = 4.17$ vs. $M_{high\text{-}end\_durable} = 4.26$, $p = 1.00$). Subsequently, with regards to the duvet inner neither durability nor high-end product status had significant impact on attitudes towards the duvet inner.

This research sought to further confirm or extend findings from Sun et al.'s (2021) durability bias in a different consumer context (New Zealand) across three different consumer products. Though Sun et al. (2021) test apparel (i.e., coat, shoes, and handbags), they do not examine durability bias in home appliances such as vacuum cleaners and homewares such duvet inners. Overall, we have further confirmation of durability bias shown by consumers in a different cultural context of New Zealand and within additional consumer product categories (i.e., home appliances and homewares). Additionally, like Sun et al. (2021) this analysis (within the context of the vacuum and boots), found that participants' attitudes are impacted by product status rather than durability framing.

4.3 Testing H2b

H2b: Exposure to a more (vs. less) sustainable good yields greater willingness to purchase products.

Vacuum cleaner. Testing for H2b for willingness to pay reveals that patterns seem to align with attitudes toward the vacuum in each condition. An ANOVA showed a significant effect of durability and high-end product status on willingness to purchase the vacuum cleaner ($F(3, 190) = 6.32$, $p < .001$). Participants are more willing to purchase the control

vacuum when in a low-end condition, ($M_{low\text{-}end\_control}$= 4.73 vs. $M_{low\text{-}end\_durable}$= 3.79, *p* =.023). Participants are more willing to purchase the high-end control vacuum (M = 4.86) than they are willing to purchase the low-end durable vacuum (M = 3.79, *p* =.023), confirming an overall preference for and impact of product status on willingness to purchase. However, unlike results of product attitudes, participants' willingness to purchase is significantly higher in condition four; when the high-end vacuum is positioned as durable, than when in condition two when the low-end vacuum is positioned as durable ($M_{high\text{-}end\_durable}$= 5.16 vs. $M_{low\text{-}end\text{-}\_durable}$= 3.79, *p* <.001).

Boots. To probe for purchase intention and test H2b with the boots, an ANOVA showed a significant effect of high-end product status on willingness to purchase for the boots (*F*(3, 190) = 8.64, *p* <.001). Like the above analysis, durability framing does not seem to significantly impact participants' willingness to purchase. Instead, higher willingness to purchase is driven by product status.

Bonferroni's comparison reveals this effect is driven by a significant difference between condition 1 (low-end, control, M = 2.65) and condition 3 (high-end, control, M = 4.20, *p* < .001). This mean that participants were far more willing to buy in the high-end condition versus the low-end condition. This is also emerging with a significant difference between condition 1 (low-end, control, M = 2.64) and condition 4 (high-end, durable, M = 4.05, *p* = .006). Again, participants reported they were significantly more willing to buy in the high-end condition and are drawn to luxury.

There was also a significant difference between condition 2 (low-end, durable, M = 2.62) and condition 3 (high-end, control, M = 4.20, *p* = .001). Again, high-end is the driving effect and yields more willingness to buy. Further, there is a significant difference between condition 2 (low-end, durable, M = 2.62) and condition 4 (high-end, durable, M = 4.05, *p* = .007). This shows that, again, high-end is sought.

What confirms the idea that status alone is driving willingness to purchase the boots is there are no significant differences between high-end products that are more durable (condition 4, M = 4.05) and less durable (condition 3, M = 4.20). So, durability framing does

not impact willingness to purchase in the high-end condition. Therefore, participants are more willing to buy when something is high-end, and that is driving the effect rather than durability framing and positioning.

Duvet inner. Finally, H2b was tested with the duvet inner via an ANOVA with condition as the predictor variable and willingness to purchase the duvet inner as the dependent variable. In contrast to the previous analysis of attitudes, this ANOVA with willingness to purchase as the dependent variable displayed durability and product status had a significant effect ($F(3, 190) = 3.229$, $p = .024$). However, Bonferroni's comparison finds no significant difference between condition and willingness to purchase, making interpretation difficult. Of note, much as in Sun et al. (2021), analysis in this thesis project found that participants' willingness to pay is influenced by product status rather than durability framing. However, unlike the vacuum and boots where participants had higher willingness to purchase the high-end versions, the opposite was true for the duvet inner.

4.4 Testing H3a

H3a: Consumers with more (vs. less) wisdom are more (vs. less) likely to sustainably acquire products.

In order to test this hypothesis, I conducted a series of hierarchal linear regressions with consumer wisdom as the block 1 independent variable and (high vs. low end) condition (Sun et al., 2021) in block 2. This was run three time using the willingness to pay for all three products (vacuum, boots, and duvet) as the dependent variable.

Vacuum cleaner. For willingness to pay for the vacuum, the block 2 regression result is significant ($F(2, 188) = 4.64$, $p = .011$). R^2 for the model was .05, and the adjusted R^2 was .04. This means 4% of the variance in willingness to pay for the vacuum is explained by consumer wisdom. A positive and significant coefficient weight (b= .72, $p = .003$) shows that when consumer wisdom is higher, participants demonstrate a higher willingness to purchase the high-end (vs. low-end) vacuum cleaner.

Boots. When it comes to the willingness to pay for the boots, the block 2 regression result is again significant ($F(2, 188) = 12.96$, $p < .001$). R^2 for the model was .12, and the adjusted R^2 was .11. This again shows that 11% of variance in willingness to pay is explained by consumer wisdom. A positive and significant coefficient weight (b= 1.5, $p < .001$) shows that when consumer wisdom is higher, participants are more willing to purchase the high-end (vs. low-end) boots.

Duvet inner. Probing purchase intent for the duvet inner revealed a significant but dissimilar pattern of results via hierarchal linear regression. In the case of the duvet inner, participants were instead drawn to the lower-end product (microfibre duvet inner). With consumer wisdom entered in block 1 and condition (high-end vs. low-end) entered in block 2, the block 2 regression result was significant ($F(2, 188) = 4.66$, $p = .011$) for willingness to pay for the duvet inner. R^2 for the model was .05, and the adjusted R^2 was .04, which shows that consumer wisdom explains 4% of the variance in willingness to pay. A negative and significant coefficient weight (b= -.72, $p = .003$) shows that when consumer wisdom is higher, participants have a higher willingness to purchase the low-end (vs. high-end) duvet.

Hierarchical multiple regression was run to test H3a and investigate the ability of consumer wisdom to predict willingness to pay for more (vs. less) sustainable products (Sun et al., 2021). Results confirm that participants with more (vs. less) wisdom are more (vs. less) likely to sustainably acquire the vacuum and boots. This is shown by a higher willingness to pay for high-end (vs. low-end) products, which Sun et al. shows have more (vs. less) sustainability features. However, this only holds true for the vacuum and boots but not the duvet inner, where the pattern is reversed. To conclude, results of these analyses reveal that, at least when it comes to willingness to pay, H3a is supported for two of the three product categories: appliances and apparel, but not bedding.

4.5 Testing H3b

H3b: Consumers with more (vs. less) wisdom are more (vs. less) likely to demonstrate sustainable usage intentions.

Three separate bivariate regression analyses were run with product care tendency (Ackermannn et al., 2021) for each of the three consumer products (vacuum, boots, and duvet inner) as the dependent variable and consumer wisdom as the independent variable in order to test this hypothesis. As shown in the methodology chapter (see chapter 3), product repair tendency (Scott & Weaver, 2014) is another way sustainable use can be operationalised. Therefore, a regression analysis was also run with product repair tendency as the dependent variable and consumer wisdom as the independent variable to further probe for sustainable usage responses.

Product care tendency of the vacuum. A regression analysis was run with consumer wisdom as the independent variable and product care tendency of the vacuum cleaner as the dependent variable. The regression analysis revealed that the model significantly predicted product care tendency of the vacuum ($F(1, 188) = 23.74$, $p < .001$). Consumer wisdom significantly shaped participants' product care tendency for the vacuum (B= .51, $p < .001$). R^2 for the model was .11, and the adjusted R^2 was .11, therefore consumer wisdom accounts for 11% of the variance in the product care tendency for the vacuum.

Product care tendency of the boots. The same regression analysis was run for the product care tendency for the boots and revealed that again, consumer wisdom significantly predicted product care tendency of the boots ($F(1, 189) = 24.33$, $p < .001$). The coefficient (B= .52, $p < .001$) confirms consumer wisdom significantly influenced product care tendency for the boots. Consistent with the vacuum cleaner, consumer wisdom explains 11% of the variance in the product care tendency for the boots (R^2 for the model was .11, and the adjusted R^2 was .11).

Product care tendency of the duvet inner. Patterns continue to be consistent when running regression analysis with product care tendency as the dependent variable. Results revealed that consumer wisdom again, significantly predicted product care tendency of the duvet ($F(1, 189) = 19.97$, $p < .001$). Again, consumer wisdom significantly shaped participants' product care tendency for the duvet (B= .51, $p < .001$). R^2 for the model was .10,

and the adjusted R^2 was .10, therefore consumer wisdom explains 10% of the variance in the product care tendency for the duvet.

Product repair tendency. A regression of consumer wisdom on product repair tendency was significant ($F(1, 190) = 19.97$, $p < .001$). Consumer wisdom significantly shaped participants' product repair tendency (B= .53, $p < .001$). R^2 for the model was .25, and the adjusted R^2 was .24. This shows that approximately 24% of the variance in the product repair tendency stems from participants who score more highly on the consumer wisdom scale. The coefficient (B= .53) further indicates the nature of the relationship, in that as consumer wisdom score rises so does product repair tendency.

Taken together, these analyses confirm H3b: Consumer wisdom impacts sustainable use of a product. As consumer wisdom increases, so too does product care tendency across all three consumer products and so does product repair tendency. Table 7 summarises overall results for the relevant hypotheses tested.

Table 7

Hypotheses outcomes

Hypotheses Table		Support or reject
H1	Consumer acquisition of a more (vs. less) sustainable good yields more (vs. less) sustainable usage intentions.	Rejected
H2a	Exposure to a more (vs. less) sustainable good yields higher consumer attitudes towards products.	Partially supported- driven by product status (High-end = more sustainable Sun et al. 2021)
H2b	Exposure to a more (vs. less) sustainable good yields greater willingness to purchase products.	Partially supported- driven by product status (High-end = more sustainable Sun et al. 2021)
H3a	Consumers with more (vs. less) wisdom are more (vs. less) likely to sustainably acquire products.	Supported- for vacuum and boots but rejected for duvet
H3b	Consumers with more (vs. less) wisdom are more (vs. less) likely to demonstrate sustainable usage intentions.	Supported

Chapter Five: Discussion and conclusion

Any action or behaviour, such as repair and maintenance, that supports a longer lifespan of a product is an example of product care (Ackermannn et al., 2018). Multiple academics and industry exports support the notion that product lifespan extension is sustainable use as it decreases the speed of product replacement (i.e., Den Hollander & Bakker, 2012; Cherrier, 2010; Sekhon & Armstrong Soule, 2020; MacArthur, 2013; Webster, 2017; Cline, 2012). Research in marketing on post-acquisition product usage behaviours is lacking (Wells, 1993; Makri et al., 2020; Trudel, Argo & Meng, 2016; Scott & Weaver, 2018; Prothero et al., 2011; MacInnis & Folks, 2010; Pieters, 1991). Therefore, there is a gap in academic research that is important to address.

The goal of this thesis was to examine sustainable consumption and sustainable usage of products within a New Zealand context. Although initial acquisition motivation is examined, the study focused on understanding the antecedents to sustainable behaviours within the understudied usage stage. By concentrating on consumer use, the study contributed to closing an enduring gap in the research. Specifically, this study aimed to investigate possible relationships between sustainable acquisition and sustainable use of products and how levels of consumer wisdom might impact these behaviours.

The literature review in chapter two explored the interconnected nature of several modern-day consumer behaviour phenomena. These include sustainable consumption, anticonsumption, slow consumption, alternative consumption, and consumer wisdom. These phenomena were discussed in connection to surrounding factors, such as product durability and obsolescence, product care tendency, and cognitive engagement relevant to consumer wisdom. These surrounding factors can either impede or encourage consumer engagement with these sustainable consumer behaviours.

Specifically, this thesis sought to answer two research questions, RQ1 ‘How does sustainable acquisition of goods impact sustainable use?’ and RQ2 ‘How does consumer wisdom influence sustainable acquisition and sustainable use of goods?’. The research also

intended to confirm or reject five proposed hypotheses (below) based on the above questions.

H1: Consumer acquisition of a more (vs. less) sustainable good yields more (vs. less) sustainable usage intentions.

H2a: Exposure to a more (vs. less) sustainable good yields higher consumer attitudes towards products.

H2b: Exposure to a more (vs. less) sustainable good yields greater willingness to purchase products.

H3a: Consumers with more (vs. less) wisdom are more (vs. less) likely to sustainably acquire products.

H3b: Consumers with more (vs. less) wisdom are more (vs. less) likely to demonstrate sustainable usage intentions.

This research used a quantitative survey experiment to reveal if more (vs. less) sustainable acquisition can impact more (vs. less) sustainable use of a good. It also investigated how differing levels of consumer wisdom could impact those behaviours. The study employed a 2 (product category: high-end vs. low-end) x 2 (durable framing vs. non-durable control framing) between-subjects factorial design. The data was collected using a survey produced and hosted on Qualtrics. CINT panel management distributed the online survey experiment to New Zealand participants. Participants were randomly assigned to one of four conditions and primed via an advertisement image of three consumer products (stick vacuum cleaner, boots, and duvet inner). Participants were asked a series of questions that included: product attitude evaluation, purchase intentions, product care tendency, product repair propensity, and attitudes toward product retention. Finally, consumer wisdom was measured, and respondents filled in general demographics. Data was exported to and analysed using SPSS software. Specifically, analysis of variance ANOVA, regression analysis, and Hayes process models for moderation analysis were utilised.

This final discussion chapter allows for elaboration and unpacking of the results from the previous chapter. My thesis has stemmed from a substantive gap in consumer behaviour

literature and therefore focuses on the post-acquisition product usage stage. This study fits into the growing knowledge of Transformative Consumer Research and seeks to expand on a study by Sun et al. (2021). Literature on the phenomenon of consumer wisdom and interrelated concepts of sustainable consumption, mindful consumption, slow consumption, alternative consumption and anticonsumption provided insight to inform this research. The first hypothesis was definitively rejected; however, some hypotheses earned partial support and warrant further analysis.

5.1 Findings

5.1.1 Sustainable acquisition as an antecedent of sustainable use

In this thesis, sustainable acquisition is operationalised as consumption of more durable luxury or high-end product (Sun et al., 2021). Sustainable use includes any behaviour during usage which lowers the need for replacement purchases. Taking care of owned products through proper maintenance, storage, and repair promotes lifespan extension. That makes them behaviours that exemplify sustainable use (Den Hollander & Bakker, 2012; Cherrier, 2010; Sekhon & Armstrong Soule, 2020).

The thesis findings show that sustainable acquisition does not necessarily lead to sustainable use, and this holds true across all three consumer products tested. This is the first step to answering the first research question, ‘How does sustainable acquisition of goods impact sustainable use?’ In short, it doesn’t. Yet, it appears that consumer wisdom as a secondary mechanism can be responsible for altering sustainable usage behaviours, which will be discussed later.

5.1.2 Exposure to more vs. less sustainable products and consumer attitudes

Some of the results of this study are consistent with Sun et al. (2021) and confirm the presence of the durability bias also held by New Zealand consumers. Specifically, exposure to a product that has durability framing (vs. control) does not impact consumer attitudes. Instead, product status drives changes in consumer attitudes. The higher status the product, the more likely consumers are to report higher attitudes and purchase intent. Regarding the

vacuum cleaner and boots, attitudes are altered by product status in that the high-end vacuum (Dyson) and boots (Dr Martens) were preferred over the low-end counterparts (i.e., the Kmart vacuum and boots from The Warehouse).

These findings can be explained within the discussion by Sun et al. (2021). Durability is not a prominent characteristic when thinking about high-end (or luxury) products (Sun et al., 2021), yet it is key to the embodiment of luxury (Amatulli et al., 2017; Athwal et al., 2019) or high-end products. Moreover, consumers commonly make choices using simple and readily available cues and contexts (Feldman & Lynch, 1988; Tverksy & Kahneman, 1974) and frequently do not contemplate qualities that are not easily processed (Legrenzi, Girotto & Johnson-Laird, 1993). Therefore, high-end products are vulnerable to durability neglect because consumers place more importance on the individual and social attributes of luxury goods (Kapferer, Klippert & Leproux 2014; Wiedmann, Hennigs & Siebels 2007). That means they neglect to think about the durability of the product.

Interestingly, within the context of the duvet inner neither the durability framing nor high-end product status impacted consumer attitudes as expected. This is discussed further in the limitations section.

5.1.3 Exposure to more vs. less sustainable products and willingness to purchase

The previous pattern emerges with consumers' willingness to pay. Like consumer attitudes, consumer willingness to pay is also influenced by product status, and not durability framing. In this study, higher willingness to purchase operationalises higher likeliness of acquisition. Building from Sun et al. (2021), purchasing fewer high-end goods can be perceived as an example of sustainable consumption. Although my thesis' findings show that product status drives the change in willingness to purchase instead of durability framing, consumers are still more likely to acquire goods that are more sustainable (i.e., high-end, and durable) in the case of the vacuum cleaner and boots.

Unexpected results with regards to the duvet inner continue, with consumers having a higher willingness to purchase the low-end product (Bed, Bath & Beyond microfibre inner)

compared to the high-end product (Natura bamboo inner). This will be discussed further within the limitations section.

5.1.4 Consumer wisdom and sustainable acquisition

Using ‘willingness to pay’ to represent the likelihood of acquisition, results show that as consumer wisdom increases, so does the sustainable acquisition of a Dyson vacuum (vs. less sustainable Kmart vacuum) and Dr Martens boots (vs. less sustainable boots from The Warehouse).

Therefore, within the context of the vacuum cleaner and boots, consumers with higher wisdom tend to prefer to save up and invest in one Dyson vacuum or one pair of Dr Martens boots (an example of more sustainable consumption) than buy multiple cheaper Kmart vacuums or boots from The Warehouse, which may involve more replacing or repurchasing of multiple units.

However, in the case of the duvet inner, as consumer wisdom increases, willingness to purchase the low-end (therefore less sustainable; Sun et al. 2021) microfibre duvet inner also increases, conflicting with the expected results displayed with the previous two consumer products. But this is consistent in terms of previous results, and this will be discussed later.

5.1.5 Consumer wisdom and sustainable use

Results of the study strongly confirm that as consumer wisdom (Luchs et al., 2021) increases so do product care tendencies (Ackermann et al., 2021) and product repair propensity (Scott & Weaver, 2014). Therefore, if a consumer is wiser, they are more likely to place importance on caring for (e.g., cleaning, maintaining, and repairing) their owned products as it is a positive experience and makes them feel proud. Wiser consumers are more experienced in caring for and feel more capable of looking after their owned products. In conjunction with this, wiser consumers are also more likely to mend and repair their owned products, therefore delaying disposal and subsequent product replacement (Cherrier,

2010). This, in turn, shows that higher consumer wisdom has practical implications for the sustainability of product usage behaviours.

5.2 Overall Summary

In conclusion, this study has contributed to the minimal body of knowledge of consumer usage. This necessary and important consumption stage needs continuing research as product usage and product life extension considerations are integral to sustainable consumption (Makri et al., 2020; Sheoran & Kumar, 2022). Specifically, this study focused on New Zealand consumers' product care tendencies (Ackermann et al., 2021) and product repair propensity (Scott & Weaver, 2014). It also contributes to the growing body of knowledge of Transformative Consumer behaviour with a focus on consumer wisdom (Luchs et al., 2021). Consumer wisdom encompasses sustainable consumption, mindful consumption, slow consumption, alternative consumption and anticonsumption behaviours that not only benefit personal well-being of the consumer but also the environment in which consumption occurs.

5.3 Contributions and Implications

5.3.1 Theoretical Contribution

A key theoretical contribution that this research provides is increased knowledge and attention paid to the crucial and vastly understudied consumption stage of usage. Academic research has overlooked the post-choice elements of the consumption cycle (Wells, 1993; Makri et al., 2020; Trudel, Argo & Meng, 2016; Scott & Weaver, 2018; Prothero et al., 2011; MacInnis & Folks, 2010; Pieters, 1991). Consumer behaviour at the disposal stage has recently garnered a sizable body of literature (e.g., Dommer & Winterich, 2021; Evers et al., 2018, Donnelly et al., 2017; Sun & Trudel, 2017; Trudel et al., 2016). Conversely, scholarship and theory around the usage stage remains understudied. Literature on sustainable use has been sparse, though is evolving. This includes research completed by Scott and Weaver across multiple years on product repair (2012, 2014) and expanding product life spans (2018). Two other notable studies put emphasis on the product usage stage. These include

‘the upgrade effect’ (Bellezza, Ackermann & Gino, 2017) which found consumers are more likely to behave recklessly and show less care with possessions when there are newer versions (or upgrades) available. A second notable study includes the more recent discussion on product care tendency which resulted in scale development (Ackermann et al., 2021). This thesis sought to help fill this gap in consumer behaviour scholarship and is important to expand on as product usage and product life extension is essential for sustainable consumption (Makri et al., 2020; Sheoran & Kumar, 2022; Den Hollander & Bakker, 2012; Cherrier, 2010; Sekhon & Armstrong Soule, 2020).

Product durability is a crucial factor to facilitate sustainable consumption (Haws, Winterich & Naylor, 2014; Luchs et al., 2010; White, Habib & Hardisty, 2019). This thesis provides further confirmation of the durability bias, extending findings of the phenomenon in the different consumer context within New Zealand and across two different consumer product categories untested by Sun et al. (2021), home appliances such as vacuum cleaners and homewares such as duvet inners.

This study also provides further support for several consumer behaviour phenomena within a New Zealand context. It also provides practical applications and integration of three separate scales; the consumer wisdom scale (Luchs, Mick & Haws, 2021), the product care tendency scale (Ackermann et al., 2021), and product repair propensity (Scott & Weaver, 2014). By discussing these phenomena in tandem and in relation to each other, this thesis answer calls for more quantitative research on product care tendency (Ackermann et al., 2021).

Luchs, Mick, and Haws (2021) described a need for future research on consumer wisdom within a context of developing production and consumption systems that are predominantly linear but are changing to become more circular. By completing consumer wisdom research within New Zealand, I am answering this call. The findings of this study provide a practical illustration of Scott and Weaver’s (2014) proposed product repair propensity scale and the more recent product care tendency scale (Ackermann et al., 2021), as well as further investigation in relation to consumer wisdom (Luchs, Mick & Haws, 2021).

Scott and Weaver (2014) developed a repair propensity scale and investigated surrounding circumstances associated with product repair behaviour among consumers with differing levels of repair propensity. They found initial product cost, attachment to the product, perceived convenience, stewardship, and innovativeness predicted repair propensity (Scott & Weaver, 2014). In accordance, product care tendency is determined by easiness, positive experience, and relevance (Ackermann et al., 2021).

To the best of my knowledge this is the first research to integrate multiple scales measuring consumer usage behaviours and connecting these behaviours to levels of consumer wisdom within a quantitative study.

5.3.2 Methodological contribution

Academic studies based in WEIRD cultures (a western, educated, industrialized, rich, and democratic societal context, see, Henrich, Heine, and Norenzayan (2010)) are often standard for consumer behaviour studies. Researchers have begun to expand within previously understudied Asian countries, e.g., Malaysia (Haron et al., 2005), Hong Kong (Joy et al., 2012), India (Eckhardt & Mahi, 2012) and China (Islam et al., 2021). However, smaller countries such as New Zealand, although theoretically WEIRD, have major sociocultural differences versus the United Kingdom and the United States. Of key importance, New Zealand consumers exhibit differences that impact sustainable use of products. While line-drying laundry (a facet of sustainable use) in New Zealand is commonplace, Americans shun use of the clothesline to line dry clothing as it is often outlawed by Homeowner's Associations (Nautiyal et al., 2023). Additionally, Americans tend to avoid outfit repeating and therefore have a much lower average for number of wears for owned garments compared to the rest of the world (Assoune, 2020). That type of behaviour may impact results if researchers recruit participants from a respondent pool that sees sustainable use (such as line drying to extend the lifetime of your clothing) as against the social norms and even rules in their neighbourhoods. By completing this research in New Zealand, my thesis adds to the

growing body of knowledge that exists within a context outside the heavily researched United Kingdom and United States.

5.3.3 Managerial contribution

A key finding for New Zealand marketers, based on the results of this research, is that promoting a product as being more versus less durable will have no significant impact on consumer attitudes and willingness to purchase. This is in line with findings from the United States (Sun et al., 2021) which found consumers neglect durability. However, product status had a significant impact on consumer attitudes and willingness to purchase.

Sun et al. (2021) suggest that marketers of high-end brands give consumers concrete lifespan estimations of their products and convey their durability. Although not concrete, durability is implicit in luxury watchmaker brand Patek Philippe's 'next generation' advertising campaign. This marketing message communicates this is a quality product, designed to be timeless and can be handed down generations. Therefore, the brand further reflects a rejection of planned and perceived obsolescence within their products and branding. Importantly, this is also unlike much of the message framing in mainstream marketing communications, which is focused on getting consumers to replace more frequently, buying new instead of repairing what they already have (Okada, 2006). Patek Philippe 'walks the talk' and facilitates wise consumer behaviour through their post-purchase services with a 'pledge to service, repair, or restore any Patek Philippe timepiece regardless of its age' (Patek Philippe, n.d.).

This brand encourages having respect for its product, another element of consumer wisdom, shown by necessitating a higher degree of care for their product. This is uncommon and a lost practice among mainstream manufacturers where a replacement is easier, which destines the older product to landfill. This consumeristic paradigm is a symptom of mass-marketing and mass-production and negatively impacts the environment (Csikszentmihalyi, 2000; Peattie & Peattie, 2009). Today consumer wisdom is harder to achieve in practice, and even impossible for some and this wisdom and subsequent well-being of consumers is often

impeded by marketers (Ozanne et al., 2021). By increasing the conversation around product durability, marketers can help consumers recognize durable from non-durable (low quality) products. Marketers like those at Patek Philippe who promote the value of durability can hopefully boost consumer wisdom and the resultant purchase of fewer high-quality goods (therefore overcoming durability neglect).

The study in this thesis highlights the importance of knowing who your target market is. Specifically, if your target market includes those who are likely to demonstrate higher levels of consumer wisdom, generally they will have a heightened preference for purchasing higher-end products and more sustainable product usage behaviour. Patek Philippe's inclusion of post-purchase servicing is ideal for enticing and offering value to consumers with higher degrees of wisdom who have higher product care and repair tendencies.

5.4 Limitations

Two limitations of this study stem from the primary limitation of the budget constraint. First, a smaller data collection budget meant that manipulation checks of experimental stimuli and conditions within a pretest were unable to be completed. Manipulation checks are commonplace, designed to confirm the stimuli was "appropriately" manipulated and therefore strengthen the casual inferences (Kardes & Herr, 2019). As such, there was no confirmation that the stimuli successfully communicated the experimental conditions that were intended.

Although it appears that the vacuum and boots product status conditions were manipulated as intended, it appears that participants didn't have the envisioned perception of the difference in product status between the Bed, Bath & Beyond microfibre duvet inner and the Natura bamboo duvet inner from Harvey Norman. This can be seen in the participants' higher willingness to purchase the microfibre inner over the bamboo inner.

Sourcing of materials, and the production and manufacturing processes are two dimensions of sustainable products (Sun et al., 2021). According to Silva et al. (2023), bamboo is a versatile renewable resource and sustainable material due to multiple features, such as fast growth, high resistance, and durability. This is why a bamboo duvet inner was

chosen as the more sustainable option. The Natura bamboo duvet inner from Harvey Norman also has a higher thread count cotton outer than the low-end Bed, Bath & Beyond microfibre duvet inner and will therefore take longer to go threadbare. Consequently, it will be more durable. In addition, Natura was chosen as the high-end option because it is manufactured by Bambi, a reputable bedding brand, focused on producing high quality, sustainable bedding.

A pretest to complete manipulation checks would have been beneficial for this research as the stimuli for the duvet inner could have been adjusted to better reflect the intended condition. In hindsight, perhaps opting for a “down alternative” duvet inner would have better communicated high-end product status. Down alternative duvet inners are made of a “superior” microfibre filling designed to mimic down or feather filling.

Secondly, although completing this research in New Zealand allowed this study to have methodological contributions in an under-researched country, it also meant that the cost of recruiting each participant was more expensive with CINT panel management. That limited the number of respondents for the study. Additionally, our female to male ratio was not balanced in that there were far more females. Females made up 80.6% (n=154), while males represented only 19.4% of the sample (n= 37). This, in turn, impacts the external validity and generalisability of results across the New Zealand population (Kardes & Herr, 2019).

This studies’ findings were also constrained by the limitations of the quantitative study design chosen. Therefore, this paper cannot uncover specific motivations behind participants’ reported attitudes, willingness to purchase, and their sustainable use.

5.5. Directions for future research

The limitations of this study provide useful in guiding future research. Specifically, this study may be duplicated, however proposed stimuli should undergo manipulation tests in a separate pilot study to test their effectiveness with different respondents. Completing this would provide confirmation that the stimuli successfully communicated the experimental

conditions that were intended. If this research was duplicated with a larger budget it would allow for recruitment a larger sample size, with better balance and diversity of genders.

Although this study provided a small amount of insight into consumer usage, additional information is still needed. This is because of the key role consumer usage plays in product replacement and subsequent expenditure to landfill. Advancing our knowledge of consumer behaviour within a product usage context is therefore important to understand how we (as a society) can make our consumption overall more sustainable. Further research could investigate additional product categories and it would provide a different context.

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Appendices

Appendix 1: Ethics Approval

Auckland University of Technology Ethics Committee (AUTEC)

28 March 2023

Sommer Kapitan
Faculty of Business Economics and Law

Dear Sommer

Re Ethics Application: **23/75 A stitch in time saves nine: Facilitators and impediments of sustainable use**

Thank you responding to AUTEC's conditions.

Your ethics application has been approved for three years until 28 March 2026.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.
7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online http://www.aut.ac.nz/research/researchethics

For any enquiries, please contact ethics@aut.ac.nz
(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: zoe.ashcroft2@gmail.com

Appendix 2: Survey experiment

Start of Block: Opener

Welcome to the study on your consumer preferences.

Before participating, we need to stress that we are seeking respondents who can complete this study in 1 sitting.

Please read the following general instructions on your participation in this task:
- Complete this task continuously and in one sitting.
- Answer all questions to the best of your ability.
- Keep your browser window maximized.
- Do NOT press the back or refresh buttons on your browser.
- Make sure you go through all pages on the task without skipping questions.
- Thanks for being part of our study today and helping us learn more!

Please click the ">>" arrow below to begin.

→

Page Break

Participant Information Sheet

Date Information Sheet Produced: 31/01/2023

Project Title: A stitch in time saves nine: Facilitators and impediments of sustainable use.

Hi, I'm Zoe Ashcroft, a Master of Business student at AUT. I would be extremely grateful to those of you who choose to participate in this research as it will help me attain my degree, as well as increase academic knowledge in this understudied area of consumer behaviour.

What is the purpose of this research?

Academic research has focused on consumer purchasing, less research has investigated consumer's use of products. The findings of this research will be published as part of my masters' thesis and may be used for other academic publications and presentations.

Participation

You were randomly selected as a member of panel respondents managed by CINT. Your participation in this research is voluntary (it is your choice) and whether you choose to participate will neither advantage nor disadvantage you. As a participant you will be asked to give consent at the beginning of the survey experiment (by ticking a "Yes, I consent" sentence). If you do not want to proceed, then you can easily exit online survey experiment at any point and your data will not be used.

What will happen in this research?

As a participant you will be randomly assigned to one of four groups. You will then be shown advertising of three different consumer products and asked to assess the products and your purchase intentions. The next section will then ask you questions regarding your individual consumer behaviours. Lastly, you will be asked for general demographics and be thanked.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to Dr. Sommer Kapitan, sommer.kapitan@aut.ac.nz, 09 921 9999 (ext 5131), or Zoe Ashcroft, zoe.ashcroft@aut.ac.nz.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

- ○ Yes, I Consent *(1)*
- ○ No, I do not Consent *(2)*

Skip To: End of Survey if (2)= No, I do not Consent

Page Break

Part I

Thank you for being part of my study!

This study has two parts. In part 1, we'll ask you to **evaluate 3 products**. We seek to know your attitudes and willingness to purchase the products.

Please press the ">>" arrows below to check out the **products we seek your opinion on**.

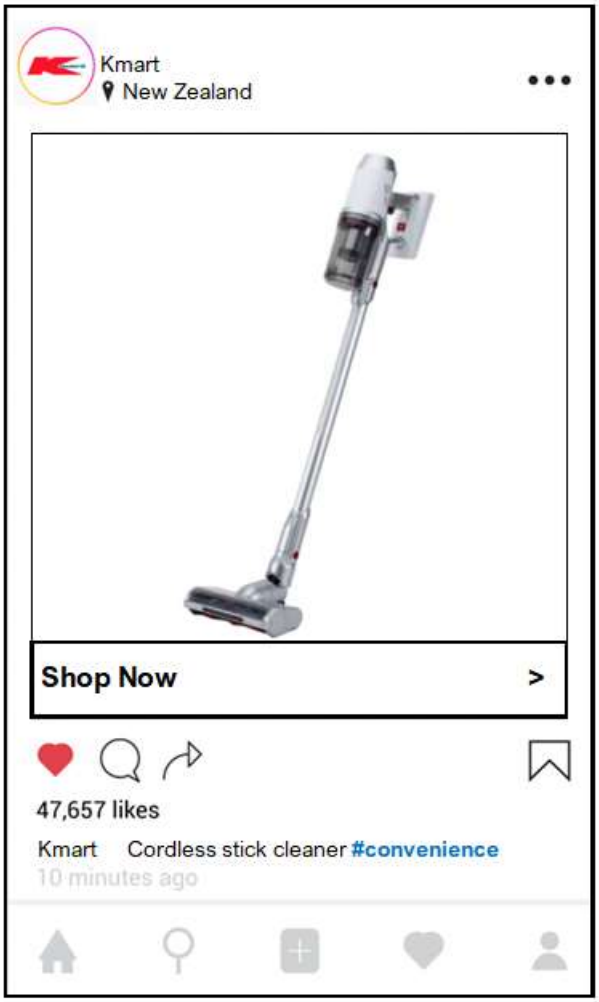
→

End of Block: Opener

Please note as this was a between-subjects design participants will have only completed 1 of the 4 conditions

Start of Block: Condition 1- low end control

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this vacuum (1)	○	○	○	○	○	○	○
I desire this vacuum (2)	○	○	○	○	○	○	○
This vacuum is attractive (3)	○	○	○	○	○	○	○
I would use a vacuum like this (4)	○	○	○	○	○	○	○
I would be interested in buying this vacuum (5)	○	○	○	○	○	○	○

I would be willing to purchase this vacuum.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my vacuum (1)	○	○	○	○	○	○	○
I can look after my vacuum well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my vacuum (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

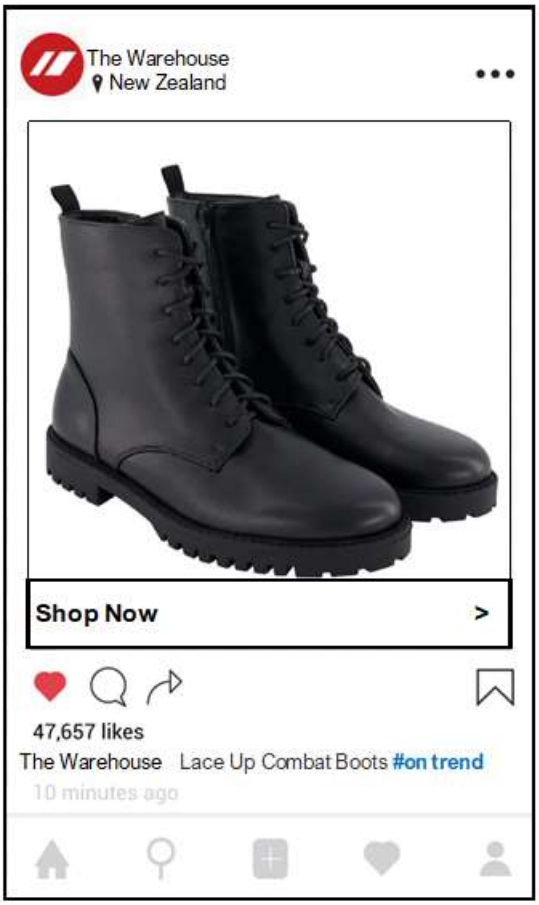
	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my vacuum (1)	○	○	○	○	○	○	○
I look after my vacuum (2)	○	○	○	○	○	○	○
I try to prevent my vacuum from failure (3)	○	○	○	○	○	○	○
I clean my vacuum (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my vacuum gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my vacuum (2)	○	○	○	○	○	○	○
In general, looking after my vacuum is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like these boots (1)	○	○	○	○	○	○	○
I desire these boots (2)	○	○	○	○	○	○	○
These boots are attractive (3)	○	○	○	○	○	○	○
I would use boots like this (4)	○	○	○	○	○	○	○
I would be interested in buying these boots (5)	○	○	○	○	○	○	○

I would be willing to purchase these boots.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my shoes (1)	○	○	○	○	○	○	○
I can look after my shoes well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my shoes (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my shoes (1)	○	○	○	○	○	○	○
I look after my shoes (2)	○	○	○	○	○	○	○
I try to prevent my shoes from failure (3)	○	○	○	○	○	○	○
I clean my shoes (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my shoes gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my shoes (2)	○	○	○	○	○	○	○
In general, looking after my shoes is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.

Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this duvet (1)	○	○	○	○	○	○	○
I desire this duvet (2)	○	○	○	○	○	○	○
This duvet is attractive (3)	○	○	○	○	○	○	○
I would use a duvet like this (4)	○	○	○	○	○	○	○
I would be interested in buying this duvet (5)	○	○	○	○	○	○	○

I would be willing to purchase this duvet.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my duvet (1)	○	○	○	○	○	○	○
I can look after my duvet well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my duvet (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my duvet (1)	○	○	○	○	○	○	○
I look after my duvet (2)	○	○	○	○	○	○	○
I try to prevent my duvet from failure (3)	○	○	○	○	○	○	○
I clean my duvet (4)	○	○	○	○	○	○	○

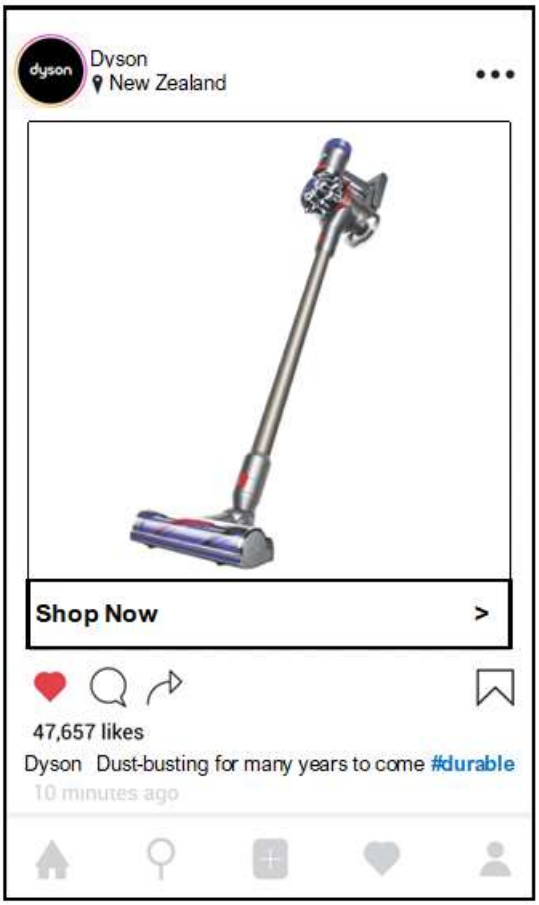
Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my duvet gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my duvet (2)	○	○	○	○	○	○	○
In general, looking after my duvet is a positive experience (3)	○	○	○	○	○	○	○

End of Block: Condition 1- low end control

Start of Block: Condition 4- high end durable

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this vacuum (1)	○	○	○	○	○	○	○
I desire this vacuum (2)	○	○	○	○	○	○	○
This vacuum is attractive (3)	○	○	○	○	○	○	○
I would use a vacuum like this (4)	○	○	○	○	○	○	○
I would be interested in buying this vacuum (5)	○	○	○	○	○	○	○

I would be willing to purchase this vacuum.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my vacuum (1)	○	○	○	○	○	○	○
I can look after my vacuum well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my vacuum (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

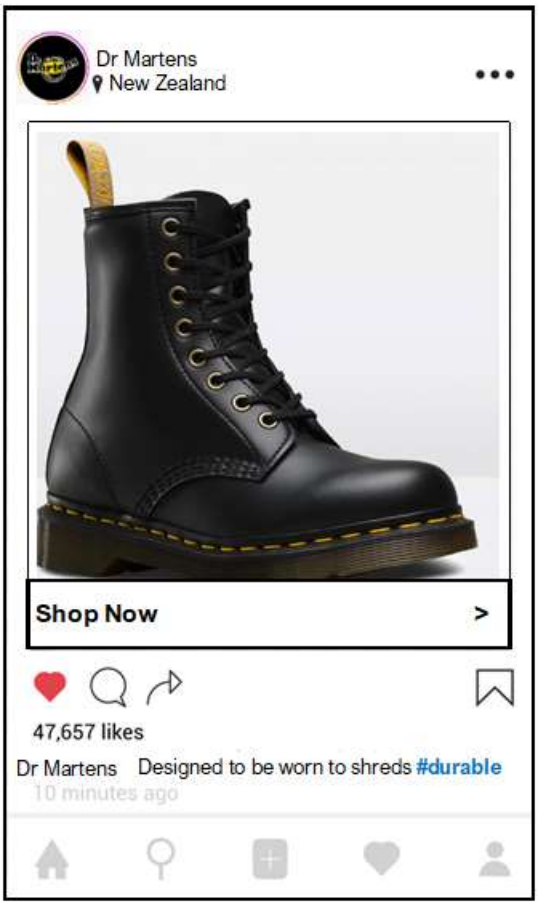
	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my vacuum (1)	○	○	○	○	○	○	○
I look after my vacuum (2)	○	○	○	○	○	○	○
I try to prevent my vacuum from failure (3)	○	○	○	○	○	○	○
I clean my vacuum (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my vacuum gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my vacuum (2)	○	○	○	○	○	○	○
In general, looking after my vacuum is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like these boots (1)	○	○	○	○	○	○	○
I desire these boots (2)	○	○	○	○	○	○	○
These boots are attractive (3)	○	○	○	○	○	○	○
I would use boots like this (4)	○	○	○	○	○	○	○
I would be interested in buying these boots (5)	○	○	○	○	○	○	○

I would be willing to purchase these boots.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my shoes (1)	○	○	○	○	○	○	○
I can look after my shoes well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my shoes (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my shoes (1)	○	○	○	○	○	○	○
I look after my shoes (2)	○	○	○	○	○	○	○
I try to prevent my shoes from failure (3)	○	○	○	○	○	○	○
I clean my shoes (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my shoes gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my shoes (2)	○	○	○	○	○	○	○
In general, looking after my shoes is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.

Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this duvet (1)	○	○	○	○	○	○	○
I desire this duvet (2)	○	○	○	○	○	○	○
This duvet is attractive (3)	○	○	○	○	○	○	○
I would use a duvet like this (4)	○	○	○	○	○	○	○
I would be interested in buying this duvet (5)	○	○	○	○	○	○	○

I would be willing to purchase this duvet.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my duvet (1)	○	○	○	○	○	○	○
I can look after my duvet well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my duvet (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my duvet (1)	○	○	○	○	○	○	○
I look after my duvet (2)	○	○	○	○	○	○	○
I try to prevent my duvet from failure (3)	○	○	○	○	○	○	○
I clean my duvet (4)	○	○	○	○	○	○	○

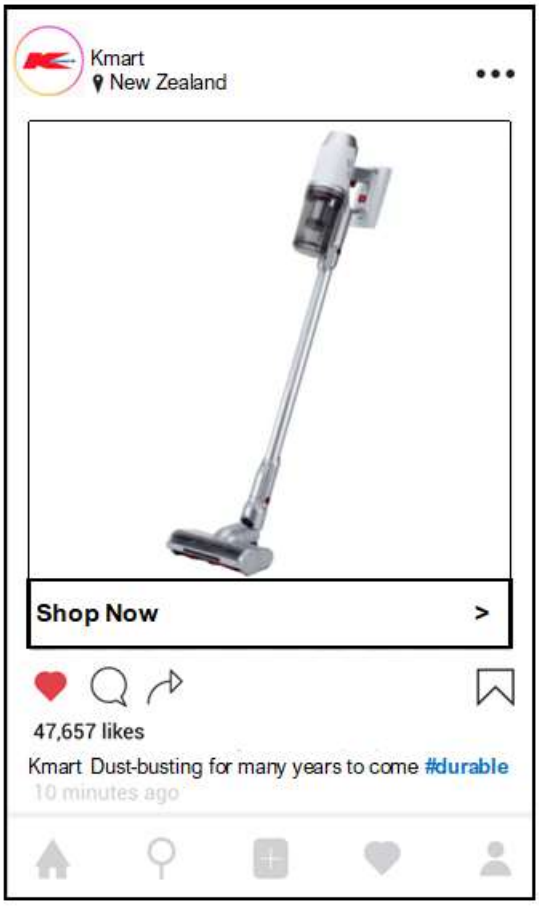
Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my duvet gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my duvet (2)	○	○	○	○	○	○	○
In general, looking after my duvet is a positive experience (3)	○	○	○	○	○	○	○

End of Block: Condition 4- high end durable

Start of Block: Condition 2- low end durable

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this vacuum (1)	○	○	○	○	○	○	○
I desire this vacuum (2)	○	○	○	○	○	○	○
This vacuum is attractive (3)	○	○	○	○	○	○	○
I would use a vacuum like this (4)	○	○	○	○	○	○	○
I would be interested in buying this vacuum (5)	○	○	○	○	○	○	○

I would be willing to purchase this vacuum.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my vacuum (1)	○	○	○	○	○	○	○
I can look after my vacuum well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my vacuum (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

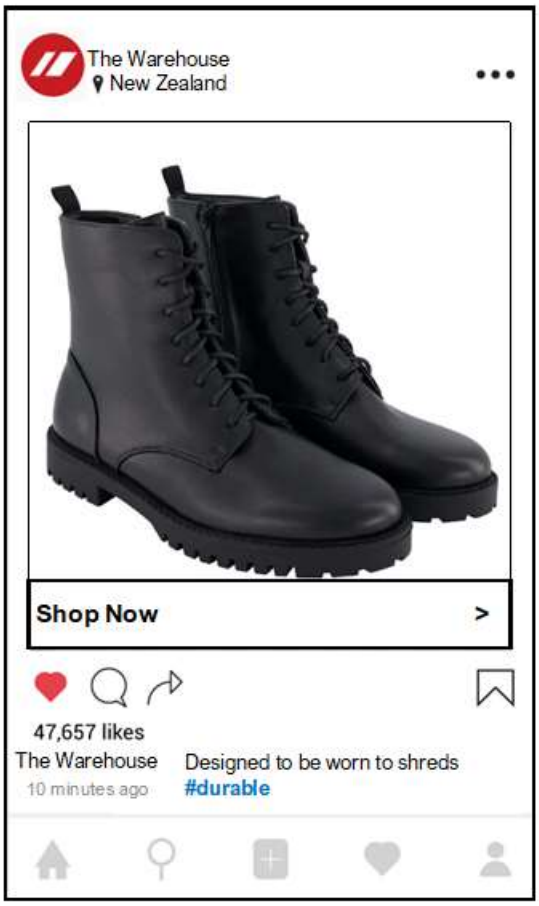
	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my vacuum (1)	○	○	○	○	○	○	○
I look after my vacuum (2)	○	○	○	○	○	○	○
I try to prevent my vacuum from failure (3)	○	○	○	○	○	○	○
I clean my vacuum (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my vacuum gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my vacuum (2)	○	○	○	○	○	○	○
In general, looking after my vacuum is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like these boots (1)	○	○	○	○	○	○	○
I desire these boots (2)	○	○	○	○	○	○	○
These boots are attractive (3)	○	○	○	○	○	○	○
I would use boots like this (4)	○	○	○	○	○	○	○
I would be interested in buying these boots (5)	○	○	○	○	○	○	○

I would be willing to purchase these boots.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my shoes (1)	○	○	○	○	○	○	○
I can look after my shoes well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my shoes (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my shoes (1)	○	○	○	○	○	○	○
I look after my shoes (2)	○	○	○	○	○	○	○
I try to prevent my shoes from failure (3)	○	○	○	○	○	○	○
I clean my shoes (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my shoes gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my shoes (2)	○	○	○	○	○	○	○
In general, looking after my shoes is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.

Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this duvet (1)	○	○	○	○	○	○	○
I desire this duvet (2)	○	○	○	○	○	○	○
This duvet is attractive (3)	○	○	○	○	○	○	○
I would use a duvet like this (4)	○	○	○	○	○	○	○
I would be interested in buying this duvet (5)	○	○	○	○	○	○	○

I would be willing to purchase this duvet.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my duvet (1)	○	○	○	○	○	○	○
I can look after my duvet well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my duvet (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my duvet (1)	○	○	○	○	○	○	○
I look after my duvet (2)	○	○	○	○	○	○	○
I try to prevent my duvet from failure (3)	○	○	○	○	○	○	○
I clean my duvet (4)	○	○	○	○	○	○	○

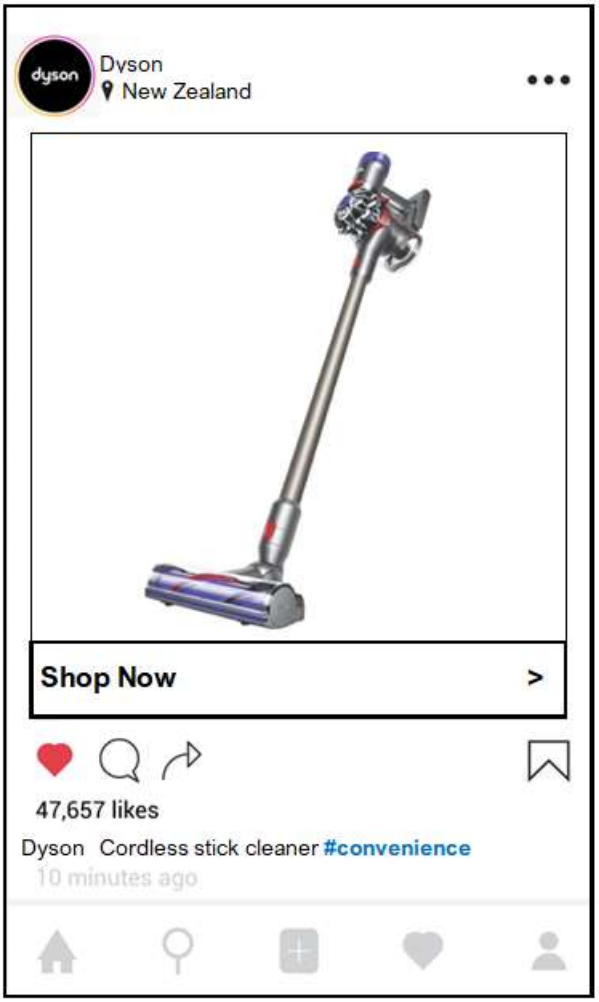
Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my duvet gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my duvet (2)	○	○	○	○	○	○	○
In general, looking after my duvet is a positive experience (3)	○	○	○	○	○	○	○

End of Block: Condition 2- low end durable

Start of Block: Condition 3- high end control

Please view the advertisement of the following consumer product



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this vacuum (1)	○	○	○	○	○	○	○
I desire this vacuum (2)	○	○	○	○	○	○	○
This vacuum is attractive (3)	○	○	○	○	○	○	○
I would use a vacuum like this (4)	○	○	○	○	○	○	○
I would be interested in buying this vacuum (5)	○	○	○	○	○	○	○

I would be willing to purchase this vacuum.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my vacuum (1)	○	○	○	○	○	○	○
I can look after my vacuum well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my vacuum (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

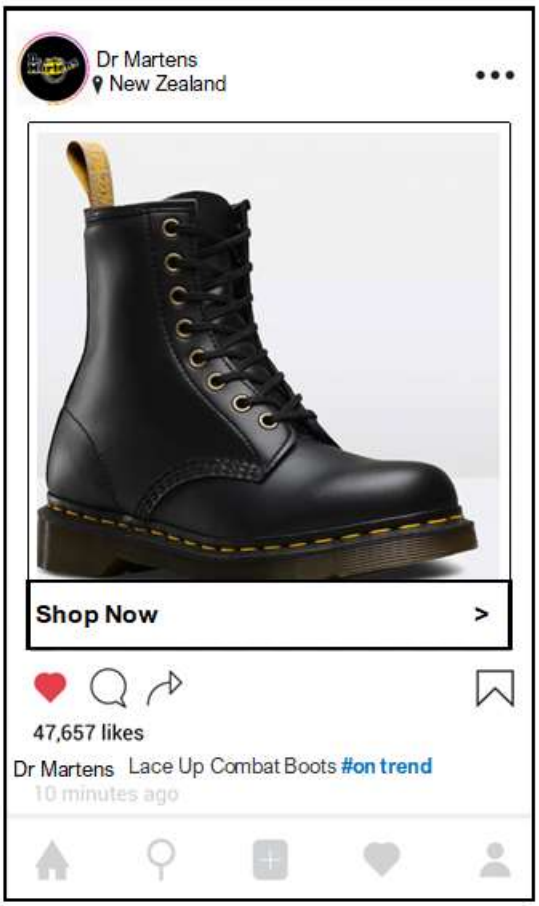
	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my vacuum (1)	○	○	○	○	○	○	○
I look after my vacuum (2)	○	○	○	○	○	○	○
I try to prevent my vacuum from failure (3)	○	○	○	○	○	○	○
I clean my vacuum (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my vacuum gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my vacuum (2)	○	○	○	○	○	○	○
In general, looking after my vacuum is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.



Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like these boots (1)	○	○	○	○	○	○	○
I desire these boots (2)	○	○	○	○	○	○	○
These boots are attractive (3)	○	○	○	○	○	○	○
I would use boots like this (4)	○	○	○	○	○	○	○
I would be interested in buying these boots (5)	○	○	○	○	○	○	○

I would be willing to purchase these boots.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my shoes (1)	○	○	○	○	○	○	○
I can look after my shoes well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my shoes (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my shoes (1)	○	○	○	○	○	○	○
I look after my shoes (2)	○	○	○	○	○	○	○
I try to prevent my shoes from failure (3)	○	○	○	○	○	○	○
I clean my shoes (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my shoes gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my shoes (2)	○	○	○	○	○	○	○
In general, looking after my shoes is a positive experience (3)	○	○	○	○	○	○	○

Page Break

Please view the advertisement of the following consumer product.

Tell us what you think! Please evaluate this product on the following measures.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like this duvet (1)	○	○	○	○	○	○	○
I desire this duvet (2)	○	○	○	○	○	○	○
This duvet is attractive (3)	○	○	○	○	○	○	○
I would use a duvet like this (4)	○	○	○	○	○	○	○
I would be interested in buying this duvet (5)	○	○	○	○	○	○	○

I would be willing to purchase this duvet.

- ○ Would never buy 1 (1)
- ○ 2 (2)
- ○ 3 (3)
- ○ 4 (4)
- ○ 5 (5)
- ○ 6 (6)
- ○ Would definitely buy 7 (7)

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I am experienced in looking after my duvet (1)	○	○	○	○	○	○	○
I can look after my duvet well (2)	○	○	○	○	○	○	○
I have the necessary equipment to maintain my duvet (3)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It is important for me to take care of my duvet (1)	○	○	○	○	○	○	○
I look after my duvet (2)	○	○	○	○	○	○	○
I try to prevent my duvet from failure (3)	○	○	○	○	○	○	○
I clean my duvet (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Taking care of my duvet gives me a good feeling (1)	○	○	○	○	○	○	○
It makes me proud that I am able to take care of my duvet (2)	○	○	○	○	○	○	○
In general, looking after my duvet is a positive experience (3)	○	○	○	○	○	○	○

End of Block: Condition 3- high end control

Start of Block: Repair propensity scale

Part II

Thanks for thinking about and evaluating the products.

Up next, we ask you some questions about your preferences for using products and a little bit more about yourself. This helps us understand more about choices. We appreciate your time and energy on this study.

Please press the ">>" arrows below to continue.

→

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
If a product can be fixed, I feel obligated to repair it instead of replace it (1)	○	○	○	○	○	○	○
I am more likely to have a product repaired than to replace it (2)	○	○	○	○	○	○	○
It is important to try to fix a product before getting rid of it (3)	○	○	○	○	○	○	○
I always try to fix a product myself or have someone else fix it (4)	○	○	○	○	○	○	○

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
If you take good care of your possessions, you will definitely save money in the long run. (1)	○	○	○	○	○	○	○
There are many things that are normally thrown away that are still quite useful (2)	○	○	○	○	○	○	○
Making better use of my resources make me feel good (3)	○	○	○	○	○	○	○
Please select 3 as an attention check (4)	○	○	○	○	○	○	○
If you can re-use an item you already have, there's no sense in buying something new (5)	○	○	○	○	○	○	○

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (6)	2 (7)	3 (8)	4 (9)	5 (10)	6 (11)	Strongly agree 7 (12)
Getting rid of stuff is difficult for me (1)	○	○	○	○	○	○	○
I tend to hold onto my possessions (2)	○	○	○	○	○	○	○
Unless I have a really good reason to throw something away, I keep it (3)	○	○	○	○	○	○	○
I do not like to dispose of my possessions (4)	○	○	○	○	○	○	○

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (6)	2 (7)	3 (8)	4 (9)	5 (10)	6 (11)	Strongly agree 7 (12)
Even if I don't have the right tool for the job, I can usually improvise (1)	○	○	○	○	○	○	○
I never throw something away that I might use later (2)	○	○	○	○	○	○	○
In general, I would rather alter an old product to work in a new situation than purchase a new product specifically for that purpose (3)	○	○	○	○	○	○	○
After the useful life of a product, I can often think of ways to use its parts for other purposes (4)	○	○	○	○	○	○	○
I do not enjoy a product unless I can use it to its full capacity (5)	○	○	○	○	○	○	○

I use products in more ways than most people (6)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I work hard to protect my material possessions (1)	○	○	○	○	○	○	○
Keeping my material possessions in good working order is very important to me (2)	○	○	○	○	○	○	○
Material things should be guarded from harm (3)	○	○	○	○	○	○	○
I am very conscious about keeping my material possessions safe (4)	○	○	○	○	○	○	○

End of Block: Repair propensity scale

Start of Block: Product retention tendency

If a product you own becomes damaged, would you be more likely to repair it or to replace it? Select the statement that best reflects your intention.

	More likely to **repair** . . . More likely to **replace**
	0 10 20 30 40 50 60 70 80 90 100
Appliances ()	
Shoes & Apparel ()	
Bedding ()	

Imagine an appliance you purchased broke after 6 months...

	Not at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very much so 7 (7)
How wasteful do you think it would be to throw away the appliance? (1)	○	○	○	○	○	○	○
How attached do you think you felt to the appliance before it broke? (2)	○	○	○	○	○	○	○

Imagine a pair of shoes you purchased broke after 6 months...

	Not at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very much so 7 (7)
How wasteful do you think it would be to throw away the shoes? (1)	○	○	○	○	○	○	○
How attached do you think you felt to the shoes before they broke? (2)	○	○	○	○	○	○	○

Imagine some bedding you purchased broke after 6 months...

	Not at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very much so 7 (7)
How wasteful do you think it would be to throw away the bedding? (1)	○	○	○	○	○	○	○
How attached do you think you felt to the bedding before it broke? (2)	○	○	○	○	○	○	○

End of Block: Product retention tendency

Start of Block: Consumer wisdom scale

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I have a realistic sense of the lifestyle that I can afford (1)	○	○	○	○	○	○	○
I spend my money responsibly (2)	○	○	○	○	○	○	○
I find it easy to focus on buying only what I really need without getting tempted by things that others have (3)	○	○	○	○	○	○	○
I am able to resist temptation in order to achieve my budget and lifestyle goals (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I manage my budget so that I can spend some money on experiences that give me a lot of pleasure and joy (1)	○	○	○	○	○	○	○
I prioritise spending some money on unique experiences that help me develop my full potential (2)	○	○	○	○	○	○	○
I manage my budget so that I can spend some money on experiences that help me learn new things (3)	○	○	○	○	○	○	○
I prioritise spending money on products and experiences that help me build and strengthen relationships with others (4)	○	○	○	○	○	○	○

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I borrow or rent products to try them out before deciding if I want to buy them (1)	○	○	○	○	○	○	○
Before I buy something that I might not use very often, I try to rent it or borrow it from someone instead (2)	○	○	○	○	○	○	○
Please select 5 as an attention check (3)	○	○	○	○	○	○	○
My purchases include used products or clothing even though I could just purchase new things if I wanted to (4)	○	○	○	○	○	○	○
I like to share, swap, or trade for things with my friends and neighbours (5)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Before I buy something, I consider my previous experiences with similar purchases (1)	○	○	○	○	○	○	○
Before spending my money on something, I visualise what the experience of owning and using it is likely to be (2)	○	○	○	○	○	○	○
Before I buy something, I consider possible costs and benefits over time (3)	○	○	○	○	○	○	○
Before I buy something, I make an effort to consider my options from multiple perspectives (4)	○	○	○	○	○	○	○

Page Break

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I understand which product features are the most important (1)	○	○	○	○	○	○	○
I know when I've done enough research to make a good decision (2)	○	○	○	○	○	○	○
I know where and how to buy things so that I get the best value (3)	○	○	○	○	○	○	○
Before buying something, I know how to get the information that I need to make great choices (4)	○	○	○	○	○	○	○

Please indicate how much you agree or disagree with the following statements:

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I buy products from companies that promote environmental responsibility, even when they cost more (1)	○	○	○	○	○	○	○
My consumption behaviours consistently reflect my concern for the natural environment (2)	○	○	○	○	○	○	○
I buy products from companies that demonstrate that they share my ethical values (3)	○	○	○	○	○	○	○
I spend time thinking about how we, as a global community, affect each other through our individual consumption choices (4)	○	○	○	○	○	○	○

End of Block: Consumer wisdom scale

Start of Block: Demographics & close

What gender best represents you?

- Male (1)
- Female (2)
- Non-binary (3)
- Another gender (6)
- Prefer not to say (7)

Please list your age below.

_____

What is your ethnicity?

- European (1)
- Maori (2)
- Asian (3)
- Pacific Peoples (4)
- Middle Eastern, Latin American, and African (MELAA) (5)
- Other (9) _____

Page Break

Thank you for your participation!

If you wish to view a summary of research findings, available for viewing in August 2023, please visit https://sommerkapitan.com/lab

Confidentiality of Your Data:
As a reminder, your responses are anonymous to us as academic researchers. In addition, the results of individual questionnaires will not be reported, only the results of aggregate groups of subjects. In other words, your responses will not be traceable to you in any way.

End of Block: Demographics & close