

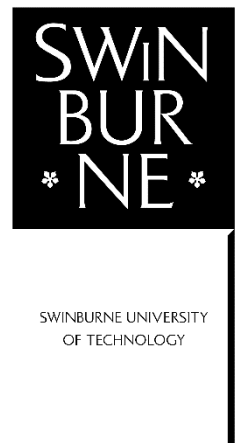
A Behavioural Control Investigation Towards Greater Sustainability

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ABSTRACT

The accelerated growth of the global economy has led to rapid environmental degradation, raising concern for the preservation of natural resources and leading to an increase in good sense against wanton consumerism. One of the ways consumers attempt to effectively reduce their impact on the environment is altering consumption behaviour by purchasing more sustainable products. Several studies have suggested that encouraging consumers' intention to consume sustainable products will increase their likelihood of purchasing sustainable products. However, the relationship between behavioural intention and actual behaviour is complex, as consumers who intend to perform a particular behaviour may not necessarily perform that behaviour—a phenomenon typically described as the intention–behaviour gap, caused by the presence of behavioural control. In order to create original, meaningful, and useful knowledge, the present study aims to better understand the application of behavioural control and its influence on consumption choice favouring sustainable products. Based on a thorough review of the extant literature, this study argues that the behavioural view on the consumption of sustainable products is incomplete without further consideration of the impact that behavioural control has on the consumption decision and the ways in which to control its impact thereon. The study seeks to extend understanding of behavioural control, a concept within the theory of planned behaviour (TPB), which posits that high behavioural control is linked to behaviour that is consistent with intention, whereas low behavioural control is associated with the gap between intention and behaviour. This gap is most prevalent in the context of purchasing sustainable products, whereby consumers may express their concern for social and environmental issues; yet, consumers' ability or will to enact their initial intentions are not necessarily the same as they may differ based on various covert (e.g., self-efficacy, neutralisation) and overt (e.g., product accessibility, availability, and affordability) control factors. Taking this into account, the study utilises a combination of within- and between-scenarios experimental approach to investigate consumers' intention to purchase sustainable products under varying degrees of behavioural control, using a stratified sample of consumers between the ages of 18 and 60 years in Malaysia. The upshot of this study, which demonstrates that behavioural control is malleable as the intention–behaviour gap may be closed in instances where a desirable behaviour is favoured and opened when an undesirable behaviour should be deterred, advances our understanding of the control factors that influence purchase intention. More importantly, it provides nuanced recommendations on the ways to manipulate behavioural control, to close or open the intention–behaviour gap, and to facilitate an ideal shift towards more sustainable

consumption behaviour. The theoretical and practical implications, limitations, and areas for future research arising from the study are also discussed.

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Marc Arul Weissmann

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DECLARATION

This thesis:

- Contains no material which has been accepted for the award to the candidate of any other degree or diploma, except where due reference is made in the text of the examinable outcome;
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- Thesis has undergone proofreading by the service provider, TopCorrect. This is in adherence to the Australian Standards for Editing Practice (ASEP) guidelines.

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LIST OF CONCEPTS AND DEFINITIONS

Concept	Definition
Behaviourism	“To predict, given stimulus, what reaction will take place” (Watson, 1930, p. 11)
Consumer behaviour	Activities and processes that people, as individuals or groups, engage in when searching, selecting, evaluating, purchasing, using, and disposing of physical goods, services, ideas or experiences so as to satisfy needs and wants (Kotler & Armstrong, 2010).
Purchase Intention	The willingness of a customer to buy a certain product or a certain service (Pavlou, 2003).
Experimental Research	“A systematic and scientific approach to research in which the researcher manipulates one or more variables and controls and measures any changes in other variables” (Blakstad, 2013, p. 4).
Factorial Design	Measures how multiple factors affect a dependent variable, both independently and together (Keppel, 1991).
External validity (or ‘generalisability’)	The extent to which the conclusions of a study pertain to the population (Yu & Ohlund, 2012)
Internal validity	Addresses the question of whether any observed changes from the research can be attributed to the intervention and not to other causes (Yu & Ohlund, 2012)
Neutralisation theory	Consumers use a series of justifications to neutralise their deviant behaviour (Sykes & Matza, 1957)
Self-efficacy	General belief that one is able to handle challenges and cope with adverse events in one’s life (Schwarzer & Jerusalem, 1995)
Theory of planned behaviour	An extension of the theory of reasoned action. Includes a measure of perceived behavioural control, the perceived ease of which the performance of a behaviour is likely to be, and this variable is posited to have both an indirect effect (i.e., through behavioural intention) and a direct effect (i.e., through actual behaviour) (Ajzen, 1985)
Theory of reasoned action	Theory suggesting that a consumer’s attitude towards a behaviour is determined by their beliefs concerning the performance of the behaviour jointly with the social norms surrounding the performance of the behaviour, influencing behavioural intention (Fishbein & Ajzen, 1975)

Overt behavioural control	Considers control factors where the power of control is external and thus not held by the consumer.
Covert behavioural control	Refers to factors in which the individual holds the power over control and so the control is internal to the performer of the behaviour.
Sustainable consumption	An intricate system of decisions and actions that incorporates all elements of purchasing a sustainable product (McDonagh et al., 2018)
Product	A good, idea, method, data, object, or service created as a result of a process meant to satisfy a need/want (Kotler & Armstrong, 2010)
Sustainable product	A sustainable product is a product that is friendly towards one's economic, environmental, and social wellbeing. Examples of such products would include energy-saving lightbulbs and hybrid vehicles (Wang et al., 2014).
Unsustainable product	An unsustainable product is a product that may produce detrimental effects on one's economic, environmental and/or social wellbeing. Examples of such products would include high-voltage lightbulbs and highly fuel-inefficient trucks.
Product classification	Segmentation of goods/services that belong together (Zentall et al., 2002)

1 INTRODUCTION

1.1 Background

Population growth and the development of global economies drive, and will continue to drive, consumption around the world as billions of consumers demand products every day. Current estimates forecast that the world population will reach nine billion by 2050, with growth primarily driven by developing countries with low per-capita income (Department of Economic and Social Affairs, 2018). This rapid increase in consumption is straining the world's finite natural resources. Recent studies suggest that we are already exceeding the Earth's ability to support our lifestyles and have been doing so for the past 20 years (WWF, 2016). In 2008, the human ecological footprint had increased to 125 per cent of the current global carrying capacity for natural resources; at the current trajectory, this is set to reach 170 per cent by 2070 (WWF, 2016). When global consumption exceeds the natural rate needed for resources to replenish, the stock of limited resources available is reduced, causing problems for production and subsequent consumption in the long run. According to the Millennium Ecosystem Assessment (MA), 60 per cent of natural resources are being degraded or used through unsustainable means due to overconsumption (MA, 2005; European Commission, 2015). Overconsumption is considered among the direct and indirect impacts of global warming, biodiversity degradation, soil searing, and water and air pollution, all of which are detrimental to the enduring livelihood of society. Thus, to address overconsumption, the literature argues that stakeholders need to make a shift in their existing consumption habits and move towards more sustainable alternatives because current consumption patterns cannot continue at their current rate (Lorek & Spangenberg, 2014; Lim, 2016).

The concept of sustainable consumption has drawn much interest from scholars, industry practitioners, and policymakers. International organisations such as the Organisation for Economic Co-operation and Development, the United Nations, and the World Wide Fund for Nature, as well as national research centres (e.g., Norway, Sweden, Germany, and the United States), have sanctioned nascent research efforts to identify ways to encourage sustainable consumption and incorporate sustainability into business and social practices. Existing research has investigated ethical consumption (Cherrier, 2005; Barnett, et al., 2017), environmental consciousness (Schlegelmilch et al., 1996; Martínez García de Leaniz, et al., 2017), ecological intelligence (Jacobs, 2009), self and place identities predicated on the environment (Kunchambo et al., 2017; Lee et al., 2015), social loading (Wilhite & Lutzenhiser, 1999),

cognitive dissonance (Thøgersen, 2002), ecological marketing (Chouinard et al., 2011), social marketing (Dibb & Carrigan, 2011), and forms of plenitude consumption (Warde, 2017), among others. Similarly, the governments of many countries have made changes to public policy in their attempts to deal with these problems (Prothero et al., 2011).

Yet, despite the plethora of work done by businesses, governments, and non-governmental institutions to comprehend and effectively shift away from unsustainable practices, such practices have not only remained but also been amplified through rapid growth in the global economy (Sheth et al., 2011; DeSoucey, 2012). The concept of sustainable consumption itself is a problematic issue that is the subject of frequent debates in the academic literature. Critics of the notion of sustainable consumption view the concept as an oxymoron, in that ‘to consume’ means to effectively use up or destroy, while ‘sustainability’ is related to the notion of preservation and advocating long-term resource availability (Hobson, 2002; Gordon et al., 2011). Hence, a different perspective on consumption is required in the context of this study. From a traditional standpoint, consumption has been narrowly confined to the contextual lens of purchasing, as it is assumed that consumers buy a product they intend to consume and/or use (Hirschman & Holbrook, 1982). This creates a problem in understanding the economic, environmental, and social sustainability behind any form of consumption, as this understanding is possible only through a holistic comprehension of the impacts from all sustainability dimensions (e.g., economic, environmental, and social) that result from the production and consumption life cycles of a product (Jones et al., 2008). The shortcoming of such traditional views forms the basis on which this research subscribes to a more contemporary view on consumption, in which the current understanding of sustainable consumption behaviour needs to be extended beyond just purchasing; instead, it should be considered as an intricate system of decisions and actions that incorporates all elements of purchasing, product use, and handling of any by-product or waste resulting from consumption (Peattie & Collins, 2009; McDonagh et al., 2018).

Nonetheless, researchers concur that the consumer’s consumption decisions (e.g., their choices, behaviour, and lifestyle) are essential to achieve sustainable development (Jackson & Michaelis, 2003). To improve the state of the global economy and reduce the negative effects of growing unsustainable consumption, stakeholders, particularly consumers, need to take intentional, systematic, and comprehensive steps towards more sustainable behaviour (Prothero et al., 2011).

Above all, it is pivotal in growing our understanding of the consumption of sustainable products, to draw clear distinction between the product categories of ‘sustainable products’ and ‘organic products’. When a product is considered ‘sustainable’ the basic underlying assumption is that the product is produced in a way that conserves limited resources, and is manufactured in a socially and environmentally responsible manner. And whilst ‘organic’ products may fall under the umbrella term of ‘sustainable’ products, not all organic products are made in a sustainable manner, and thus, should not be considered as a ‘sustainable product’ (Rigby & Brown, 2007; van Herpen et al., 2015). Indeed, research often considers ‘sustainability’ a philosophy that describes planet protective actions that can be continued indefinitely, without compromising the environment, society or ethics (Liu et al., 2017; Balderjahn et al. 2018). And whilst external factors affecting consumption has been studied in the context of organic products (Voon et al., 2011; Pandey et al. 2019), it has not been explicitly researched in the context of sustainable products (Mont & Plepys, 2008; Lim, 2016; Lim, 2017).

Indeed, if marketing is the ultimate tool for influencing consumer behaviour, it is likely to play a prominent role in determining the conditions and meaning of life in the future (Firat, 1991). Cova (1997) echoes the view that marketing is inextricably linked to value creation and that the value provided by marketing gives meaning to life. Although researchers have investigated and recommended ways to encourage consumers to consume more sustainable products, the literature still has much room to grow in terms of promoting sustainable patterns of consumption, especially given that the sustainability issue continues to persist (Evans, 2019). This study agrees with the arguments made by Lim (2016; 2017a) and Webster (2009) that marketing literature has been more data-driven than theory-driven. Hence, there is a need for sound theory on which to base the relationship between sustainability and consumption. Research on consumption and its relationship to sustainability has been viewed from the theoretical perspectives of responsible consumption, anti-consumption, and mindful consumption behaviour (Lim, 2017a). Notably, both internal factors (e.g., beliefs, preferences) and external factors (e.g., market conditions) have been known to affect sustainable and unsustainable consumption practices.

Still, a certain commonality drives all sustainable consumption: i) personal needs—consumers purchase sustainable products in circumstances where their needs and wants of safety, quality, availability, and convenience are met; and ii) social needs—bearing the mindset that the consumption of sustainable products helps solve environmental problems (Ottman, 1992).

Consumers judge the inherent value of a product by utilising quality indicators and then combining this judgement to evaluate their purchase intention. Marketers are primarily interested in favourably affecting the purchase intention of consumers toward their products, particularly when product alternatives and substitutes are present in the market. In convincing consumers that sustainable products offer a quality substitute to regular products, marketers rely on social norms as a means of persuading the consumer that the consumption of sustainable products is for the good of society.

Despite its importance, and the efforts of practitioners and researchers to push the sustainability agenda, the consumption behaviour observed among consumers falls short of their stated intentions to consume sustainable products (Carrington et al., 2010; Grimmer & Miles, 2017). There are barriers to consumption that prevent consumers from engaging in the purchase of sustainable products (Hüttel et al., 2018). The discrepancy between behaviour and intention is referred to as the intention–behaviour gap (Sheeran, 2002; Sheeran & Webb, 2016). Although much research has tried to overcome the intention–behaviour gap through volitional control (the ability to control the outcomes of specific tasks through one’s behaviour) (Heckhausen, & Schulz, 1995; Sniehotta et al., 2005; Sheeran & Webb, 2016), little theoretical understanding has been devoted to investigating the conceptual boundaries and applications of consumer behavioural control in the intention–behaviour gap when volitional control is absent. Together with the increasingly desperate need to realize our actual sustainable consumption potential, the importance of understanding the intention–behaviour gap (the problem) and the utilisation of effective behavioural control (the remedy) to overcome the gap is greater than ever.

1.2 Research Questions

Encouraging sustainable consumption behaviour necessitates a dual approach: i) mitigating undesirable behaviour (e.g., not consuming unsustainable products), and ii) increasing desirable behaviour (e.g., consuming sustainable products). An intention–behaviour gap exists when the individual loses volitional control over the purchasing situation in the presence of behavioural control. Behavioural control impedes the actual behaviour at the point when a consumption decision is made. Thus, there is a need to move beyond the limited focus on volitional control of previous investigations and, instead, contribute toward understanding the methods with which to approach and utilise the different types of behavioural control.

TPB suggests that behavioural control determines success in performing behaviour that is consistent with the consumer's initial intention; the level of success depends on the barriers to consumption present at the time of the purchase decision (Fishbein & Ajzen, 2010; Kiriakidis, 2017). When applied to sustainable consumption, the theory reveals that consumers are subjected to two distinct typologies of behavioural control: internal (covert) behavioural control stemming from personal beliefs, and external (overt) behavioural control influenced by external market conditions, such as availability and accessibility of products. Premised on this theory, the current paper aims to fill the latent gap in the literature, to address the distinct typologies of behavioural control and how they can be developed or overcome to ensure favourable behavioural change. This leads to the following broad research questions:

1. How do covert and overt behavioural controls affect consumers' intention to purchase sustainable products?
2. How can we use different behavioural control typologies (overt, covert) to strengthen or weaken desired and undesired behaviour, respectively?

1.3 Research Objective

To extend previous investigations into behavioural control, this study examines the application of distinct types of behavioural control in the context of sustainable consumption. In addition, this study examines the chronic and primed behavioural responses that elicit both desirable and undesirable behavioural change. Building on existing literature, the source of behavioural control is dependent on internal control (covert) and external control (overt), both of which require different and careful manipulation to navigate the intention–behaviour gap. Yet, the current understanding and application of behavioural control theory is fragmented, the findings being primarily data-driven rather than grounded in theory. This research examines the barriers inhibiting consumption through the lens of behavioural control theory in order to attain a better understanding of the necessary behavioural change interventions needed to trigger implicit and explicit actions as well as inactions. Therefore, the following research objectives are proposed:

1. To explain the influence of covert and overt behavioural controls on consumers' intention to purchase sustainable products.
2. To examine the effects of chronic and primed behavioural response in order to affect a desired or an undesired behavioural change.

1.4 Research Design

This study investigates the extent to which behavioural control may inhibit sustainable consumption intentions and establishes a means to treat the intention–behaviour gap in order to encourage desired behavioural consistency towards the consumption of sustainable products. It reviews the extant literature to identify the current research gaps and develops a conceptual framework that addresses the identified gaps.

An overarching new theory in the form of the theory of behavioural control is proposed and used as the principal theoretical lens that guides the current investigation to understand the investigated consumer behaviour. This theory extends the TPB by clarifying the typologies of and approaches to managing behavioural control. The two major typologies of behavioural control—i.e., covert behavioural and overt behavioural control—are the two perspectives from which consumption decisions are viewed, lending support to and framing the boundaries of sustainable consumption behaviour.

The TPB suggests that people engage in behaviour that they believe they are capable of performing successfully (Ajzen, 2015). In its initial extension of the theory of reasoned action (TRA), through the incorporation of the construct ‘behavioural control’, Ajzen argued that not all decision-making (e.g., purchase) situations are solely dependent on factors within the volitional control of consumers; additionally, the subjective nature of volitional control as a concept makes it difficult to measure. On this basis, this study argues that volitional control accounts for behavioural control that originates from an internal source to the consumer (e.g., self-efficacy and neutralisation mechanisms); hence, it is dubbed ‘covert’. However, in situations where the purchase decision is influenced by external sources (e.g., availability, accessibility, and affordability constraints), the nature of behavioural control is distinctly ‘overt’. This raises the question as to how the different behavioural control types affect everyday consumption decisions arising from product purchases. To address this question, this study tests the effects of covert and overt behavioural control on a stratified sample of consumers by manipulating the level of behavioural control experienced by i) consumers that intend to purchase sustainable products and ii) consumers that do not intend to purchase sustainable products. A comparison is then made—utilising a between-samples approach—to measure the effects of the strengthening or weakening of chronic intentions through priming, thus effectively manipulating behavioural control. This study shows that behavioural control

is malleable, and thus the intention–behaviour gap may be closed in instances where a desirable behaviour is favoured, and opened when an undesirable behaviour should be deterred.

Premised on the theoretical foundations put forth, the study develops a new theory in the form of the theory of behavioural control to explain the means whereby covert and overt behavioural control may bring about sustainable consumption behaviour. For example, a chronic intention to consume sustainable products held by consumers, due to high self-efficacy, may be strengthened through priming—that is, being made aware of the ease with which it is possible to consume sustainable products which prevents opening of the intention–behaviour gap—thus stabilizing the initial intention and facilitating subsequent successful performance of the behaviour. Alternatively, the intention to refrain from consuming sustainable products due to affordability constraints may be mitigated through priming by raising consumer awareness of more affordable rental alternatives. As a result, this may close the intention–behaviour gap between choosing not to consume sustainable products and the actual behaviour of consuming sustainable products.

To test the hypothesis, an experimental approach in the form of a factorial experimental design of within- and between-subjects scenarios was adopted. This research design facilitates the observance of changes in behaviour (if any) in conjunction with the manipulation of the independent variables. It also allows us to determine the optimum experimental conditions required for effective treatment, especially when multiple independent variables are involved (Keppel, 1991; Sniehotta, 2009; Abrahamse, 2016). A factorial research design is often relied upon in social science and psychology research to measure pre- and post-treatment effects (Osbaldiston & Schott, 2012; Campbell-Arvai et al., 2014). Moreover, through the comparison of within- and between-subjects scenarios in this experimental design, this study can predict, given the type of behavioural control and priming factors present, the types of behavioural reactions that we can expect from consumers in the marketplace (Dziak et al. 2012; Anderson & McLean, 2018). In their research, Campbell-Arvai et al. (2014) tested multi-intervention comprising three separate independent variables, namely the role of nudges/social cues, value orientation, and information provision, which, separately and in combination with each other, indicated significantly different effects—when analysing within, against, between group findings—on sustainable consumption behaviour. On this theoretical and methodological basis, the factorial experimental design adopted in this study enables the testing of multiple behavioural control factors (i.e., the independent variables) under controlled conditions to offer

more confidence in inferred causal relationships. This study used a stratified sample of selected consumers between the ages of 18 and 60 years from a cross-section of the population living in Malaysia. An online questionnaire comprising situation-based and scenario-based questions was used as the research instrument in the experiment. The sustainable products selected for use in the scenarios were based on recent lists of most popular/trending sustainable products according to Business Insider (2018) and Forbes (2018); fair-trade sugar, energy-saving lightbulbs, eco-air conditioners, sustainable outdoor grills, and fuel-efficient cars. This provided the necessary product range needed to test the varied test conditions (i.e. product affordability is perceived as having greater importance in high priced products as opposed to everyday fast moving consumer goods (FMCGs)).

In addition to basic demographic questions (e.g., age, gender), the questionnaire measured the degree of purchase intention (i.e., with and without priming) for sustainable products under varying conditions of internal (i.e., covert—i.e., self-efficacy, neutralisation) and external (i.e., overt—i.e., availability, accessibility, and affordability) behavioural control. In line with the between-subjects approach, different groups of respondents, who were randomly grouped, were exposed to different versions of the survey, each of which incorporated different scenario-based assessments and either accounted for the presence of priming or involved no priming at all. The results of the experiments are discussed, followed by the study's specific implications for theory and practice.

1.5 Significance of the Study

In deciding whether to purchase a product, consumers are faced with behavioural control mechanisms that hinder consumption, effectively establishing an intention–behaviour gap. While behavioural control has been acknowledged as a barrier to the realisation of actual behaviour, its operationalisation in the literature remains varied and undecided. Latent unaddressed issues concerning the conceptualisation and operationalisation of behavioural control hinder the effectiveness of utilising behavioural control mechanisms as a form of behavioural change and intervention strategy.

Studies that aimed to identify implementation strategies to bridge the intention–behaviour gap caused by lapses in behavioural control largely focus on internal control factors that are within the power of the consumer to change (Sniehotta et al., 2005; Godin et al., 2005; Mohiyeddini, et al., 2009; Norton et al., 2017). Reliance on an internal control belief approach to behavioural control may be effective in warping the perceptions of realities and ideals that people hold; however, upon using the same approach in situations where the behavioural control is dependent on actual reality, the perspective loses its appeal. Yet, the literature remains silent on the means to overcome such behavioural control that stems from the external environment, such as the factors beyond the control of the consumer at the time of purchase. The present study extends the research in this area and contributes by providing a theoretical explanation that advances understanding of behavioural control in instances where the source of the behavioural control originates from the external environment—that is, it is ‘overt’ in nature. More specifically, positing the objectivity of overt behavioural control as a categorical and unidimensional construct positions this form of behavioural control as a suitable way to understand and target interventions for behavioural change to close the intention–behaviour gap. Empirical testing in this study justifies its use and opens up areas for future research on behavioural control.

By denoting the distinction in the different typologies of behavioural control, this study lays the foundation for making the argument that, depending on the form of behavioural control to which the consumer is exposed, it is possible to elicit a desired behavioural response by controlling the strength of the behavioural control. In targeting the specific behavioural control through priming, it is possible to effectively open or close the intention–behaviour gap, thereby either bringing about desired behaviour or deterring undesired behaviour. In doing so, the study contributes by providing an understanding of the conditions needed for consumers to purchase

sustainable products, namely through the manipulation of the behavioural control factors to which target consumers are exposed.

1.6 Outline of the Study

The study is organised in the following manner: Chapter 2 clarifies the research gap by reviewing the extant literature on behavioural control. Chapter 3 addresses the identified gap by first stating the research problem at hand, and establishes the theoretical foundation and perspectives of the study. A conceptual framework is developed by reviewing the conceptual constructs under study, establishing a relationship between the measured constructs, thereby proposing hypotheses to be tested. Chapter 4 highlights the methodology adopted, including the research paradigm, approach, instruments, and procedure. Chapter 5 reports the characteristics of participants in the research sample used and the results of testing for internal and external validity, treatment effects, and hypothesis testing. Chapter 6 discusses the implications of the research findings from the factorial experiment for theory and practice. The chapter ascertains whether research findings support—in full or in part—or disprove the proposed hypotheses, including why and how current findings agree or disagree with the existing literature. Finally, Chapter 7 provides a short account of the research findings and connects these findings to the objective of the research, its importance, and the means with which it contributes to knowledge on consumer behaviour and the field of marketing. Limitations which the study were subjected to and additional areas for future research are discussed thereafter.

2 Literature Review

2.1 Chapter Overview

A careful consideration of studies on behavioural prediction in the existing literature suggests that behavioural control is often included as one of the key factors involved in the theorisation of consumer behaviour.

In their early seminal research, Tversky and Kahnemann (1974) put forth the notion of the ‘availability heuristic’, a form of heuristics in which people develop judgement on the likelihood of a behaviour/event occurring, based on how easily information comes to mind. In an example of this, an investor may judge the quality of a particular investment based on recent information attained from the news, ignoring other relevant variables in his/her decision making (Tversky & Kahneman, 1974). Similarly, in the area of health research, it has been shown that exposure to drug advertising recall affects perceived prevalence of illness (An, 2008), and that a physician’s experience in dealing with recent conditions of patients increases their likelihood of recognising the same condition in other patients (Poses & Anthony, 1991). In considering consumer research, availability heuristics has been shown to influence estimate measures, such as store pricing (Ofir et al., 2008) and product failure (Folkes, 1988). Additionally, it is argued that the cognitive ability to store information in memory for later use is grounded on the notion that in instances where the individual selects the outcome which is most representative of the inputs provided, the higher the predictability in the successful delivery of the outcome (Tversky & Kahneman, 1973; Kahneman & Tversky, 2012). On this basis, the research by Kahneman and Tversky (2012) propounded that, when encountering an uncertain circumstance, the rational reasoning which is based on probabilities, is overpowered by subjective reasoning based on heuristics. This suggests that the reasoning relied upon by individuals during anticipated situations differs from the reasoning used when faced with unanticipated situations; thus, the behaviour engaged in would be different too (Ajzen, 2006; Kahneman & Tversky, 2012; Mahardika et al., 2019).

In recent years, similar research by Mahardika et al. (2019) has supported this line of reasoning, arguing that to accurately predict behaviour it is necessary to establish the stability of behavioural intention associated with the actual behaviour. The stability of behavioural intention is subject to both anticipated and unanticipated factors, which inadvertently may alter the actual behaviour performed. Evidence shows that unexpected events that occur prior to the individual performing the behaviour initially intended, greatly influence their temporal

perspective, often leading to the dominance of the present perspective over their future perspective in affecting likened behaviour (Wittmann & Sircova, 2018). The problem highlighted by the preceding literature is that whilst anticipated circumstances can be accounted for, namely through the concept of internal behavioural control or control over ones 'self' (Jekauc et al., 2015; Paul et al, 2016), a lot of the times internal behavioural control become ineffective when unanticipated factors appear; and this influences the ability to predict behaviour (Vermeir & Verbeke, 2006; Antonetti & Maklan, 2014).

While attempts have been made to understand the application of behavioural control when the influence of the inhibition of the behaviour is internal (e.g., attitude-alignment [Antonetti & Maklan, 2014], shifts in temporal perceptions [Wittmann & Sircova, 2018], raising self-efficacy through motivational cues [Paul et al, 2016]), little theoretical effort has been made to enrich the understanding of the conceptual boundaries and the application of behavioural control for addressing the unexpected, external factors in the environment (Ajzen, 2002; Kidwell & Jewell, 2003; Leung & Rosenthal, 2019). The application of behavioural control research has in recent times focused on the means to ensure behavioural consistency in areas of key social concern, such as promoting pro-environmental behaviour (Leung & Rosenthal, 2019) and engaging in corporate social responsibility activities (Feder & Weißenberger, 2019), as well as conservation and recycling behaviour (Khan et al., 2019). Nonetheless, most research often oversimplifies or simply dismisses the influence from the external environment; thus, any form of behavioural control is only selectively effective until the external environment inhibits behaviour.

In this chapter, a closer review of the extant literature on behavioural control is conducted. In particular, the research paradigm that grounds extant understanding of behavioural control—i.e. behaviourism—is explained. Following that, the concept of behavioural control is discussed in relation to theoretical trajectories on the concept, such as the TRA and the TPB. The discussion herein also strives to provide greater conceptual clarity on the extant knowledge gaps in -and the proposed conceptual boundaries for- behavioural control. This, in turn, helps the study to create an informed position that explains how behavioural control is relevant to extend our understanding to encourage desired behavioural change in sustainable consumption practices.

2.2 Positivistic Behaviourism

Positivist paradigms applied to consumer behaviour subscribe to an intensive, and often utilitarian, approach to the research on consumer activities within the market (Hunt, 1991). The behaviourist approach to consumer research was first introduced by John B. Watson (1913). This approach is founded on the philosophy that behaviour can be determined by external events, so much so that all living organisms can be measured, trained, and changed to do specific actions and emulate behaviour. The aim of behaviourism, according to Watson (1930), is to determine the level of predictability in which a given stimulus may cause a reactionary response. Thus, behaviour, regardless of the level of complexity, can be simplified into a basic stimulus-response association (McLeod, 2007). Based on theory, it can be observed that 'behaviourism', as an objective branch of natural science, carries the intended purpose to predict and control behaviour through research designs and methodologies that rely on empirical findings obtained through carefully considered observations of behaviour, which is a stark contrast to internal processes, such as cognition and emotions. While observable behaviour can be objectively and scientifically measured, internal processes (i.e., cognition, emotion) are often discounted, overly simplified, or just written off in studies due to their subjective nature (Watson, 1930; Mangaong-Boado, 2013; Sreen et al., 2018).

The behaviourist approach reinforces the assumption that consumer behaviour is a conditioned response to external events; the approach is activated when consumers are faced with a consumption decision. The process of 'conditioning' occurs when the person involved in making the consumption decision interacts with the external environment; the response to the external stimuli shapes consumer behaviour (Foxall, 1995; Verplanken, & Wood, 2006). Two of the most influential proponents of the behaviourist approach were Ivan Pavlov, whose experiments established classical conditioning (Pavlov, 1960), and Burrhus Skinner, who advanced operant conditioning (Skinner, 1938). Both of these researchers relied heavily on positivism to interpret results, maintaining that empirical methods, supported by objective viewpoints, can be applied to consumer behaviour studies (Eysench, & Keane, 2010).

In classical conditioning, a technique used in behavioural experiments, significant emphasis is placed on the response to a given stimulus in the external environment, which is paired with another stimulus that, by itself, does not elicit a measurable response (Gorn, 1982; Till & Priluck, 2000; Till et al., 2008; Crutzen, & Peters, 2018). Evidence from Muposhi and Dhurup (2017) show that consumers are more willing to consider making purchases of sustainable

products when relevant eco-labelling or eco-branding is attached, which illustrates that product availability of information (as to the product nature) serves as a stimulus or conditioned cue to trigger purchasing behaviour. When consumers are confronted with another stimulus, such as a promotional strategy to discount the sustainable product offer, they will spend money even more easily. Therefore, conditional effects have a higher probability of occurring in circumstances where the conditioned and unconditioned stimuli are paired (Schemer et al., 2008).

Alternatively, in operant conditioning the individual learns both i) 'desired behaviour', which results in positive outcomes and ii) 'undesired behaviour', which yields negative outcomes (Rothschild, & Gaidis, 1981; Foxall, 1993; Bagozzi, & Dholakia, 1999). In Skinner's (1938; 1953) model of operant conditioning, the emphasis was on the reinforcement of behaviour, the positive and negative outcomes associated with an operant (i.e., response). Through exposure via both reinforcement (for positive behaviour, which incites pleasantness) and punishment (for negative behaviour, which conditions the need for avoidance), the desired action can be shaped, with the assumption that the individual will maximize the benefit over the cost associated with the decision (Skinner, 1938; Skinner, 1965).

Both classical and operant conditioning offer valuable insight into better understanding consumers; their desired behaviours, behavioural analysis, as well as effecting behavioural change (i.e. strengthening desirable behaviour and inhibiting undesirable behaviour). However, critics of the theory argue that i) behaviour researched under test conditions are artificial (e.g., lab conditions, mere inference from human results) and unrealistic under real-world market conditions, and ii) behaviour ignores the cognitive and emotional aspects involved in learning (Cherry, 2012; Tonneau, 2004; Todd, & Morris, 1992).

Refuting these arguments, Woollard (2010) stated that i) the majority of consumer behaviour studies rely on data from actual consumers in laboratory conditions similar to actual purchase scenarios, thus mimicking the actual affair to a critical extent (i.e., intention and not actual behaviour), and ii) even extremists in the field of behaviourism accept that the mind does play a part in consumption behaviour; however, scientific endeavours should be allocated to the measurement and explanation of the product of the mind (i.e., the actual behaviours stemming from cognition and emotion). Boeree (2006, p.14) added to this argument by stating that '... behaviourism, with its emphasis on experimental methods, focuses on variables we can observe, measure, and manipulate, and avoids whatever is subjective, internal, and unavailable

(i.e., mental).’ Therefore, from an experimental perspective, the standard would be to manipulate the singular variable to measure its subsequent effect on another variable.

The behaviourist approach to research is deterministic and supports the ‘nurture’ aspect of the ‘nature–nurture’ debate, forwarding the notion that in the exception of innate reflexes and capacities for learning, all complex behaviour is influenced and learned from the environment (Hutchison, 2018). Thus, the assumption held is that consumer behaviour is controlled by the environment and through internal aspects.

While the literature acknowledges two major paradigms that are relied upon in social science research (Collis & Hussey, 2013; Kumar, 2019), a positivist paradigm was chosen over an interpretive paradigm for three key reasons. First, positivism states that the nature of reality being studied is stable and, thus, allows an outside spectator to make feasible, observable measurements of the depicted changes (Guba & Lincoln, 1989). Hence, when issues are identified, and their impact, objects, and entities can be measured, using a positivist paradigm is an effective approach (Onwuegbuzie, 2002; Smith, 1983). Due to the evidence available, both in the defence and the critique of the relationship between the independent variables (self-efficacy, neutralisation, product availability, product affordability, and product accessibility) and the dependent variable (purchase intention), as well as the latent role of moderating variables introduced through priming in this research, there is justification in using a behavioural approach that facilitates the creation of measurable results from which to draw comparisons.

Second, employing a positivistic paradigm facilitates the use of deductive reasoning to approach the quantitative data intended to be collected by this research, relying on objective methods to justify the results analysed from the data (Wicks & Freeman, 1998; Green & Thorogood, 2018). Effectively, this accounts for the problems of bias and speculation that are common to interpretive research methods. In addition, the systematic means whereby the positivistic paradigm views data allows this approach to explore the direct relationship and its strength between studied constructs. Thus, through statistical inference, the significance (or lack) of the relationship between constructs can be identified. As a result, this quantitative form of research allows for high reliability and validity in testing the hypotheses in the present study.

The final advantage of using a positivistic paradigm is that data can be substantiated and replicated for future research, since replication is necessary to assess and build upon the existing body of knowledge (Flew, 1984). Consequently, other researchers should be able to build on the present study and produce comparable results (Cavana et al., 2001). Therefore, positivism provides an avenue for future research that is focused on furthering the application of the new theory of behavioural control put forth in the present study and its applications beyond the realm of the sustainable product purchase intention.

2.3 Behavioural Control

Psychology, as a discipline, is dedicated to the study of the mind and how cognition drives behaviour (Taylor et al. 1964). Consumer behaviour draws on elements of psychology and lends itself to other diverse fields, namely sociology, economics, and marketing, to provide clarity in understanding how the everyday consumer would behave in specific conditions (East, 1997). The knowledge of the behaviour of consumers forms the basis on which marketers then build strategies and promotions to better access the target consumer and cultivate favourable behavioural consumption responses. This provides valuable insights to marketers: by utilising data on past purchase behaviour of consumers, and by identifying the relevant stimuli to create favourable market conditions to elicit a desired behavioural response, marketers can more accurately predict behavioural performance. To be precise, the understanding of consumer behaviour aids marketers in identifying the internal and external stimuli necessary to affect specific behaviour (purchase of a specific product or brand). This has promulgated in multiple research perspectives utilising consumer-behaviour theory to explain sustainable consumption phenomenon determined by factors such as gender, race, religion, and education (Luchs & Mooradian, 2012; McCabe et al., 2013; Staniškis et al., 2012; Thøgersen & Schrader, 2012; Leung & Rosenthal, 2019; White et al., 2019). Still, the gap in the literature remains, and much research is dedicated to identifying the many conditions which drive consumers to choose a specific product over another alternative.

Many studies have attempted to rationalize the consumer-behaviour process through models and frameworks, many of which provide the foundational basis upon which the present study expands. Earliest models studied the impacts of behaviour that, when carried out, may elicit favourable and/or unfavourable reactions from others, and may reveal unanticipated difficulties or facilitating factors. The feedback stemming from this research will likely change the individual's behavioural, normative and control beliefs, affecting subsequent intention and actions (Fishbein & Ajzen, 1980). The most frequently cited models include the theory of goal-directed behaviour, the theory of trying, and the TPB, which is an extension of the TRA (Bay & Daniel, 2003; Fishbein & Ajzen, 2010).

According to the TRA, both the attitude surrounding a behaviour and the subjective norm (the individual's insight into what others perceive the individual should do in the circumstance and the extent to which the opinion of others is of importance to the individual) form the intention to perform the behaviour. The TRA puts forward that certain aspects of our behaviour are internal, and thus, cognitive control and alteration of perspective may facilitate greater

behavioural consistency where lacking. A critical assumption held by the TRA is that a direct determinant of behaviour is behavioural intention, and that the success of the theory in explaining behaviour is dependent on the level of volitional control an individual has over the performance of the behaviour. Hence, the theory cannot accurately predict behavioural performance when the behaviour is beyond the volitional control of the individual. This has been criticised as simplistic and too limited in its application to predict realistic behaviour, as supported by Fishbein and Ajzen (1980), who built upon the application of TRA through TPB, arguing for the additional construct of perceived behavioural control. The construct of perceived behavioural control comprises past purchasing experience and anticipated problems with the purchase decision that affect the perceived ease of performing a behaviour (seen in Figure 2.1). This has become a cornerstone for much consumer behaviour research aimed at explaining behaviour such as drug use (Hogarth et al, 2012), green product usage (Vazifehdoust et al., 2013), dietary behaviour (Povey et al, 2000), and sustainable consumption behaviour (Leßmann, 2015; Ghose & Chandra, 2019). Reliance on these models is due in part to the ease of operationalisation of these models and the relative capability to anticipate behaviour (Armitage & Conner, 2001; Conner & Armitage, 1998; Sutton, 1998; Zint, 2002). However, a greater scrutiny of the current literature and an analysis of criticism by researchers reveal that the ability to predict behaviour by existing models are not as straightforward as assumed.

A key discussion in the literature surrounds which of the two viable constructs should be used in measuring a behavioural change, namely the attitude surrounding the behaviour or the behavioural intention associated with the performance of the behaviour.

In considering the use of 'attitude' to determine behaviour, researchers in the social science have debated the usefulness of attitude as an accurate predictor of observable behaviour for many years, stemming from the pioneering research by LaPiere (1934). Careful consideration and a thorough review of the literature at the time led Wicker (1969) to posit that at its best, attitude could only account for an estimated 10 per cent of variability in predicting behaviour. Subsequently, Deutscher (1966, 1973) responded to this by arguing that there is a lack of theoretical reasoning to expect any form of congruence between the words spoken and the actions performed, and every reason to expect some form of discrepancy at the time. However, a lot of research has gone into examining the attitude-behaviour relationship since the publication of LaPiere's article, providing greater clarity on the parameter and theoretical confines of the relationship. Early studies focused on the bivariate nature of the relationship, that is, attitude was perceived to be the sole predictor of behaviour (DeFleur & Westie, 1958).

Eventually, researchers recognized the importance of incorporating the social situational variables in better understanding the attitude–behaviour relationship, which was a notable development for theory in explaining the attitude–behaviour inconsistency (Warner & DeFleur, 1969). The attitude–behaviour inconsistency was linked to the moderation effect caused by the social interaction of the individual within a system of social constraints which prevented the individual from ‘legitimising’ behavioural performance (Warner & DeFleur, 1969). Influenced by this particular insight, researchers proceeded to operationalise such social constraints and various others to gain better contextual understanding of the attitude–behaviour relationship.

DeFleur developed the ‘contingent consistency’ approach to understand the attitude–behaviour relationship. The contingent consistency approach argues that a combination of social constraints (i.e., societal norms, and visibility of the behaviour being performed) affects the attitude–behaviour relationship (Warner & DeFleur, 1969). The approach further contends that multiple intervening variables would affect the attitude–behaviour relationship, and that the scope of the respective research would be geared to identify and measure the strength of each these variables. A latter update to the contingent consistency approach, called the ‘configurational approach’, which was meant to increase the predictive power of the model, combines attitude with social influence variables in configurations which then facilitates the measure of interaction effects between such variables (Acock & DeFleur, 1972). Thus, the basic contingent consistency approach involves adding attitudes to individual constraints (i.e., skill and knowledge), and social constraints to predict behavioural performance. On the other hand, the configurational approach posits that the relationship between attitude and behaviour is not simply additive, but also involves significant interrelation effects between variables. Regardless of which approach is used, the common shortcoming is that neither approaches establish parsimony; a difficulty in establishing which social constraints are most crucial and require inclusion in the research process. This problem is further complicated by the rapid proliferation of ‘intervening’ variables that may interfere in the attitude–behaviour relationship. The concept of parsimony in research stipulates that these variables be confined to some manageable set that can be applied in an iterative nature (Albrecht & Carpenter, 1976).

The idea of relying on attitudes, alongside some operationalised measure of social norms, was first proposed by Fishbein and his associates (Fishbein & Ajzen, 1975; Fishbein & Ajzen, 1980; Fishbein & Ajzen, 2010; Chan & Fishbein 1993). Through theoretical development and empirical testing over the years, the authors have established the theory of attitude–behaviour relationship that predicates a need to integrate a set of predictive variables into a single

conceptual model. The three basic antecedents that form the basis of the model are (1) the attitude associated with the behaviour to be performed, (2) the normative beliefs associated with the performance of the behaviour, (3) and the motivation to comply with the normative beliefs (Fishbein, 1963). Thus, the two specific antecedents of behavioural intention are attitudinal factors and normative factors (which itself is a product of normative beliefs and the motivation to comply with those same beliefs).

In his research, Fishbein (1963), found that there is high correlation between the attitude to perform the specified behaviour, the normative beliefs, the motivation to elicit those same beliefs, and high behavioural intention to perform the specified behaviour. Indeed, in their research, Ajzen and Fishbein (1973) suggested that in their assessment of 10 different studies, the average multiple correlation was about .81 ($R^2 = \pm .66$), which when compared to earlier findings by Wicker (1969)—who stated that the amount of variation that is accounted for by attitudes averages about 10 per cent—is a more accurate predictive model of behaviour. The basic model proposed by Ajzen and Fishbein (1973) is both more parsimonious and draws similarity from DeFleur's model on the attitude-behaviour relationship. However, a comparison with the work of other researchers at the time brings to light some key differences in Ajzen and Fishbein's 'behavioural intention' model. The first and most discernible difference is that the model is focused on determining behavioural intention rather than attitude, so much so that the strong correlation between behavioural intention and behaviour is deemed sufficient in predicting the behaviour that is initially intended. Yet, this difference in the application of theory to predict behaviour leaves too much room for interpretation, particularly when the intention does not fit the actual behaviour performed. The second difference is that the first variable in the behavioural intention model is the attitude related to performing a specific behaviour within a specified set of circumstances, rather than the attitude associated with the object. In that sense, as opposed to generalising attitude, the behavioural intention model deals with very specific attitude related to the performance of very specific behaviour. The limitation of this approach is that, due to the specific nature of the relationship between attitude and behavioural intention, the findings of such research cannot be generalised beyond the parameters of the experiment. The third and final difference is that the behavioural intention model utilises semantic differential scales for measuring attitudes rather than traditional Likert-type scales. For example, in a study Ajzen and Fishbein (1972) utilised a series of hypothetical scenarios to which individuals were exposed and then asked to respond. The individuals were then expected to choose between adjective alternatives to describe their perceptions of the

actions required in each scenario. Thus, the range of behavioural actions in which an individual can engage with an attitude object is incredibly varied. Hence, it is important to develop measures that encompass at least part of the hypothetical range.

Indeed, for several decades now, beginning with the pioneering effort of LaPiere (1934), researchers have debated the efficacy of attitude as a predictor of actual behavior. Early reviews of the research accumulated during this period led researchers, such as Wicker (1969), to conclude that, at best, attitude accounts for about ten percent of the variability in predicting behavior. Deutscher (1966; 1973) has gone even further in arguing that there is no theoretical reason to expect congruence between attitude and behaviour, and, in fact, every reason to expect discrepancies. It now becomes clear that, while the rhetoric for using attitude to determine actual behavioural performance may constitute a relevant predictor of behaviour, attitude is easily swayed and succumbs to overgeneralisation in its application. It is this problem with the operationalisation of 'attitude', a problem of parsimony, which lends itself to the abuse of creativity of researchers and over reliance on interpretivism. The result of which has been the multiplication of potential 'intervening variables' which further complicates operationalisation and dilutes significance in determining any kind of bivariate relationships between variables (Albrecht & Carpenter, 1976; Ajzen & Cote, 2008).

Conversely, the reasons to utilise behavioural intention to determine actual behaviour is due to its reliance by researchers as a proxy for actual behaviour (Carrington et al., 2010; Hassan et al, 2016; Kytö et al., 2019). By acknowledging that actual behaviour is positively correlated to higher behavioural intention, it can also be concluded that the actual behaviour is dependent on the antecedents of behavioural intention. The greatest accuracy in behavioural prediction is achieved when researchers are able to compare the intended behaviour with the actual behaviour simultaneously. This allows researchers to find the gap(s), which may provide insight into the reality of time (Shang et al., 2019; Kytö et al., 2019). If the identified gap between intention and behaviour is excessive, then researchers may be able to ground new strategies to bridge the intention-behaviour gap. Thus, while some studies have looked at the attitude-behaviour gap as an indirect predictor of behaviour (Lavergne & Pelletier, 2015), more recent studies, such as Grimmer and Miles (2017) have focused on the intention-behaviour as a direct predictor of behaviour (e.g., TRA, TPB, Carrington's Behaviour-Intention Model).

A pivotal limitation of the TPB is that it can only focalise future behaviour, which is derived from behavioural intention, meaning that any events between the formation of the initial

intention and the performance of the actual behaviour may intervene to change behaviour. In fact, owing to the intention–behaviour gap, only 36 per cent of initial intention actually manifests in intention-consistent behaviour (Armitage & Conner, 2001; Rise et al., 2010). The ‘intention–behaviour gap’ is commonly described as a paradoxical behavioural phenomenon in which the initial intention conflicts with the actual behaviour performed (i.e., intent to buy sustainable product, but at point-of-sale purchase non-sustainable product instead) (Sheeran, 2002; Sheeran et al., 2003; Sheeran & Webb, 2016). This consideration has led researchers to question the assumption of ‘sufficiency’ presented by the TPB; the assumption holds that the TPB adequately encapsulates all theoretical determinants of behavioural intention (Rise et al., 2010). In developing the TPB, Ajzen (1991) made explicit reference to this and thus relaxed this assumption further, stating that in principle the TPB is flexible in its inclusion of additional predictors as long as their inclusion increases the explained variance of behavioural intention. Consequently, several researchers have since proposed additional predictors meant to augment the model’s predictive validity; these include the role of self-identity and the perceptions of one’s self (Rise et al., 2010), the importance of preparatory actions in anticipation of behavioural performance (Abraham et al., 1998), determining how goal intentions lead to goal performance (Conner & Armitage, 1998), the role of emotions in predicting behavioural intention (Parkinson et al., 2018), and the role of moral obligation as a determinant factor in forming purchase intention towards halal products (Ali et al., 2018), among others.

In fact, it was the TPB which posited behavioural control as a means to better understand the ability to predict behaviour in the context of the intention–behaviour gap (Fishbein & Ajzen, 2010; Kiriakidis, 2017). Although the TPB has been used to describe a large array of human behaviours, a prime focus of research has been on sustainable consumption and sustainability policies (Vermeir & Verbeke, 2006; Nguyen et al., 2019; Garcia-Herrero et al., 2018; Ghose & Chandra 2019; Vazifehdoust et al., 2019). Prototypical research has targeted concerns from local communities, such as sustainable transportation use (De Groot & Steg, 2007), workplace behaviour (Greaves et al., 2013), and recycling (Nigbur et al., 2010) in different locales around the world (Oreg & Katz-Gerro, 2006; Chao, 2012). In his research, Niaura (2013), tested the validity of the TPB variables and conservation behaviour on a sample of young adults. Findings from his research showed that the relationship between sustainable intention and actual behaviour was twice as strong as compared to the relationship between attitude and behaviour, positing the notion that behavioural intention is a reliable predictor of proximal behaviour (Niaura, 2013). Earlier TPB research by Armitage and Conner (2001) relied on a meta-analysis

to predict 39 per cent of the variance in behavioural intention, 21 per cent of the variance in self-reported behaviour, and 30 per cent of the variance in observable behaviour. Similarly, Kaiser et al. (1999) investigated the effects of environmental attitudes and their subsequent effect on environmental behaviour, indicating 40 per cent of the variance in behavioural intention, and 38 per cent of the variance in ecological behaviour. The strongest predictability of TPB was demonstrated by Kaiser et al. (2005) in which they explained 76 per cent of the variance in conservation intention and 95 per cent in sustainability behaviours. Thus, the utility of the TPB in explaining sustainable intentions and behaviour was demonstrated, concluding that the subjective norms held by individual are sharply influenced by the idiosyncrasies of evaluators (Nigbur et al, 2010) and moderated by group/self-identification (Schultz et al., 2007).

In a review of the literature on the determinants of sustainable consumption behaviour, common consensus suggests that both the constructs in the TRA and TPB offer themselves as suitable determinants of sustainable consumption behaviour (Luchs & Mooradian, 2012; McCabe et al., 2013; Scholl et al. 2010; Staniškis et al., 2012; Thøgersen & Schrader, 2012).

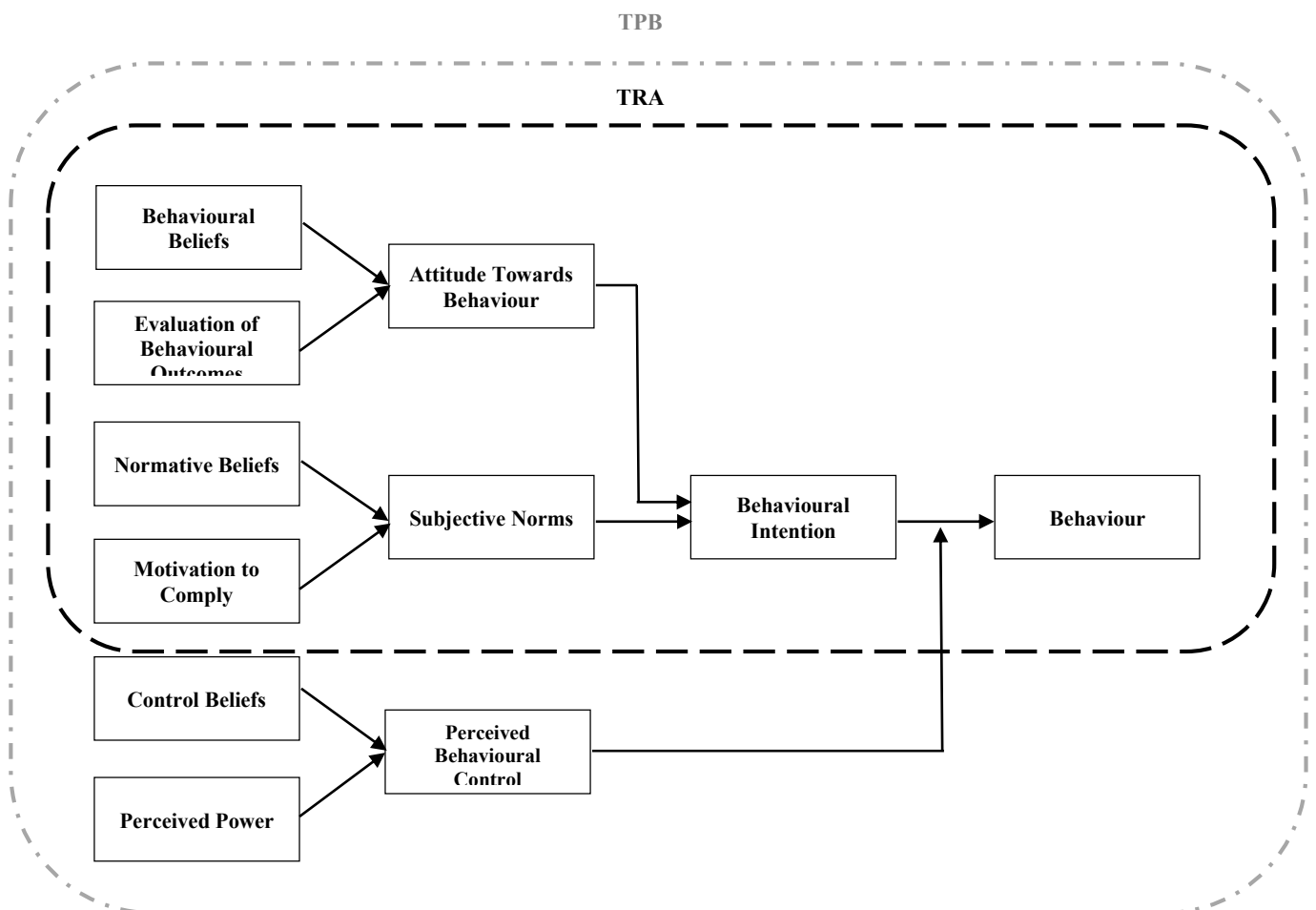


Figure 2.1 TRA and TPB Source: Ajzen (1985, 1991)

As illustrated in Figure 2.1, the TPB contends that in certain instances when a person decides on performing a specific behaviour, the individual may not have volitional control over performance of the behaviour. The absence of volitional control may be related to the presence of behavioural control. In this sense, the presence of behavioural control impedes the performance of the specific behaviour originally intended, opening the behaviour-intention gap. Furthermore, when volitional control is present, specific behaviour may be performed, rendering irrelevancy to behavioural control and closing the intention-behaviour gap, effectively reducing the TPB to TRA (Ajzen, 2002; Ajzen, 2011; Sniehotta et al., 2014).

Extant research relies on a single theoretical approach to investigation within a defined context that utilises the basic framework of the TRA viewed through the theoretical lens of the TPB (Hardeman et al., 2002; Armitage & Conner, 2001; Fishbein & Ajzen, 2010; Kautonen et al., 2013; Procter et al., 2019). Research conducted through a single theoretical approach focusses on the identification of the determinants associated with the specified behaviour of interest, as well as the type of relationship shared between the determinants and the behaviour (Michie & Johnston, 2012). Through follow-up rejoinders, proponents of the TPB have defended the predictive validity of the theory, which is predicated on criticisms that TPB did not specify the process of how cognition changes, thereby providing an insufficient basis for devising behaviour intervention strategies (Sniehotta et al., 2014). In fact, both conceptual and empirical papers since have agreed that TPB is not a theory of behaviour change, but instead serves as a useful reference point on which behavioural intervention strategies may be based upon (Ajzen, 2011; Ajzen, 2015; Conner, 2015).

Though the TPB provides a useful lens from which to base this study, there is still a need for more effort to be dedicated to enhance our understanding of the conceptual boundaries and strategies to approach behaviour change intervention. This is evidenced by the variability in the conceptualisation and operationalisation of behaviour change, which are carefully considered and discussed in later sections of this chapter. In addition, gaps in knowledge in behavioural control have not been thoroughly explored, hampering the depth of our understanding in matters of behavioural reinforcement (strengthening), behavioural inhibition (weakening), and the manipulation of the intention-behaviour gap. Yet, these topics remain underexplored and empirical evidence for the practical application of behavioural control theory to circumvent the intention-behaviour gap is sparse.

To fill this gap, the present study identifies, reviews, and organises the current work on behavioural control, it then proceeds to test the application of theory to elicit sustainable consumption behaviour and/or prevent non-sustainable consumption behaviour. The present study uses a deductive approach in the form of deductive reasoning—that is, a top-down approach to research which develops hypotheses based on existing theory, and then proceeds to design strategies to test the application of theory by the extent to which it can confirm/reject proposed hypotheses. By building on existing theory (e.g., TRA, TPB; Ajzen, 1975), this study can validate the conceptual boundaries of behavioural control theory, and provide the means by which marketers may design interventions to engage with the intention–behaviour gap; to either open the intention–behaviour gap (i.e., to deter unfavourable behaviour) or close the intention–behaviour gap (i.e. to reinforce favourable behaviour).

2.3.1 Extant theorisation

The TPB, the extension of the TRA, has been a cornerstone of behavioural control research for decades. Both theories belong to the ‘attitude–behaviour’ branch of theories. This branch assumes that all individuals are rational and make systematic use of information that is made available to them. Individuals use this information in tandem with the possible implications of their actions when deciding on performing behaviour (Ajzen & Dasgupta, 2015; Fishbein & Ajzen, 1980; Fishbein & Ajzen, 1975).

The TRA is an early example of a theory that posits a linear model of behaviour change; in simple terms, it is the intention held by the individual towards the performance of a given behaviour. In other words, their readiness for the performance of a given behaviour determines the likelihood of the actual performance of the behaviour. Therefore, the higher the initial intention towards the performance of the behaviour (i.e., intention to buy the sustainable product), the higher the chance of the individual actually executing the behaviour (i.e., actual purchase of sustainable product) (Fishbein & Ajzen, 1975). Apart from predicting behaviour, the TRA theorizes that behavioural intention is comprised of two main elements: i) attitude (i.e., the degree to which the performance of the behaviour is positively or negatively valued), and ii) subjective norms (i.e., the perceptions of social pressure to engage or not to engage in the behaviour) (Ajzen & Fishbein, 1980). Predicated on the expectancy–value model, the attitude towards the behaviour is determined by behavioural beliefs that link the behaviour of interest to the expected outcomes. Thus, the strength of each behavioural belief is weighted by the evaluation of the expected outcome (Ajzen & Fishbein, 1977). By using the same analogy, the subjective norm of behaviour is determined by normative beliefs that link the behaviour of interest to the expectations of important referents (e.g., spouse, family, friends, supervisors, co-workers) so that the strength of each normative belief is weighted by the motivation to comply with the expectations of the important referent (Ajzen & Fishbein, 1973). The theory noted that, while individuals may hold many behavioural beliefs with respect to a given behaviour, it is likely that only a relatively small proportion of these beliefs may be readily accessible at a given point in time, and thus the perspective of ‘readily accessible’ is taken in the assessment of the beliefs’ underlying attitudes and subjective norms (Ajzen & Fishbein, 1972).

In the following decade, Ajzen acknowledged the limitations of the TRA in explaining situations where consumers have little to no volitional control in determining their behaviour, and thus, could not ensure performance of behaviour. To fill this gap and address the circumstances that are beyond the volitional control of individuals, Ajzen added the construct

‘perceived behavioural control’ to account for this, upgrading the TRA into the TPB (Ajzen, 1991). The construct, perceived behavioural control, refers to individuals’ perceptions of their latent ability to perform specific behaviour. Drawing on an analogy similar in nature to the expectancy–value model of attitude, perceived behavioural control is determined by the total number of accessible control beliefs (i.e., beliefs about the presence of factors that may either impede or facilitate performance of the specified behaviour) when the behaviour is to be performed (Ajzen, 2011). In specific terms, the strength of each individual control belief is weighted according to the perceived power of the control factor as assigned by the individual. Therefore, perceived behavioural control alongside intention (TPB) is a more accurate predictor of behaviour (Ajzen, 2002). Indeed, the TPB in its application to behavioural change intervention may offer a more accurate model of behaviour prediction encompassing circumstances both within and beyond volitional control. Additionally, due in part to the systematic aspects of our deductive research approach, the theory lends itself to highlight the targeted entry points for effective behavioural intervention strategies to elicit favourable consumer response. To move our understanding of behavioural control forward, the following section will delve into the existing conceptualisation and operationalisation of behavioural control offered by past researchers in the field.

2.3.2 Extant conceptualisation and operationalisation

The concept of behavioural control, which stems from the TPB, provides consideration for the many beliefs that individuals hold in relation to their ability to actually perform a specified behaviour (Ajzen, 1985). In reality, the idea behind the concept itself was based on similar constructs from other behavioural models, such as ‘barriers’ in the health belief model (Rosenstock et al., 1988) and ‘facilitating conditions’ in the model of interpersonal behaviour (Triandis, 1977). However, its strongest and most pronounced influence is derived from the theory of self-efficacy proposed by Bandura (1977). In his research, Bandura clarified that the expectations individuals hold can be categorized into two discrete types: The first, self-efficacy, refers to people’s beliefs about their capabilities to exercise control over their own level of functioning and over events that affect their lives to affect an intended outcome (i.e. by accomplishing a particular task), and outcome expectancy, a belief about the chance of the behaviour leading to a specified outcome. Bandura then proceeds to elaborate that self-efficacy is a precondition to i) behavioural change, as it forms the initial condition that triggers coping behaviour, and ii) behavioural performance, due to the ability of self-efficacy to incite individuals to reflect on their confidence in carrying out specified behaviour (Bandura, 1982).

While self-efficacy was the basis of the behavioural control concepts, Ajzen in his research (Ajzen, 1985; Ajzen, 1991; Ajzen, 2002; Ajzen & Madden, 1986; Fishbein & Ajzen, 2010), highlighted two important observations that establish the rationale for replacing self-efficacy with behavioural control within the TPB. The first argument relies on the limited relevancy of self-efficacy in situations where the individual lacks volitional control. For example, if a consumer enters a storefront with the intention to buy an energy-saving lightbulb but the store is out-of-stock for the specified product, the situation is beyond the control of the consumer and increasing/decreasing volitional control does not change the circumstance in any way (i.e., the energy-saving lightbulb will still be out of stock). Thus, control through self-efficacy only presents a modicum of relevance in situations where the performance of the behaviour or outcome in questions is strongly influenced by the individual's ability, which itself is intrinsic (Manstead & Eekelen, 1998).

The second argument highlights the difficulty in providing an objective measure at which point volitional control is established by an individual, thus limiting the application of self-efficacy as a predictor of behaviour (Ajzen, 2002). In an example of this, although an internal factor such as 'ability' may be considered as malleable and potentially under volitional control to some, others may consider it as immutable and not amenable to control (Dweck & Leggett, 1988; Ajzen, 2002). Indeed, the perceived control established by the individual themselves is separate and independent of the internal and external loci of the factors which are responsible for it. Based on these observations, with regard to the conceptualisation of behavioural control, it was initially proposed that perceived behavioural control directly impacts behaviour (Ajzen, 1985; Ajzen, 1991), which is supported by evidence from researchers that investigated the effect of perceived behavioural control after initial intention for the behaviour of interest has been established (Armitage & Conner, 2001; Cooke & French, 2008; Yzer, 2012). With the advancement of knowledge in the field, behavioural control has come to be considered as a moderating variable rather than a predictor in determining the likelihood of behaviour occurring. The rationale to support this shift in perspective accompanies the ease with which researchers may quantify the change in initial intention as opposed to accounting for the change in actual behaviour which more often than not does not occur in an instance. From the consumers' perspective, an individual is more likely to act on an intention when they perceive they have greater control over the performance of the behaviour (Ajzen, 2012; Fishbein & Ajzen, 2010). However, as Ajzen argues, though self-efficacy and behavioural control share many similarities, the more important difference is in the operationalisation of both concepts.

The assessment of self-efficacy is prompted by asking individuals their likelihood of overcoming a particular obstacle or onerous task; on the other hand, the investigation into establishing behavioural control raises questions as to what extent the individual is able to perform a specified behaviour and to what degree the behaviour is under their control (Ajzen, 1985; Ajzen, 1991; Ajzen, 2002; Ajzen, 2012; Ajzen & Madden, 1986; Fishbein & Ajzen, 2010). This argument was reinforced by Terry and O’Leary (1995) who, based on empirical findings, postulated that the independent measures of behavioural control and self-efficacy are not interchangeable.

Despite the theoretical validation and the empirical findings to support Ajzen and likeminded researchers for the conceptualisation and operationalisation of the concept of behavioural control, some researchers propose a spectrum of alternative applications of the concept (Fishbein & Ajzen, 2010; Ajzen, 2012; Tornikoski & Maalaoui, 2019). For example, while Terry and O’Leary (1995) concurred with Ajzen on the general operationalisation of the differing concepts of self-efficacy and behavioural control, they contested Ajzen on the conceptualisation of the concepts. They considered behavioural control factors as ‘external constraints’ whilst self-efficacy was viewed as ‘internal constraints’, both of which are encountered by individuals in the performing of behaviours of interest. And yet, other researchers have posited that neither perceived behavioural control nor self-efficacy are accurate predictors of behaviour if the external environment supersedes actual behaviour performance, rendering any means of internal/intrinsic behavioural control ineffective (Armitage & Conner, 2001). Indeed, Trafimow et al. (2002) referenced Ajzen and Madden (1986, p. 457) in describing perceived behavioural control as “... the person’s belief as to how easy or difficult performance of the behaviour is likely to be.” Through further elaboration, Trafimow et al. (2002) predicated the need to separate the individuals’ perceived control over the behaviour from the difficulty associated with the behaviour; whilst individuals may have volitional control in the current circumstance to exert the behaviour, they may succumb to certain difficulty that prevents behavioural performance, such as when investors have to inform their clients of poor investment choices, or when managers need to reprimand employees and explain to them the reason for making them redundant (Ajzen & Madden, 1986; Chan & Fishbein, 1993). In earlier research, Manstead (1998) typified that behaviour which required higher ability was dependent on self-efficacy, while behaviour that required lower ability was more dependent on behavioural control. Based on these findings, defining perceived behavioural control in terms of the perceived ease with which individuals approach the

performance of the behaviour generates potential for perceived behavioural control to overlap with self-efficacy in domains where the outcome of the behaviour is largely dependent on ability, but diverge in domains where the outcome of the behaviour is not dependent on ability. Other researchers, such as Vermeir and Verbeke (2006), have attempted to perceived extend behavioural control through the addition of extra dimensions shaped by context, such as perceived availability (i.e., the extent to which individuals perceive the availability of resources required to perform the behaviour of interest) (Barnes et al., 2016) as well as perceived effectiveness (i.e., the extent to which the individual believes that his or her personal efforts can contribute to the solution of a problem) (Heo & Muralidharan, 2019). They opined individuals who were motivated to perform behaviour of interest oftentimes did not follow through with the initial intention held, and that this problem may be related to the perceived barriers that contribute to the opening and widening of the intention–behaviour gap, such as inadequate promotion and visibility, lack of regularity, and scarcity of products as demanded by consumers. Similarly, the findings of scholars, such as Armitage (2005), Manstead and Eekelen (1998), add further support to show that perceived behavioural control is in fact multidimensional; reflecting the perceptions of capacity, autonomy, confidence, self-efficacy, and the locus of control. It is these clear inconsistencies and the difficulty in clarifying the application of behavioural control that form the several nuanced knowledge gaps. The means to fill these knowledge gaps are discussed in the subsequent sections.

2.3.3 Extant knowledge gaps

The convoluted and inconsistent application of the concept of behavioural control has limited its application in consumer behaviour, leaving marketers uncertain on how to elicit favourable behaviour and/or deter undesired behaviour. Whilst behavioural control remains an important concept to address the behaviour-intention gap, there are three pivotal challenges that need to be addressed before behavioural control can be a reliable source of behavioural change and reinforcement interventions.

First, the conceptualisation of behavioural control suffers from its sole reliance on control beliefs which are overly subjective in nature. The construct, control beliefs, stems from the perceptions of individuals. The pivotal difference between beliefs and perceptions is in their conviction: Perception relies on sensory data and processes information through interpretation, while beliefs are derived from the vindication of those same perceptions disregarding any semblance of truth (Schwarz et al., 2016; Searle, 2015). The assumption of control belief holds

up in situations where behavioural intervention strategies aim to alter the ideals and supposed realities held by the individual, such as targeting low self-esteem consumers and convincing them that buying a particular beautification product would improve their self-image may elicit the marketers desired response (to buy their product). However, applying this same principle in situations where behavioural performance is dependent on actual realities, or when behavioural performance is subjected to change at the time the actual realities take effect (e.g., when the degree of truth to the belief matters) causes the behavioural intervention in this instance to become ineffective, if not completely redundant. In fact, the control beliefs perspective towards approaching behavioural control undermines the importance of investigating and the understanding of ‘actual’ behavioural control and instead emphasises ‘perceived’ behavioural control (Armitage & Conner, 2001; Sheeran, 2002; Sheeran & Webb, 2016). A common concern in the literature, from the perspective of the behaviourist paradigm, is that actual behaviour is difficult to measure and assess, and that the intensive focus on *perceived* rather than *actual* behaviour is more quantifiable, and thus, warranted. The present study provides the empirical insights into the application of the ‘new behavioural theory’, which explains why a shift in focus from ‘perceived’ to ‘actual’ behavioural control is necessary and how this difficulty can be overcome.

Secondly, the ongoing debate on the operationalisation of behavioural control provides strong support for the need for a standardized and clear application of behavioural control theory. In other words, to what extent does volitional control prove ineffective when the individual is no longer dealing with perceived behavioural control. In the absence of volitional control, to what parameters does actual behavioural control adhere? The complexity of behavioural control demands greater scrutiny from researchers to validate the operationalisation of the concept, whereas the variability of the concept emphasizes the need for improved clarity on when the different approaches toward the operationalisation of behavioural control (i.e., actual behavioural control or perceived behavioural control) should be considered. Essentially, the perceived power of control belief relied upon in the operationalisation of the control factor is a double-barrelled subjective evaluation as both perception and belief are subjective to the individual. Therefore, the insights gained from perceived power of control beliefs may only be able to explain internal or covert behavioural control factors, that is, those factors in which the individual holds the power over control and so the control is internal to the performer of the behaviour, such as self-efficacy. This approach alone is insufficient to account for factors that are beyond the individual’s internal control. Based on this reasoning, this study posits the need

for a second form of behavioural control, namely ‘overt behavioural control’. The operationalisation of overt behavioural control considers control factors where the power of control is external and therefore not held by the consumer such as when concerned with the accessibility and availability of products sold by marketers; both provide instances where the performer of the behaviour has no influence over the control factors originating from the external environment.

The present study argues that there is a disparity between covert behavioural control interventions and overt behavioural control interventions. Depending on the source nature of the behavioural control (whether it originates internally or externally), the type of intervention strategy needs to be differed. By suggesting otherwise, researchers would be suggesting that individuals are able to exert control over their external environment, and as previously discussed, this is not always the case.

In terms of the variability in the operationalisation of behavioural control, researchers these days rely on a perceptual route which has seen focus of the application of perceived power of control beliefs, and, to some extent, perceived availability and perceived difficulty of control beliefs (Kraft et al., 2005). Other notable scholars have operationalised behavioural control as a unidimensional construct (Ajzen, 2002), and yet others have operationalised behavioural control as a multidimensional construct (Manstead & Eekelen, 1998; Sparks et al., 1997; Terry & O’Leary, 1995; Vermeir & Verbeke, 2006). There is debate in the literature around the circumstances when a unidimensional approach over a multidimensional approach should be utilised, vice versa. It is such variability in the operationalisation of behavioural control that posits the need for greater standard optimal measures and clarification for the procedures in approaching behavioural control (Rossiter, 2017).

Lastly, this study aims to provide empirical evidence to vindicate the extension of the TPB as a suitable theory of behavioural change. Indeed, many of the issues surrounding the operationalisation of behaviour control via the TPB is due to the lack of proper designing and testing of intervention strategies (Mitchie et al., 2011; Sniehotta et al., 2014). An error in behavioural intervention design is when researchers fail to identify the initial problem—e.g., is the problem caused by a lack of motivation to perform the behaviour or is the problem caused by a failure to carry out existing favourable intentions? The design for each problem is vastly different; whereas, in designing intervention strategies for the first problem the focus is on establishing strong initial intention, the purpose in designing intervention strategies for the

second problem harkens to the identification/removal of the barrier causing the non-performance of the already established intention (Larsen et al., 2018). It is the second problem, that pertains to the intention–behaviour gap and lacks relevant intervention strategies (Ajzen, 2015). By assuring that the beliefs accessible in the behavioural context do not vary substantially from the initial intention recorded at the behavioural elicitation phase; standardizing the skill, resource and means available to individuals when drawing comparison between treatment vs. non-treatment groups; accounting for the barrier of behavioural performance and manipulating its presence to study its effect; and ensuring that no additional information or unanticipated events have caused initial intention to be revised prior to assessing behaviour; this study will indicate the most important effects demanded and currently absent in the literature, that of i) the behavioural control barriers, and ii) the effectiveness of intervention treatments.

2.3.4 Reconfiguring Behavioural Control

The introduction of behavioural control—itsself a component of the TPB—has been popularized through its many conceptualisations and operationalisations in consumer behaviour literature (Ajzen, 1985; Ajzen, 1991). It has become a pivotal focus for many researchers as a means to better understand the intention–behaviour gap, the discordance between initial intention and actual behaviour, as well as the means to identify and introduce behavioural intervention strategies to address that gap in desired ways (Ajzen, 2015). In consideration of the knowledge gaps pertaining to the limitations, variability and misconceptions of behavioural control identified and discussed, this study contends for the need to support the new theory of behavioural control through valid, reliable and clear empirical evidence that solidifies our understanding of behavioural control. The central basis for our understanding of the many types of behavioural control is focussed on the two major but sufficiently distinct categories of behavioural control—namely, covert behavioural control and overt behavioural control. The following sections explain in detail the means to apply these two types of behavioural control.

2.3.4.1 Covert Behavioural Control

The concept of covert behavioural control considers the behavioural control mechanisms that are innate to every individual. Every individual has an inherent volitional control over their behaviour that is only limited by their resources or unforeseen circumstances caused by the external environment (e.g., product being unavailable). A simple example of covert behavioural control would be self-efficacy, which refers to one's own belief about their ability

to competently perform a behaviour of interest to achieve some intended outcome (e.g., the ability to solve a maths equation). By experiencing success, for example, the mastery of a task will build the individual's self-belief in performing the task (raising self-efficacy), and the failure of the task will undermine the efficacy belief (lowering self-efficacy). In a more complex example of covert behavioural control, individuals may experience distress if they have performed a behaviour that conflicts with their initial intention - engaging in an act of neutralisation (i.e., personal self-justification of the hypocritical behaviour). The nature of hypocritical behaviour is latent and so often requires exposing by others, this is because such behaviour has negative connotations attached and is viewed unfavourably according to social norms (e.g., criticizing reckless driving and then subsequently running a red light). By raising awareness of hypocrisy to the individual performing the behaviour, it would trigger cognitive distress stemming from the inconsistency between initial intention and actual behaviour, to eliminate the distress, the individual may change behavioural performance in future instances. In many ways, covert behavioural control is similar in nature to control beliefs, they both rely on the individual's self-evaluation of their ability stemming from the belief of their individual competency or mastery of the ability to perform a specified behaviour. Any form of behavioural control that is 'covert' relies on changes in perception of the individual, similarly, to change behaviour that is dependent on control belief which is formed internally by the individual (i.e., based on how emotions and cognition make us perceive information) requires an internal change to an individual's self. Furthermore, this indicates that covert behavioural control is an intentional act that is performed by the individual, to adjust their perception in response to a stimulus, as adjustments to behaviour require conviction on the individual's behalf. Additionally, the subjective nature of perceptions held by the individual posits covert behavioural control as a fitting predictor of behaviour that may manifest in the form of continuous, multidimensional constructs. This is in contrast to the objective (or categorical, unidimensional) nature of moderators, either 'yes' or 'no' scenarios such as perceived availability, perceived accessibility, perceived affordability (e.g., products are either perceived as available in the store or as not available), typically associated with the intention-behaviour gap. These arguments predicate the suitability of covert behavioural control as a form of volitional control.

2.3.4.2 Overt Behavioural Control

The second type of behavioural control contended in this present study is overt behavioural control. Overt behavioural control refers to situations where individuals have no control over

the external environment and there is a complete absence/lack of volitional control. This marks an important departure from the traditional conceptualisation of behavioural control that anchors on control belief, as the existing conceptualisation of behavioural control advocates for the separation of behavioural controls based on the assignment of power; arguing that power is held internally by the individual through affection and cognition (covert) and externally by the environment, and is thus beyond the individual (overt). A common example of overt behavioural control is evidenced in the accessibility and availability of products that are sold by marketers, both of which are unknown variables to individuals until they arrive at the storefront to purchase the product. Unlike covert behavioural control, the concept of overt behavioural control is subject to the goals and actions of entities in the marketplace; it is the power vested in other organisations and people which either imposes or removes overt behavioural control over the performer of the behaviour. In contrast to covert behavioural control, overt behavioural control is an unintended form of behavioural control, lending itself to be a categorical, unidimensional construct. In considering overt behavioural control as such, it positions the concept as a suitable moderator of behaviour to indicate any observable difference between intended and actual behaviour. This is in stark contrast to the continuous, multidimensional, and subjective nature of predictors that usually offer themselves as the determinants of attitudes and the intention-supporting behaviours. Thus, the idea behind overt behavioural control is an integral typification of behavioural control that lends itself to the investigation of the intention–behaviour gap, in which the source of behaviour inhibition stems from external means (e.g., product availability, product accessibility, and product affordability). The multidimensional constructs and their significance in the conceptual framework for this study are discussed in Chapter 3.

2.4 Behavioural Change

The theory of behavioural control addresses the gap in the study of behavioural control from one that treats behavioural control as a key concept in the TPB to one that treats behavioural control as a standalone theory. The present study contends that this upgrade is warranted as behavioural control may be conceptualised and operationalised in many complex ways, whereby its application to study and the strategies that are developed from the insights thereafter, such as its application to develop and strengthen the desired behavioural control or to overcome and weaken undesired behavioural control, are dependent on the distinct way that behavioural control is conceptualised (i.e., covert or overt) and operationalised (i.e., predictor or moderator, categorical or continuous, unidimensional or multidimensional). In that sense, the insights from inductive reasoning subscribed to by this study suggests that the intention–behaviour gap should not be limited to being treated as a gap that should be closed to encourage desired behaviours (e.g., sustainable consumption) but a gap that should be opened to discourage undesired behaviours (e.g., unsustainable consumption).

From a behavioural change intervention research perspective, most notably in laboratory settings, controlling the strength or presence of behavioural controls elicits desired, measurable behavioural responses (Lim, 2015). This is typically performed by introducing or manipulating behavioural controls through priming.

The effectiveness of priming as a means of triggering a desirable behavioural response is based on the research surrounding memory cognition, and the cognitive task of part-list cuing. The concept of cognitive retrieval, also known as the reactivation of acquired memories, was neglected until the 1960s when Endel Tulving, one of its earliest proponents, argued for the importance of memory reactivation. This was a time when research was focused on stimulus–behaviour response and memory storage. The behaviourist perspective did not distinguish between memory retrieval and storage. Indeed, it was considered at that time that recall performance could directly reflect the information that was encoded and stored in memory (Tulving, 1962). However, Tulving argued that this information was only representative of a fraction of the information that was obtained, and that much more memory is stored than we can recall at any one point in time; making a critical distinction between memory availability and memory accessibility (Tulving & Thomson, 1971). According to his typification of memory, while information is theoretically available to us in our memories, we may only access the information in specific circumstances (Tulving & Thomson, 1971).

An important factor which is detrimental to memory recall is the presence of effective retrieval cues in the individual's environment—e.g., hints and cues that are present when an individual engages in a retrieval attempt and hold evocative power to trigger memory recall (Tulving & Pearlestone, 1966). The amount of information that can be retrieved at any one moment depends on the number of retrieval cues exposed to at the time of the memory recall. In their research, Tulving and Pearlestone (1966) observed that individuals recalled more information regarding a list of categorized words when they were re-exposed to it during the test to trigger retrieval aid. Thus, the researchers provide empirical evidence that cues assist us to recall information we otherwise would not be able to recall.

The related associative and organisational theories which stemmed from this research in the 1960s and early 1970s focus on the effects of retrieval cues and their associative connections to the target memory (Anderson & Bower, 1972; Collins & Loftus, 1975). The basic assumption underlying memory retrieval research has been that the associations between single memory items may assist in the retrieval of a specific memory. Activating these items during memory retrieval, like the presentation of a product label or seeing the original store environment from which the individual originally bought the product, may increase the memory accessibility of related memories through a process referred to as 'spreading activation'. Essentially, spreading activation is the cognitive process by which a given memory trace activates associatively related memories automatically, which in turn increases the chance of the associatively related memories being retrieved. This concept of spreading activation and its function as a means of recalling associatively related memories indicate how retrieval cues make memories more accessible (Wang et al., 2019).

Around the same time, researchers started to question the generality of spreading activation, arguing that the exposure to retrieval cues does not always improve retrieval and may even hinder it (Slamecka, 1968; Roediger III, 1973). In the research by Slamecka (1968), it was initially intended to vindicate the theoretical view that by making an item more accessible it may support the retrieval of associated items, providing the reasoning that the facilitative effects of the associative connections established between memories may be observed in a more direct means when the subset of items from a previously studied word list was provided as effective retrieval cues for the remainder of the items on the list. For the purposes of his experiment, Slamecka (1968) conducted a number of experiments, each of which had varied test conditions for two groups of participants. After a short time was provided to participants with the task of studying a word list, an experimental group who had already been exposed to

the word list were then given a subset of the item list and required to recall the missing items, in contrast, the control group was not provided the subset and simply required to recall as many items as they could recall. Slamecka's (1968) findings showed that the presentation of the retrieval cues (i.e., the subset of the complete item list) did not facilitate memory recall, instead, it impaired the recall of the remaining items; this would become known as 'part-list cuing impairment'. These findings have been replicated by existing researchers and extended in a number of studies that have centred on the detrimental effects of part-list cuing (Aslan et al., 2007; Lehmer & Bäuml, 2018; Jin et al., 2019). Indeed, the part-list cuing effect proves to be robust and pervasive in a wide spread of research areas (Slamecka, 1968; Lehmer & Bäuml, 2018; Jin et al., 2019), testing for the presence of important concepts in recall, recognition, and reconstruction tasks (Oswald et al., 2006; Kelley & Bovvee, 2007; Lehmer & Bäuml, 2018), and in different participant groups (Marsh et al., 2004; John & Aslan, 2018; Aslan & John, 2019).

In recent years, challenges to the part-list cuing effect have argued that the inhibition of memory recall cannot be sufficiently explained by just one cognitive mechanism, but that in reality more than one mechanism is mediating the part-list cuing effect. The two studies by Bäuml and Aslan (Bäuml & Aslan, 2006; Aslan & Bäuml, 2007) posited that different mechanisms are involved depending on the encoding situation; an individual may either encode memories item-by-item or they may decide to develop connections between memories to construct a serial retrieval plan. Thus, when the individual is exposed to a part-list retrieval cue at the time of the experiment, the selection of encoding used may then lead to a different cognitive mechanism being utilised which may also influence the effects of part-list cuing.

While a large part of part-list cuing has been dedicated to the negative effects of part-list cuing, such as inhibition and impairment of memory recall, part-list cuing can be used for beneficial recall. Research by Goernert and Larson (1994) investigated the effects of part-list cuing on the recall of a list of items which was initially forgotten after having studied it. Participants in the research were given two lists; one was studied and then to be forgotten and then replaced by a new list. However, during the test conditions participants were asked to recall items from both lists and were exposed to either a random selection of the list items as part-list cues or were requested to recall as many items as they could. Findings from this research indicated that part-list cuing increased the recall of the forgotten items, providing novel evidence that part-list cuing can improve target recall (Bäuml & Schlichting, 2014; Lehmer & Bäuml, 2018; Jin

et al., 2019). Thus, it was posited that the presentation of part-list cues may reactivate the original context and thus improve recall performance.

An extension of part-list cuing is the utilisation of the concept in cognitive priming (Aslan et al., 2007). Priming, like part-list-cuing, relies on established memories which it activates at the time a specific action or behaviour is required (Custer & Aarts, 2005; Aslan et al., 2007; Cameron et al., 2018). For example, chronic (or initial) intentions to consume sustainable products held by the consumer due to high self-efficacy prior to priming can be developed or stabilized and strengthened through exposure to primes, such as marketing messages of how easy it is to consume sustainable products (e.g., no difference in consuming recycled and non-recycled A4 papers), and as a result, it avoids opening up the intention–behaviour gap through the realization of the chronic intentions of choosing to consume sustainable products in the form of the actual behavioural performance of consuming sustainable products (e.g., choosing to consume recycled A4 papers) (Lim, 2017b). Similarly, chronic intentions to not consume sustainable products due to the non-availability of sustainable products (e.g., no recycled A4 papers in the city) may be overcome or weakened through exposure to primes, such as online shopping and postal deliveries offered by recycled A4 papers manufacturers and retailers. Consequently, this closes the intention–behaviour gap through a shift in chronic intentions from choosing not to consume sustainable products to the actual behavioural performance of consuming sustainable products (e.g., choosing to purchase recycled A4 papers online and having them delivered at home for consumption).

Moreover, the theory of behavioural control empowers numerous strands of fruitful research. First, the theory should drive the exploration of behavioural controls that consumers must deal with and strive to overcome to enact their intentions in order to perform behaviours of interest, reemphasising the need for greater intention–behaviour consistency. Second, the theory should motivate a scrutiny of the qualities of behavioural control that influences intended and actual behavioural performances. By extending the current behavioural control theory through the empirical testing of the facets of covert and overt behavioural control within real market conditions, we can ascertain the extent of the influence of internal and external factors on the intention–behaviour gap. Third, the theory should inspire the development of mechanisms that can activate or deactivate behavioural controls to encourage or discourage behavioural performance. Thus, the theorisation of behavioural control should be useful to address and clarify existing confusion and discrepancies arising from the complexity and variability in the

conceptualisation and operationalisation of behavioural control as well as to act as a guide to future research on how behavioural control may be applied to the intention–behaviour gap.

To move the extant understanding of behavioural control forward, particularly through the underpinnings of covert and overt controls proposed by the theory of behavioural control, this exploratory study will identify the desired covert and overt behavioural controls that need to be developed or strengthened as well as the undesired covert and overt behavioural controls that need to be overcome and weakened. This examination of chronic and primed behavioural responses with respect to behavioural change and intervention strategies will contribute new knowledge to the field of consumer behaviour.

The investigations into covert behavioural controls, such as self-efficacy and neutralisation, and overt behavioural controls, such as accessibility, availability, and affordability, in pressing behaviour-related issues, such as those related to ethical behaviour and sustainable consumption, should fruitfully extend and enrich behavioural insights in the area—that is, insights related to behavioural change interventions to address implicit and explicit actions, as well as inactions (Ajzen & Dasgupta, 2015; Ajzen & Sheikh, 2013; Hardeman et al., 2002).

2.5 Changing Intention to Change Behaviour

In their attempt to affect a desired behaviour, consumers often rely on goal intentions. These goal intentions serve as a self-instruction to the consumer to achieve a desired outcome (i.e., 'I intend to satiate my thirst'), whereas behavioural intentions are instructions detailing the behaviour required to attain this outcome (i.e., 'I intend to buy a cup of coffee'). Intentions encompass both the intensity of the behaviour and the level of commitment (the resources) to achieving the outcome. Granting that some behaviour is habitual and can trigger due to situational cues (e.g., Bargh, 2006; Wood & Neal, 2007), the formation of initial intention is pivotal in conceiving long-term goals (Baumeister & Bargh, 2014; Kuhl & Quirin, 2011). Thus, the formation of intention has been crucial in behaviour change research; interventions focused on the promotion of energy-conserving behaviour, public health awareness, and education programmes are all construed in accordance with frameworks reliant on intention as a key determinant of action (e.g., Ajzen, 1991; Bandura, 1996; Locke & Latham, 1992; Rogers, 1983).

Many causational studies have proved that intentions can predict behaviour. For example, Sheeran (2002) meta-analysed 10 previous meta-analyses (incorporates 422 studies total) and found a 'large' sample-weighted average correlation between the variables, intention, which was measured at one-point in time, and behaviour, which was measured at a later point in time ($r=0.53$). Furthermore, it was found that intention was a clearer indicator of behaviour when compared to attitudes (explicit and implicit), norms and perceptions of risk and severity (e.g., McEachan et al., 2011; Sheeran et al., 2014; Sheeran et al., 2016). Therefore, as suggested by these findings, in order to initiate new behaviours or alter their behaviour away from actions deemed no longer desirable, an individual must first have the relevant, and similarly inclined, intention to do so.

The literature states that the same factors which form intention also play a role in determining if those intentions are realized (Deci & Ryan, 2000). Similar to self-determination theory, research findings indicate that intentions based on personal beliefs regarding the outcomes of acting (attitude) more accurately predict behaviour than intentions derived from social pressure (norms) (Sheeran & Orbell, 1999). Additionally, intentions based on affective attitudes (feelings) towards the behaviour are better predictors of behaviour than intentions based on cognitive attitudes (thoughts surrounding the consequences of acting on intention) (Conner et al., 2016; Keer et al., 2014). Additionally, findings argue that circumstances involving greater

feelings of moral obligation to perform behaviour and/or guilt in failing to perform behaviour increase the prospect of initial intentions being enacted (Abraham & Sheeran, 2004; Conner et al., 2006; Godin et al., 2005; Godin et al., 2014; Sheeran & Abraham, 2003; Sheeran & Orbell, 1999). In considering the literature on intention, it becomes apparent that there is often a conflict between what consumers 'want to do' and 'what they feel they should do'. For example, perhaps the consumer has the initial intention to go to the local hardware store to buy a lightbulb to replace an old one (feel they should do), but when it is time to prepare to go out, they instead decide to postpone it to another day and take a nap (want to do). Research by Taylor, Webb and Sheeran (2014) support this behavioural inconsistency by arguing that conflicts of intention may strengthen justifications for indulgence that may effectively undermine acting out the initial intention. By comparing this, to existing research on self-licencing (e.g., De Witt Huberts et al, 2012; De Witt Huberts et al, 2014a; De Witt Huberts et al, 2014b), it appears that when exposed to certain conditions, consumers willingly undermine their initial intentions through the use of their own personal justifications, such as neutralising the guilt that society would otherwise fault onto them (e.g., people who don't eat junk food but will have McDonalds because they are tired or have run out of time to cook).

And so, 'intention' in its fallible nature is sufficient to determine a modicum of relationship between the independent variables and itself. However, its application is limited to the extent where conditions, especially those originating in the market external to the consumer, cause disparity through the intention-behaviour divide. In such circumstances, intentions lose predictability in forecasting actual behaviour. Thus, the extent of the effect the independent variables have on purchase intention (the dependent variable) needs to be manipulated based on scenarios, thereby allowing us to determine significant consistency in the measured effect within a spectrum of test conditions. By identifying the test conditions which provide statistical significance, this study creates the foundations required to bring about successful manipulation of the intention-behaviour gap to facilitate sustainable consumption.

2.6 Sustainable Consumption

To affect a desired behavioural change towards sustainable consumption choices, it is important to first understand the desired outcome (sustainable consumption) itself. The term ‘sustainable consumption’ was first used in 1994 by the Oslo Symposium. In the early 1990s, the United National Environmental Programme (UNEP) attempted to define ‘sustainable consumption’ as ‘the use of services and related products which respond to basic needs and bring a better quality of life, while minimizing the use of natural resources and toxic materials as well as emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations’ (UNEP, 2015). Since that time, the failures of the checks-and-balance system to regulate ecological subversions such as the BHP Billiton oil spill and Volkswagen carbon emission scandal, the increasing number of Sustainable Development Goals (SDGs), and the growing concerns over overconsumption have placed notions of sustainable consumption behaviour at the forefront of academic research in sustainability (Onuma, 1999; Thoøgersen, 1999; Schmidt & Matthies, 2018).

The concept of ‘sustainable consumption’ is deeply related to a decision-making process that consumers make every day, namely to be accountable to society and incorporate an element of social responsibility in their daily consumption choices alongside personal needs and wants (Herpen et al., 2003). An outcome-driven perspective views sustainable consumption as a form of consumption that results in the conservation of future generations’ needs without causing irreversible damage to the environment (Jackson & Michaelis, 2003). Research by Schor (2010, 2012) connected this outcome-driven perspective on sustainable consumption to the concept of ‘plenitude consumption’. Plenitude consumption posits that in order to encourage sustainable development consumer’s needs and wants need to incorporate elements of environmental and social responsibility. However more recent research by Lim (2017b) has argued that sustainability, as an agenda, needs to take an adaptive, balanced, and contextualised approach in developing strategies meant to achieve the objectives of the specific dimensions in any definition of sustainability and its related concepts (e.g., sustainable consumption); in order to fully realise sustainability (e.g., human fulfilment and survival) a more holistic approach to the application of the concept of sustainability is absent from the literature (Schor, 2012; Lim, 2016; Lim, 2017). The inherent characteristics of this approach towards sustainable consumption (i.e., adaptive, balanced, and contextualized) and reliance on multi-faceted principles (i.e., “(1) meets the basic needs of the current generation, (2) does not impoverish future generations, (3) does not cause irreversible damage to the environment, (4) does not

create a loss of function in natural systems (ecological and human value systems; environmental and social responsibility), (5) improves resource use efficiency, (6) improves quality of life, and (7) avoids consumerism and modern hyperconsumption) provide a more holistic, less limiting view of sustainable consumption” (Lim, 2016, p. 71). This is the definition and the application of ‘sustainable consumption’ used in the present study.

Yet, the issue remains that these everyday consumption purchases are still heavily influenced by convenience, habits, value for money, aspects of hedonism, and individual responses to institutional and social norms (Zhu et al., 2013; Bhamra et al., 2011; Dong et al., 2018; Cerri et al., 2019), which make the consumers resistant to changing their behaviour.

To affect a desirable sustainable consumption decision it becomes important to first understand the three key perspectives (i.e. responsible consumption, anti-consumption, mindful consumption) which are pertinent to sustainable consumption research and the key insights derived thereof.

The first of the three perspectives is based on the concept of ‘responsible consumption’. The earliest definition of the concept of responsible consumption by Fisk (1973) made reference to the concept of responsible consumption as a form of ‘conscientious activity’ which is derived from the rational and efficient use of resources with respect to the global human population. However, this view of responsible consumption took a limited supply-side perspective; the actions organisations take to influence responsible consumption. As such, a more demand-sided view, as that taken by Antil (1984) and Webb et al. (2008) present a more strategic complement to Fisk’s definition, and vindicates responsible consumption as a form of consumer behaviour. But perhaps the most comprehensive definition is provided by Ozcaglar-Toulouse (2005, p. 52), in which he defines responsible consumption as “the set of voluntary acts, situated in the sphere of consumption, achieved from the awareness of consequences judged as negatives of consumption on the outside world to oneself, these consequences raising therefore not from the functionality of the purchases nor from immediate personal interest.” Indeed, the presence of responsibility salience is not limited to the rational, straightforward view provided by Fisk (1973) and Ozcaglar-Toulouse (2005), but rather operates under a certain modicum of feelings, contexts and people; in which behaviours are evaluated based on the positive impact outweighing their negative implications (Ulusoy, 2016). Whilst this definition does not explicitly focus on social, environmental, or ethical concerns, it provides a context in which ‘responsibility’ is shaped by the environment, and both social and ethical

concerns are indirectly part of that environment. This forms the basis on which more recent research by Lim (2016), advanced the conceptualisation of responsible consumption to incorporate the dimensions of social (e.g., maximizing the benefits for society and social equity), environmental (e.g., minimizing resource use, encouraging preservation, and reducing environmental degradation), and ethical (e.g., morally wrong for society to engage in activities that pollute and destroy the economic, natural, and social environment) into the umbrella term – responsible consumption.

The second perspective of sustainable consumption relates to the notion of ‘anti-consumption’. Research by Sandikci and Ekici (2009) posited that consumers have the choice to refuse to consume products which are incompatible with their personal conservation ideology. Indeed, there is much research that focusses on consumer reactions against consumption, such as both active and visible actions (Hogg et al., 2009) occurring among consumer groups (simplifiers and global impact consumers; Iyer & Muncy, 2009) and within systems (Cherrier & Murray, 2007). For example, research on brand avoidance (Lee et al., 2009), boycotting (Hoffmann, 2011; Yuksel & Mryteza, 2009), consumer rebellion (Funches et al., 2009; Hoffmann & Muller, 2009), consumer resistance (Close & Zinkhan, 2009; Cromie & Ewing, 2009), culture jamming (Sandlin & Callahan, 2009), emancipated consumption (Holt, 2002; Kozinets, 2002), ethical consumption (Shaw & Riach, 2011; White et al., 2012), non-consumption (Stammerjohan & Webster, 2002), and voluntary simplicity (Shaw & Newholm, 2002) addresses consumer motivations, ideologies, and practices related to anti-consumption.

A common trend for all these anti-consumption manifestations is to resist or starve-off the effects of consumerism in the marketplace. The level of anti-consumption behaviour that the consumer can engage in depends on the objective nature of the consumption decision. In instances, where the anti-consumption decision is objective (i.e., can be determined by a ‘yes, to consume’ or ‘no, to not consume’ decision) the consumer may engage in aversion, avoidance, and abandonment (Hogg et al., 2009). Such actions of turning away from a particular subject and is often expressed as dislike, disgust, and revulsion (a form of attitude); avoidance involves staying away from a particular subject; and abandonment involves giving up something previously consumed (forms of actual behaviour; Hogg, 1998; Hogg et al., 2009). However, when the anti-consumption behaviour is subjective, and is based on limiting rather than starving-off the actual consumption, the limitations of Hogg and others’ (2009) research becomes apparent.

To accommodate this, Lee and others (2011) argued for the additional anti-consumption actions of rejection, restriction, and reclamation. In the process of rejecting, consumers intentionally and meaningfully exclude particular products/brands from their consumption cycle (i.e., do not consume, a form of actual behaviour). When complete anti-consumption is not possible, they can choose to restrict consumption of particular products/brands (i.e., limit consumption, a form of actual behaviour), for example, by restricting electricity or water use. Reclamation represents an ideological shift to a holistic process that includes acquisition, use, and dispossession (i.e., retrieving products/brands from the process of dispossession, a form of actual behaviour); for example, dumpster divers reclaim trash from the process of dispossession and imbue waste with new meaning and value (Fernandez et al., 2011). Thus, this integration would enable researchers to distinguish consumers' expressed commitment to anti-consumption as observed through aversion, avoidance, and abandonment, in which varied anti-consumption choices are also available (i.e., rejection, restriction, and reclamation).

The final perspective concerned with sustainable consumption behaviour considers the concept of 'mindful consumption'. Mindful consumption refers to the inherent quality of human consciousness derived from the capacity for attention and awareness oriented to the present moment that varies in degree within and between individuals and which can be assessed empirically and independent of religious, spiritual, or cultural beliefs (Black, 2011). In their research, Sheth and others (2011) contended that the consumer mindset and behaviour is determined by the core attribute- the consumer's sense of care relative to the consequences of consumption. This core attribute comprised of three elements, namely, (i) caring for the self which consists of paying heed to one's personal wellbeing, inclusive of eudemonic aspects (e.g., happiness) and economic aspects (e.g. monetary sacrifices), (ii) caring for the community (Dennis et al., 2016), (iii) caring for nature, which encompasses intrinsic, instrumental, and aesthetic values (Kilbourne, 2006; Winter, 2007). Certainly, mindful consumption has the potential to lead to sustainable consumption by encouraging practices that heighten people's sense of awareness, whereby such greater awareness of both the self and the ecosystem may dampen the effects of unsustainable practices, such as overconsumption and deviant consumption, thereby fostering more sustainable outcomes.

The diversity and complexity of these motivations suggest that there is still considerable scope to grow understanding in affecting a behavioural change towards sustainable patterns of consumption. Empirical findings from the literature denote the importance of changing intention towards more sustainable consumption behaviour. Whilst this may sometimes be the

case, other times the behaviour gap prevents initial intention from being enacted. In cases where consumers are sustainability-inclined, this study hopes to understand the intention–behaviour gap experienced by such consumers, specifically the reasoning that prevents sustainable consumption choices.

To aid in the investigation, the framework below was utilised to study the major factors (both internal and external) affecting the intention–behaviour gap:

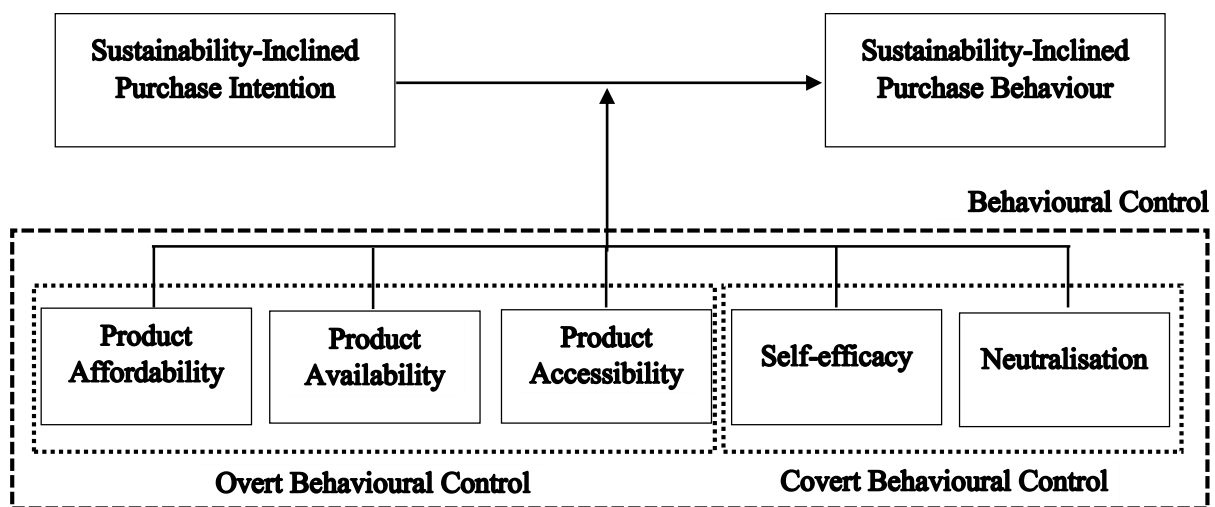


Figure 2.2 Behavioural Control Factors

Based on Figure 2.2, this study acknowledges the direct relationship between sustainability-inclined purchase intentions formed by the consumer at the onset of consumption, which then manifests in actual sustainable consumption behaviour (i.e., the purchase of sustainable products). However, this relationship may be moderated by both internal (self-efficacy, neutralisation) and external factors (affordability, availability, and accessibility) related to behavioural control that may close or open the intention–behaviour gap. Investigating this effect and identifying the means to control the intention–behaviour gap should therefore fill an important research gap.

2.7 Chapter Summary

To clarify the research gap, Chapter 2 reviewed the existing literature thoroughly and elucidated the current understanding surrounding the intention–behaviour gap for sustainable consumption. While prior research has identified the intention–behaviour gap and means to overcome its internal aspects (those stemming from consumer cognition), the barriers originating in the external environment (product availability, product affordability, product accessibility) have been largely ignored from an empirical standpoint. These external factors are often simplified, collated together as the umbrella term ‘external factors’, or just dismissing all together. In other words, the research to-date, only understands the intention–behaviour gap to the limited extent where the consumer has control over his/her own cognition/emotions (i.e., covert control). But once the external environment affects the purchase scenario, covert control is ineffective. The choices consumers make in such situations, is largely absent from the literature. Moreover, there is no clarity on how to overcome the intention–behaviour gap when the source of the barriers to consumption are external (overt). The next chapter utilises these identified gaps to state the research problem, and then proceeds to develop the research model.

3 CONCEPTUAL FRAMEWORK

3.1 Chapter Overview

This chapter aims to close the gaps in the literature highlighted in the previous chapter by first stating the research problem being investigated and then specifically developing the conceptual framework by reviewing the conceptual constructs under study, establishing conceptual links among the constructs, and proposing the research hypotheses to be tested. Additionally, this chapter also presents the theoretical foundation and the conceptual frameworks considered in the development of the new theory of behavioural control framework applied in this present study to frame behavioural control towards consumers' intentions for the consumption of sustainable products. More specifically, the current chapter, which conceptualises a holistic framework that incorporates both overt and covert behavioural control, builds on the previous chapter, which identified the shortcomings of existing research to deal with the intention–behaviour gap that persists and limits the potential of sustainable consumption.

In investigating the uses of overt and covert behavioural control to affect a behavioural change, most recent models of behavioural control were evaluated to develop a holistic framework consisting of both overt variables and covert variables. While existing models concede the need to incorporate an element of the external environment that may subvert the effect of chronic intention originating from internal means (such as attitudes [Joshi & Rahman, 2015; Yadav & Pathak, 2016]), norms (Vermeir & Verbeke, 2006), and personal agency (Johe & Bhullar, 2016; Grimmer & Miles, 2017), the literature remains sparse on means to overcome situations where chronic intentions are not consistent with the subsequent behavioural actions (Carrington et al., 2010; Montano & Kasprzyk, 2015). This present study furthers the concept of a holistic framework to refine the existing 'Integrated Behavioural Model' (Montano & Kasprzyk, 2015), and 'the Intention–behaviour Mediation and Moderation Model of the Ethically Minded Consumer' (Carrington et al., 2010) currently favoured by consumer behaviour literature to contribute a potential solution to the persistent problem posed by the intention–behaviour gap.

After providing a background on the conceptual constructs under study, the chapter articulates the conceptual links among the constructs. This is carried out in two main phases; the first involves positing the hypotheses to identify the individual effects of each variable on the formation of consumer purchase intention. This aids in ascertaining the relationship that each variable (be it 'covert' or 'overt') shares with purchase intention when considered individually. In the second phase, the hypotheses postulate the effects that priming interventions have on the

relationship established between the variable and purchase intention in the previous phase. Such an examination will help shed light on the effects of both covert and overt behavioural control variables, and the means by which the intention–behaviour gap may be manipulated through priming to either open/close the behaviour-intention gap.

3.2 Statement of the Research Problem

An extensive review of the literature presented in the previous chapter suggests that our understanding of the intention–behaviour remains incomplete. Indeed, most studies on the intention–behaviour gap remain silent as to how the intention–behaviour gap may be overcome and are overly focused on dealing with covert ‘internal’ behavioural control whilst oversimplifying or completely ignoring overt factors influencing behavioural control. The present study aims to make significant theoretical and practical contributions in this area of behavioural intervention to more clearly define the role of the intention–behaviour gap when dealing with sustainable consumption. To do so, the present study posits that it is important to first understand the distinct characteristics of the barriers to sustainable consumption behaviour, followed by an investigation of the mechanics behind the identified barriers; both covert and overt.

As the theoretical focus of our problem, the intention–behaviour gap is a pervasive issue that has allegedly hindered sustainable consumption to a point where it has fallen below society’s optimal potential to consume sustainably. The problem resides in consumers who, in the initial stages of a consumption decision, intend to consume sustainable products but do not actually behave in accordance with their intentions (Sheeran & Webb, 2016). On this basis, research has relied on the usage of behavioural control as a means to explain the intention–behaviour gap (Kraft et al., 2005; Vermeir & Verbeke, 2006; Grimmer & Miles, 2017). While such understanding is useful in determining the prospect of potential consumers purchasing sustainable products, the extant literature has not adequately addressed the means necessary to utilise the full potential of behavioural control to either encourage desired or deter undesired behaviour. In instances where consumers intend to perform the behaviour but fail to do so, it may be a result of their inability to voluntarily control their behaviour. This “inability” highlights the barriers that consumers need to overcome in order to successfully engage in a sustainable consumption behaviour, such as making a purchase for a sustainable product. Such barriers may occur in varying conditions, as consumers are exposed to different external stimuli—such as product availability and accessibility—and to economic constraints through product affordability (Ajzen & Sheikh, 2013; Ajzen & Dasgupta, 2015). Therefore, the understanding of the intention–behaviour gap and its relationship to sustainable consumption behaviour is not complete without a thorough understanding of these barriers, the impact these

barriers have on sustainable consumption, and the effects that priming may have in overcoming these barriers.

To extend previous investigations on the intention–behaviour gap and means to overcome it, the present study examines and predicts consumer’s purchase intention towards sustainable and non-sustainable product alternatives when faced with covert/overt barriers to behavioural performance. First, the integrated behavioural model is introduced to provide insight into how consumer’s form behaviour which follows a general discussion on the relevant constructs from the model commonly adopted by behavioural change literature, as well as its shortcomings in predicting actual behaviour. Secondly, the chapter looks at Carrington’s intention–behaviour model as a means to further develop current conceptual framework on behavioural change to vindicate the application of the new behavioural control theory, thereby facilitating greater understanding of covert behavioural control and overt behavioural control and the ways to overcome them in the pursuit of greater sustainable consumption behaviour.

3.3 Integrated Behavioural Model

The Integrated behavioural model incorporates elements of the TRA, TPB, and other behavioural theories (as seen in Figure 3.1 below).

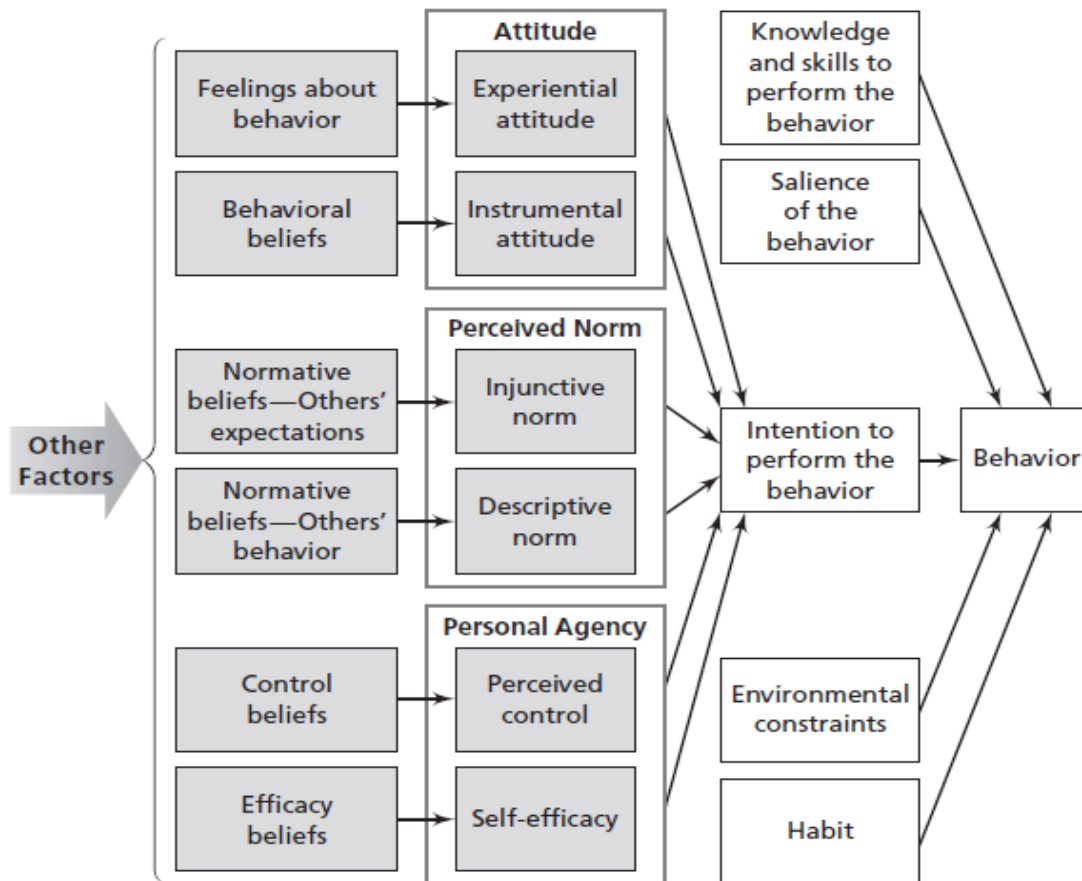


Figure 3.1 Integrated Behavioural Model **Source: Montano & Kasprzyk, 2015**

Similar to the TRA and TPB, the main measure for determining the end behaviour is the intention behind the initial behaviour. This suggests that should the intention supporting the behaviour be strong, then it is likely that the behaviour will be executed, whereas should the intention behind the behaviour be weak, then the ensuing behaviour is unlikely to be performed.

According to this model, four pivotal elements comprise behaviour: i) the knowledge and skill needed to affect the intended behaviour, ii) the absence of environmental restraint (e.g., perceived availability, perceived accessibility, perceived affordability) that may hinder the intended behaviour from being performed, iii) behaviour should be salient to the individual, and iv) any past experience in performing the behaviour may result in its recurrence, forming habits, which weakens the importance of intention in performing the behaviour (Triandis,

1980). The integrated behavioural model suggests that the manner in which the four elements interact is important to consider when designing behavioural intervention strategies. For example, if an individual holds a strong intention to buy a sustainable hybrid car, it becomes important for the individual to ensure that he/she has sufficient knowledge of the features and the limits of the new hybrid car to act on his/her intention, and that there are no environmental constraints, such as lack of proper roads/infrastructure to support the use of the car, or a lack of availability of the car in nearby showrooms, which may prevent the individual from making the purchase. It is important to note that even in the integrated behavioural model, the three elements comprising behaviour—i.e., i) internalization of knowledge, ii) behavioural salience, and iii) nature of the behaviour (irregular vs. habitual)—are treated as ‘intrinsic’ to the individual. This is similar in conceptualisation to the ‘covert’ factors considered in our new model of behavioural control which considers aspects of covert behavioural control, vindicating the need for elements of internal factors that stem from within the individual in consideration of behavioural control. In essence, the integrated behaviour model supports the importance of removing environmental barriers which are external to the performer of the behaviour as a key concern for behavioural intervention strategies. This is evident in the literature which posits that habit forming does not involve much internal consideration by the individual and that in likened circumstances, dealing with internal barriers to behaviour (covert behavioural control) is less instrumental in behaviour forming than dealing with external barriers (overt behavioural control). This necessitates approaching covert behavioural control factors and its respective interventions, separate and distinct in its application from, from overt behavioural control factors and its respective interventions (Triandis, 1980; White et al, 2019).

The commonality in all behavioural models, resides in the means by which intention to perform the behaviour is derived. Similar to existing behavioural models (such as the TRA/TPB, decomposed TPB, extended TPB), the integrated behaviour models’ multidimensional construct of ‘intention’ is determined by the three constructs seen in Figure 3.1.

The first construct is the attitude towards a behaviour (i.e., the level of favour towards performance of a specific behaviour). Researchers have defined ‘attitude’ as a sum of affective and cognitive dimensions (Triandis, 1980; Fishbein, 2007; French et al., 2005). According to Fishbein (2007) the affective dimension also referred to as ‘experiential attitude’ denotes an individual’s emotional response towards performing a specified behaviour. Therefore, if an individual holds a strong negative emotional response towards a behaviour then the individual

is unlikely to perform the specified behaviour, conversely, should the individual hold a strong positive emotional response towards the behaviour, then the behaviour is likely to be performed. The cognitive dimension manifests in instrumental attitude, this is determined by the beliefs surrounding behavioural performance, similar to the TRA/TPB. The conceptualisation of experiential attitude is distinct from the concepts of 'mood or arousal, as Fishbein (2007) argues that experiential attitude affects intention indirectly, influencing the perceptions associated to the behavioural outcome likelihood as well as the evaluation of outcomes (whether positive and favourable, or negative and unfavourable). It was LaPiere (1934) who was the first to conduct a study that predicated that attitude does not predict behaviour. In his research, LaPiere (1934), travelled together with a Chinese couple across the USA to visit a number of hotels and restaurants, of which only one hotel refused them service and majority of the restaurants provided above average service to them. A few months later, a letter was sent to these same establishments to inquire whether they would accept members of the Chinese race as patrons to their establishments, and 91 per cent of refused to serve Chinese customers. Indeed, while this argued for a gap in behavioural-attitude consistency, others questioned the validity of the findings; it is argued that LaPiere's presence may have influenced the service received, additionally, the extended time interval between delivery of the original behaviour and the subsequent statement of attitude may have affected the reliability of the results. This was then further substantiated by Fishbein and Coomb's (1974) study, in which they evidenced that behaviour of voters was easiest to predict within a shorter temporal distance, as opposed to greater inconsistencies derived from larger temporal distance from the time the attitude was initially provided. The idea that attitude was a less than perfect predictor of behaviour was further supported by Fazio and Zanna (1981), in which they posited that direct experience (i.e., past behaviour of a committing nature from which the individual may infer the attitude) has greater influence in predicting behaviour as opposed to when an individual faces an indirect experience (i.e., the process of attitude formation which is based on non-behavioural information such as being recommended the use of a product by a friend).

Still, other researchers have proceeded to vindicate the findings by LaPiere (1934). In one such instance, Corey (1937) investigated the relationship between student's attitude associated to cheating and their actual behaviour. In his research Corey (1937) presented sample groups of students with a multiple choice test which were at a later point in time returned to them to be marked. The students were not informed that their actual score had already been recorded, thus, any changes to the scores recorded were associated to 'cheating behaviour'. Findings of this

research showed that there is a low consistency between attitude held by the participants of the experiment and the behaviour performed. This was later supported by the meta-analysis by Wicker (1969) who predicated low correlation between attitude and behaviour.

Psychology has attempted to explain to what extent attitude does not affect behaviour. A frequently cited model relied upon in explaining the attitude-behaviour discrepancy is the ABC model first presented by Rosenberg and Hovland (1960). Previous studies at the time, such as Fishbein and Ajzen (1980, p.19) citing Allport (1935) commented that “the unidimensional affective or evaluative measures did not do justice to the complexity of the attitude concept.” Indeed, at the time Rosenberg and Hovland (1960) posited that in order to accurately predict behaviour, it is required to have access to a multidimensional model in order to measure real attitude in determining behaviour.

According to Rosenberg and Hovland’s (1960) model, the construct ‘attitude’ is comprised of three major dimensions, namely i) the affective element, or the emotional feelings, such as affection/dislike associated to an object, ii) the behavioural elements, or the general predisposition of an individual to behave in a certain manner, such as the intent supporting the performance of the behaviour, iii) cognition, or the way an individual perceives a particular object, regardless of whether their opinion and perceptions are well founded. The interrelation between these three dimensions are posited to be able to predict behaviour. For example, if a manager receives information that suggest a particular group is performing well due to being highly self-motivated and he/she decides to believe this information, then he/she develops feelings of affection towards that group, and a results of this, he/she may behave more positively towards that group whenever future relational interactions are required. It was later suggested that parts of the attitude-behaviour inconsistency may be attributed to the failure to test for all dimensions of attitude—for example, overtly focusing on measuring behaviour whilst ignoring cognitive and affective elements (Ajzen & Fishbein, 1977; Guagnano et al., 1995).

In the absence of at least one of the three dimensions comprising attitude, attitude-behaviour inconsistency is present (Festinger, 1962). Yet, the factors determining attitude-behaviour inconsistency are not just limited to these dimensions. Research by Triandis (1980) suggests that there are nearly 40 factors which contribute to the attitude-behaviour inconsistency. Research by Fazio (1986) investigated shopper’s attitudes toward voting in the 1986 US presidential elections, participants were required to express their opinion on statements such as

whether “a good president for the next four years would be Ronald Regan”, they were then contacted again three months later (i.e., after voting) to determine whom they have actually voted for. Findings from this research indicated that participants who indicated highly accessible attitudes (i.e., those attitudes which can be more easily recalled from memory) showed an 80 per cent variance explained by attitude, whilst those participant who expressed lowly accessible attitudes only showed a 44 per cent variance which is explained by attitude. And so, it is difficult to determine any one variable or construe an argument to explain why attitude does not consistently predict behaviour, but rather it is an interrelation between multiple factors which constitute the attitude-behaviour inconsistency. Attitude as a construct is complex, and there is no definitive, direct relationship between attitude and behaviour rather they interact in a number of indirect ways that are influenced by both internal and external factors. A meta-analysis of the literature by Nawhami (2013) found that two main theories predicate the general rhetoric as to why attitude does not predict behaviour. The first theory is the theory propounded by Fazio (1986), in which the individual’s lack of accessibility to their relevant memory of the attitude held in the past and failure to respond promptly in the current circumstance is attributed to the attitude-behaviour inconsistency. The second theory, is the TPB posited by Ajzen (1985), in which he suggested that the absence of i) attitude towards the specific behaviour, ii) perceived behavioural control, or iii) subjective norm causes poor consistency between attitude and behaviour. It was the TPB which first posited a move away from the reliance on attitude and instead advocated behavioural intention as a viable replacement. And yet the reliance of the integrated-behavioural model on attitude is a step backwards in the advancement in the operationalisation of a model meant to simplify and promote accessibility in the prediction of otherwise complicated behaviour.

Next, the second construct of the integrated behavioural model, which is that of ‘perceived norms’, suggests that norms incorporate the elements of social pressure associated with the performance of behaviour which society deems positive, or the prevention of behaviour society views as negative. All individuals are, to a certain extent, accountable to society. The previous conceptualisation of subjective norms put forth by the TRA/TPB as an injunctive norm (i.e., perceptions held by individuals of what ought to be and denotes behaviour approved/disapproved by others) is limited in its capacity to fully encapsulate normative influence (Fishbein, 2007). Indeed, the integrated behavioural model extends on the shortcomings of the TRA/TPB to include normative influence by introducing the dimension of ‘descriptive norms’ which consists of the individual’s perception of what others think in one’s

social/personal networks, alongside subjective norms. The new construct, perceived norms, depicts the strong social identity common to many cultures, which according to some researchers is a key component of normative influence (Bagozzi & Lee, 2002; Triandis, 1980).

The third, and final, construct of the integrated behavioural model is ‘personal agency’; when an individual exerts his/her own control over the self and the environment (Bandura, 2006). In the integrated behavioural model, the conceptualisation of personal agency consists of two main constructs, namely, self-efficacy and perceived control. Perceived control describes the belief held by individuals regarding their control over their internal state, and their ability to enact behavioural performance when the difficulty associated with performing the behaviour is dependent on environmental factors. In contrary, the second construct of perceived control, ‘self-efficacy’ is the level of confidence that individuals have in their ability to enact the specific behaviour when faced with obstacles and challenges meant to inhibit behavioural performance. The investigation that helped to operationalise the integrated behavioural model relied on a bipolar “certain I could not–certain I could” scales. Similar to the present study, the integrated behavioural model vindicates the reasoning that sufficient difference exists between the operationalisation of the two constructs of self-efficacy and perceived behavioural control to warrant including both measures (Montano & Kasprzyk, 2015).

On closer inspection of the integrated behavioural model, important limitations become apparent. One such limitation is that the theory is applicable only in situations where the behaviour stems from the individual themselves. Additionally, whilst the integrated behavioural model does consider the individual’s perceived control over the intended consumption behaviour, it does not accurately reflect the individual’s actual control. Indeed, an individual may perceive themselves as having control over their consumption behaviour, but in reality, the individual may not be able to exert this control. For example, an individual might have the intention to purchase a sustainable product, their attitude might reflect this intention, and they might perceive that this behaviour is fully under their control. But, actual circumstances, such as a shortage of the sustainable product at the retail store or other factors that would make the product difficult to obtain, remove that control from the individual. An individual’s actual control over their ability to perform such consumption behaviour, or their lack of control, becomes vital in determining whether or not the intended behaviour comes to fruition.

Therefore, utilising the variables in the integrated behavioural model grounds this research in established and tested theory, but further develops the practical application of the model by also including the factors inherent in the external environment (overt factors such as affordability, availability and accessibility), and thus, addresses the limitations and unrealistic nature of past frameworks.

3.4 Carrington's Intention-behaviour Mediation and Moderation Model

The Carrington intention-behaviour model was first presented as a means to better understand the intention-behaviour gap. Specifically, the purpose of Carrington's intention-behaviour model was to clarify the role of cognitive and environmental barriers to the inhibition of ethical purchase intention. In view of this, behavioural control and self-efficacy have been considered a moderating influence on the intention-behaviour relationship by the literature as well as in the preceding integrated behavioural model. The relevance of each of these concepts is considered in turn.

The TPB asserts that each individual first develops the purchase intention associated with a specified behaviour, prior to enacting the purchase behaviour. In Carrington's intention-behaviour, 'purchase intention' is construed from a variety of factors; attitudes, perceived behavioural control and social norms. Similar in nature to perceived control in the integrated behavioural model, perceived behavioural control constitutes an individual's perceived capability towards specified behavioural performance—i.e. the degree to which behavioural performance is perceived to be under their (external) control and within their (internal) abilities (Kidwell & Jewell, 2003; Sheeran et al., 2003). Perceived behavioural control is not a new concept to consumer behaviour research but its application to the field has been mainly limited towards the formation of purchase intentions (e.g., Shaw et al., 2000; Arvola et al., 2008; Montano & Kasprzyk, 2015). The perceived behavioural control construct has been criticised by researchers mainly due to the ambiguous nature of the construct as conceptualised and presented by the TPB (Trafimow et al., 2002). To address this ambiguity various studies categorize perceived behavioural control as a higher-order construct consisting of two variables; controllability and self-efficacy (Ajzen, 2002; Hagger & Chatzisarantis, 2005; Ajzen, 2015; Amornwitthawat & Tanakanjana Phongkhieo, 2019). The factor, controllability, denotes the degree to which the behavioural performance is reliant on the individual, subject to the inhibition of factors like the cooperation of others in performing the behaviour, financial restraints, as well as knowledge and habits. The second factor, self-efficacy, within Carrington's intention-behaviour model shares similarities to Bandura's (1997) conceptualisation and operationalisation of the concept, which is also incorporated in the integrated behavioural model discussed in Figure 3.1. This particular similarity suggests that the means of establishing internal control (via self-efficacy) is independent from the control over the external environment, which may inhibit the behaviour all together.

A great deal of research exists to support that the individual's ability to control his/her behaviour through both controllability and self-efficacy determined by internal and external factors (Fishbein et al., 2000; Davis et al., 2015). Shaw and Clarke (1999) identified price, availability, convenience, information, ethical issues and time as key influences on the consumer's behaviour in deciding to make ethical purchases. Additionally, McEachern et al., (2007) investigated common scenarios where the consumer is not the shopper, and this, contributed as an influencing factor for the purchase of specified products. The problem with perceived behavioural control factors rests in the limit to which a consumer can perceive and prepare for internal or external events happening. Imagined scenarios may differ from reality (Ajzen, 1991). Indeed, it is this gap between purchase intention and actual purchase behaviour that demands further research to explain the limits of behavioural control theory in the realm beyond the individual's voluntary control. A modicum of this was demonstrated through Ajzen and Madden's (1986) extended TPB which incorporated perceived behavioural control. Through this framework, perceived behavioural control may directly influence behavioural intentions whilst also indirectly affecting behaviour. The construct of perceived behavioural control is often relied upon by behaviour change theories such as the TPB due to its high chance of predicting behaviour when used as a proxy measure of actual control (Armitage & Conner, 2001; Amornwitthawat & Tanakanjana Phongkhieo, 2019). Research by Ajzen and Madden (1986) address this in their conceptualisation of perceived behavioural control within the TPB when they stated that the construct 'does not claim a direct causal effect for perceived behavioural control' (Ajzen & Madden, 1986, p. 472), instead "... it is actual control — not perceived behavioural control — that is the causal determinant of behaviour" (Sheeran et al., 2003, p. 394). The argument for the validity of perceived behavioural control as a means of proxy for actual behavioural control was outlined on two grounds of reasoning; the first, when measuring behaviour which is beyond the willful control of the individual; the second, "... perceptions of behavioural control must reflect actual control in the situation with some degree of accuracy" (Ajzen & Madden, 1986, p. 460).

A major limitation of Carrington's intention-behaviour mediation and moderation model is the lack in defining the criteria for when to apply perceived behavioural controls and when to apply actual behavioural controls, both of which require sufficient, reliable empirical support (Carrington et al., 2010; Hassan et al., 2016). The idea that control over behaviour operates on two interrelated dimensions, internal and external, provides insight into the further development of a more holistic framework that explains the extent of the influences of the

internal, self-reliant control and the external, environment-dependent control in affecting behavioural performance. Unlike the integrated behavioural model, Carrington's intention-behaviour model is more attuned with addressing the problem of the intention-behaviour gap in circumstances beyond consumer's volitional control. However, the lack of empirical evidence and the infancy of the actual behavioural control concept identify the relevant gap in the literature which the current research aims to fill.

3.5 Proposed New Intention–behaviour Model

The key contribution of this study’s conceptual framework is two-fold: it is integrated and holistic. In bringing together the insights of purchase intentions, actual behavioural control, and situational context to understand the intention–behaviour gap of sustainably-inclined consumers, this study combines powerful insights from separate literature fields that function as an ‘integrated whole’. In addition, the integration of environment factors at the point of purchase within a cognitive framework results in a holistic model that reflects the complex real-life purchase decision making of sustainability-inclined consumers.

The modified theory of behavioural control proposed by this study utilises elements established in the literature to frame new theory according to established paradigms. Whilst self-efficacy has been an integral part to determine behaviour when the control over the behavioural performance is within the individuals’ own volition, behaviour does not always correspond to chronic intentions. Predicating these circumstances, individuals succumb to a varying degree of neutralisation of which they may be unaware. Altering the internal state of the individual’s self is within the realm of change that the individual can affect, such as convincing one’s self that their purchasing behaviour is making a positive difference.

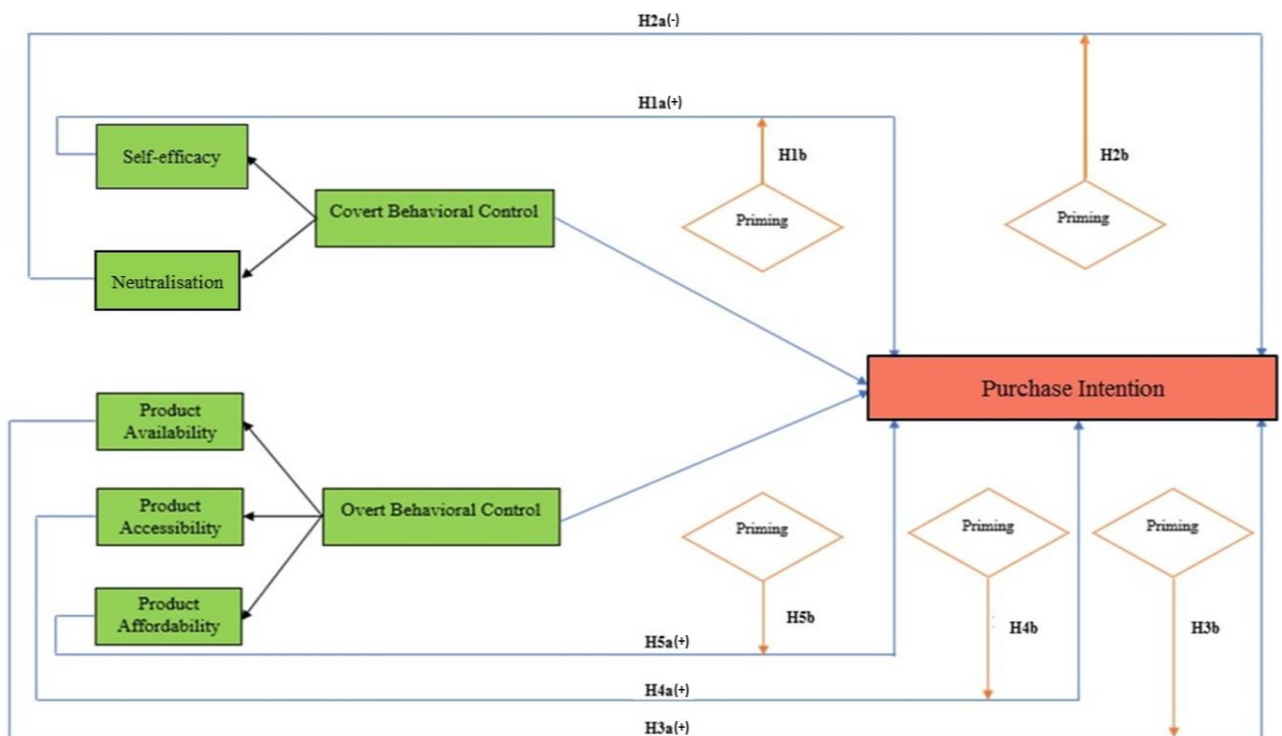


Figure 3.2 The New Theory of Behavioural Control

Similarly, the state of hypocrisy that an individual is exposed to depends on the individual's own awareness of his/her hypocritical behaviour, and their act of neutralisation which stems thereof. In an example of neutralisation; the individual may well play down the importance of the hypocritical behaviour for self-assurance and as a means to relieve mental distress caused the behavioural inconsistency. Regardless, both self-efficacy and neutralisation are controlled by cognitive functions, and thus, constitute covert behavioural control mechanisms. These mechanisms focus on investigating behavioural change interventions designed to elicit change in the individuals' cognitive assessment of their self in relation to behavioural performance. They are relevant to covert variables but are redundant in the face of overt variables.

In contrast, overt behavioural control mechanisms consist of three constructs that are frequently mentioned in behaviour change research, namely: i) product availability, ii) product accessibility, and iii) product affordability. The 'overt' nature of these constructs stems from them originating in the external environment, being beyond the volitional control of the individual. The overt behavioural control mechanism of the proposed conceptual framework attempts to clarify those factors that are unaccountable until the individual is at the point of sale.

With regards to behavioural change intervention, the priming concerning overt behavioural control is meant to undermine the severity of the problem posited by the behavioural performance barrier. For example, when the sustainable product is perceived as 'not affordable' by the consumer at the point of sale, availing alternatives of sustainable product that are priced cheaper may help to weaken the barrier to sustainable consumption (e.g., product ownership versus rental).

Both covert (i.e., self-efficacy, neutralisation and overt behavioural (i.e., product availability, product accessibility, product affordability) controls are discussed in greater detail, with the respective hypotheses for each relevant construct presented in the following sections.

3.5.1 Self-efficacy

Owing to the influence self-efficacy has on an individual's behaviour, exploring the extent of its influence in a consumption setting seems warranted. As such, it contributes to the paucity of knowledge regarding the impact of self-efficacy on sustainable consumption decisions. Indeed, the extant work pertaining to self-efficacy within the domain of behaviour has mainly concerned itself with behavioural change in the workplace and as a motivational means (Lloyd

et al., 2017; Ozyilmaz et al., 2018), with limited inroads into its application towards sustainable consumption (Li & Zhong, 2017). Apart from this, the current research included two distinctly different forms of consumption, conspicuous and sustainable consumption. Rarely has research considered examining such contrasting forms of consumption conterminously. The current research also contributes to the understanding of the influencers of these two distinct antipodal forms of consumption. In particular, both conspicuous and sustainable consumption are investigated vis-à-vis the perspectives of self-efficacy and approach-avoidance motivations. Subsequently, the present study contributes to practice by advising marketers whether any differentiation in marketing strategies is required when trading in either non-sustainable goods or sustainable goods when dealing with consumers with differing levels of self-efficacy (Phipps et al, 2013; Antonetti & Maklan, 2014). The utilisation of this construct provides important insight into the impact of self-efficacy and changeability under varying conditions of temporal orientation to determine the likelihood of positive behavioural intention towards sustainable products (Schutte & Bhullar, 2017). In their study, Schutte and Bhullar (2007) demonstrated that participants in the experiment that expressed greater self-efficacy for sustainable behaviour also showed greater approach motivation towards such sustainable behaviour, and reported more of such actual behaviour being performed. Additionally, it was found that increasing self-efficacy held by participants encouraged behavioural consistency in the performance of the actual sustainable behaviour.

To provide a grounded comparison of the behavioural consequences under study, this study examines the behavioural intention for two types of products—i.e., conspicuous products and sustainable products—under varying market conditions. The market factors that are manipulated are the perceived temporal distance of the decision being considered by consumers, as well as the differing motivational factors later introduced as priming methods to prompt more sustainable consumption decisions. First, this study establishes the levels of i) self-efficacy and ii) the degree to which a consumer would intend to purchase a sustainable product or conspicuous product. Next, this study manipulates the consumers' likeliness to respond to statements that trigger approach motivation to bring about a positive intention to consume sustainable products, as supported by prior research (Schutte & Bhullar, 2017). By priming via positive statements, consumers that respond positively to approach motivational cues would be prompted to consume sustainable products, whereas, priming via negative cues geared towards highlighting the negative impacts of unsustainable behaviour (conspicuous consumption) is used on consumers that respond negatively towards the avoidance statement.

This would cause consumers to shy away from conspicuous consumption with a subsequent effect of raising self-efficacy towards the consumption of more sustainable alternatives. With regards to consumption, high levels of self-efficacy, particularly self-control, predict high levels of consumption of products with a societal benefit, such as those which are sustainability-oriented, when these products offer a future focused benefit; whereas, consumers with low levels of self-efficacy are more likely to choose products that focus on immediate benefit (Ein-Gar et al., 2012). High self-efficacy has been associated with reducing the tendency for impulsive consumption (Loewenstein, 1996), while the decrease in self-efficacy has been associated with a reduction in altruism (Martinsson et al., 2012; Hanss et al., 2016). Overall, individuals with high levels of self-efficacy are more likely to concentrate on the greater good and are more consistent in their initial behaviour (Ein-Gar et al., 2012; Farmer et al., 2017). And so, this study hypothesises that:

H1a. Self-efficacy has a positive effect on sustainable purchase intention.

Existing research on the effects of temporal distance on consumption decisions have not considered the impact different types of goods may have on in relation to the urgency of the consumption decision faced by consumers (Brosius et al., 2013; Antonetti & Maklan, 2014). While sustainability is related to forward-thinking consumers, conspicuous consumption is linked to immediate gratification. This, in turn, provides a concentric basis to distinguish certain consumer groups from others in analysis of consumer responses. Consequently, given that i) high levels of self-efficacy relate to behaviour that is consistent with initial purchase intention, ii) long-term temporal distance is associated with sustainable consumption and iii) both approach-avoidance motivations are effective in bringing about a change in behaviour that is consistent with pro-social goals, it is contended that by targeting consumers that practice conspicuous consumption behaviour and priming them via both approach and avoidance motivational statements, it may be possible to shift consumption behaviour towards sustainable product alternatives. Thus, it is also hypothesised that:

H1b. Priming through heightening the benefits and costs of sustainable and unsustainable product alternatives moderates the relationship between self-efficacy and sustainable purchase intention.

3.5.2 *Neutralisation*

Consumers predominantly engage in consumption to derive a level of need satisfaction, in addition to appeasing higher emotional and aspirational wants (Warde, 2005; Giorgi, 2017). Whilst much consumption is associated with outcomes of derived fun, entertainment and pleasure (Wolfenbarger & Gilly, 2001; Hüttel et al., 2018), some goods have a dark side, the consumption of which involves the consumer suffering a modicum of intangible emotional costs as part of the shopping experience (Babin, Darden, & Griffin, 1994). An internal conflict is created in consumers when realisation sets in that in order to satisfy primal needs, certain purchasing situations challenge their personal ethical standards. This is often the case in the modern business world, when producer's charge competitively low prices, through means that may be viewed as unethical; such as forcing labourers to work under inhumane working conditions to keep costs low. Then again, there are also rising concerns from consumer pressure groups regarding sustainability measures and intentions behind corporate social responsibility initiatives (Sen & Bhattacharya, 2001; Leonidou & Skarmeas, 2017). Thus, researchers and market practitioners believe that the irresponsible actions of the corporation affect both the attitudes and behaviour of consumers towards that same corporation in an unfavourable way (Hofenk et al., 2019; Arli et al., 2017). Research by Hofenk et al. (2019) indicated that both personal norms (i.e., the way a person perceives himself/herself) and social factors (i.e., the way others perceive a person) had a role to play in determining the decision to consume sustainably. They suggest that by imposing ethical standards derived from society and internalising them, consumers should react accordingly to consumer's perception of corporate reputation.

However, this is only a partial truth, as corporations in such situations only receive a moderate negative behavioural response from consumers for being in a scandalous situation (Brunner, 2014). Consumers do not impose their pro-ethical stance onto their actual purchasing behaviour, which results in an intention-behaviour gap (Govind et al., 2019). This means that although consumers may express themselves as being 'all caring' in surveys, they continue to ignore environmental, social and even economic issues as they continue to engage in traditional product preferences and purchases in the market place (Hofenk et al., 2019). This may be due to 'neutralisation' tendencies where consumers leverage on reasons that help them to convince themselves to continue engaging in actions that they would otherwise would not have engage (Fukukawa et al., 2017). This creates the problem of misrepresenting the degree of sustainable consumption that would occur based on survey data (Auger & Devinney, 2007). This is part of

the widely acknowledged gap between attitude, intention, and behaviour (Wong & Sheth, 1985). The problem is exacerbated when the focus is on socially desirable behaviour, such as sustainable consumption, because people are loathe to admit that they do not care about the societal issues that others believe they should care about (Eckhardt et al., 2010). Based on this, the relationship proposed by this study posits that in the presence of neutralisation behaviour consumers face low sustainable purchase intention (i.e. negative relationship between neutralisation and sustainable purchase intention). From a theoretical perspective, the incorporation of this construct sheds light on consumer behaviour outcomes resulting from the relationship between neutralisation and unsustainable consumption behaviour through the following hypothesis:

H2a. Neutralisation has a negative effect on sustainable purchase intention.

Next, this study introduces the awareness of hypocrisy as a priming factor to overcome neutralisation behaviour. In this way, this study attempts to resolve the ambiguities surrounding the internal reasoning consumers rely on in masking cognitive distress experienced through neutralisation. Through growing our understanding of both the intention–behaviour gap, and the way consumers react to the gap, it becomes easier to counteract with suitable marketing communication strategies in scenarios where consumers deal with hypocrisy, essentially, by raising consumer awareness to the fallacies of their unsustainable consumption. Investigation in this direction will provide greater insights into the application of hypocrisy as a priming mode for consumer behaviour, as its current application is limited to only criminology and psychology (Priolo et al., 2016). Indeed, when self-efficacy falls short in explaining behaviour, the individual needs to then justify their actions when faced with hypocrisy. Within the realm of hypocrisy, the consumer needs to re-assess his/her stance on the consumption of the product he/she consumed. Thus, it is proposed that by raising consumer awareness of hypocrisy, the moderating effect weakens the effect of neutralisation that lowers sustainable intention. This understanding is stated for testing through the following hypothesis:

H2b. Priming through increased awareness of hypocritical behaviour moderates the relationship between neutralisation and sustainable purchase intention.

3.5.3 *Product Availability*

The construct of ‘product availability’ is heavily featured in the literature and one of the more observable phenomenon that is measurable in a consumer’s everyday consumption behaviour. The degree of physical product availability hinges on a simple bipolar scale, in which the product is either ‘yes, available’ or the product is ‘no, not available’ (Vermeir & Verbeke, 2006). However, much of the application of the concept of product availability has been viewed through the lens of perceived availability (i.e., consumer perception of the potential availability of the product they intend to purchase), which suggests that any sustainability-oriented intentions formed may not necessarily be a true representation of the actual behavioural response chosen by consumers at the point of purchase (Tarkiainen & Sundqvist, 2005; Vermeir & Verbeke, 2006; Wallace & MacEntee, 2012). This is partially due to social desirability bias that irks consumers to make morally righteous and socially desirable choices for their behaviour, but that may not truthfully represent their actual behaviour. In this study, product availability (actual rather than perceived) is examined, whereby consumers who are sustainability-inclined are more likely to purchase sustainable products when they are available. This, in turn, helps to ascertain the relationship between product availability and purchase intention of sustainability products, and lays the foundation for priming interventions that tries to enhance those intentions even more. Thus, this study hypothesises that:

H3a. Product availability has a positive effect on sustainable purchase intention.

As mentioned, high product availability of a sustainable product will have a positive effect by facilitating the realisation of the consumers’ sustainable purchase intention (Cerri et al., 2018). If a consumer already holds favourable intention of purchasing the sustainable product, then making the product available in stores would assist the ‘purchase of the sustainable product’ behaviour being performed. Conversely, lack of product availability inhibits behavioural performance as initial consumer intention towards the purchase of sustainable product becomes redundant (volitional control absent in the presence of behavioural control). As such, chronic intentions to not consume sustainable products due to the non-availability of sustainable products (e.g., no recycled A4 paper in the city) may be overcome or weakened through exposure to primes, such as online shopping and postal deliveries offered by recycled A4 paper manufacturers and retailers, and, as a result, this closes the intention–behaviour gap through a shift in chronic intentions from choosing not to consume sustainable products to the actual behavioural performance of consuming sustainable products (e.g., choosing to purchase

recycled A4 paper online and having them delivered at home for consumption). Whilst this study posits product availability as an overt behavioural control factor preventing behavioural performance, this study also argues that the means to overcome this barrier is through priming, such as by availing an online purchase facility to weaken the effect of the intended product being unavailable in physical environments. Indeed, many consumers may well view sustainable products as ‘elusive’ and never available at the time a purchase decision needs to be made. Their past experience of the elusiveness of sustainable products at retail stores may dull their chronic intention (Johnstone & Tan, 2015). By offering viable alternative channels to acquire the product, this study investigates the effectiveness such intervention strategy has on behavioural performance, with a focus on measuring change in behavioural intention (pre- and post-intervention [priming]). Thus, this present study hypothesises that:

H3b. Priming through an alternative retail format in the form of online retail options that had products available moderates the relationship between product availability and sustainable purchase intention.

3.5.4 Product Accessibility

Accessibility is a concept that many scholars consider alongside a group of factors, such as price and quality, when studying consumers’ perceptions of behavioural control (Ribot & Peluso, 2003; Pritchard et al., 2009; Saunders & Hughes, 2018; Chang & Watchravesringkan, 2018). Earliest efforts by Anderson (1971, p. 361) attempted to define accessibility within the field of consumer behaviour “very little is known about critical or ‘threshold’ accessibility levels (‘objective’ or ‘perceived’, minimum or maximum), and there is some confusion about the relative importance of social and spatial factors”. The definition provided by Anderson (1971) suggests a stark difference between the type of accessibility which is measurable, overt and objective, against the type of accessibility which is covert, perceived.

The reliance on an objective measure of accessibility to explain behavioural phenomenon was promulgated by Ingram (1971) who posited the concept of ‘relative accessibility’, in which the physical distance between two places (e.g., the distance between the individual intending to purchase the product and the store in which the product is present) is considered as a measure of accessibility from one place to another; so, highly accessible places would be only a short distance from each other while less accessible places would be separated by great physical distance. In that sense, the measure of relative accessibility or spatial accessibility is reflexive as long as the route between two locations is not unidirectional (Pirie, 1979). Spatial

accessibility may be measured by physical distance, the time or resource cost involved in accessing the intended target object (Pirie, 1979). And whilst a number of studies have suggested that higher accessibility leads to an increase in intended behaviour (Lucan et al., 2015; Saunders & Hughes, 2018; Zhang & Zhou, 2018; Chang & Watchravesringkan, 2018), supported by the rationale that the closer a consumer is to the store or service provider the more they would frequent the location (Bedimo-Rung et al., 2005; Yoshi & Rahman, 2015), others argue that accessibility has no significant effect on influencing the preferences and frequency of visitation by consumers (Payne et al., 2002; Hillsdon et al., 2006). Indeed, research by Kim and Jin (2018) suggest that the predisposition of the individual in the form of product preference (in this case towards the purchase of sustainable products), particularly for products which provide some level of social benefit and are perceived as socially appropriate, may supersede any form of inconvenience caused by low accessibility. Similarly, the research by Lin et al. (2014) and Wang et al. (2015) evidenced that an individual's natural orientation towards the product/service is a stronger determinant of predicting behaviour as opposed to the level of accessibility. This suggests that the effect of accessibility is context-specific, a view that has been supported by current applications of the concept (Chang & Watchravesringkan, 2018; Zhang & Tan, 2019). The differences in results from these studies may also be due to the inconsistencies in how accessibility in consumer behaviour is measured, such as in considering actual physical proximity or whether investigating perceived accessibility (i.e., the subjective evaluation of the distance/costs required to be undergone to acquire a product) (Zhang & Tan, 2019).

Research effort was concentrated on understanding perceived accessibility, with increasing importance called by the literature to distinguish the relevance of when to apply notions of perceived accessibility and when it was relevant to consider physical, spatial accessibility (Carvalho et al, 2016; Chang & Watchravesringkan, 2018; Zhang & Tan, 2019). The subjective evaluation involved forming nuances and value judgements regarding whether the individual should invest his/her time and costs into pursuing the target object (Eitam & Higgins, 2010). Essentially, the mental representation of accessibility that forms the perceptions of an individual, considers the amount of external stimuli needed to bring about a shift in latent state (relevant memory is present in the mind of the individual but inactive at the time) to an active state (in which the memory influences current thought and action). This study argues that within the confines of volitional control, individuals may placate any form of low accessibility that may inhibit their target behaviour through altering their perceived accessibility (through

covert behavioural control), but when the influence of accessibility is of an overt spatial nature then the individual will have to rely on overt behavioural control in the absence of volitional control. Most often, poor spatial accessibility is signalled as one of the main reasons behind the intention–behaviour gap, a gap that limits actual consumption despite signals of favourable behavioural intentions held by consumers (Gaspar et al., 2010; Zhang et al., 2016).

Given the above articulations, the present study hypothesises that greater accessibility of products has a positive influence on intention to purchase that product, especially, in the case of sustainable products;

H4a. Product accessibility has a positive effect on sustainable purchase intention.

From the consumer’s perspective, products which are perceived difficult (too inconvenient) to attain due to reasons of physical limitations as well as geographic barriers such as spatial distance may dissuade consumers from acting on their initial purchase intention, regardless of the negative moral standing incurred. The element of accessibility becomes a justification for consumers to refrain from consuming an intended poorly accessible product to instead consume an unintended highly accessible alternative. And so even though consumers may have positive intentions to purchase sustainable products, the external environment may inhibit this purchase intention (Wright et al., 2006). Manipulating the external environment factors, such as accessibility, would shed light on the extent of the influence the external environment has on consumer purchase intention.

The frameworks to this point have investigated the relationship between the external factor of accessibility and intention to purchase. Yet, as mentioned previously, in the presence of the intention–behaviour gap, not all situations will translate into consumers picking the sustainable product alternative initially intended. In an effort to overcome the intention–behaviour gap, psychology literature, suggests that by bolstering chronic intention by raising awareness in respondents of their contradictory nature, behaviour is more likely to mimic initial intention (Yousaf & Gobet, 2013). In another instance priming has been utilised to lessen cognitive dissonance as well as inconvenience (Priolo et al., 2016). This study proposes that to overcome self-justification of consumers to not consume sustainable products due to poor accessibility, respondents should be primed by exposing them to sharing alternatives to stabilize intentions and lead to behaviour which is consistent with these chronic intentions. Indeed, with rapid proliferation in business models and technologies, such as those that democratize product access (e.g., product sharing through AirBnB, Uber, club and gym memberships), consumers

are now exposed to a wider range of alternatives for accessing products to consume and satisfy their needs and wants. This suggests that the array of accessibility options today hold great promise for changing consumers' perceptions of behavioural control in settings where behavioural control limits the performance of desired behaviour, especially sustainable consumption (Zhang et al., 2016; Chang & Watchravesringkan, 2018). While sharing is not an old concept (Belk, 2010), it has in recent times expanded to incorporate a myriad of both for-profit and non-profit business initiatives (Acquier, Carbone, & Massé, 2016; Sundararajan, 2016). For example, in the tourist industry, AirBnB (a form of an online accommodation rental marketplace), and in transport, Uber (shared transport for a fee) have disrupted and redefined conventional markets. The sharing of these otherwise private and underutilised assets has been referred to as the 'access economy' (Bardhi & Eckhardt, 2012). The idea of promoting greater access to products and services is fundamental to the idea of sharing (Belk, 2014). And although access-based transactions which rely on granting temporary access instead of more permanent transfer of ownership are not new, the act of sharing for short-term benefit as an alternative to long-term usage is growing in popularity (Botsman & Rogers, 2011). Essentially, individuals are increasingly motivated to share products, services and knowledge with other consumers in order to generate value. And so, otherwise poorly accessible goods through sharing may become more accessible. These articulations, in turn, inform the next hypothesis:

H4b. Priming through sharing option availability across different geographical extents (e.g., a local neighbourhood, another state, or another country) moderates the relationship between product accessibility and sustainable purchase intention.

3.5.5 Product Affordability

Behavioural theory guides the current work by framing the research and establishing the confines of the various purchase scenarios. While in a cognitive sense, consumers have full control over their internal covert behaviour, contrastingly, the external environment present during the purchase scenario adds an element of unpredictability for which consumers have no control over. In theory, the consumer's evaluation of product affordability (or the practical feasibility of purchasing a product) acts as a barrier to consumption, particularly in the context of sustainable products (Zsóka et al., 2013; Gleim & J. Lawson, 2014). A recurring theme in the literature on behavioural control debates the significance of product affordability as an external barrier to behavioural performance (Notani, 1997; Limpo et al., 2018).

More specifically, the concept of affordability is a psychological manifestation of an economic variable derived from the concepts of value, quality, and capability (Odomirok, 2016). Such measures of whether a person deems themselves capable of spending on a product circumvents the challenge inherent in more objective measures of purchasing ability, such as real disposable income (Notani, 1997; Singh & Kathuria, 2016). With the revolution in e-commerce and credit facilities, such perceptions on affordability may form more realistic measures on how much consumers may actually spend. It may also be argued that the concept of affordability tends to be applied to products considered as expensive, as intention is often sufficient to form consistent behaviour in cheap products due to greater acceptability and lower costs (Lien et al., 2015). Yet, only having the ability to purchase a product does not necessarily lead to a purchase. For a purchase to take place, a consumer must have both the ability and the intention to buy the product. Similarly, purchase intention is stronger in situations where in addition to liking the product, a consumer genuinely believes that he/she can afford the product (Singh & Kathuria, 2016). In contrast, in situations where the consumer liked the product, but is unable to afford it, he/she would not be able to purchase it and may resort to purchase product alternatives (Notani, 1997; Singh & Kathuria, 2016). Here, it is important to note that the power anchor when it comes to product affordability is product pricing, which is outside the volitional control of the individual as price is determined by the seller not the buyer. With this understanding, this study examines the relationship between affordability and purchase intention through the following hypothesis:

H5a. Product affordability has a positive effect on sustainable purchase intention.

As mentioned, highly affordable products tend to be lower priced, and observations from existing research indicate that consumer willingness towards the purchase of such low-priced products tends to be higher. In situations where the product is deemed 'affordable', consumers' behaviour should indicate positive intention towards such products, independent of their product type (sustainable or non-sustainable). The literature supports this argument, as perceived price (or affordability) has often been relied on to determine purchase intention for certain product brands over others (Diallo, 2012; Limpo et al., 2018).

More importantly, the extent of affordability to inhibit sustainable consumption behaviour has not been tested empirically by research (Cassady et al., 2007; Gleim & J. Lawson, 2014). Priming, has been utilised to overcome consumer inconvenience resulting from purchasing decisions in which the consumer is made to make an unsustainable consumption decision

(Priolo et al., 2016). To test the influence of affordability on sustainable consumption behaviour, priming is used to make consumers aware of rental service alternatives. This is similar to the approach by Ferrey (2012), in which priming, as a means of promoting behaviour consistent with initial intention was used to overcome moral integrity problems. Findings from this current research would highlight the significance of affordability as a pricing strategy for businesses in general. It will also provide a way for consumers to self-evaluate prior to making sustainable consumption decisions to initiate a shift towards more sustainable behaviour that is consistent with intentions.

Following this line of research, this study proposes a solution to overcome the intention–behaviour gap, namely by testing the reinforcement of consistency in consumer behaviour through priming behaviour by raising consumer awareness of rental alternatives during the purchasing situation. That is, by exposing consumers to alternative methods of purchasing sustainable products which may be viewed as ‘not affordable’, this study contends that it is possible to alter perceptions of affordability. Specifically, this study contends that it is possible to positively influence consumers to carry out their intended sustainable purchase intention by offering rental options for these same sustainable products. Through this understanding, this study posits the following hypothesis:

H5b. Priming through rental option availability moderates the relationship between product affordability and sustainable purchase intention.

3.6 Chapter Summary

Building on the research gap identified in the previous chapter, this chapter states the research problem and then attempts to bridge the gap through the use of a new framework that is grounded on prior research to define and posit tenable hypotheses. That is, this chapter identifies a need to predict purchase intentions for sustainable products to close the theoretical gap between intentions and actual purchase through covert behavioural control and overt behavioural control. Based on this identified gap, the present study lays the theoretical foundation by explaining the research phenomenon using the new theory of behavioural control that typifies behavioural control into covert-type behavioural control and overt-type behavioural control. Conceptual links among these constructs are established and the hypotheses to be tested are proposed. The chapter begins by establishing the relationship shared between individual constructs and the dependent variable, in this case purchase intention.

This served as a frame to within which we posit for potential intervention strategies to effect the intention–behaviour gap. The theory explains that the type of behavioural control determines the potential effectiveness of intervention strategies, specifically priming, to facilitate either opening/closing of the intention–behaviour gap. By using an array of alternatives to prime consumers (seen in Table 3.1 below), this study argues that it is possible to measure the extent to which both covert and overt factors influence chronic intentions towards sustainable products.

Table 3.1 List of Priming Moderators

<i>Factor being Primed</i>	<i>Priming Type</i>	<i>Treatment (Prime)</i>
<i>Self-efficacy</i>	<i>Conceptual Priming</i>	<i>Approach-Avoidance Motivation</i>
<i>Neutralisation</i>		<i>Awareness of Hypocrisy</i>
<i>Product Availability</i>		<i>Online Shopping</i>
<i>Product Accessibility</i>		<i>Sharing</i>
<i>Product Affordability</i>		<i>Rental Facilities</i>

The presence of priming may, thus, stabilize consumer’s chronic intention, contributing to the literature on ways to overcome the intention–behaviour gap. As a whole, this chapter defines the conceptual framework and research hypotheses to be tested in this study. This provides a basis for the following chapters of the study, beginning with the formulation of the research design in the subsequent chapter, Chapter 4, regarding the research methodology.

4 METHODOLOGY

4.1 Chapter Overview

This chapter explains the research methodology of the study. The study aims to answer the research questions outlined in Chapter 1, and to test the hypotheses proposed in Chapter 3. A behaviourist approach (from a positivist paradigm), as mentioned in Chapter 2, is utilised. The goal of the study is to examine the effects of behavioural control on the consumer intention to purchase sustainable products and the ways in which behavioural control may be manipulated to bring about a desired shift in behaviour. Hence, the behaviourist approach is well suited to the study as it has been used in previous studies to "... predict, given the stimulus, what reaction takes place" (Watson, 1913, p. 11). Moreover, the main theoretical goal of behaviourist research is "... prediction and control such that its research design and methodologies should be supported by empirical data obtained through careful and controlled observation and measurement of behaviour" (Watson, 1913, p. 158). Thus, a factorial experimental design, which permits within- and between-group comparison to gauge effectiveness of behavioural change treatments, is adopted in this study to investigate the effects of moderating variables and their subsequent impact on altering the strength of behavioural control factors.

This chapter commences by addressing the research paradigm that forms the basis of this study. It then proceeds to explain the research instrument. Lastly, the chapter provides a detailed discussion of the research procedure utilised in this study.

4.2 Factorial Experimental Design

Traditional forms of research study the effects of singular factors in an isolated environment (to account for market conditions) (Oll et al., 2018). Whilst this approach facilitates ease of statistical manipulation, it becomes impractical and overly simplistic to analyze data that deals with variables of an interdependent nature (Yang, & Yen, 2018). Merely relying on the nature of the variables is insufficient to account for their subsequent interaction with other variables, particularly when the effect of the variables depends on external market conditions. ‘Interdependence’ amongst variables such as this is most pronounced in consumer behaviour, where both internal cognitive processes function in tandem to external dynamic market conditions, creating a complex system. Dörner (1996) defined complexity as the label we give to the existence of many interdependent variables in a given system, whereby the more variables and the greater their interdependence, the greater that system’s complexity. The complexity of the system propounds the intricacies of the many interlinked relationships between variables. This complexity can be best studied through the relationship between the individual and their external environment. In such interdependent relationships between the state of internal cognition and the state of market conditions, at the point of sale, consumers need to determine the feasibility of the consumption actions available to them (Varnali, 2018). By decomposing complex behaviours into subsystems and descriptive viewpoints, the nature of these specific relationships and their impact on the individual can be studied more accurately.

When the focus of the research shifts towards the nature of the variables and the dynamic relationship between variables, two key research designs were considered appropriate for this study: (1) Randomised Controlled Trials (RCT), and (2) Factorial Experimental Design. Each research design was critically appraised in their effectiveness to measure the nature of the variables, the relationship between variables and the effect of the treatment.

In an RCT design, the respondents are randomly assigned to one of two possible groups; one of which is the experimental group (receives the intervention treatment being tested), the other acts as the control group (receives no intervention treatment). Both groups are assessed to identify if the treatment had any effect on the predetermined outcome (e.g., purchase behaviour, decision-making, formation of habits). The results from this form the basis on which the effectiveness of the treatment can be measured. Thus, the focus of an RTC design is to determine the effect of the treatment-control difference (Hartmann-Boyce et al., 2018).

In considering the RCT design, two pivotal constraints of the research design become apparent. The first restriction manifests in the number of experimental conditions that can be used. Literature evidences that conditions are usually limited to just two or three conditions (often referred to as “arms”); the objective being to facilitate comparison between individual experimental conditions (Hartmann-Boyce et al., 2018; Beattie et al. 2019). When comparing control conditions against treatment conditions, it can be established whether the treatment has any effect. However, this limits analysis of the treatment/behavioural change being studied – omitting the analysis of the individual components comprising the treatment which bring about the desired effect studied. Whilst the RCT design establishes a needed preliminary cause-effect relationship between variables, further research into the context of these relationships provides the necessary insight into evoking/pacifying these relationships.

The second restriction of the RCT is in the rigidity of its sample determination. To determine an appropriate sample size in RCT, the expected effect size associated with the treatment-control difference is established, subsequently, a sample size is selected so that power is maintained at the desired level. To highlight the rigidity of the method; envision an RCT with only two experimental conditions, a standard condition and the treatment condition, Treatment A ($N = 300$, in which case the power analysis suggests 150 respondents per condition). Should the researcher anticipate the need to introduce a second treatment, Treatment B, the RTC would become a three-arm RTC. With the assumption that the power analysis for the effect size remains the same, an additional 150 respondents would be required ($N = 450$). Essentially, when adding a new arm to an existing RCT, the sample size needs to be reinforced by n , it becomes necessary to increase the number of respondents by n in order to meet the adequate power of effect size (Reio, 2016; Wilding, 2019). This requires the researcher to predetermine variables, anticipate the desired effect, and likely suffer from sampling errors when working within the confines of a tight research budget.

In contrast, in considering a factorial experiment, the objective of the research design is not to compare experimental versus control conditions to each other, rather the effects of a combination of experimental conditions are compared (Keppel, 1991). A key benefit of factorial experimental design is the ability of the design to allow for the subtle manipulation of larger interdependent variables. This facilitates the streamlining of research, which allows more powerful statistical methods to highlight any correlation between variables in a myriad of conditions. Apart from highlighting these relationships between variables, it also allows the measurement of the effects of manipulating a single variable to be isolated and analysed singly

within the different respondent groups. Due to the nature of the design, establishing multiple scenarios which measure the slightest difference in responses brought about by test conditions, it is possible to reduce statistical errors caused by confounding variables (MacKinnon et al., 2000).

Gathering a sufficient sample size is easier using a factorial experimental design. Consider a similar hypothetical research example as the RCT, where there are three main effects, one associated with each of the three variables. The size of the effects (d) may vary depending on the possible test conditions. The size of effects is interpreted through Cohen's d value, which can be utilised when comparing two means, similar to conducting a t -test, and reflects the difference between the means of two groups divided by their standard deviation (Cohen, 1988). Cohen (1988) in his study of effect size that a d value = 0.2 indicates a 'small' effect size, a d value = 0.5 indicates a 'medium' effect size, and that a d value = 0.8 suggests a 'large' effect size is measured. The appropriate effect size can be determined by evaluating the size of the effects of these three main effects, following which, the smallest-sized effect is selected to form the basis of the desired level which needs to be maintained in lieu of other conditions. Now, suppose the expected size of the effects for each variable in the example are as follows; Availability effect = .15, Accessibility effect = .12, Affordability effect = .17. Utilising this sample size, the power of the other associated variables will have to maintain the smallest measured effect size (in this case $d = .12$, for affordability). Should there be a need to change the perimeters of the research by adding an additional treatment, the base sample determinant remains unchanged, and the qualifying criteria for sample size determination demands any changes only maintain the smallest effect size, Affordability effect, $d = .12$.

As the present study deals with multiple conditions and the effects the interaction between variables has on the measured outcome (purchase intention), the factorial experimental design offers the flexibility and the required depth in analysis to lend itself to our research. It also accommodates the resource constraints while maintaining rigor expected of a doctoral research, as in the present study.

4.3 Research Design

To test the hypotheses, a between-subjects scenario-based experiment was designed with two independent variables at two levels each (2 x 2) for each of the five conditions (i.e., availability, affordability, accessibility, self-efficacy, neutralisation). The independent variables manipulated within these scenarios were the condition (i.e., two levels: condition present, condition absent), and product type (i.e., two types: sustainable product, regular product). Product type was used to account for the presence of sustainable products and to measure the influence the presence/absence of such products has on the strength of accessibility as an inhibitor of sustainable consumption. A similar method was used by Parguel et al (2011) to investigate the role of independent sustainability ratings on consumers' responses to companies' CSR communication.

Based on their responses, the respondents were categorized as having either high purchase intention or low purchase intention. This purchase intention then formed the dependent variable for this study. For this variable, validated scales from consumer behaviour literature were used. The purchase intention scale was the single-item, seven-point version adapted from Pavlou (2003) asking respondents how likely they were to purchase the products in the scenario. Data was collected by means of an online survey that comprised the purchasing scenarios as well as categorical responses targeted at establishing initial intention to purchase sustainable products.

4.4 Research Procedure

Figure 4.1 illustrates this study's procedure for data collection, preparation, and data analysis. The data was collected utilising an online questionnaire and analysed with SPSS v. 25.

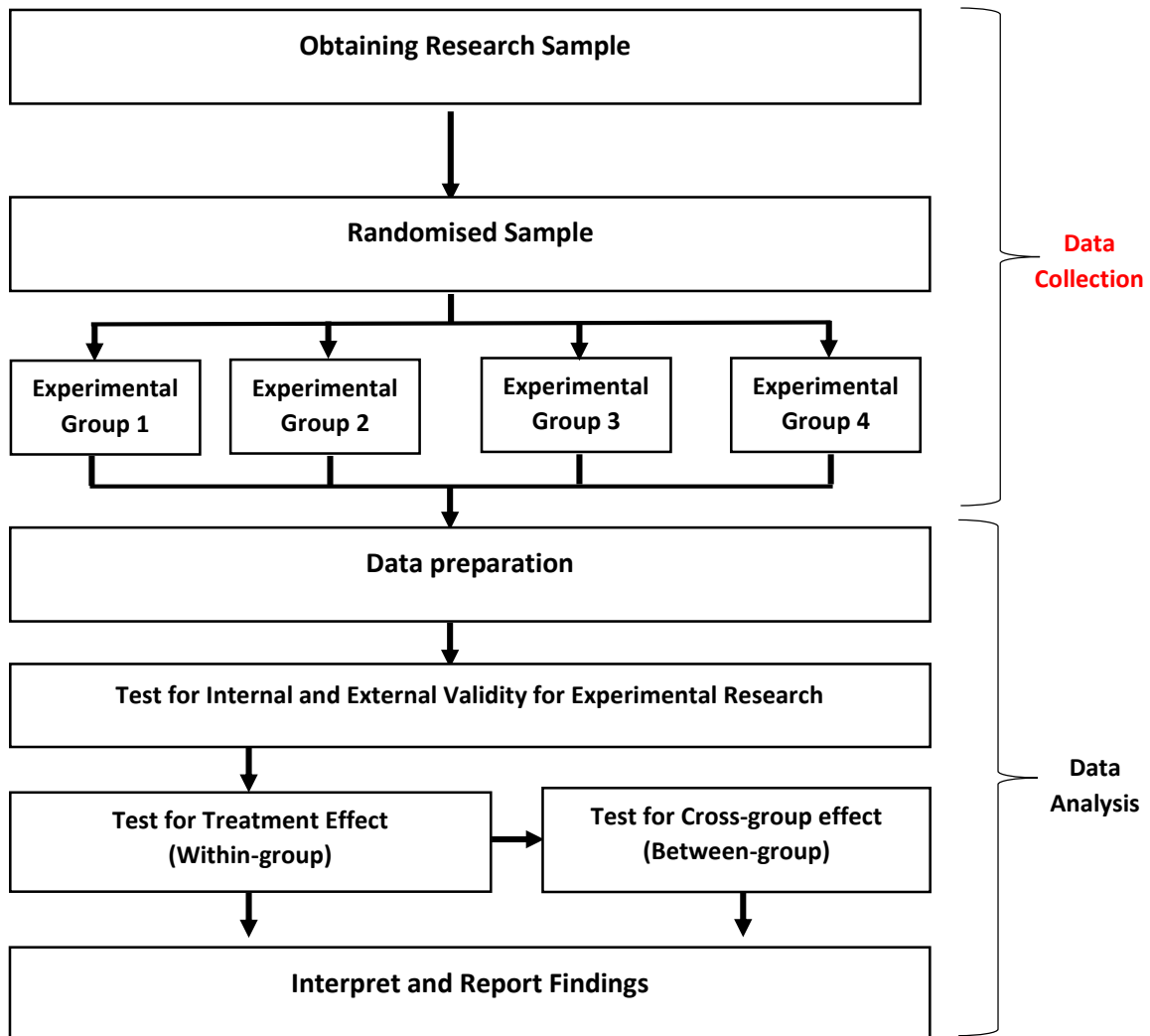


Figure 4.1 Research procedure

4.5 Data Collection Procedure

A total of 600 randomly selected working adults (between the age 18-60) from a cross-sectional population of consumers located in Malaysia were sent an email invitation to participate in our online survey by an external marketing agency. Treatment of data, to allow removal of non-sustainability inclined respondents and to account for straight lining, resulted in a useable sample size of $n= 419$. Working adults were specifically targeted because of their relative willingness and independence in decision making with regards to how to spend their income.

Stratified random sampling was used to reflect a cross-sectional view of the general population while yet allowing for data variance as to the reasoning behind the dissonance of purchase intention. This sample size was determined based on Krejcie and Morgan's (1970) formula for sample size determination. The sample size of 419 participants is ideal for the range of statistical analysis that can be relevantly carried out to analyse this relation—e.g., analysis of difference (*t*-test) (Krejcie & Morgan 1970). In their sample size determination Krejcie and Morgan's (1970) require a minimum respondent size of $n=15$ for each scenario presented (i.e., $15 \times 20 = 300$) to validate findings; our sample size fits well within the required criteria. Given recent advances in big data technologies and scarcity of resources in the university for internally funded projects, this study chose to outsource data collection to an independent market surveyor that is legally registered and have high profile experience with top companies and multinationals in Malaysia—i.e., Vase (Vase, 2019).

Vase has a pool of 700,000 people who have voluntarily registered to become survey respondents (Vase, 2019). Voluntarily registered survey respondents whom comprise this sample pool are people who have voluntarily registered on Vase's website and agreed to Vase's terms and conditions, including awareness about Vase's ethical and responsible conduct to ensure the strictest protection of participant privacy and data storage (Vase, 2019). The survey respondents who are part of this sample pool agreed in writing to have their non-identifiable responses published by clients in return for a small token of appreciation (of about RM5.00 = AUD 1.74) for their time and effort. The market surveyor, Vase, only sends out and documents contracted surveys by and for their clients to this pool of voluntarily registered survey respondents, using a computational randomised algorithm. This is carried out by Vase's internal employees, who insert client requirements into Vase's internal systems that will use its computational randomised algorithms to: i) randomly select and provide clients' project description and information consent statement to target participants in Vase's pool of

voluntarily registered survey respondents; ii) disseminate survey to and record responses of voluntarily registered survey respondents in this pool who are interested and willing to take the client survey; and iii) automatically generate and send the dataset and report to clients once the target number of participants have been reached (Vase 2019). The selection criteria for determining respondents for this present study is by legal definition any Malaysian who is part of the workforce and thus has consumer purchasing power. And so we limit the age range between 18 to 60 years, with 18 as the minimum age and 60 as the minimum retirement age – this age range is generally considered as the age range characterizing the workforce (Malaysian Department of Statistics, 2019). Additionally, the scoping of the present study only considers the behavioural responses from sustainability-inclined consumers, thus the sample pool was further narrowed based on consumer's chronic response to the question of preference for product type, either typified as a 'sustainable' or 'non-sustainable' product.

The market surveyor, Vase, was informed to attach a pre-approved Consent Information Statement making the details of the present study known to interested and willing target participants who were selected from Vase's pool of voluntarily registered survey respondents. These participants were then informed that clicking on the subsequent 'Proceed to Survey' button prompt visible on-screen would constitute their expression to release their data for use in the present study and would allow them to proceed to answer the intended questionnaire.

The Consent Information Statement included information, such as the intention of the project to understand participant's consumption values and behaviours and that they are under no obligation to participate in the study. It also notifies participants of the experiment and that they can choose to opt out at any time, and thus none of their responses will be collected; the participants will not receive any token appreciation if they opt out (as per standard agreement when they choose to sign up as survey participants with the independent market surveyor). Additionally, if they (i.e. the respondents) voluntarily participate, they will be told that the survey may take up to 20 minutes and that their responses will not be identifiable in any way (as no personal contact information will be collected or passed onto the client – i.e. the investigator of this project) and may be published by the client who has engaged the services of the independent market surveyor. Lastly, the respondents will be informed that the survey takes a single-blind process where clients (that is, the investigators of this project) do not and will not know any personal and private information about any individual survey participant (though survey participants can reach and report to Swinburne Sarawak Ethics Working Committee if they wish to do so for any reason).

The questionnaire collects data on socio-demographic characteristics of respondents and the chronic and primed responses on purchase intentions of sustainable and non-sustainable alternatives under different behavioural control scenarios relating to self-efficacy, neutralisation, product availability, product accessibility, and product affordability.

The goal of the survey was to capture initial consumer purchase intention through i) situation-based assessments and ii) scenario-based assessments. Subjects were informed that participation was purely voluntary and that they could stop at any point during the survey. They were also promised that all information collected would be kept strictly anonymous and analyses would only be on aggregate level. The study was approved by the university's research ethics committee for compliance with research ethics, in which ethics clearance was granted for data collection for the period 10/09/2018 till 31/03/2019 (reference is made to clearance and completion of SUHREC Project No: 2018/028).

The main concern with regards to research measuring such socially desirable outcomes such as sustainable consumption is the presence of social desirability bias (Edwards, 1970; Sudbury-Riley et al., 2016). Indeed, much of what we know of consumer behaviour is gathered through research which relies of self-report measures (Peterson & Kerin, 1981). However, due to underlying ego-defensive or impression management rationale individuals are often unwilling to report accurate responses which honestly reflect their general predisposition towards a particular topic, whether it be to underreport socially undesirable behaviour or over report desirable behaviour (Gittelman et al., 2015). Psychologist and social researchers posit that the effect of social desirability is instigated through two distinct dimensions (Krumpal, 2013); the first relates to an individual's characteristics, in which some individuals are more prone to succumb to the effects of social desirability when reporting information concerning themselves, the second dimension considers the survey's characteristics, or the manner in which the survey items are worded, their specific format, the means by which the research is conducted, be it face-to-face or online. Research has indicated that self-administered surveys such as online surveys record lower prevalence of the social desirability effect as opposed to survey administration modes that require an interviewer to be present (Crutzen & Göritz, 2010; Holbrook & Krosnick, 2010; Gittelman et al., 2015).

As such, different respondents were exposed to different versions of the survey, each of which incorporated different scenario-based assessments and additionally accounted for priming. Additionally, as mentioned previously, participants in the experiment were guaranteed

anonymity as part of the Consent Information Form each respondent is exposed to. Through the guarantee of anonymous survey settings; the subject is assured that their responses would not be linked to them, and they are not asked to divulge sensitive information directly to the researcher. Surveys were self-administered through electronic survey (Furnham, 1986; Durmaz et al., 2020). And the survey was conducted online, thereby eliminating any potential influence that the physical presence of a facilitator may have on the participant at the time the survey is answered (Gittelman et al., 2015). Lastly, the survey relied on nominative and best friend techniques; in which respondents were provided questions which measured their response according to their judgement of their peer's actions (Nederhof, 1985; Nuno & John, 2015). These steps were taken to avoid social desirability bias, as well as to encourage genuine responses (Gittelman et al., 2015).

4.6 Research Instrument

Research instruments are tools designed to measure the data that is obtained on a specific field/area of research interest from a target sample (or population of potential respondents). The research instrument relied on this study are questionnaires and scenario-based interventions. A Likert-scaled question was used to measure consumer intention to purchase either non-sustainable products or sustainable products. This would then provide an indication of how their sustainability product-inclination could be strengthened (or subverted) to increase the probability of a desired purchase being made, promoting consistency between behavioural-intention and closing the behavioural-intention gap (opening the behaviour-intention gap).

The questionnaire in this case consisted of a section aimed at categorizing participants by demographics, after which the following sections comprised of a series of questions to determine the purchase intention toward sustainable products. The questionnaires and research instruments herein underwent review by experts and were pretested before being administered to the main sample.

4.6.1 Questionnaire

The online questionnaire itself was administered to participants through a third-party marketing agency (VASE) via stratified random sampling. VASE uses a Monte Carlo computational algorithm to randomly select a sample of participants from their pool of over 700,000 registered survey participants according to required respondent characteristics. This computational algorithm relies on repeated random sampling to obtain numerical results. The idea is to use randomness to solve problems which may seem deterministic in principle.

In addition to general questions that describe the basic characteristics of the participants (e.g., age, gender), the questionnaire includes questions meant to measure the dependant variable—namely the likelihood of the participants making a sustainable consumption decision. This study adopts the Likert scale from Creyer (1997), with regard to the measure regarding “the willingness to reward the company through purchasing behaviour” and contextualizes it for use in determining purchasing intention. To improve accuracy, Creyer’s five-point Likert scale is adapted to a 7-point Likert scale, with the scale having been validated by previous research into the prediction of behavioural performance (Poškus, 2015; Toni et al., 2018; Corsini et al., 2018), the scale ranges from “1=Strongly Disagree, 7=Strongly Agree.” To justify this, this study posits that compared to a five-point Likert scale, a 7-point Likert scale allows for greater

variance in the behavioural response from participants (Wittink & Bayer, 2003). The questionnaire, structured in five sections also comprised of scenarios which investigated the likelihood of behavioural performance towards both the sustainable product and the non-sustainable alternative, which is measured using a 7-point Likert scale of likelihood (Malhotra et al., 2006) (“1= No chance, 7= Certain.”). As the study aims to detect the variance in behavioural response from priming, through the comparison of the pretest, posttest, and control groups, the slightest difference measured could be significant; thus, a larger scale for use by participants facilitates higher sensitivity to picking up differences in response (Wittink & Bayer, 2003; Boone & Boone, 2012). Furthermore, the use of larger scales addresses the issues of leniency, central tendency, and the “halo effect” (giving an extreme response because the choice of in-between categories has been left out) which plague smaller Likert scales (Boone & Boone, 2012).

Participants received the questionnaire, which contained basic demographic questions and measured the dependent variable. They also were also randomly assigned to a hypothetical scenario with questions measuring the same dependent variable (purchase intention) in order to measure consistency in their response. More importantly, participants were allowed to participate only once in the experiment. All participants were informed prior to the administering of the questionnaire that those who had previously taken part in the experiment should not take part in the experiment again. The next section of this study provides details regarding the target sample of this questionnaire.

4.6.2 Scenario-based Interventions

Scenario-based interventions were used to examine the chronic and primed responses of participants in this study toward sustainable and non-sustainable alternatives for purchase. In particular, five types of scenarios were introduced by means of narrative to participants through the online questionnaire administered by the market surveyor for this study. These scenarios were designed to project each of the behavioural controls under study, two covert (i.e., self-efficacy, neutralisation) and two overt (i.e., product availability, accessibility, and affordability). Building on consumer responses in terms of their purchase intentions of sustainable and non-sustainable products under these behavioural control scenarios, the priming interventions are introduced to examine its effects on encouraging sustainable purchases and on mitigating unsustainable purchases. For self-efficacy, the prime used was related to heightening the benefits and costs of sustainable and unsustainable product

alternatives as a modifier of participant's chronic self-efficacy. For neutralisation, the prime used was related to explicit awareness and non-awareness of hypocritical behaviour (i.e., explicit awareness that alignment of intention and behaviour is non-hypocritical and that non-alignment of intention and behaviour is hypocritical) as a modifier of participant's chronic tendency to engage in neutralisation. For product availability, the prime used was an alternative retail format in the form of online retail options that had sustainable and non-sustainable products available as an alternative to the chronic situation of product purchase from a physical retailer. For product accessibility, the primed used was sharing option availability across different geographical extents (e.g., a local neighbourhood, another state, or another country) as an alternative to the chronic situation of product ownership through product purchase from a physical retailer. Finally, for product affordability, the primed used was rental as an alternative to the chronic situation of product ownership through product purchase from a physical retailer. These scenario-based experiments and interventions were expert reviewed prior to randomised administration to the main sample.

4.7 Data Analysis Procedure

This study uses Statistical Package for Social Science (SPSS) version 25.0 to carry out the data analysis.

As presented in the research procedure, in terms of data preparation, all returned questionnaires are slated for screening to identify illegible, incomplete, or ambiguous responses (Malhotra et al., 2012). Due to the scope of the present study, respondents who did not test positive for chronic sustainability-inclination (= 146 respondents) were removed from the collected data pool. The data screening methods employed, thereafter, include the detection of blank responses and straight lining. In accordance with the work of Sekaran and Bougie (2016), and Laaksonen (2018) straight liners who have answered the questionnaire in the same repetitious pattern should be removed from the data set as well. To account for the effects of straight lining inherent in longer online surveys, research by Johnson (2005) and Leiner (2013), posited that the size of the targeted removal of straight lining respondents should not exceed the margin of 2.9 – 10.0 percent of the collected sample size to maintain reliability of the data. Based on this, the present study removed only 8.4 percent of the total sample (= 35 respondents) which indicated straight lining (i.e., responses were the same for ‘Chronic - No purchase scenario’, ‘Chronic - Purchase scenario’, ‘Primed Intention’ for both sustainable and non-sustainable products).

Next, a series of test for internal and external validity for experimental research was conducted. It should be noted that traditional validity (e.g., factor analysis) and reliability (e.g., Cronbach’s alpha) tests typically associated with regression-based analysis are inappropriate for this study as the independent constructs (i.e., the different types of behavioural control) under study are manipulated through experimental scenarios rather than through items measured using questions and scales. Moreover, the dependent construct (i.e., purchase intention) under study was a single-item measure as the study was concerned with macro rather than micro evaluation (i.e., I am likely to purchase the sustainable/non-sustainable product), which is common and typical in experimental studies. More importantly, a series of actions were undertaken to assess internal and external validity relevant for experimental research. These include steps for mortality/attrition, the diffusion of treatment, experimenter and participant effects, floor and ceiling effects, reactive effects of experimental arrangements, and multiple treatment inferences. These steps are discussed in detailed in the results chapter.

Following that, a series of tests of difference (e.g., *t*-test) was used to examine measurable differences *within-* (i.e., between chronic and primed within a single experimental scenario of a single behavioural control) and *between-* (i.e., between chronic and primed responses across experimental scenarios of a single behavioural control) *experimental scenarios*. The findings of these results are reported in the results chapter.

Finally, hypothesis testing was conducted based on the significance of findings from the tests of difference for hypotheses pertaining to chronic effects (i.e., H1a–H5a) and primed effects (H1b–H5b) (see summary in Table 4.1) A hypothesis is rejected when there is no observable effect (Anderson & Darling, 1954).

Table 4.1 List of overarching research hypotheses

Chronic effects	
H1a	Self-efficacy has a positive effect on sustainable purchase intention.
H2a	Neutralisation has a negative effect on sustainable purchase intention.
H3a	Product availability has a positive effect on sustainable purchase intention.
H4a	Product accessibility has a positive effect on sustainable purchase intention.
H5a	Product affordability has a positive effect on sustainable purchase intention.
Primed effects	
H1b	Priming through heightening the benefits and costs of sustainable and unsustainable product alternatives moderates the relationship between self-efficacy and sustainable purchase intention.
H2b	Priming through increased awareness of hypocritical behaviour moderates the relationship between neutralisation and sustainable purchase intention.
H3b	Priming through an alternative retail format in the form of online retail options that had products available moderates the relationship between product availability and sustainable purchase intention.
H4b	Priming through sharing option availability across different geographical extents (e.g., a local neighbourhood, another state, or another country) moderates the relationship between product accessibility and sustainable purchase intention.
H5b	Priming through rental option availability moderates the relationship between product affordability and sustainable purchase intention.

4.8 Chapter Summary

The data analysis is conducted through SPSS, after which the findings thereof are interpreted and reported. This entails an in-depth discussion of the theoretical and practical implications of this studies' findings. The findings from the experimental results make reference to the existing literature to provide insight into to the reasoning driving consumers to respond in like. Due to the study adopting a behaviourist approach to research, the factorial experimental method is a nuanced means to understand the cause and effect of the different combinations of marketing stimuli on consumer purchase intention towards sustainable products and non-sustainable products. In doing so, this chapter provides a review of factorial design which leads to a discussion and justification of the choice to use the factorial experimental design in this study to examine the hypotheses put forth in this chapter. A detailed discussion was offered on the research instrument used herein, aids to clarify the content of the questionnaire used for data collection and the design of treatments for the experiment. Finally, the research procedure is outlined to provide clarity of the data collection, treatment and analysis process, setting up the framework for use in the following chapter.

5 DATA ANALYSIS AND RESULTS

5.1 Chapter Overview

The preceding chapter elucidated the theoretical underpinnings that ground the methods used in the testing of the present study's proposed hypotheses. From a positivistic behaviourist paradigm, the present study utilises a factorial experimental design, investigating measurable differences i) *within-scenario* (i.e., between chronic and primed within a single experimental scenario of a single behavioural control) and ii) *between-scenario* (i.e., between chronic and primed responses across experimental scenarios of a single behavioural control). Based on the research procedure outlined in the previous chapter, this chapter begins by first presenting the characteristics of research participants who consented to be part of the present study. Following that, this chapter then presents the results from the tests on internal and external validity. Next, this chapter reports the results from testing the variables in a *within-scenario* analysis to establish the relationship between variables. It then proceeds to test the established relationships by exposing the same respondents to priming statements (the treatment), relying on a *between-scenario* analysis, testing for the effect of the treatment in changing the relationship between variables (if at all). Finally, this chapter presents the results from hypotheses testing.

5.2 Respondent Profile

The participants who took part in the present study consisted of a cross-section of the everyday Malaysian sustainability-inclined consumer between the ages of 18 years – 60 years. Detailed summaries of the characteristics of the research sample are provided in the sections below.

More specifically, most participants fell within the range of 18 to 24 years (32.9 percent), with only a small minority being between the ages of 55 to 60 years (2.4 percent).

Table 5.1 Age Break-Down of the Respondents

Age	<i>Frequency (n = 419)</i>	<i>Percentage</i>
18 – 24 years	138	32.9
25 – 34 years	130	31.0
35 – 44 years	88	21.0
45 – 54 years	53	12.6
55 – 60 years	10	2.4

The termination criteria for the survey excluded any participant above the legal retirement age of 60 years (i.e., the legal retirement age for workers in Malaysia) (Malaysian Department of Statistics, 2019), as the scope of the present study only investigates persons with independent control over the use of their own income, thus, participants of the labour force who are employed. A break-down of gender indicates that there was an even spread of male respondents (50.1percent) and female respondents (49.9 percent) who underwent the survey. This is comparable to the Malaysian Department of Statistics' sex ratio (2019) which has been consistently maintained at '107: 100' (population of male to female) since the year 2013 (Malaysian Department of Statistics, 2019).

Table 5.2 Gender Break-Down of the Respondents

Gender	<i>Frequency (n = 419)</i>	<i>Percentage</i>
Male	210	50.1
Female	209	49.9

According to the Malaysian Department of Statistics (2019), the ethnical composition of the population constituted 'Bumiputera' comprising of indigenous settlers such as the 'Dayak' and 'Bidayuh' as well as the Malay people (67.9 percent), Chinese (23.7 percent), Indian (3.3

percent) and others (5.1 percent). These percentages are closely reflective of the actual racial distribution by Malaysian Department of Statistics (2019).

Table 5.3 Ethnical Break-Down of the Respondents

Ethnicity	Frequency (n = 419)	Percentage
Chinese	93	22.2
Malay	291	69.5
Indian	15	3.6
Others	20	4.8

With regards to the level of qualification of participants, it must be first acknowledged that the Malaysian education system follows a 6+3+2+2 model, with six years of compulsory primary education beginning at age seven, followed by three years of lower secondary education, two years of upper secondary, and two years of pre-university senior secondary study. Thus, the average Malaysian would have passed at least the first six years of primary school education- from the age seven years – 14 years. Indeed, the largest percentage of participants specified to at least carrying a tertiary level degree qualification, approximately 48.7 per cent, which is in line with projections from national consensus and World Bank data of tertiary school enrolments (Malaysian Department of Statistics, 2019; The World Bank, 2019). This is also substantiated by research which suggests that consumers of sustainable products are generally more well educated (Olli et al., 2001; Young et al., 2010) and wealthy (Hallin, 1995; Gilg et al., 2005).

Table 5.4 Educational Break-Down of the Respondents

Qualification	Frequency (n = 419)	Percentage
Primary School	6	1.4
Secondary School	67	16.0
Post-Secondary/Matriculation/Vocational	16	3.8
Diploma	103	24.6
Degree	204	48.7
Postgraduate or above	21	5.0
Others	2	0.5

The sample pool collected showed that a large majority of respondents lived within the city/town centres of their respective states; approximately 70.8 per cent. In contrast, only 29.2 per cent indicated that they lived outside and beyond the city/town centre.

Table 5.5 Break-Down of Respondents by Place of Residence

Place of Residence	<i>Frequency (n = 419)</i>	<i>Percentage</i>
Within City/Town Centre	297	70.9
Outside City/Town Centre	122	29.1

Similarly, a large majority of the respondents indicated working within the city/town centre (75.2 percent), notably, this was larger than the percentage recorded for those ‘residing’ within the city/town centre (only 70.9 percent). This indicates that a certain proportion of the sample pool (albeit a small proportion) do commute into the city/town centre for work. This was similar to the national statistics which recorded an estimated 73.0 percent of the population in Malaysia lives within the city/town centre (Naeem, 2016). This is supported by the smaller proportion of the sample pool (24.1 percent) who specified their place of work as being outside city/town centre, which is also less than the percentage of respondents who reside outside the city/town centre (29.1 percent).

Table 5.6 Break-Down of Respondents by place of work

Place of Work	<i>Frequency (n = 419)</i>	<i>Percentage</i>
Within City/Town Centre	318	75.9
Outside City/Town Centre	101	24.1

The minimum wage for Malaysia is set between RM920 - RM 1,000 (AUD320 – AUD349) depending on the state policy, at the time of data collection. The majority of Malaysians recorded earning an average gross monthly income of below RM1,000, or AUD349 (22.2 percent). The second largest group (21 percent) of the sample pool earned an average gross monthly income of between RM1,000 – RM1,999 (AUD349 – AUD697). Both of these groups are considerably larger compared to the combined total of respondents earning more than an average gross monthly income of above RM6,000 (AUD2,091), with only a combined 9.6 per cent earning that amount. However, in considering that the most updated statistics for mean monthly salary in Malaysia (2017) was recorded at between RM2,040 – RM3,038 (AUD711 –

AUD1,059), the median gross income earning is closer to RM 1,704 (AUD594) – mostly due to the lower salary drawn by the workforce in east Malaysian states (The Star, 2018; Malaysian Department of Statistics, 2019). Thus, our sample more closely reflects the median statistics and is more realistic by evening out the income disparity of lower paid east Malaysian states.

Table 5.7 Income Break-Down of the Respondents

Gross Monthly Personal Income	Frequency (n = 419)	Percentage
Below RM1,000 (Below AUD349)	93	22.2
RM1,000 – RM1,999 (AUD349 – AUD698)	88	21.0
RM2,000 – RM2,999 (AUD698 – AUD1,054)	90	21.5
RM3,000 – RM3,999 (AUD1,054 – AUD1,395)	52	12.4
RM4,000 – RM4,999 (AUD1,395 – AUD1,744)	32	7.6
RM5,000 – RM5,999 (AUD1,744 – AUD2,093)	24	5.7
RM6,000 – RM6,999 (AUD2,093 – AUD2,459)	20	4.8
RM7,000 – RM7,999 (AUD2,459 – AUD2,811)	8	1.9
RM8,000 – RM8,999 (AUD2,811 – AUD3,139)	4	1.0
RM9,000 – RM9,999 (AUD3,139 – AUD3,488)	2	0.5
RM10,000 and above (AUD3,514 and above)	6	1.4

Lastly, the sample pool was checked to determine their inclination towards the preference for sustainable products. The scope of the research as discussed previously, is concerned with the relationship of intention established by sustainability-inclined consumers, meaning that the chronic intention held by respondents for sustainable products should be stronger when compared to non-sustainable product alternatives.

It must be noted, that a key component of the survey incorporated the definition of a ‘sustainable’ product subscribed to in the present study, prior to asking the participants to respond to survey questions, this provides clearer insight into the context of the question and prevents misunderstanding.

As the profiles presented above show, respondents belonged to a diverse group, in terms of their sociodemographic background (age, gender, income, qualifications, etc.). The homogeneity within the sample group reflects that all respondents are Malaysian and have a sustainability-inclination.

5.3 Testing for internal and external validity

With the factorial experimental design, several tests are required to assess internal and external validity before the differences of *Within-scenario* and *Between-scenario* can be ascertained. More specifically, before further analysis on the effectiveness of treatments can be performed, it is pivotal to account for mortality/attrition, the diffusion of treatment, experimenter and participant effects, floor and ceiling effects, reactive effects of experimental arrangements, and multiple treatment inferences.

5.3.1 Mortality or attrition

The effects of mortality and attrition occur when respondents drop in/out of experimental groups, to such an extent where the significant rates of mortality and attrition pose a threat to the internal validity of the experiment (Jackson et al., 2006). To address these concerns regarding mortality and attrition rates, the present study ensures that each participant is only being subjected to one experimental group. Additionally, potential participants were notified in advance that participation in the present study was purely on a voluntary basis. Only those participants who agreed to the consent were allowed access to the survey, thus, also providing explicit consent to use their completed questionnaire/be subjected to the treatment. Thus, mortality and attrition was not an issue in the present study, adding further support towards the internal and external validity of the derived experimental results.

5.3.2 Diffusion of treatment

Certain circumstances may be susceptible to the diffusion of treatment in which respondents in a group receive and spread information to one another, affecting the internal validity of the experiment as responses from respondents may be ‘corrupted’ - not reflecting the true state of affairs (i.e. the true/honest opinions) (Shaughnessy et al., 1990). In reference to Chapter 4, regarding methodology, whilst respondents may have received the questionnaire and partook in the experiment at the same period of time, respondents were reminded not to share information with one another and to respond to the question within the survey in a way that reflects their honest and truthful intent. Every respondent was also reminded that there were no ‘correct’ or ‘wrong’ responses to the questions, and that their responses were anonymous (i.e. no unique identifiers could be discerned from their responses). This careful and considerate approach to data collection helps reduce the threat of diffusion of experimental treatment.

5.3.3 Experimenter and participant effects

Another threat to internal validity may arise due to researchers (be it intentionally or unintentionally) influencing how respondents react to experimental conditions, or, if respondents themselves perform behaviours they believe the researcher is demanding from them or even purposely responding in such a way as to sabotage the experiment (Martella et al., 2013; Christensen et al., 2015; Onwuegbuzie, & Johnson, 2006). The researcher was not directly involved in the collection of data from respondents, in fact data was collected via online survey administered by a third party marketing agency. It is important to reemphasise that the research instrument was designed in such a way so as to not have any major personal identifiers, thus allowing respondents complete anonymity. In addition, as previously mentioned, respondents were encouraged to provide their honest opinions and were reminded that there were no right or wrong answers to the questions posed in the survey. Furthermore, participation in this survey was completely on a voluntary basis, and explicit consent is provided by respondents who completed the survey. Thus, the present study took reasonable steps to reduce the threat posed by researcher and participant effects that could potentially undermine the internal validity of the present study's experimental results.

5.3.4 Floor and ceiling effects

In general, the presence of either 'floor and ceiling effects' indicate that the response provided by respondents is more varied than the research instrument can measure. Ceiling effects exist when there is potential for a higher measure than is observed by the research instrument (i.e., imposing a "ceiling" on the highest observed measure). In contrast, a floor effect occurs when measurements of the dependent variables result in low scores on the measurement scale- which may be hiding a possible effect of the independent variable. In the present study, Likert-scaled questions measured the dependent variable – both, the purchase intention towards sustainable products and the purchase intention towards non-sustainable product alternatives – which helped determine the effectiveness of priming as a behavioural intervention strategy for maneuvering the behavioural-intention gap.

Additionally, further Likert-scaled questions were asked throughout the survey to facilitate comparison between chronic and primed effects, among other things this allowed the researcher to measure the effectiveness the treatment (i.e., priming) had on the chronic intention for sustainable products in a multitude of scenarios. These well-defined questions were definitive and straightforward, allowing for objective measure of responses. Through this, the present

study possessed a sufficient range of instruments that captures and explains the outcome(s) of the dependent variable, further verifying the internal validity of the experimental results herein.

5.3.5 Reactive effects of experimental arrangements

The experimental arrangement in the present study required respondents to react in relation to a hypothetical purchasing scenario based on situations that they may face/have faced in reality. An important difference is that only the product type was provided (i.e., sustainable or non-sustainable), that is, respondents were informed which product, be it Product A or Product B, fit into either category. Additionally, no brands were indicated and product designs for both product alternatives were homogenous. This particular arrangement contributes to establishing the external validity for the experimental results herein (Ohlund & Yu, 2010).

5.3.6 Multiple treatment inference

In instances where the post-test scores of the dependent variable are based on the set-up of exposing untreated control groups to specified treatment and then measuring the change in effect such treatment has on the dependent variable, the experiment may succumb to threat to its external validity should respondents be reacting to the effect of multiple treatments (i.e., potentially overcompensating for treatment effects and preventing accurate pinpointing of the effectiveness of any one treatment by itself). The present study subscribes to a Between-scenario approach, in which any one respondent is allocated at random to only one experiment group, and thus, may only be exposed to one treatment. This arrangement prevents the fallacies associated with multiple treatment interferences from threatening external validity in the present study.

5.4 Experimental Testing of Treatment Effects

In considering, that both internal and external validity have been adequately accounted for, the present study now proceeds to examine the *Within-scenario* (i.e., between chronic and primed within a single experimental scenario of a single behavioural control) and *Between-scenario* (i.e., between chronic and primed responses across experimental scenarios of a single behavioural control). The table of the findings for each control factors is presented (see Table 5.12, Table 5.17, Table 5.27, Table 5.49, Table 5.50, Table 5.51, Table 5.52, Table 5.58), the respective sections make reference, through *Within-scenario* and *Between-scenario* analysis, to the individual sections of the table of the findings highlighting the key findings within their context and providing a summary.

5.5 Findings (Self-Efficacy)

In testing for the nature of the relationship between self-efficacy and purchase intention, respondents were tested on the effects exposure to information regarding the benefits of consuming sustainable products and/or the cost of consuming non-sustainable products has on sustainability awareness- altering their self-efficacy. Manipulation checks identified any changes in the chronic preference for sustainable products over non-sustainable products. Respondents were then randomly allocated to one of four distinct groups, which comprised of:

- Group 1 (G1): In this experimental scenario, respondents were made aware of the benefits of using the sustainable product (i.e., lower carbon-emissions), but they were not made aware of the costs associated with the use of the non-sustainable product (i.e., greater fuel consumption).
- Group 2 (G2): Respondents are exposed to an experimental scenario where awareness of the benefits associated with purchasing the sustainable product are heightened, and so too are the costs of purchasing the non-sustainable product.
- Group 3 (G3): In this experimental scenario, there was no substantial attempt to heighten awareness on benefits and costs – only broad statements were provided to activate self-efficacy.
- Group 4 (G4): Respondents are exposed to an experimental scenario where awareness of the costs associated with purchasing the non-sustainable product are heightened, however no attempt is made to heighten the awareness of costs of using the non-sustainable product.

Chronic intention is compared against primed scenario intention to reaffirm sustainability-inclination held by the respondents, and test the effect (if any) of the treatment.

5.5.1 Self-efficacy Within-scenario Analysis

The results from Main Table 5.12 (Pairs 1 and 2) and Summary Tables 5.8 and 5.9 of the *within-group* analysis suggest the following.

The results for Pair 1_(Self-efficacy), as seen in Table 5.8, show that there is a significant difference in the scores comparing chronic intention to purchase the sustainable products and the chronic intention to purchase the non-sustainable product for all Groups. This confirms the sample pool is fit for the purpose of the present study, in its investigation in testing treatment effects for the intention–behaviour gap for sustainability-inclined consumers, that is, all groups reporting

positive sustainability-inclination; statistically significant ($p < 0.05$) preference of sustainable product over non-sustainable product choice.

Table 5.8 Within-scenario Comparison: Self-Efficacy Pair 1

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1	1.571	2.087	3.450	.003
<i>Chronic Intention (Purchase Sustainable)</i>	G2	2.429	2.501	4.449	.000
<i>minus</i>					
<i>Chronic Intention (Purchase Non-Sustainable)</i>	G3	1.826	1.749	4.789	.000
	G4	1.550	1.701	4.076	.001

The results for Pair 2_(Self-efficacy), as seen in Table 5.9, show that priming has two main effects, the first, weakens intention towards non-sustainable products, the second effect, strengthens intention towards sustainable products. The significant difference between the primed intention derived from the priming—either raising awareness of benefits for consuming the sustainable product and/or raising awareness of the costs for consuming the non-sustainable product—is evidence of the dichotomous nature of the prime, be it ‘motivation’ or ‘avoidance’ to affect the intended behaviour.

Table 5.9 Within-scenario Comparison: Self-Efficacy Pair 2

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1	2.333	2.058	5.197	.000
<i>Primed Intention (Purchase Sustainable)</i>	G2	3.571	2.638	6.205	.000
<i>minus</i>					
<i>Primed Intention (Purchase Non-Sustainable)</i>	G3	2.174	1.749	5.961	.000
	G4	1.850	2.300	3.596	.002

5.5.2 Self-efficacy Between-scenario Analysis

The results from Main Table 5.12 (Pairs 3 and 4) and Summary Tables 5.10 and 5.11 of the *between-group* analysis suggests the following.

The results for Pair 3_(Self-efficacy), as seen in Table 5.10, indicate significant difference in the scenarios where the prime used involved heightening awareness of the benefits of consuming the sustainable product (Groups 1 and 2), which effectively strengthens consumer’s sustainability-inclination.

Table 5.10 Between-scenario Comparison: Self-Efficacy Pair 3

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
	G1	-.476	.873	-2.500	.021
<i>Chronic Intention (Purchase Sustainable)</i>	G2	-.429	.746	-2.631	.016
<i>minus</i>					
<i>Primed Intention (Purchase Sustainable)</i>	G3	-.130	.815	-.768	.451
	G4	-.050	.887	-.252	.804

The results for Pair 4_(Self-efficacy), as seen in Table 5.11, suggest that raising awareness of the costs associated with the consumption of the non-sustainable alternative product is not an effective prime, unless, also raising awareness of the benefits that the consumption of the sustainable product will have. This could indicate that the detriment/cost of our consumption choice may only be realized when we are provided with a better product alternative.

Table 5.11 Between-scenario Comparison: Self-Efficacy Pair 4

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
	G1	.286	1.056	1.240	.229
<i>Chronic Intention (Purchase Non-Sustainable)</i>	G2	.714	1.521	2.152	.044
<i>minus</i>					
<i>Primed Intention (Purchase Non-Sustainable)</i>	G3	.217	.850	1.226	.233
	G4	.250	1.293	.865	.398

Table 5.12 T-Test for Equality of Means (Self-Efficacy)

Group	Pairing	Purchase Intention	M	SD	<i>t</i>	<i>p</i>
G1 (n = 21)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	5.33	1.155	3.450	.003
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.76	1.446		
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.81	.873	5.197	.000
		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.48	1.537		
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	5.33	1.155	-2.500	.021
		<i>Primed Intention (Purchase Sustainable)</i>	5.81	.873		
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.76	1.446	1.240	.229
		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.48	1.537		
G2 (n = 21)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	5.62	1.284	4.449	.000
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.19	1.632		
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	6.05	1.284	6.205	.000
		<i>Primed Intention (Purchase Non-Sustainable)</i>	2.48	1.569		
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	5.62	1.284	-2.631	.016
		<i>Primed Intention (Purchase Sustainable)</i>	6.05	1.284		
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.19	1.632	2.152	.044

		<i>Primed Intention (Purchase Non-Sustainable)</i>	2.48	1.569			
G3 (n = 23)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	5.70	1.105	4.798	.000	
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.87	1.546			
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.83	1.072	5.961	.000	
		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.65	1.369			
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	5.70	1.105	-.768	.451	
		<i>Primed Intention (Purchase Sustainable)</i>	5.83	1.072			
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.87	1.546	1.226	.233	
		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.65	1.369			
	G4 (n = 20)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	5.25	1.020	1.550	.001
			<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.70	1.380		
		Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.30	1.261	1.850	.002
			<i>Primed Intention (Purchase Non-Sustainable)</i>	3.45	1.669		
Pair 3		<i>Chronic Intention (Purchase Sustainable)</i>	5.25	1.020	-.050	.804	
		<i>Primed Intention (Purchase Sustainable)</i>	5.30	1.261			
Pair 4		<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.70	1.380	.250	.398	
		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.45	1.669			

Note. M = Mean. SD = Standard Deviation. Purchase intention (Chronic/Primed) ranges from 1 (No Chance) to 7 (Certain)

5.6 Findings (Neutralisation)

To investigate the effects of neutralisation on sustainability-inclined consumers' purchase decisions, experiments were conducted to identify potential differences in consumer purchase intention of sustainable and non-sustainable products when consumers are being made to make the product choice. These differences in the pre-determined product choice were either in-line with consumers' preference towards sustainable products or in conflict with these same preferences. The experiment consisted of four experimental groups that were exposed to either one of the four treatments, namely:

- Group 1 (G1): Participants are exposed to an experimental scenario where they are told that their initial purchase intention is to purchase a non-sustainable product, but due to their hypocritical nature, their actual behaviour manifests as purchasing a sustainable product instead (this differs from their initial purchase intention);
- Group 2 (G2): Participants are exposed to an experimental scenario where they are told that their initial purchase intention is to purchase sustainable product, but due to their hypocritical nature, their actual behaviour manifests as purchasing a non-sustainable product instead (this differs from their initial purchase intention);
- Group 3 (G3): In this experimental scenario participants were told that their initial purchase intention is to purchase a sustainable product, at the point of purchase the respondents are then informed that they do in fact purchase the sustainable product (this is consistent with their initial purchase intention);
- Group 4 (G4): In this experimental scenario participants were told that their initial purchase intention is to purchase a non-sustainable product, at the point of purchase the respondents are then informed that they do in fact purchase the non-sustainable product (this is consistent with their initial purchase intention).

As done previously, the chronic intention is compared against primed scenario intention to reaffirm sustainability-inclination held by the respondents, then we proceed to test the effect (if any) of the treatment.

5.6.1 Neutralisation Within-scenario Analysis

The results from Main Table 5.17 (Pairs 1 and 2) and Summary Tables 5.13 and 5.14 of the *within-group* analysis suggest the following.

The results for Pair 1_(Neutralisation), as seen in Table 5.13, demonstrate the sustainability inclination of consumers from all experimental groups. Again, significant difference ($p < 0.05$) in the scores show that consumers have a chronic preference for sustainable products.

Table 5.13 Within-scenario Comparison: Neutralisation Pair 1

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1	.500	.933	2.627	.015
<i>Chronic Intention (Purchase Sustainable)</i>	G2	.950	1.731	2.454	.024
<i>minus</i>					
<i>Chronic Intention (Purchase Non-Sustainable)</i>	G3	1.100	1.210	4.067	.001
	G4	1.000	2.093	2.241	.036

The results for Pair 2_(Neutralisation), as seen in Table 5.14, evidence that exposure to the prime (i.e., informing the respondent of their hypocrisy) has a measurable and significant effect on both the intention to purchase sustainable products and the intention to purchase non-sustainable products, albeit in different directions. Importantly, the results show that priming strengthens the intention to purchase sustainable products and weakens the intention to purchase non-sustainable products.

Table 5.14 Within-scenario Comparison: Neutralisation Pair 2

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1	.833	1.786	2.286	.032
<i>Primed Intention (Purchase Sustainable)</i>	G2	1.400	2.088	2.999	.007
<i>minus</i>					
<i>Primed Intention (Purchase Non-Sustainable)</i>	G3	.850	1.461	2.602	.018
	G4	0.909	1.875	2.274	.034

5.6.2 Neutralisation Between-scenario Analysis

The results from Main Table 5.17 (Pairs 3 and 4) and Summary Tables 5.15 and 5.16 of the *between-group* analysis suggests the following.

The results for Pair 3_(Neutralisation), as seen in Table 5.15, suggest that when the consumer's initial purchase intention is inconsistent with the actual behaviour, but the actual behaviour is consistent with consumers' chronic sustainability inclination, the priming of hypocrisy has a significant effect in strengthening sustainability-inclination (i.e., results for Group 1).

Additionally, in scenarios where the final behaviour conflicts chronic intention, the priming of hypocrisy has no effect.

Table 5.15 Between-scenario Comparison: Neutralisation Pair 3

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1	-.625	1.245	-2.460	.022
<i>Chronic Intention (Purchase Sustainable)</i>	G2	-.300	1.455	-.922	.368
<i>minus</i>					
<i>Primed Intention (Purchase Sustainable)</i>	G3	-.100	1.165	-.384	.705
	G4	.000	.976	.000	1.000

The findings for Pair 4_(Neutralisation), as seen in Table 5.16, indicate that treating respondents by raising awareness of their hypocritical consumption behaviour has no discernible effect on their purchase intention for the consumption of non-sustainable products. This supports the findings from Pair 3_(Neutralisation) that priming through raising awareness of hypocrisy has no effect when the actual behaviour performed conflicts with chronic intention (i.e., the consumer's sustainability-inclination).

Table 5.16 Between-scenario comparison: Neutralisation Pair 4

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1	-.292	1.574	-.908	.373
<i>Chronic Intention (Purchase Non-Sustainable)</i>	G2	.150	1.872	.358	.724
<i>minus</i>					
<i>Primed Intention (Purchase Non-Sustainable)</i>	G3	-.350	1.040	-1.505	.149
	G4	-.091	1.065	-.400	.693

Table 5.17 T-Test for Equality of Means (Neutralisation)

Group	Pairing	Purchase Intention	M	SD	t	p
G1 (n = 24)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	4.63	.824	2.627	.015
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	4.13	.992		
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.25	1.113	2.286	.032
		<i>Primed Intention (Purchase Non-Sustainable)</i>	4.42	1.442		
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	4.63	.824	- 2.460	.022
		<i>Primed Intention (Purchase Sustainable)</i>	5.25	1.113		
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	4.13	.992	- .908	.373
		<i>Primed Intention (Purchase Non-Sustainable)</i>	4.42	1.442		
G2 (n = 20)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	4.80	1.005	2.454	.024
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.85	1.496		
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.10	1.410	2.999	.007
		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.70	1.809		
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	4.80	1.005	- .922	.368
		<i>Primed Intention (Purchase Sustainable)</i>	5.10	1.410		
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	3.85	1.496	.358	.724

		<i>Primed Intention (Purchase Non-Sustainable)</i>	3.70	1.809		
G3 (n = 20)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	5.25	1.020	4.067	.001
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	4.15	1.182		
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.35	1.089	2.602	.018
		<i>Primed Intention (Purchase Non-Sustainable)</i>	4.50	1.433		
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	5.25	1.020	- .384	.705
		<i>Primed Intention (Purchase Sustainable)</i>	5.35	1.089		
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	4.15	1.182	- 1.505	.149
		<i>Primed Intention (Purchase Non-Sustainable)</i>	4.50	1.433		
G4 (n = 22)	Pair 1	<i>Chronic Intention (Purchase Sustainable)</i>	5.05	1.046	2.241	.036
		<i>Chronic Intention (Purchase Non-Sustainable)</i>	4.05	1.362		
	Pair 2	<i>Primed Intention (Purchase Sustainable)</i>	5.05	.999	2.274	.034
		<i>Primed Intention (Purchase Non-Sustainable)</i>	4.14	1.457		
	Pair 3	<i>Chronic Intention (Purchase Sustainable)</i>	5.05	1.046	.000	1.000
		<i>Primed Intention (Purchase Sustainable)</i>	5.05	.999		
	Pair 4	<i>Chronic Intention (Purchase Non-Sustainable)</i>	4.05	1.362	- .400	.693
		<i>Primed Intention (Purchase Non-Sustainable)</i>	4.14	1.457		

Note. M = Mean. SD = Standard Deviation. Purchase intention (Chronic/Primed) ranges from 1 (No Chance) to 7 (Certain)

5.7 Findings (Product Availability)

By investigating the relationship between product availability and purchase intention, this study provides new understanding into whether consumers' purchase intentions for sustainable and non-sustainable products differ as a result of product availability, including the means to circumvent product non-availability to maintain sustainability-inclination.

The experiment consisted of four experimental groups that were exposed to either one of the four treatments, namely:

- Group 1 (G1): Participants are exposed to an experimental scenario where both sustainable and non-sustainable products are available at a physical retailer;
- Group 2 (G2): Participants are exposed to an experimental scenario where sustainable product is available but non-sustainable product is not available at a physical retailer;
- Group 3 (G3): Participants are exposed to an experimental scenario where sustainable product is not available but non-sustainable product is available at a physical retailer;
- Group 4 (G4): Participants are exposed to an experimental scenario where both sustainable and non-sustainable products are not available at a physical retailer.

The analysis first established the sustainability-inclination of the respondents by comparing responses on chronic and primed intention through a *Within-scenario analysis*. Thereafter, change in purchase intention brought about by exposure to a prime (i.e., the prime used was an alternative retail format in the form of online retail options) was measured at chronic and primed conditions through a *Between-scenario analysis*.

5.7.1 Product Availability Within-scenario Analysis

The results from Main Table 5.27 (Pairs 1, 2, and 3) and Summary Tables 5.18, 5.19, and 5.20 of the *within-group* analysis suggest the following.

The results for Pair 1 (Product Availability), as seen in Table 5.18, show that respondents from all groups are sustainability-inclined when they do not encounter a purchase scenario. This was denoted by a significant difference in scores favouring the sustainable product choice over the non-sustainable product alternative.

Table 5.18 Within-scenario Comparison: Product Availability Pair 1

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	G1	2.957	1.821	7.786	.000
	G2	2.478	1.880	6.323	.000
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	G3	1.833	1.167	7.695	.000
	G4	1.118	1.495	3.082	.007

The results for Pair 2 (Product Availability), as seen in Table 5.19, indicate a preference for the sustainable product in purchase scenarios where the sustainable product is physically present at the retailers (i.e., Groups 1 and 2), but also when the non-sustainable product alternative is physically present (i.e., Groups 1 and 3). However, when no products are available at the retailers, consumers are indifferent to their choice of product; sustainability-inclination is weakened (i.e., Group 4).

Table 5.19 Within-scenario Comparison: Product Availability Pair 2

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	G1	1.609	1.852	4.165	.000
	G2	1.130	2.117	2.561	.018
<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G3	.708	1.334	2.600	.016
	G4	.824	2.270	1.496	.154

The results for Pair 3 (Product Availability), as seen in Table 5.20, pertain to priming that offers respondents an alternative channel of acquiring product, namely, through an online retail store. The results show significant differences in purchase intention of sustainable products was greater than purchase intention of non-sustainable products through an online channel.

Table 5.20 Between-scenario Comparison: Product Availability Pair 3

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	G1	1.348	1.945	3.324	.003
	G2	1.087	2.130	2.447	.023
<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G3	-.208	1.503	-.679	.504
	G4	1.059	2.164	2.017	.061

5.7.2 Product Availability Between-scenario Analysis

The results for Main Table 5.27 (Pairs 4, 5, 6, 7, 8, and 9) and Summary Tables 5.21, 5.22, 5.23, 5.24, 5.25, and 5.26 for the *between-group* analysis are as follows.

The results for Pair 4 (Product Availability), as seen 5.21, show that the chronic intention of sustainability-inclination is strengthened only when both the sustainable product and the non-sustainable alternative were physically present at the store, and thus allowed physical product comparison (i.e., as in Group 1). In the scenarios where at least one if not both products were physically absent, the purchase scenario had no significant effect, and respondents maintained their level of sustainability-inclination.

Table 5.21 Between-scenario Comparison: Product Availability Pair 4

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	G1	.652	1.191	2.626	.015
	G2	.522	1.504	1.664	.110
<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	G3	-.042	1.429	-.143	.888
	G4	.235	1.300	.746	.466

The results for Pair 5 (Product Availability), as seen in Table 5.22, show significant difference in the scores for the scenarios in which a product (regardless of product type) was physically present at the retailers (Groups 1, 2, and 3); weakening sustainability-inclination in the respective groups. Offering the physical product via the online retail channel and in some scenarios reminding respondents that the product they originally intended to purchase is not available makes the sustainable product available at the retailers dearer. This effect goes as far as to weaken sustainability-inclination when the product is made available for online purchase. This could suggest that respondents, at least with regards to sustainable products, prefer traditional nuances of acquiring ownership (i.e., physically inspecting the good prior to purchase) over modern means such as online purchasing.

Table 5.22 Between-scenario Comparison: Product Availability Pair 5

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable) minus <i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	G1	1.174	1.072	5.249	.000
	G2	.957	1.397	3.283	.003
	G3	.750	1.225	3.000	.006
	G4	.765	1.855	1.700	.190

The results for Pair 6 (Product Availability), as seen in Table 5.23, suggest that when non-sustainability products are available at the retailers, the purchase intention for the non-sustainable product alternative may become more preferable (e.g., Group 3), including instances when sustainability products are also present (e.g., Group 1). Based on these results, this study infers that respondents are most likely to purchase the non-sustainable product when a sustainable product alternative is present in tandem. At this point, sustainability-inclination is taken for granted and set-aside.

Table 5.23 Between-scenario Comparison: Product Availability Pair 6

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable) minus <i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G1	-.696	1.063	-3.138	.005
	G2	-.826	2.059	-1.924	.067
	G3	-1.167	1.551	-3.685	.001
	G4	-0.59	.827	-.293	.773

The results for Pair 7 (Product Availability), as seen in Table 5.24, suggest that the prime strengthens the intention to purchase the non-sustainable product, only in the scenario, where the non-sustainable product is the only product physically present at the retailers. This supports the findings from Pair 5 (Product Availability), in which the treatment makes the physical product (i.e., regardless of product type, sustainable or non-sustainable) dearer to the respondent, suggesting the respondent is seeking immediate satisfaction of the want associated with the use of the intended product (i.e., in reference to the scenario, to replace a broken lightbulb).

Table 5.24 Between-scenario Comparison: Product Availability Pair 7

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable) minus <i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G1	-.435	1.237	-1.686	.106
	G2	-.435	1.903	-1.096	.285
	G3	-1.292	1.398	-4.526	.000
	G4	.706	1.896	1.535	.144

The results for Pair 8 (Product Availability), as seen in Table 5.25, indicate that the treatment makes the products which are physically present at the retailers dearer compared to the offerings on the online retail channel. This is evident as the prime significantly weakens intention to purchase the sustainable product in scenarios where the only avenue to acquire the sustainable product is to purchase it online.

Table 5.25 Between-scenario Comparison: Product Availability Pair 8

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable) minus <i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	G1	.522	1.344	1.862	.076
	G2	.435	1.409	1.480	.153
	G3	.792	1.382	2.805	.010
	G4	.529	1.772	1.232	.236

The results for Pair 9 (Product Availability), as seen in Table 5.26, show that the prime had no effect in strengthening or weakening the respondents' intention to purchase the non-sustainable product alternative.

Table 5.26 Between-scenario Comparison: Product Availability Pair 9

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable) minus <i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G1	.261	.964	1.298	.208
	G2	.391	1.588	1.182	.250
	G3	-.125	1.541	-.397	.695
	G4	.765	1.786	1.765	.097

Table 5.27 T-Test for Equality of Means (Product Availability)

Group	Pairing	Purchase Intention	M	SD	t	p
G1 (n = 23)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	6.04	1.022	7.786	.000
		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.09	1.276		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.39	1.559	4.165	.000
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.78	1.278		
	Pair 3	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.87	1.392	3.324	.003
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.52	1.473		
	Pair 4	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	6.04	1.022	2.626	.015
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.39	1.559		
	Pair 5	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	6.04	1.022	5.249	.000
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.87	1.392		
	Pair 6	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.09	1.276	- 3.138	.005
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.78	1.278		
	Pair 7	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.09	1.276	-1.686	.106
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.52	1.473		
	Pair 8	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.39	1.559	1.862	.076
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.87	1.392		

G2
(n = 23)

Pair 9	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.78	1.278	1.298	.208
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.52	1.473		
Pair 1	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.96	.928	6.323	.000
	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	3.48	1.504		
Pair 2	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.43	1.343	2.561	.018
	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	4.30	1.717		
Pair 3	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	5.00	1.382	2.447	.023
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.91	1.703		
Pair 4	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.96	.928	1.664	.110
	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.43	1.343		
Pair 5	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.96	.928	3.283	.003
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	5.00	1.382		
Pair 6	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	3.48	1.504	- 1.924	.067
	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	4.30	1.717		
Pair 7	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	3.48	1.504	-1.096	.285
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.91	1.703		
Pair 8	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.43	1.343	1.480	.153
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	5.00	1.382		
Pair 9	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	4.30	1.717	1.182	.250

		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.91	1.703		
	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.46	1.141	7.695	.000
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	3.63	1.313		
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.50	1.216	2.600	.016
		<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.79	1.215		
	Pair 3	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	4.71	1.546	-.679	.504
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.92	1.640		
	Pair 4	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.46	1.141	-.143	.888
		<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.50	1.216		
G3 (n = 24)	Pair 5	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.46	1.141	3.000	.006
		<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	4.71	1.546		
	Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.71	1.564	-3.685	.001
		<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.63	1.313		
	Pair 7	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	3.63	1.313	-4.526	.000
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.92	1.640		
	Pair 8	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.50	1.216	2.805	.010
		<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	4.71	1.546		
	Pair 9	<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.79	1.215	-.397	.695
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.92	1.640		

G4 (n = 17)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	4.94	.966	3.082	.007
		<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	3.82	1.468		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	4.71	1.724	1.496	.154
		<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.88	1.691		
	Pair 3	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.18	1.776	2.017	.061
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.12	1.576		
	Pair 4	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	4.94	.966	.746	.466
		<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	4.71	1.724		
	Pair 5	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	4.94	.966	1.700	.109
		<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.18	1.776		
	Pair 6	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	3.82	1.468	-.293	.773
		<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.88	1.691		
	Pair 7	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	3.82	1.468	1.535	.144
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.12	1.576		
	Pair 8	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	4.71	1.724	1.232	.236
		<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.18	1.776		
	Pair 9	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.88	1.691	1.765	.097
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.12	1.576		

Note. M = Mean. SD = Standard Deviation. Purchase intention (Chronic/Primed) ranges from 1 (No Chance) to 7 (Certain).

5.8 Findings (Product Accessibility)

To investigate the relationship between the independent variable - product accessibility- and the dependent variable- purchase intention for i) sustainable products, and ii) non-sustainable products- groups of respondents were subjected to different scenarios that examined the effect that varying degrees of product accessibility has on purchase intention.

The experiment consisted of four experimental groups that were exposed to either one of the four treatments, namely:

- Group 1 (G1)— Both sustainable and non-sustainable products available at the retailer and there are people willing to share the use of either product for a fee;
- Group 2 (G2)— Non-sustainable product unavailable at the store but there are people willing to share the use of either product for a fee;
- Group 3 (G3)— Sustainable product unavailable at store but there are people willing to share use of the either product for a fee;
- Group 4 (G4)— Both product unavailable at the store but there are people willing to share the use of either product for a fee

The present study then tested the effectiveness of treating perceived inaccessibility by informing the respondent that people in either a i) another neighbourhood, ii) another state, or iii) another country would be willing to share the product they initially intend to purchase for a small fee.

5.8.1 Product Accessibility Within-scenario Analysis

By interpreting the findings from the Main Tables; Table 5.49, Table 5.50, Table 5.51, Table 5.52 (Pair 1, Pair 2, Pair 3, Pair 4 and Pair 5) of the *within-group* analysis, the following is determined:

The findings for Pair 1 (Product Accessibility), as seen in Table 5.28, show that there is a significant difference in the scores for intention to purchase the sustainable product and intention to purchase the non-sustainable product, this is consistent throughout all Groups (i.e. Group 1, Group 2, Group 3 and Group 4). Therefore, we can establish that all respondents meet the selection criteria for the present study- prevailing sustainability-inclination is evident.

Table 5.28 Within-scenario comparison: Product Accessibility Pair 1

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)				
	G1 (B)	1.278	1.487	3.645	.002
	G1 (C)				
	G2 (A)				
	G2 (B)	1.429	1.720	3.807	.001
	G2 (C)				
<i>Chronic Intention No Purchase Scenario (Purchase Sustainable) minus Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	G3 (A)				
	G3 (B)	1.286	1.678	3.512	.002
	G3 (C)				
	G4 (A)				
	G4 (B)	.471	.800	2.426	.027
	G4 (C)				

The findings for Pair 2 (Product Accessibility), as seen in Table 5.29, support the previous findings, (refer to Pair 1 (Product Accessibility)), in which exposure to a prime reinforces the sustainability-inclination held by respondents. Group 2, Group 3, and Group 4 could not be tested due to the physical absence of one or both products at the retailers, as part of the scenario set-up.

Table 5.29 Within-scenario comparison: Product Accessibility Pair 2

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)				
	G1 (B)	1.667	1.749	4.043	.001
	G1 (C)				
<i>Chronic Intention Purchase Scenario (Purchase Sustainable) minus Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	G2 (A)				
	G2 (B)	-	-	-	-
	G2 (C)				
	G3 (A)				
	G3 (B)	-	-	-	-

G3 (C)				
G4 (A)				
G4 (B)	-	-	-	-
G4 (C)				

The findings for Pair 3 (Product Accessibility), as seen in Table 5.30, suggest that the significant difference in the scores that are observed in Group 1 and Group 2 evidence a preference for sharing the sustainable product with other peoples over sharing the non-sustainable product with other peoples. When the sustainable product is not available for purchase at the retailers, as in the scenarios for Group 3 and Group 4, respondents were indifferent to product choice-weakening their sustainability-inclination.

Table 5.30 Within-scenario comparison: Product Accessibility Pair 3

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)				
	G1 (B)	1.056	2.043	2.192	.043
	G1 (C)				
	G2 (A)				
	G2 (B)	.714	1.554	2.107	.048
	G2 (C)				
<i>Chronic Intention Purchase Scenario (Sharing Sustainable) minus Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	G3 (A)				
	G3 (B)	.714	2.194	1.492	.151
	G3 (C)				
	G4 (A)				
	G4 (B)	.529	1.663	1.313	.208
	G4 (C)				

The findings for Pair 4 (Product Accessibility), as seen in Table 5.31, imply significant differences in the scores concerning purchase intention for the sustainable product and the purchase intention for the non-sustainable product when offered an alternative to purchase the product via sharing. Sustainability-inclination held by respondents was strengthened in all cases, as respondents found it dearer to purchase the sustainable product as opposed to sharing it. However, in

comparing the available options to share the product, respondents were most inclined to sharing the sustainable product, if the person who is offering to share his/her product is located in a nearby neighbourhood (i.e., G1A).

Table 5.31 Within-scenario comparison: Product Accessibility Pair 4

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
	G1 (A)	1.222	2.045	2.535	.021
	G1 (B)	1.722	1.565	4.670	.000
	G1 (C)	1.500	1.757	3.621	.002
	G2 (A)	-	-	-	-
	G2 (B)	-	-	-	-
	G2 (C)	-	-	-	-
<i>Primed Intention Purchase Scenario (Purchase Sustainable) minus Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	G3 (A)	-	-	-	-
	G3 (B)	-	-	-	-
	G3 (C)	-	-	-	-
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 5 (Product Accessibility), as seen in Table 5.32, show that by treating lack of product accessibility through alternative means, by way of sharing the intended product with peoples in the vicinity, generally, respondents are indifferent to product choice when engaging in sharing the product. The treatment shows significance difference in product choice in instances where both the sustainable product and non-sustainable product were presented in the same circumstances (i.e. both physically present at retailers, or both absent at retailers). Only when faced with these exact circumstances did respondents act on their sustainability-inclination to intend to purchase the sustainable product (i.e., Group 1C and Group 4C).

Table 5.32 Within-scenario comparison: Product Accessibility Pair 5

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.944	2.182	1.836	.084
	G1 (B)	.667	1.680	1.683	.111
	G1 (C)	.889	1.605	2.350	.031
	G2 (A)	.429	1.165	1.686	.107
	G2 (B)	.429	1.805	1.088	.289
<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable) minus	G2 (C)	.143	1.621	.404	.691
<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	G3 (A)	.571	2.271	1.153	.262
	G3 (B)	.286	1.102	1.188	.249
	G3 (C)	.095	.768	.568	.576
	G4 (A)	.529	2.035	1.073	.299
	G4 (B)	.824	1.629	2.084	.054
	G4 (C)	.765	1.480	2.130	.049

5.8.2 Product Accessibility Between-scenario Analysis

By interpreting the findings (refer to summary Table 5.49, Table 5.50, Table 5.51, Table 5.52-Pair 6 to Pair 21) of the *between-group* analysis, the following is determined:

The findings for Pair 6 (Product Accessibility), as seen in Table 5.33, suggest the priming of purchase intention for the sustainable product is most effective in weakening the sustainability-inclination of respondents when the sustainable product is the only product available at the retailer- meaning no alternatives are available alongside it. In the absence of choice, priming product accessibility weakens sustainability-inclination.

Table 5.33 Between-scenario comparison: Product Accessibility Pair 6

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)				
<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable) minus	G1 (B)	.333	1.188	1.190	.250
<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	G1 (C)				
	G2 (A)	.857	1.652	2.378	.027

G2 (B)				
G2 (C)				
G3 (A)				
G3 (B)	-	-	-	-
G3 (C)				
G4 (A)				
G4 (B)	-	-	-	-
G4 (C)				

The findings for Pair 7 (Product Accessibility), as seen in Table 5.34, indicate that there is a significant difference in the scores between chronic purchase intention for sustainable products and primed intention for sustainable products. Indeed, results suggest that priming weakens sustainability-inclination, these are similar to the findings observed in Pair 6 (Product Accessibility). However, the findings herein also emphasize a general preference of respondents in favouring the purchase of the sustainable product as opposed to sharing the product.

Table 5.34 Between-scenario comparison: Product Accessibility Pair 7

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)				
	G1 (B)	.500	1.249	1.699	.108
	G1 (C)				
	G2 (A)				
	G2 (B)	1.619	1.830	4.055	.001
	G2 (C)				
	G3 (A)				
	G3 (B)	1.571	1.832	3.930	.001
	G3 (C)				
	G4 (A)				
	G4 (B)	1.235	1.921	2.651	.017
	G4 (C)				

*Chronic Intention No Purchase Scenario
(Purchase Sustainable)
minus
Chronic Intention Purchase Scenario
(Sharing Sustainable)*

The findings for Pair 8 (Product Accessibility), as seen in Table 5.35, suggest the priming had no effect (i.e. strengthen or weaken) on the chronic purchase intention for non-sustainable products.

Table 5.35 Between-scenario comparison: Product Accessibility Pair 8

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)				
	G1 (B)	.722	1.602	1.913	.073
	G1 (C)				
	G2 (A)				
	G2 (B)	-	-	-	-
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable) minus	G2 (C)				
	G3 (A)				
<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G3 (B)	.619	1.884	1.506	.148
	G3 (C)				
	G4 (A)				
	G4 (B)	-	-	-	-
	G4 (C)				

The findings for Pair 9 (Product Accessibility), as seen in Table 5.36, imply that there is a significant difference between the chronic purchase intention for non-sustainable products and the primed sharing intention for non-sustainable products. When sharing is offered as an alternative to purchasing the product (which in the case of Group 3 and Group 4 is physically absent from the retailer) the chronic intention is weakened, thus becoming the primed intention. Sharing the product is a less preferable means to using the intended product, so much so, that consumers may starve-off their product purchase intention for the time being.

Table 5.36 Between-scenario comparison: Product Accessibility Pair 9

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable) minus	G1 (A)				
	G1 (B)	.278	1.708	.690	.500

<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>					
	G1 (C)				
	G2 (A)				
	G2 (B)	.905	2.300	1.803	.087
	G2 (C)				
	G3 (A)				
	G3 (B)	1.000	1.844	2.485	.022
	G3 (C)				
	G4 (A)				
	G4 (B)	1.294	1.160	4.600	.000
	G4 (C)				

The findings for Pair 10 (Product Accessibility), as seen in Table 5.37, imply that treating respondents for lack of product accessibility, when the sustainable product is not physically present at the retailer (i.e. as in Group 2), has a significant effect on chronic purchase intention for sustainable products by weakening respondents' intention.

Table 5.37 Between-scenario comparison: Product Accessibility Pair 10

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.556	1.423	1.656	.116
	G1 (B)	.111	.900	.524	.607
	G1 (C)	.111	1.183	.399	.695
	G2 (A)	1.143	1.852	2.828	.010
	G2 (B)	1.143	1.389	3.771	.001
<i>Chronic Intention No Purchase Scenario (Purchase Sustainable) minus Primed Intention Purchase Scenario (Purchase Sustainable)</i>	G2 (C)	1.143	1.558	3.361	.003
	G3 (A)	-	-	-	-
	G3 (B)	-	-	-	-
	G3 (C)	-	-	-	-
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 11 (Product Accessibility), as seen in Table 5.38, suggest that the treatment did not strengthen/weaken the primed purchase intention for sustainable products. Sustainability-inclination towards purchase intention was maintained in the face of the treatment for product accessibility.

Table 5.38 Between-scenario comparison: Product Accessibility Pair 11

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention Purchase Scenario (Purchase Sustainable) minus Primed Intention Purchase Scenario (Purchase Sustainable)</i>	G1 (A)	.222	.647	1.458	.163
	G1 (B)	-.222	.808	-1.166	.260
	G1 (C)	-.222	1.003	-.940	.361
	G2 (A)	.286	1.231	1.064	.300
	G2 (B)	.286	1.347	.972	.343
	G2 (C)	.286	2.261	.579	.569
	G3 (A)	-	-	-	-
	G3 (B)	-	-	-	-
	G3 (C)	-	-	-	-
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 12 (Product Accessibility), as seen in Table 5.39, suggest that on exposure to the treatment, respondents did not show favour in purchasing the sustainable product over sharing the sustainable product in the priming stage.

Table 5.39 Between-scenario comparison: Product Accessibility Pair 12

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Primed Intention Purchase Scenario (Sharing Sustainable) minus Primed Intention Purchase Scenario (Purchase Sustainable)</i>	G1 (A)	.056	1.589	.148	.884
	G1 (B)	-.389	1.420	-1.162	.261
	G1 (C)	-.389	1.650	-1.000	.331
	G2 (A)	-.476	1.806	-1.208	.241

G2 (B)	-.476	1.470	-1.484	.153
G2 (C)	-.476	2.442	-.894	.382
G3 (A)	-	-	-	-
G3 (B)	-	-	-	-
G3 (C)	-	-	-	-
G4 (A)	-	-	-	-
G4 (B)	-	-	-	-
G4 (C)	-	-	-	-

The findings for Pair 13 (Product Accessibility), as seen in Table 5.40, imply that exposure to the treatment significantly weakens purchase intention for sustainable products. By offering an alternative route, in the form of sharing the product, respondents are reminded of the benefits in the complete, full ownership awarded to purchase of the intended product. The treatment is more effective in weakening the sustainability-inclination the further away (in a geographic sense) the person willing to share the product resides.

Table 5.40 Between-scenario comparison: Product Accessibility Pair 13

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable) minus <i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	G1 (A)	.667	1.237	2.287	.035
	G1 (B)	1.722	1.565	4.670	.000
	G1 (C)	1.778	1.896	3.978	.001
	G2 (A)	1.667	1.880	4.063	.001
	G2 (B)	1.333	1.742	3.508	.002
	G2 (C)	2.000	1.949	4.702	.000
	G3 (A)	1.810	1.778	4.663	.000
	G3 (B)	2.429	2.204	5.050	.000
	G3 (C)	2.762	2.047	6.183	.000
	G4 (A)	1.353	1.967	2.836	.012
	G4 (B)	1.588	2.238	2.926	.010
	G4 (C)	2.588	2.181	4.893	.000

The findings for Pair 14 (Product Accessibility), as seen in Table 5.41, suggest there is a significant difference in the scores between primed purchase intention for the sustainable product and the treated sharing intention for the sustainable product. When respondents are first informed about the lack of accessibility to one/both product types, initially, they have high inclination to purchase the sustainable product (i.e., in both Group 1 and Group 2). By exposing the respondents to the treatment, availing sharing as an alternative to using the product if it is absent at the retailer, it is observed that sustainability-inclination is weakened, particularly, when the person offering to share their product is located in another country.

Table 5.41 Between-scenario comparison: Product Accessibility Pair 14

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.333	1.815	.779	.447
	G1 (B)	1.389	1.914	3.079	.007
	G1 (C)	1.444	2.281	2.687	.016
	G2 (A)	.810	1.601	2.318	.031
	G2 (B)	.476	2.112	1.033	.314
<i>Chronic Intention Purchase Scenario (Purchase Sustainable) minus Primed Intention Purchase Scenario (Sharing Sustainable)</i>	G2 (C)	1.143	2.516	2.082	.050
	G3 (A)	-	-	-	-
	G3 (B)	-	-	-	-
	G3 (C)	-	-	-	-
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 14 (Product Accessibility), as seen in Table 5.42, suggest that in the presence of the non-sustainable product alternative, the treatment has a significant effect in weakening sustainability-inclination, specifically, in regards to the willingness to share the sustainable product (i.e., as in Group 1 and Group 3). Findings show that respondents were more willing to share the sustainable product in the absence of a prompt. Similar to the findings for Pair 14 (Product Accessibility), respondents were least willing to share the use of the sustainable product when the sharing is offered by a person located in another country.

Table 5.42 Between-scenario comparison: Product Accessibility Pair 15

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.167	1.043	.678	.507
	G1 (B)	1.222	1.517	3.419	.003
	G1 (C)	1.278	1.841	2.945	.009
	G2 (A)	.048	1.687	.129	.898
	G2 (B)	-.286	2.239	-.585	.565
<i>Primed Intention (Sharing sustainable)</i>	G2 (C)	.381	2.334	.748	.463
-					
<i>Treated Intention (Sharing sustainable)</i>	G3 (A)	.238	1.261	.865	.397
	G3 (B)	.857	1.621	2.423	.025
	G3 (C)	1.190	2.089	2.612	.017
	G4 (A)	.118	1.654	.293	.773
	G4 (B)	.353	2.090	.696	.496
	G4 (C)	1.353	2.621	2.129	.049

The findings for Pair 16 (Product Accessibility), as seen in Table 5.43, show that by offering the avenue of sharing as an alternative to using the non-sustainable product has no direct effect on purchase intention.

Table 5.43 Between-scenario comparison: Product Accessibility Pair 16

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.500	1.543	1.374	.187
	G1 (B)	.556	1.423	1.656	.116
	G1 (C)	.333	1.645	.860	.402
	G2 (A)	-	-	-	-
<i>Chronic Intention No Purchase Scenario</i>	G2 (B)	-	-	-	-
<i>(Purchase Non-Sustainable)</i>	G2 (C)	-	-	-	-
<i>minus</i>					
<i>Primed Intention Purchase Scenario</i>	G3 (A)	.429	1.363	1.441	.165
<i>(Purchase Non-Sustainable)</i>	G3 (B)	.429	2.087	.941	.358
	G3 (C)	.095	1.786	.244	.809
	G4 (A)	-	-	-	-

G4 (B)	-	-	-	-
G4 (C)	-	-	-	-

The findings for Pair 17 (Product Accessibility), as seen in Table 5.44, indicate that the treatment has no direct effect in either strengthening/weakening purchase intention for the non-sustainable product.

Table 5.44 Between-scenario comparison: Product Accessibility Pair 17

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	-.222	.548	-1.719	.104
	G1 (B)	-.167	1.098	-.644	.528
	G1 (C)	-.389	1.335	-1.236	.233
	G2 (A)	-	-	-	-
	G2 (B)	-	-	-	-
	G2 (C)	-	-	-	-
<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable) minus Primed Intention Purchase Scenario (Purchase Non- Sustainable)</i>	G3 (A)	-.190	1.436	-.608	.550
	G3 (B)	-.190	1.721	-.507	.618
	G3 (C)	-.524	1.436	-1.672	.110
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 18 (Product Accessibility), as seen in Table 5.45, support the findings from Pair 13 (Product Accessibility) by showing a significant difference in the primed purchase intention for the non-sustainable product and the treated sharing intention for the non-sustainable product. However, this is only in the case for G3C, and thus also suggests that the treatment is less effective in treating non-sustainable purchase intention. Generally, respondents favour purchasing the product over sharing the product, regardless of product type (i.e. sustainable or non-sustainable).

Table 5.45 Between-scenario comparison: Product Accessibility Pair 18

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.222	1.114	.846	.409
	G1 (B)	.278	.895	1.317	.205
	G1 (C)	.056	.873	.270	.790
	G2 (A)	-	-	-	-
	G2 (B)	-	-	-	-
<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable) minus	G2 (C)	-	-	-	-
<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	G3 (A)	-.571	2.063	-1.269	.219
	G3 (B)	-.571	1.748	-1.498	.150
	G3 (C)	-.905	1.921	-2.158	.043
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 19 (Product Accessibility), as seen in Table 5.46, similarly, imply that respondents prefer purchasing the non-sustainable product against sharing the non-sustainable product. This is signified by the significant difference in the scores between the chronic purchase intention for the non-sustainable product and the treated sharing intention for the non-sustainable product (i.e. as in Group 1, Group 3 and Group 4). In the absence of the non-sustainable product at the store, respondents were more willing to engage in sharing the non-sustainable product.

Table 5.46 Between-scenario comparison: Product Accessibility Pair 19

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
	G1 (A)	.333	1.111	2.650	.017
	G1 (B)	1.389	1.852	3.183	.005
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable) minus	G1 (C)	1.389	1.852	3.183	.005
<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	G2 (A)	.667	2.517	1.214	.239
	G2 (B)	.333	2.266	.674	.508
	G2 (C)	.714	2.194	1.492	.151

G3 (A)	1.095	2.022	2.482	.022
G3 (B)	1.429	1.989	3.291	.004
G3 (C)	1.571	2.158	3.337	.003
G4 (A)	1.412	1.460	3.986	.001
G4 (B)	1.941	1.713	4.673	.000
G4 (C)	2.882	1.691	7.027	.000

The findings for Pair 20 (Product Accessibility), as seen in Table 5.47, indicate a significant difference in the scores between the primed purchase intention for the non-sustainable product and the treated sharing intention for the non-sustainable product. Specifically, by offering sharing as an alternative to purchasing the product, the findings show respondents prefer purchasing the product, especially, if the product has an existing store presence.

Table 5.47 Between-scenario comparison: Product Accessibility Pair 20

Purchase Intention	Group	M _{difference}	SD _{difference}	t	p
<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable) minus Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	G1 (A)	-.389	1.290	-1.279	.218
	G1 (B)	.389	1.378	1.197	.248
	G1 (C)	.667	1.572	1.799	.090
	G2 (A)	-	-	-	-
	G2 (B)	-	-	-	-
	G2 (C)	-	-	-	-
	G3 (A)	.476	1.778	1.227	.234
	G3 (B)	.810	1.778	2.086	.050
	G3 (C)	.952	2.061	2.118	.047
	G4 (A)	-	-	-	-
	G4 (B)	-	-	-	-
	G4 (C)	-	-	-	-

The findings for Pair 21 (Product Accessibility), as seen in Table 5.48, consider the effect the treatment has on sharing intention for the non-sustainable product, evidencing that exposure to the treatment weakens the intention to share the product in scenarios where both the sustainable-

product and the non-sustainable product are facing similar circumstances (i.e. both products absent from retailer, or both present at retailer) as in Group 1 and Group 4 respectively. Additionally, the further away the person offering to share his/her product resides, the less willing the respondents are to sharing the product.

Table 5.48 Between-scenario comparison: Product Accessibility Pair 21

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
	G1 (A)	.056	.873	.270	.790
	G1 (B)	.833	1.383	2.557	.020
	G1 (C)	1.111	1.530	3.082	.007
	G2 (A)	-.238	1.044	-1.045	.309
	G2 (B)	-.571	1.886	-1.388	.180
<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	G2 (C)	-.190	2.294	-.381	.708
<i>minus</i>					
<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	G3 (A)	.095	1.670	.261	.797
	G3 (B)	.429	1.121	1.752	.095
	G3 (C)	.571	1.568	1.671	.110
	G4 (A)	.118	1.576	.308	.762
	G4 (B)	.647	1.412	1.890	.077
	G4 (C)	1.588	1.839	3.561	.003

Table 5.49 T-test for Equality of Means (Accessibility, Group 1)

Group	Pairing	Purchase Intention	M	SD	t	p
G1 (Scenario A) (n = 18)	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	3.645	.002
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162		
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283	4.043	.001
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534		
	Pair 3	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339	2.192	.043
		<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396		
	Pair 4	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	4.78	1.478	1.222	.021
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.56	1.423		
	Pair 5	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	4.67	1.328	.944	.084
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	3.72	1.447		
	Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	1.190	.250
		<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283		
	Pair 7	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	1.699	.108
		<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339		
	Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	1.913	.073
		<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.33	1.534		

Pair 9	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.06	1.162	.690	.500
	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.78	1.396		
Pair 10	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.33	1.029	.556	.116
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.78	1.478		
Pair 11	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.00	1.283	.222	.163
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.78	1.478		
Pair 12	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.83	1.339	.056	.884
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.78	1.478		
Pair 13	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.33	1.029	.667	.035
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.67	1.328		
Pair 14	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.00	1.283	.333	.447
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.67	1.328		
Pair 15	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.83	1.339	.167	.507
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.67	1.328		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.06	1.162	.500	.187
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.56	1.423		
Pair 17	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	3.33	1.534	- .222	.104
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.56	1.423		
Pair 18	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.78	1.396	.222	.409

		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.56	1.423		
	Pair 19	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	.333	.412
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	3.72	1.447		
	Pair 20	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534	-.389	.218
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	3.72	1.447		
	Pair 21	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396	.056	.790
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	3.72	1.447		
	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	3.645	.002
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162		
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283	4.043	.001
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534		
	Pair 3	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339	2.192	.043
		<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396		
	Pair 4	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.174	1.033	.002
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.97	1.497		
	Pair 5	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.77	1.591	.433	.091
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	3.33	1.626		
	Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	1.190	.250
		<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283		

G1
(Scenario B)
(n = 18)

Pair 7	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.33	1.029	1.699	.108
	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.83	1.339		
Pair 8	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.06	1.162	1.913	.073
	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	3.33	1.534		
Pair 9	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.06	1.162	.690	.500
	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.78	1.396		
Pair 10	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.33	1.029	.111	.607
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.22	1.215		
Pair 11	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.00	1.283	- .222	.260
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.22	1.215		
Pair 12	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.83	1.339	- .389	.261
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.22	1.215		
Pair 13	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.33	1.029	1.722	.000
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	3.61	1.685		
Pair 14	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.00	1.283	1.389	.007
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	3.61	1.685		
Pair 15	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.83	1.339	1.222	.003
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	3.61	1.685		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.06	1.162	.556	.116

		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.50	1.425		
	Pair 17	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534		
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.50	1.425	- .167	.528
	Pair 18	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396		
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.50	1.425	.278	.205
	Pair 19	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162		
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.94	1.474	1.111	.017
	Pair 20	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534		
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.94	1.474	.389	.248
	Pair 21	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396		
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.94	1.474	.833	.020
	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029		
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	3.645	.002
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283		
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534	4.043	.001
	Pair 3	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339		
		<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396	2.192	.043
	Pair 4	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	5.22	1.517		
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.72	1.526	3.621	.002

G1
(Scenario C)

(n = 18)

Pair 5	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.56	1.688	2.350	.031
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.67	1.572		
Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	1.190	.250
	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283		
Pair 7	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	1.699	.108
	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339		
Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	1.913	.073
	<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.33	1.534		
Pair 9	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	.690	.500
	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396		
Pair 10	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	.399	.695
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	5.22	1.517		
Pair 11	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283	-.940	.361
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	5.22	1.517		
Pair 12	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339	-1.000	.331
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	5.22	1.517		
Pair 13	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.33	1.029	3.978	.001
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.56	1.688		
Pair 14	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.283	2.687	.016

	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.56	1.688		
Pair 15	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.83	1.339	2.945	.009
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.56	1.688		
Pair 16	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	.860	.402
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.72	1.526		
Pair 17	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534	-1.236	.233
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.72	1.526		
Pair 18	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396	.270	.790
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.72	1.526		
Pair 19	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.06	1.162	3.183	.005
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.67	1.572		
Pair 20	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.33	1.534	1.799	.090
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.67	1.572		
Pair 21	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.78	1.396	3.082	.007
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.67	1.572		

Table 5.50 T-test for Equality of Means (Accessibility, Group 2)

Group	Pairing	Purchase Intention	M	SD	t	p
G2 (Scenario A) (n = 21)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	3.807	.001
		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.48	1.569		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-
	Pair 3	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.29	1.736	2.107	.048
		<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.57	1.630		
	Pair 4	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
	Pair 5	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.868	1.686	.107
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.81	1.914		
	Pair 6	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	2.378	.027
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	1.465		
	Pair 7	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	4.055	.001
		<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.29	1.736		
	Pair 8	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
	Pair 9	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.48	1.569	1.803	.087

	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.57	1.630		
Pair 10	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	2.828	.010
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.76	1.729		
Pair 11	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	1.465	1.064	.300
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.76	1.729		
Pair 12	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.29	1.736	-1.208	.241
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.76	1.729		
Pair 13	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	4.063	.001
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.868		
Pair 14	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	1.465	2.318	.031
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.868		
Pair 15	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.29	1.736	.129	.898
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.868		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 17	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 18	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		

G2 (Scenario B) (n = 21)	Pair 19	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.48	1.569	1.214	.239	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.81	1.914			
	Pair 20	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	-	-			
	Pair 21	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.57	1.630	-1.045	.309	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.81	1.914			
	G2 (Scenario B) (n = 21)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	3.807	.001
			<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.48	1.569		
		Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
			<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-		
		Pair 3	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.29	1.736	2.107	.048
			<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.57	1.630		
		Pair 4	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
			<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 5		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.57	1.912	3.807	.001	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	4.14	1.824			
Pair 6		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	2.378	.027	
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	1.465			
Pair 7		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.90	.539	4.055	.001	

	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736		
Pair 8	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		
Pair 9	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.48	1.569	1.803	.087
	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.57	1.630		
Pair 10	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	3.771	.001
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.76	1.375		
Pair 11	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.05	1.465	.972	.343
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.76	1.375		
Pair 12	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736	- 1.484	.153
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.76	1.375		
Pair 13	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	3.508	.002
	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	4.57	1.912		
Pair 14	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.05	1.465	1.033	.314
	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	4.57	1.912		
Pair 15	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736	- .585	.565
	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	4.57	1.912		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		

G2 (Scenario C) (n = 21)	Pair 17	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	Pair 18	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	Pair 19	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.48	1.569	.674	.508
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	4.14	1.824		
	Pair 20	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	-	-	-	-
	Pair 21	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.57	1.630	- 1.388	.180
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	4.14	1.824		
	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	3.807	.001
		<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.48	1.569		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-		
	Pair 3	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736	2.107	.048
	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.57	1.630			
Pair 4	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	-	-	-	-	
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-			
Pair 5	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	5.90	.539	.404	.691	

	<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	4.48	1.569		
Pair 6	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	2.378	.027
	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.05	1.465		
Pair 7	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	4.055	.001
	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736		
Pair 8	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		
Pair 9	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.48	1.569	1.803	.087
	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.57	1.630		
Pair 10	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	3.361	.003
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.76	1.609		
Pair 11	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.05	1.465	.579	.569
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.76	1.609		
Pair 12	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736	-.894	.382
	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	4.76	1.609		
Pair 13	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.90	.539	4.702	.000
	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	3.90	2.022		
Pair 14	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	5.05	1.465	2.082	.050
	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	3.90	2.022		

Pair 15	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.29	1.736	.748	.463
	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	3.90	2.022		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		
Pair 17	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		
Pair 18	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		
Pair 19	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.48	1.569	1.492	.151
	<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	3.76	2.143		
Pair 20	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	-	-		
Pair 21	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.57	1.569	-.381	.708
	<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	3.76	2.143		

Table 5.51 T-test for Equality of Means (Accessibility, Group 3)

Group	Pairing	Purchase Intention	M	SD	t	p
G3 (Scenario A) (n = 21)	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.57	1.121	3.512	.002
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231		
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	-	-		
	Pair 3	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.700	1.492	.151
		<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.504		
	Pair 4	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
		<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	-	-		
	Pair 5	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.76	1.700	1.153	.262
		<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	3.19	1.504		
	Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
		<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
	Pair 7	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.57	1.121	3.930	.001
		<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.732		
	Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	1.506	.148
		<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.67	1.390		
	Pair 9	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	2.485	.022

	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.554		
Pair 10	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 11	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 12	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 13	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.57	1.121	4.663	.000
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.76	1.700		
Pair 14	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-		
Pair 15	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.732	.865	.397
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.76	1.700		
Pair 16	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	1.441	.165
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.86	1.424		
Pair 17	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.67	1.390	-.190	.550
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.86	1.424		
Pair 18	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.554	-.571	.219
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.86	1.424		

G3 (Scenario B) (n = 21)	Pair 19	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.29	1.231	1.095	.022	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.19	1.504			
	Pair 20	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	3.67	1.390	.476	.234	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.19	1.504			
	Pair 21	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.29	1.554	.095	.797	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.19	1.504			
	G3 (Scenario B) (n = 21)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.57	1.121	3.512	.002
			<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.29	1.231		
		Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
			<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-		
		Pair 3	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.00	1.732	1.492	.151
			<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.29	1.554		
		Pair 4	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
			<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 5		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	3.14	1.682	1.188	.249	
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	2.86	1.621			
Pair 6		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-	
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-			
Pair 7		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.57	1.121	3.930	.001	

	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.732		
Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	1.506	.148
	<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.67	1.390		
Pair 9	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	2.485	.022
	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.554		
Pair 10	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 11	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 12	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 13	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.57	1.121	5.050	.000
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.14	1.682		
Pair 14	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-		
Pair 15	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.732	2.423	.025
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.14	1.682		
Pair 16	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	.941	.358
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.86	1.652		

G3 (Scenario C) (n = 21)	Pair 17	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	3.67	1.390	-0.507	.618
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.86	1.652		
	Pair 18	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.29	1.554	-1.498	.150
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	3.86	1.652		
	Pair 19	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.29	1.231	3.291	.004
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	2.86	1.621		
	Pair 20	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	3.67	1.390	2.086	.050
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	2.86	1.621		
	Pair 21	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.29	1.554	1.752	.095
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	2.86	1.621		
	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.57	1.121	3.512	.002
		<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	4.29	1.231		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-		
	Pair 3	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.00	1.732	1.492	.151
		<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.29	1.554		
	Pair 4	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-		
	Pair 5	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	2.81	1.569	.568	.576

	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.71	1.586		
Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 7	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.57	1.121	3.930	.001
	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.732		
Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	1.506	.148
	<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	3.67	1.390		
Pair 9	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	2.485	.022
	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.554		
Pair 10	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 11	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 12	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 13	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.57	1.121	6.183	.000
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	2.81	1.569		
Pair 14	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-		

Pair 15	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.732	2.612	.017
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	2.81	1.569		
Pair 16	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	.244	.809
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.19	1.632		
Pair 17	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.67	1.390	.130	.110
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.19	1.632		
Pair 18	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.554	-.030	.043
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	4.19	1.632		
Pair 19	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.29	1.231	3.337	.003
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.71	1.586		
Pair 20	<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.67	1.390	2.118	.047
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.71	1.586		
Pair 21	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.29	1.554	1.671	.110
	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.71	1.586		

Table 5.52 T-test for Equality of Means (Accessibility, Group 4)

Group	Pairing	Purchase Intention	M	SD	t	p
G4 (Scenario A) (n = 17)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.59	.795	2.426	.027
		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	5.12	.781		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-		
	Pair 3	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.35	1.730	1.313	.208
		<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.82	1.131		
	Pair 4	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
	Pair 5	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.751	1.073	.299
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.71	1.404		
	Pair 6	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-		
	Pair 7	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.59	.795	2.651	.017
		<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.35	1.730		
	Pair 8	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
	Pair 9	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	5.12	.781	4.600	.000

	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.82	1.131		
Pair 10	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-		
Pair 11	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-		
Pair 12	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-		
Pair 13	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.59	.795	2.836	.012
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.751		
Pair 14	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	-	-		
Pair 15	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.35	1.730	.293	.773
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.24	1.751		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 17	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 18	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		

G4 (Scenario B) (n = 17)	Pair 19	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	5.12	.781	3.986	.001
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.71	1.404		
	Pair 20	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	-	-		
	Pair 21	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.82	1.131	.308	.762
		<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.71	1.404		
	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.59	.795	2.426	.027
		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	5.12	.781		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-		
	Pair 3	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.35	1.730	1.313	.208
		<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.82	1.131		
	Pair 4	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 5	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.00	1.904	2.084	.054	
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	3.18	1.334			
Pair 6	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	-	-	-	-	
	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	-	-			
Pair 7	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.59	.795	2.651	.017	

	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.35	1.730		
Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	-	-	-	-
	<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	-	-		
Pair 9	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	5.12	.781	4.600	.000
	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.82	1.131		
Pair 10	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 11	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 12	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 13	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.59	.795	2.926	.010
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.904		
Pair 14	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-		
Pair 15	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.35	1.730	.696	.496
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	4.00	1.904		
Pair 16	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Non-Sustainable)</i>	-	-		

G4 (Scenario C) (n = 17)	Pair 17	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	Pair 18	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-
	Pair 19	<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	5.12	.781	4.673	.000
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	3.18	1.334		
	Pair 20	<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-	-	-
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	-	-	-	-
	Pair 21	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.82	1.131	1.890	.077
		<i>Primed Intention</i> Purchase Scenario (Sharing Non-Sustainable)	3.18	1.334		
	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable)	5.59	.795	2.426	.027
		<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable)	5.12	.781		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	-	-	-	-
		<i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	-	-		
	Pair 3	<i>Chronic Intention</i> Purchase Scenario (Sharing Sustainable)	4.35	1.730	1.313	.208
	<i>Chronic Intention</i> Purchase Scenario (Sharing Non-sustainable)	3.82	1.131			
Pair 4	<i>Primed Intention</i> Purchase Scenario (Purchase Sustainable)	-	-	-	-	
	<i>Primed Intention</i> Purchase Scenario (Purchase Non-Sustainable)	-	-	-	-	
Pair 5	<i>Primed Intention</i> Purchase Scenario (Sharing Sustainable)	3.00	2.031	2.130	.049	

	<i>Primed Intention Purchase Scenario (Sharing Non-Sustainable)</i>	2.24	1.480		
Pair 6	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 7	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.59	.795	2.651	.017
	<i>Chronic Intention Purchase Scenario (Sharing Sustainable)</i>	4.35	1.730		
Pair 8	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	-	-	-	-
	<i>Chronic Intention Purchase Scenario (Purchase Non-Sustainable)</i>	-	-		
Pair 9	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	5.12	.781	4.600	.000
	<i>Chronic Intention Purchase Scenario (Sharing Non-sustainable)</i>	3.82	1.131		
Pair 10	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 11	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 12	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Purchase Sustainable)</i>	-	-		
Pair 13	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	5.59	.795	4.893	.000
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	3.00	2.031		
Pair 14	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	-	-	-	-
	<i>Primed Intention Purchase Scenario (Sharing Sustainable)</i>	-	-		

Pair 15	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	4.35	1.730	2.129	.049
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Sustainable</i>)	3.00	2.031		
Pair 16	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 17	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 18	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Purchase Non-Sustainable</i>)	-	-		
Pair 19	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	5.12	.781	7.027	.000
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	2.24	1.480		
Pair 20	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	-	-	-	-
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	-	-		
Pair 21	<i>Chronic Intention</i> Purchase Scenario (<i>Sharing Non-sustainable</i>)	3.82	1.131	3.561	.003
	<i>Primed Intention</i> Purchase Scenario (<i>Sharing Non-Sustainable</i>)	2.24	1.480		

Note. M = Mean. SD = Standard Deviation. Purchase intention (Chronic/Primed) ranges from 1 (No Chance) to 7 (Certain)

5.9 Findings (Product Affordability)

In the present study's investigation to determine the relationship between product affordability and purchase intention, groups of respondents were subjected to different scenarios that examined the effect that varying degrees of product affordability has on purchase intention. In each of these scenarios the price of either the sustainable-product and/or the non-sustainable product were manipulated- to appear cheaper as before.

The experiment consisted of four experimental groups that were exposed to either one of the four treatments, namely:

- Group 1 (G1)— Both sustainable and non-sustainable products normal priced after rental sustainable product price lowered (perceived as cheaper);
- Group 2 (G2)— Non-sustainable product highly priced while sustainable product is normal priced, after rental, sustainable product price lowered (perceived as cheaper);
- Group 3 (G3)— Non-sustainable product normal priced while sustainable product is highly priced, after rental, sustainable product price lowered (perceived as normal price);
- Group 4 (G4)— Non-sustainable product highly priced while sustainable product is highly priced, after rental, sustainable product price lowered (perceived as normal price).

The analysis first compares responses by respondents during chronic, primed and treatment phases to track the sustainability-inclination of purchase intention (i.e., *within-scenario analysis*). Thereafter, change in purchase intention was measured at chronic, primed and posttest (i.e., *between-scenario analysis*). The prime used to treat product affordability was by offering rental as an alternative means of acquiring product ownership.

5.9.1 Product Affordability Within-scenario Analysis

By interpreting the findings (refer to Main Table 5.58- Pair 1 and Pair 2) of the *within-group* analysis, the following is determined:

The findings for Pair 1 (Product Affordability), as seen in Table 5.53, show that sustainability-inclination is latent at first, with the exception of respondent for Group 1. Respondents, at this phase of the experiment, are mostly indifferent to the choice of products presented, be it sustainable or non-sustainable.

Table 5.53 Within-scenario comparison: Product Affordability Pair 1

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
<i>Chronic Intention</i> <i>No Purchase Scenario</i> <i>(Purchase Sustainable)</i>	G1	-.400	.957	-2.089	.047
	G2	-.190	1.078	-.810	.428
<i>Chronic Intention</i> <i>No Purchase Scenario</i> <i>(Purchase Non-Sustainable)</i>	G3	-.211	1.437	-.639	.531
	G4	.105	1.560	.294	.772

The findings for Pair 2 (Product Affordability), as seen in Table 5.54, imply that priming has a significant effect in strengthening sustainability-inclination in respondents in scenarios where the discount offered causes the sustainable product to be cheaper as compared to the non-sustainable product alternative (i.e., as in Group 1, Group 2 and Group 3).

Table 5.54 Within-scenario comparison: Product Affordability Pair 2

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
<i>Chronic Intention</i> <i>Purchase Scenario</i> <i>(Purchase Sustainable)</i>	G1	1.960	2.475	3.960	.001
	G2	1.333	2.153	2.839	.010
<i>Chronic Intention</i> <i>Purchase Scenario</i> <i>(Purchase Non-sustainable)</i>	G3	.789	2.720	1.265	.222
	G4	2.211	2.699	3.570	.002

5.9.2 Product Affordability Between-scenario Analysis

Through interpretation of the findings (refer to Main Table 5.58- Pair 3, Pair 4 and Pair 5) of the *between-group* analysis, the following can be determined:

The findings for Pair 3 (Product Affordability), as seen in Table 5.55, suggest that priming did not have any effect, with regards to strengthening/weakening the purchase intention for the sustainable product.

Table 5.55 Between-scenario comparison: Product Affordability Pair 3

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Sustainable) minus <i>Chronic Intention</i> Purchase Scenario (Purchase Sustainable)	G1	-.560	1.917	-1.461	.157
	G2	-.238	1.546	-.706	.489
	G3	-.421	1.644	-1.117	.279
	G4	-.684	1.635	-1.824	.085

The findings for Pair 4 (Product Affordability), as seen in Table 5.56, indicate that the priming did have a significant effect on the scores between the chronic purchase intention for the non-sustainable product and the primed purchase intention for the non-sustainable product- weakening the purchase intention. Indeed, the priming only affected intention when the non-sustainable product appeared more expensive compared to the pricing of the sustainable product.

Table 5.56 Between-scenario comparison: Product Affordability Pair 4

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
<i>Chronic Intention</i> No Purchase Scenario (Purchase Non-Sustainable) minus <i>Chronic Intention</i> Purchase Scenario (Purchase Non-sustainable)	G1	1.800	2.466	3.649	.001
	G2	1.286	1.648	3.576	.002
	G3	.579	2.631	.959	.350
	G4	1.421	2.610	2.373	.029

The findings for Pair 5 (Product Affordability), as seen in Table 5.57, suggest that, generally, consumers favour purchasing the sustainable product as opposed to renting the sustainable product at a cheaper price. By offering a cheaper alternative means of acquiring the use of the product, the treatment effectively weakens intention for the sustainable product. This is evident in the statistically significant difference in the scores for Group 2, Group 3 and Group 4 - in which respondents noted higher purchase intention for the sustainable product prior to exposure to the treatment. However, when both products were present at the retailers, the treatment did not affect purchase intention for the sustainable product, this could suggest that product rental is less effective in the presence of substitute products (i.e., as seen in Group1).

Table 5.57 Between-scenario comparison, Affordability Pair 5

Purchase Intention	Group	M_{difference}	SD_{difference}	t	p
<i>Chronic Intention</i> <i>No Purchase Scenario</i> <i>(Purchase Sustainable)</i> <i>minus</i> <i>Primed Intention</i> <i>Purchase Scenario</i> <i>(Rent Sustainable)</i>	G1	.320	1.600	1.000	.327
	G2	1.000	2.098	2.185	.041
	G3	.947	1.747	2.364	.030
	G4	1.105	1.941	2.483	.023

Table 5.58 T-test for Equality of Means (Affordability)

Group	Pairing	Purchase Intention	M	SD	t	p
G1 (n = 25)	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	4.92	.812	-2.089	.047
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	5.32	.945		
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.48	1.806	3.960	.001
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.52	1.873		
	Pair 3	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	4.92	.812	-.560	.157
		<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.48	1.806		
	Pair 4	<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	5.32	.945	3.649	.001
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.52	1.873		
	Pair 5	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	4.92	.812	1.000	.327
		<i>Primed Intention Purchase Scenario (Rent Sustainable)</i>	4.60	1.384		
G2 (n = 21)	Pair 1	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	4.76	.625	-.810	.428
		<i>Chronic Intention No Purchase Scenario (Purchase Non-Sustainable)</i>	4.95	.921		
	Pair 2	<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.378	2.839	.010
		<i>Chronic Intention Purchase Scenario (Purchase Non-sustainable)</i>	3.67	1.494		
	Pair 3	<i>Chronic Intention No Purchase Scenario (Purchase Sustainable)</i>	4.76	.625	-.706	.489
		<i>Chronic Intention Purchase Scenario (Purchase Sustainable)</i>	5.00	1.378		

G3 (n = 19)	Pair 4	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.95	.921	3.576	.002
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	3.67	1.494		
	Pair 5	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	4.76	.625	2.185	.041
		<i>Primed Intention</i> Purchase Scenario (<i>Rent Sustainable</i>)	3.76	2.022		
	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	4.47	.612	-.639	.531
		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.68	1.376		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.89	1.487	1.265	.222
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	4.11	1.595		
	Pair 3	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	4.47	.612	-1.117	.279
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	4.89	1.487		
Pair 4	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.68	1.376	.959	.350	
	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	4.11	1.595			
Pair 5	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	4.47	.612	2.364	.030	
	<i>Primed Intention</i> Purchase Scenario (<i>Rent Sustainable</i>)	3.53	1.611			
G4 (n = 19)	Pair 1	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	.848	.294	.772
		<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.95	1.433		
	Pair 2	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.74	1.368	3.570	.002
		<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	3.53	1.837		
	Pair 3	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	.848	-1.824	.085

	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Sustainable</i>)	5.74	1.368		
Pair 4	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Non-Sustainable</i>)	4.95	1.433	2.373	.029
	<i>Chronic Intention</i> Purchase Scenario (<i>Purchase Non-sustainable</i>)	3.53	1.837		
Pair 5	<i>Chronic Intention</i> No Purchase Scenario (<i>Purchase Sustainable</i>)	5.05	.848	2.483	.023
	<i>Primed Intention</i> Purchase Scenario (<i>Rent Sustainable</i>)	3.95	1.615		

Note. M = Mean. SD = Standard Deviation. Purchase intention (Chronic/Primed) ranges from 1 (No Chance) to 7 (Certain)

5.10 Hypothesis Testing

Based on the experimental results, relying on both i) *within-scenario analysis*, and the ii) *between-scenario analysis*, the data have presented the significance in the relationships between the covert (i.e., self-efficacy, neutralisation) and overt (i.e., product availability, accessibility, and affordability) behavioural controls and purchase intentions of sustainable (and non-sustainable) products. This study then presents the results of priming to manipulate the intention–behaviour gap instigated by these behaviour controls. The summary of hypotheses testing is presented in Table 5.61. In total, three hypotheses are accepted (H1a, H4a, and H3b), four hypotheses are partially accepted (H3a, H1b, H2b, and H4b), and three hypotheses are rejected (H2a, H5a, and H5b).

Table 5.59 Results of Hypothesis Testing

No.	Hypotheses	Status
Chronic Effects		
H1a	Self-efficacy has a positive effect on sustainable purchase intention.	Accepted
H2a	Neutralisation has a negative effect on sustainable purchase intention.	Rejected
H3a	Product availability has a positive effect on sustainable purchase intention.	Partially Accepted
H4a	Product accessibility has a positive effect on sustainable purchase intention.	Accepted
H5a	Product affordability has a positive effect on sustainable purchase intention.	Rejected
Priming Effects		
H1b	Priming through heightening the benefits and costs of sustainable and unsustainable product alternatives moderates the relationship between self-efficacy and sustainable purchase intention.	Partial Acceptance
H2b	Priming through increased awareness of hypocritical behaviour moderates the relationship between neutralisation and sustainable purchase intention.	Partial Acceptance
H3b	Priming through an alternative retail format in the form of online retail options that had products available moderates the relationship between product availability and sustainable purchase intention.	Accepted
H4b	Priming through sharing option availability across different geographical extents (e.g., a local neighbourhood, another state, or another country) moderates the relationship between product accessibility and sustainable purchase intention.	Partial Acceptance
H5b	Priming through rental option availability moderates the relationship between product affordability and sustainable purchase intention.	Rejected

5.11 Chapter summary

Following the research procedure set out in the previous chapter, Chapter 5, reports the results from the data analysis of experimental data. The chapter provides an overview of the respondent pool and their characteristics. It also provides insight into the data treatment procedure, and addresses multiple key areas related to internal and external validity concerning the experimental results prior to reporting the findings. The results provided herein, support the acceptance of three hypotheses (H1a, H4a, and H3b), the partial acceptance of four hypotheses (H3a, H1b, H2b, and H4b) and does not support three hypothesis (H2a, H5a, and H5b). The findings from this chapter are discussed in detail in the next chapter, Chapter 6, including their theoretical and practical implications.

6DISCUSSION

6.1 Chapter Overview

On the basis of the conceptual framework in Chapter 3 and the experimental results in Chapter 5, this chapter will discuss the findings derived from the results and the implications for theory and practice. More specifically, this chapter explains how the findings are either in agreement or disagreement with the existing literature. It then provides theoretically grounded and empirically supported reasoning to explain these findings. This delineates the specific means by which the present study contributes to the extant body of knowledge in the areas of marketing sustainability and consumer behaviour, particularly, through the novelty of its' findings and the evidence it provides to complement the findings of other researchers. The chapter then proceeds to present the practical implications of the research findings and provides recommendations on the means in which marketers may influence behavioural control, to either close or open the intention–behaviour gap in sustainability-inclined consumers.

6.2 General Discussion

The journey to greater sustainability is not an easy one. In most instances, the intention to be sustainable does not necessarily translate into actual sustainable actions. This exemplifies the intention–behaviour gap that many have tried to close, theoretically and practically. More specifically, theories such as TRA and TPB, when taken collectively, have acknowledged and addressed the intention–behaviour gap perspective through the concept of behavioural control. However, the main limitation of the existing conceptualisation and operationalisation of behavioural control that this study contends is its narrow focus on self-efficacy, which anchors the power of behaviour control solely on the individual. This, of course, may not be entirely true as sustainable consumption alternatives, especially those that are consumed through purchases, depends on external factors, most of which are shaped by sellers. Thus, in this study, the endeavor to establish a more holistic conceptualisation and operationalisation of behavioural control was undertaken through the proposal and testing of the theory of behavioural control. The theory, in essence, posits that behavioural control may be covert, which refers to factors that control behaviour that are internal to the individual (e.g., self-efficacy, neutralisation), or overt, which refers to factors that control behaviour that are external to the individual (e.g., product availability, accessibility, and affordability). When applied to practice, it becomes important to know how marketers—be it from the scholarly, practical, or policy point-of-view—can go about activating or de-activating behavioural control. The former (i.e., activating behavioural control), which closes the intention–behaviour gap, can be used to discourage the purchase of non-sustainable products, whereas the latter (i.e., deactivating behavioural control), which opens the intention–behaviour gap, can be used to encourage the purchase of sustainable products.

The overarching goal of this study was, therefore, to i) establish the relationship between covert and overt behavioural control on consumers' intention to purchase sustainable products, and ii) to examine the influence of priming as a moderator of this relationship.

Premised on the new theory of behavioural control developed herein, the present study contributes to a greater understanding of behavioural control, thereby extending existing knowledge contributed by theories such as TRA and TPB. In addition, this study contributes to predicting consumer's purchase behaviour towards sustainable products by developing an integrative account of the intention–behaviour gap, which is explained by covert (i.e., self-efficacy, neutralisation) and overt (i.e., product availability, accessibility, and affordability)

behavioural controls, and the ways that may (i.e., when results are significant) and may not (i.e., when results are insignificant) overcome this gap. More specifically, the present study clarified whether behavioural changes can be expected in terms of purchase intention as a result of exposure to either covert or overt behavioural controls and the priming interventions that seek to create changes that encourage greater purchases of sustainable products (as opposed to non-sustainable products).

In doing so, the present study answered the call for further research from academics, such as Ajzen (2015) and Larsen et al. (2018), for further research in intervention strategies to overcome the intention–behaviour gap experienced by consumers in the marketplace by contributing to a greater understanding of the interplay between the various types of intervention treatments on the intended degree of purchase behaviour. The present study also clarifies the doubts underlined by the rejoinders from Sniehotta et al. (2014) and Mitchie et al. (2011) that highlighted the complicity in behavioural control in its inability to differentiate the source of the behavioural control and its lack in empirical testing on intervention treatment effectiveness. The present study does this by classifying behavioural control factors as either covert or overt through the new proposed theory of behavioural control, which it then tests for treatment effectiveness within- (internal validity) and between- (external validity) scenarios for each covert and overt behavioural control. This, in turn, allows the present study to identify direct and optimal interventions that strengthen purchase intention towards the purchase of sustainable products.

The following sections provide a general discussion on some of the notable findings from the factorial design—namely, the chronic purchase intentions held by participants in this study, as well as the effects of the priming interventions on their purchase intentions. This, in turn, should provide a good overview of the investigated effects of behavioural controls on purchase intentions and the sustainability contexts within which such effects exist.

6.2.1 Chronic Characteristics on Sustainability Inclination

The respondents who took part in the survey in this study indicated that their chronic state in making a purchase decision between sustainable products and its non-sustainable alternatives leaned toward the purchase of sustainable products. This, in turn, suggests that respondents in this study are inherently sustainability-inclined. Such consumers would typically purchase sustainable products without being encouraged to do so.

The present study also showed that respondents in all experimental groups used for testing the effect of covert behavioural control (i.e., self-efficacy, neutralisation) preferred to purchase the sustainable product over the non-sustainable product alternative that were presented in the scenario when taking the online survey that the study administered through an independent market surveyor. Similarly, respondents in all experimental groups used for testing the effect of overt behavioural control (i.e., product availability, accessibility, and affordability) preferred the sustainable product over the non-sustainable product that were presented.

The literature indicates that there are several reasons consumers may develop chronic sustainability-inclination. According to Trudel (2019), the primary influence in forming sustainability-inclination towards product choice are social norms. These social norms—i.e., the norms imposed by society—are a means of social influence. They are the unwritten rules which are created by the relational interaction shared through social groups, the imposition of which govern social behaviour. These social norms set out the standards for what may be considered as social approval (i.e., what ought to be done) and social disapproval (i.e., what ought not to be done), whereby actions in defiance of social norms are often met with the disapproval of peers and social sanctions (Cialdini, 2004; Cialdini & Trost, 1998; Sunstein, 1996). Social norms are pervasive in every facet of human behaviour, such as when considering the purchase of sustainable products. Additionally, norms may either be categorized as descriptive or injunctive. While descriptive norms are commonly characterized by the perceptions of what people would commonly do in such circumstances, injunctive norms are generally characterized by what people ought to do, in terms of what is socially approved or socially disapproved by their social group (Schultz et al., 2007). Existing research has demonstrated the impact that social norms have on sustainability-inclined behaviour, such as influencing changes in energy consumption (Allcott & Mullainathan, 2010), the intention to compost (White & Simpson, 2013), the likelihood intention to reuse hotel towels (Goldstein et al., 2008), the intention to recycle (Meng & Trudel, 2017), and the intention to purchase sustainable products (Visser et al., 2018; Polimeni et al. 2018), among others. Collectively, research findings show that social influence, and specifically, social norms, have the ability to powerfully, predictably, and pervasively influence sustainable behaviours. In the context of this study, the effect of social norms is tested in the absence of the sustainable product and when the sustainable product is perceived as less appealing due to the heightened inconvenience (i.e., the higher demand in resource and time costs) in acquiring it.

Another key factor in the formation of chronic sustainability-inclination in consumers is the product characteristics associated with the presented product. The appeal of sustainable products is a derivative of the benefits they provide to both the environment and society as a whole during their usage. Whilst some researchers have shown that consumers attach higher value on sustainable product attributes (Irwin & Naylor, 2009), others argue that the preferences towards sustainable products and their attributes are dependent on the way consideration sets are formed and the expected benefits consumers hope to accrue from certain product categories (Luchs et al., 2010). However, the mode with which consideration sets are formed affects the importance consumers weigh on ethical attributes. Indeed, research has shown that the inclusion or exclusion of product options may lead to consumers weighting ethical attributes more heavily (Irwin & Naylor, 2009). On the basis of this, Luchs et al. (2010) argued that the preference for ethical attributes over other product attributes is also heavily dependent on consumption goals. By utilising both implicit association tests and experiments, their research indicated that consumers associated sustainable products with gentleness-related product attributes, whilst traditional products were associated with strength-related product attributes. In their research, Luchs et al. (2010) suggested that based on the consumer's attribute preference at the point in time, sustainable products with the associated gentleness-related attribute could be preferred, but only if the gentleness-related attributes were currently desired by the consumer. To account for this, the present study compared homogenous, unbranded products, and predefined the consumption need that the consumer is trying to fulfil with the only distinct difference in product choice being that the respondent is made privy to the difference in the nature of each product (i.e., sustainable product or non-sustainable product).

Findings from the present study, support the general consensus from the research (Irwin & Naylor, 2009; Luchs et al., 2010; Trudel, 2019) that posits that inherent chronic sustainability-inclination in consumers is present in consumers but in order to effect consistent behavioural action that is in-line with initial intention requires behavioural reinforcement (Luchs et al. 2010; Ajzen, 2011; Ajzen, 2015; Conner, 2015). The effectiveness of the treatment to bring about such behavioural reinforcement over covert and overt behavioural control are discussed in the following sections.

6.2.2 *Self-Efficacy and Chronic Purchase Intention*

In investigating the effects of self-efficacy on purchase intention, the following significant findings are worthy of noting.

Table 6.1 Self-Efficacy—Purchase Intention Relationship (Chronic)

No.	Hypotheses	Status
H1a	Self-efficacy has a positive effect on sustainable purchase intention.	Accepted

The manipulation checks in this study showed that consumers who participated in this study were chronically sustainability-inclined. To test the effects of covert behavioural control in the form of self-efficacy on sustainable purchase intention, this study exposed consumers to information on the benefits and costs of sustainable and non-sustainable products. The findings of the study showed that consumers who had this information had greater intentions to purchase sustainable products as compared to consumers who lacked this information.

When considering the product attributes of sustainable products, part of the reason associated to the usage of sustainable products is to generate external benefits for the environment and society—i.e., an altruistic motive (Farmer et al., 2017). On this basis, by heightening the sustainability awareness of consumers (i.e., making them aware of both benefits and costs of their purchase decision), it is possible to change the self-perception of the consumer to make them more confident in purchasing the sustainable product. This, in turn, illustrates that when sustainability-inclined consumers attain high levels of self-efficacy, they become more likely to make the altruistic choice, consistent with sustainability-inclination, to purchase the sustainable product over the non-sustainable product (H1). The different levels of self-efficacy and their impact on purchase intention are discussed in the next section.

6.2.3 *Self-Efficacy and Primed Purchase Intention*

In testing for priming effectiveness, as a moderator, to the relationship between self-efficacy and purchase intention, the following is discussed.

Table 6.2 Self-Efficacy—Purchase Intention Relationship (Primed)

No.	Hypotheses	Status
H1b	Priming through heightening the benefits and costs of sustainable and unsustainable product alternatives moderates the relationship between self-efficacy and sustainable purchase intention.	Partially Accepted

In the prime (or treatment) utilised for the covert behaviour control in the form of self-efficacy, respondents were informed by retailers of the benefits and/or costs of sustainable and non-sustainable products. The difference, here, however, relates to the extent to which consumers are exposed to such information—i.e., no, partial, or full information.

The findings suggest that consumers' sustainability-inclination to purchase sustainable products is strengthened only when their awareness of (i) the benefits of consuming sustainable products are heightened and when their awareness of (ii) the costs of consuming non-sustainable products are heightened. This, in turn, suggests that the dichotomous nature of the prime, be it using a motivation or an avoidance approach, can yield a desired behavioural response in encouraging sustainability-inclined consumers to purchase sustainable products in specific circumstances. However, it should be noted that raising consumers' awareness of the costs of consuming non-sustainable products must go hand-in-hand with efforts to raise consumer awareness of the benefits of consuming sustainable products, as raising the former alone was found to be insufficient to generate a significant increase in the purchase likelihood for sustainable products. It is only at the highest level of self-efficacy, when both the benefits and costs of the purchase decision are revealed, that priming effectively moderates the relationship between self-efficacy and purchase intention of sustainable products (H1b). Therefore, it is recommended that sellers take advantage of the strengthened chronic sustainability-inclination offered by raising awareness of purchasing and using the sustainable product, while concurrently, raising awareness of the costs associated with purchasing and using the non-sustainable product to weaken purchase intention for non-sustainable products, to effect product switching behaviour in favour of sustainable products.

6.2.4 Neutralisation and Chronic Purchase Intention

Investigating the relationship between neutralisation and purchase intention revealed the following important findings to be discussed below.

Table 6.3 Neutralisation—Purchase Intention Relationship (Chronic)

No.	Hypotheses	Status
H2a	Neutralisation has a negative effect on sustainable purchase intention.	Rejected

The investigation into the relationship between neutralisation and purchase intention focused on the potential differences in consumer purchase intention of sustainable and non-sustainable products when consumers are being made to accept a pre-determined product choice. These differences in the pre-determined product choice were either in-line with the consumer's preference towards sustainable products or in conflict with these same preferences. The chronic state of consumers throughout all respondent groups was geared towards sustainability-inclination. By placing the sustainability-inclined consumers in a situation they may otherwise not find them self, the experiment is able to measure the level of distress experienced by consumers (i.e., between their chronic states with and without neutralisation). The findings suggested that consumers were willing to make hypocritical choices when the final action conflicted with their chronic sustainability-inclination when neutralisation was absent. This also indicates that consumers are vulnerable of falling into the trap of neutralisation, which typically happens when they have behave in a way that is in contrast (i.e., made a non-sustainable purchase) with how they have initially intended to behave (i.e., wanting to make a sustainable purchase) with minimal distress.

However, when sustainable purchases are considered, the findings showed that consumers were unaffected by hypocrisy (i.e., did not engage in neutralisation) when the final pre-determined behaviour (e.g., made a sustainable purchase) was hypocritical to their initial pre-determined intention (e.g., wanting to make a non-sustainable purchase), but in-line with chronic sustainability-inclination (e.g., preference for sustainable products). This suggests that consumers do not neutralise when hypocrisy is seen to have a positive effect on sustainable purchase intention, which is in contrast to H2a but is, to a certain extent, in line with the hypothesis discussed in the next section, H2b.

6.2.5 Neutralisation and Primed Purchase Intention

In testing for priming effectiveness, as a moderator, to the relationship between hypocrisy and purchase intention, the following findings are discussed.

Table 6.4 Neutralisation—Purchase Intention Relationship (Chronic)

No.	Hypotheses	Status
H2b	Priming through increased awareness of hypocritical behaviour moderates the relationship between neutralisation and sustainable purchase intention.	Partially Accepted

In the prime (or treatment) utilised for the covert behavioural control in the form of neutralisation, respondents were informed about the hypocrisy that entails when they choose to neutralise actions that are inconsistent with intentions. That is to say, the priming statement that sustainability-inclined consumers are be exposed to would make them aware of their hypocritical purchase behaviour (if any).

The findings suggest that consumers with chronic sustainability-inclination, when exposed to a situation that they are aware is hypocritical, have their sustainability-inclination strengthened. The caveat here, however, is that the use of hypocrisy as a prime was only an effective moderator of the relationship between neutralisation and purchase intention when the final behaviour of purchasing a sustainable product contradicts the initial intention to purchase a non-sustainable product (H2b). In the scenario where the final (pre-determined) behaviour is the purchase of a sustainable product and this behaviour contradicts the initial (pre-determined) intention provided by the scenario, but nonetheless, being in-line with chronic sustainability-inclination, then the study observes that consumers becomes less distressed, which in turn, inhibits the effects of hypocrisy as a prime. These findings suggest that sellers should pair sustainable products with similar non-sustainable product alternatives and tailor advertisements to reaffirm the sustainability-inclination in consumers. This would have the effect of persuading consumers, who at the moment of time, have weakened sustainability-inclination and are currently considering the purchase of a non-sustainable product alternative.

6.2.6 Product Availability and Chronic Purchase Intention

In investigating the effects of product availability on purchase intention, the following significant findings are noted.

Table 6.5 Product Availability—Purchase Intention Relationship (Chronic)

No.	Hypotheses	Status
H3a	Product availability has a positive effect on sustainable purchase intention.	Partially Accepted

Chronic sustainability-inclination is *strengthened* only when the non-sustainable product alternative is present physically, including in instances where the sustainable product is also present, at physical retailers. When only the sustainable product is present physically at physical retailers, then chronic sustainability-inclination is *maintained*. When both the sustainable product and the non-sustainable product are physically absent from physical retailers, the chronic sustainability-inclination is also *maintained*. This has led to the partial acceptance of H3a.

The argument that the physical presence (i.e., availability) of the product at the physical retailers influences the likelihood of its' purchase, has been echoed through the literature (Yin et al., 2009; Annunziata & Scarpato, 2014) and supported by empirical research (Hurley et al., 2013; Chuang et al., 2016). Recently, findings by Cerri et al. (2018) reaffirmed the reasoning of Annunziata and Scarpato (2014) who posited that an increase in product visibility through more obvious displays and increased promotional activity centered on raising awareness of the product may stimulate the adoption of sustainable products. Conversely, low in-store product visibility has been shown to make consumers perceive the product as 'unavailable', and this has prompted consumers into not considering the unseen product as a viable purchase option. Indeed, the product may have a physical presence at the time the consumer visits the retailers, but due to its low-in store visibility, it is not considered for purchase by consumers (Barbarossa & Pastore, 2015).

The findings also indicate that the chronic (i.e., natural, untreated) relationship between product availability and sustainable products is a positive one. Specifically, in order to

strengthen the intention to purchase the sustainable product choice, retailers need to ensure an alternative product choice is available in tandem. This is supported by the literature concerning evaluation ‘nudges’ (Tan et al., 2018), in which availing the option to compare product through joint-mode evaluation (i.e., by having them both physically available) as opposed to separate-evaluation (i.e., comparing them independently) affects product preference favourably. Thus, by having both the sustainable product physically available alongside the non-sustainable alternative, consumers are better able to appraise the potential benefits to be gained and the potential losses to be foregone.

Interestingly, the chronic sustainability-inclination is also strengthened when the sustainable product is absent and the non-sustainable product is present physically at the retailer. This suggests that the physical presence of the non-sustainable product at physical retailers has the effect of weakening purchase intention for the non-sustainable product. This effect is obscured initially by the strengthening of sustainability-inclination and the shift in purchase intention towards the sustainable product. Importantly, this effect is supported by Ge et al. (2009) whose research on informational cascades effect suggests that the exposure to an unavailable product evokes higher attractiveness evaluations of the remaining product alternatives. Their findings also showed that when the consumer held high product knowledge (as they would if they were sustainability-inclined), then there would not be any informational cascades effect. The present study’s findings concur that sellers who limit their store offering to only non-sustainable product alternatives by failing to keep stock of sustainable products may also witness consumers who are sustainability-inclined shying away from intending to purchase non-sustainable alternatives when they know that the sustainable option is not in store.

6.2.7 Product Availability and Primed Purchase Intention

In testing for priming effectiveness, as a moderator, on the relationship between product availability and purchase intention, the following has been noted.

Table 6.6 Product Availability—Purchase Intention Relationship (Primed)

No.	Hypotheses	Status
H3b	Priming through an alternative retail format in the form of online retail options that had products available moderates the relationship between product availability and sustainable purchase intention.	Accepted

In the prime (or treatment) utilised for the overt behaviour control in the form of product availability, respondents were informed by retailers that while the product may be physically unavailable, the product could still be purchased through their online store.

Interestingly, the findings indicate that exposure to the prime strengthen chronic sustainability inclination when sustainable products are available at physical retailers, but nonetheless, weakened chronic sustainability inclination (or strengthened consumer's intention to purchase non-sustainable products) when the sustainable product option is unavailable at physical retailers. These findings indicate that whilst consumers may be sustainability-inclined, the heightened awareness of inconvenience of waiting for the sustainable product to be made available again at physical retailers when they are exposed to other retail format options may encourage them to purchase other available non-sustainable alternatives. Sellers who are marketing sustainable products alongside non-sustainable product need to be aware of this, and it is recommended that they ensure sustainable products are physically sold at their store as opposed to selling them through online storefronts if they intend to strengthen consumer's intention to purchase sustainable products.

The findings suggest that consumers still prefer traditional ownership, at least when considering the acquisition of sustainable products. This corroborates with early research by Amy and Moore (2009) and Moeller and Wittkowski (2010), both of which focused on investigating consumer choice in their preference for either buying or renting. Respondents in their studies were exposed to both means of product acquisition for a set of homogenous

products, and their studies evidenced that consumers favoured buying as their means of product acquisition. This juxtaposition towards acquiring a sustainable product—as the sustainable choice would be to rent the product for short-term usage—suggests that consumers may have a long-term goal in the usage of their sustainable products. For sellers, this would suggest that they do not engage in offering online retail channels as an alternative means of product acquisition. In this case, the treatment does moderate the relationship between product availability and sustainable purchase intention by having the unanticipated effect of weakening the initial chronic sustainability-inclination.

In summary, the findings of this study support the idea that consumers prefer ownership of sustainable products, and that simply making them aware of the reality of the purchase situation and product type, particularly when sustainable products are available, is sufficient to trigger a favourable behavioural response to purchase the sustainable product. Thus, priming does indeed moderate the relationship between product availability and sustainable purchase intention (H3b).

6.2.8 Product Accessibility and Chronic Purchase Intention

In investigating the effects of product accessibility on chronic purchase intention, the following significant findings are worthy of noting.

Table 6.7 Product Accessibility—Purchase Intention Relationship (Chronic)

No.	Hypotheses	Status
H4a	Product accessibility has a positive effect on sustainable purchase intention.	Accepted

The findings of this study show that the chronic sustainability-inclination of consumers is maintained when the option to purchase sustainable products is available at physical retailers. This remains true in the context of sharing, where sustainability-inclined consumers continue to prefer the sustainable product option as opposed to the non-sustainable alternative, though its effects when placed in a comparative scenario of choosing between purchasing or sharing the sustainable product favour the ownership option. These findings, which lends support to H4a, are in line with the research by Kim and Jin (2018), which suggests that i) concern-for-

sustainability is a key influence for determining the likelihood of consumers engaging in sustainability practices, and ii) the dimension of convenience is not a significant influence on sharing, as an aspect of collaborative consumption. It also, to a certain extent, supports the findings by Möhlmann (2015) which posited that channels for collaborative consumption, such as ‘sharing’, are less effective depending on product type, and that the environmental impacts associated with the benefits of using the sustainable product had no significant weighting in determining the choice of product acquisition (i.e., sharing or purchasing).

6.2.9 Product Accessibility and Primed Purchase Intention

In testing for priming effectiveness, as a moderator, on the relationship between product accessibility and purchase intention, the following has been noted.

Table 6.8 Product Accessibility—Purchase Intention Relationship (Primed)

No.	Hypotheses	Status
H4b	Priming through sharing option availability across different geographical extents (e.g., a local neighbourhood, another state, or another country) moderates the relationship between product accessibility and sustainable purchase intention.	Partially Accepted

In the prime (or treatment) for the overt behavioural control in the form of product accessibility, respondents were informed by retailers that even though the sustainable product or its alternative were not physically present at the store, people in i) a nearby neighbourhood, ii) another state, or iii) another country were willing to share their product for a small fee.

Interestingly, the findings indicate that exposure to the prime weakened chronic sustainability-inclination, regardless of the physical distance of the person willing to share the intended product—i.e., whether in i) a nearby neighbourhood, ii) another state, or iii) another country. That is to say, consumers who are sustainability-inclined do not perceive sharing as a favourable option for product acquisition of sustainable products. Here, it is important to note that consumers do not switch their purchase intention from the sustainable product to the non-sustainable product alternative, but instead, they are starving off their purchase of the sustainable product.

The findings also suggest that informing sustainability-inclined consumers of alternative product accessibility options for sustainable product causes their sustainability-inclination to weaken, especially when the sustainable product is accessible through physical retailers. This reverse effect is magnified when physical distance is greater. That is to say, when put into a sharing scenario, sustainability-inclined consumers are more willing to share sustainable products with others closer to them as opposed to those who are further away. Nonetheless, when placed in a comparative situation between purchasing and sharing the sustainable product, these consumers continue to prefer the traditional way of acquisition instead of the more contemporary, and arguably more sustainable, way of acquisition—that is, purchasing over sharing.

These findings, as a whole, suggests that the prime is ineffective in encouraging purchase intentions of sustainable products from more sustainable options (i.e., sharing over purchasing). Thus, in such situations, sellers need to ensure that the sustainable product is physically accessible at the retail store at all times. Having non-sustainable products present or not present along sustainable products at physical retailers will not make any significant difference, as seen through this study. More importantly, when the sustainable product is the only product physically accessible, sharing should not be made available as an alternative product acquisition option.

From these findings, this study can confer that priming has the effect of making the physically accessible product (i.e., the product available at the shortest physical distance from buyer) dearer (H4b). Thus, it can be recommended that when the overt behavioural control factor in the form of product accessibility is present, the most effective strategy that does not compromise on consumers' sustainability-inclination is to make the sustainable product accessible through physical retailers, and when that is not possible, then to make the sustainable product accessible within the closest distance (e.g., sharing within local neighbourhood).

6.2.10 Product Affordability and Chronic Purchase Intention

In investigating the effects of product affordability on purchase intention, the following significant findings have been noted.

Table 6.9 Product Affordability—Purchase Intention Relationship (Chronic)

No.	Hypotheses	Status
H5a	Product affordability has a positive effect on sustainable purchase intention.	Rejected

In testing the relationship between product affordability and purchase intention of sustainable products, the findings showed that raising awareness of price differentials due to price discounts did not have any significant effect on the purchase intention of sustainable products among consumers who are chronically sustainability-inclined. This contradicts the general assumption suggested by the literature that consumer's perception of product affordability, or the practical feasibility in being able to purchase an intended product, acts as a barrier to consumption in instances where the product is perceived to be unaffordable and beyond the immediate resources of the consumer (Zsóka et al., 2013; Gleim & J. Lawson, 2014). Yet, even when the sustainable product was perceived as cheaper compared to the non-sustainable product alternative, this study showed that chronic sustainability-inclination was not strengthened. This suggests that consumers who are sustainability-inclined may place greater importance in qualitative product attributes over quantitative product attributes in such instances. Regardless of the price differentials offered by the discount—i.e., in both scenarios where a 'normally priced' and a 'highly priced' are offered—consumer's chronic sustainability-inclination was maintained.

Nonetheless, when a price differential is observed between the sustainable product and the non-sustainable product alternative, where the latter is higher than the former, the findings show a significant weakening in purchase intention for the non-sustainable product alternative. This suggests whilst greater product affordability of the sustainable product does not encourage greater purchase intention of sustainable products, it does weaken the purchase intention for the non-sustainable product alternative. This finding is therefore, to a certain extent, in opposition with researchers who argue that in circumstances where a consumer is

inclined to purchase a product, but is unable to afford it at the time a purchase must be made, in such an instance, the consumer is prone to purchase product alternatives (Notani, 1997; Singh & Kathuria, 2016). As a whole, these findings indicate that the purchase intention for sustainable products held by sustainability-inclined consumers is therefore unaffected by product affordability (H5a).

6.2.11 Product Affordability and Primed Purchase Intention

To test for priming effectiveness in moderating the relationship between product affordability and purchase intention, the following is discussed.

Table 6.10 Product Affordability—Purchase Intention Relationship (Primed)

No.	Hypotheses	Status
H5b	Priming through rental option availability moderates the relationship between product affordability and sustainable purchase intention.	Rejected

In the prime (or treatment) used for the overt behavioural control in the form of product affordability, respondents were informed by retailers that product ‘rental’ options at a discounted price were available. The price discount offered was either a ‘small, marginal discount’ or a ‘large, significant discount’.

In this study, it was observed that priming consumers by informing them of alternative means of product acquisition in the form of product rental did not significantly affect chronic sustainability-inclination. This (primed intention) finding is consistent with the previous (chronic intention) finding suggesting that price differentials have no observable effect on sustainability-inclination held by consumers manifested through their purchase intention of sustainable products. Here, the discount accrued from the rental option acts to reduce the price of the sustainable product, yet this does not strengthen sustainability-inclination. This suggests that whether the price differential occurs naturally or through a promotional activity, sustainability-inclination is maintained. Thus, it is not recommended that promotional activity in the form of rental discounts initiated by sellers is targeted towards sustainable products, as the effects from priming herein is observed to be ineffective and any available resources would be better allocated towards other avenues.

Similarly, the exposure to the prime weakened the purchase intention for the non-sustainable product alternative. The price discount offered by the rental option for the sustainable product affected the initial set price to be either on par or lesser than the non-sustainable product alternative. The perceived nature of the discount had an effect on the significance of the prime in weakening the purchase intention for the non-sustainable product. When the sustainable product was subjected to the rental discount, and the discounted price was initially perceived as 'highly priced', the prime was only significant in weakening purchase intention for the non-sustainable rather than the sustainable product.

From these findings, this study can conclude that priming does not moderate the relationship between product affordability and purchase intention of sustainable products (H5b). This, in turn, suggest that consumers favour qualitative product attributes within sustainable products that go beyond the quantifiable measures of discounts and price differentials. Moreover, the findings of this study further indicates that in considering the strategy to market sustainable products, consumers are clear in revealing their preference for traditional means of product acquisition though 'purchasing' as opposed to rental options.

6.3 Theoretical implications

The following sections discuss whether the current findings are in agreement or disagreement with the predictions substantiated from prior researchers and to what extent the findings contribute to theoretical advancement. The discussion will detail the significant theoretical implications of the applications of the new proposed theory of behavioural control, and the preference for traditional product ownership over other alternative means of product acquisition.

6.3.1 Application of New Proposed Theory of Behavioural Control

The aim of the present study was to provide empirical evidence to vindicate the extension of the TPB as a suitable theory of behavioural change through the new proposed theory of behavioural control. Referring back to Chapter 2, the literature review, a key knowledge gap in the literature surrounds the means on how to operationalise behavioural control (Mitchie et al., 2011; Sniehotta et al., 2014), particularly when attempting to identify the initial problem—i.e., whether the source of the problem caused by i) lack of motivation to perform the behaviour, or is the problem caused by ii) failure to carry out existing favourable intentions. This is also a pivotal challenge in identifying effective behavioural intervention treatments in overcoming the behavioural-intention gap. The present study selected, and verified through support from the literature and factorial experimental design, the two major sources of behavioural control: i) covert behavioural control, which encapsulates internal factors to the consumer such as self-efficacy and neutralisation, and ii) overt behavioural control, which encompasses external factors to the consumer such as product availability, accessibility, and affordability. The present study supports the research by Larsen et al. (2018) by providing empirical evidence to support the need for different behavioural intervention strategies depending on the behavioural control factor influencing the consumer at the time a purchase decision is made. Based on this, when the behavioural control factor is ‘internal’ or ‘covert’, from within the consumer, the focus of the behavioural intervention strategy is in establishing strong initial intention, as in the case of self-efficacy and neutralisation. The findings indicate that consumers are able to change their self-perception when exposed to priming; when the intention–behaviour gap is open then raising self-efficacy and raising awareness of their hypocrisy will close the intention–behaviour gap. Alternatively, the purpose in designing behavioural intervention strategy for behavioural control factors which are ‘external’ or ‘overt’ requires the identification and removal of the external barrier causing the non-

performance of the already established intention with respect to the inclined purchase of a sustainable product, as in the case of product availability, accessibility, and affordability. The advancement in theory for each of the behavioural control factors is discussed in the following sections.

6.3.2 Covert Behavioural Change

In general, the present study finds that sustainability-inclined consumers have a chronic tendency to purchase sustainable products, and they are likely to have their chronic sustainability-inclination strengthened by vindicating their sustainable purchase behaviour.

In considering ‘self-efficacy’—i.e., a covert behavioural factor—the present study found that the higher the perceived self-efficacy that the consumer holds, the stronger the intention supporting the actual purchase behaviour. Similarly, early research on self-efficacy by Bandura (1993) posited that self-efficacy influences the individuals’ selection process, in which the perceptions of their ability and the potential outcome derived from their behaviour is associated with the making of choices which inevitably affects the performance of the respective behaviour (e.g., choosing one career path over another). In doing so, consumers take stock of available information—i.e., the ability to perform the behaviour and the probability of achieving the outcome linked to the performance of the behaviour—in their selection of consumption-related behaviour, choosing to invest themselves in the behaviour that is perceived to be the most likely successful.

The present study’s findings for the relationship between self-efficacy and purchase intentions showed that the consumer’s intention to purchase the sustainable product was strongest when all information was made available to the consumer—for example, the product type, the benefits of purchasing/using the sustainable product as well as the costs of purchasing/using the non-sustainable product. This helps to explain the formation of sustainability-inclination and the intention–behaviour gap, which transfers the locus of responsibility for an inability to act sustainably away from the individual and towards their immediate context, as propounded by researchers such as Tabernero and Hernández (2011) and Kornilaki et al. (2019). This is observable in the instance where only the benefit of purchasing the sustainable product is released to the consumer. Whilst this information is relevant to the purchase decision, the consumer already has a chronic tendency to purchase the sustainable product, therefore making chronic sustainability-inclined consumers aware of only the benefits of their pre-inclined product preference becomes ineffective. These findings help provide further context

to the limits of ‘approach motivation’ as an intervention strategy (i.e., raising awareness of benefits) meant to bring about behavioural change directed at more sustainable behaviour, which in turn, add to the pool of research dedicated to understanding self-efficacy and its role in promoting sustainable behaviour (Stern, 2000; Good et al., 2012; Pensini et al., 2012; Bandura, 2012; Schutte & Bhullar, 2017). In contrast, by raising awareness of the costs associated in choosing the alternative product—i.e., an example of ‘avoidance motivation’ as an intervention strategy—showed that the intervention strategy did not strengthen sustainability-inclination but did weaken the purchase intentions directed at the non-sustainable product alternative. From these findings, it can be deduced that sustainability-inclined consumers are attracted by ‘approach motivation’ intervention strategies and deterred from the non-sustainable product alternative by ‘avoidance motivation’ intervention strategies. These findings are similarly evident in the research by Reynolds et al. (2018), who suggest that consumers engaged in health behaviours felt bad when they were not performing health behaviours, but it was feeling good about performing the behaviour rather than feeling bad about not performing it that was associated with strengthening initial behavioural intention. This can also be explained from a psychological perspective, whereby individuals with a predominant approach orientation are more sensitive in responding to cues of reward/benefits, whereas people with a predominant avoidance orientation are more responsive to cues of threat/costs (Carver et al., 2000). Thus, different intervention strategies are called for when dealing with self-efficacy—for example, to encourage stronger sustainability-inclination, consumers need to be aware of the benefits of purchasing sustainable products, whereas to dissuade the purchase of non-sustainable product alternatives, consumers need to be aware of the costs entailing such product purchases, both of which should occur concurrently to effectively help consumers to overcome covert behavioural controls.

As mentioned previously, at times consumers may perform behaviour which is in conflict with their chronic tendency, subjecting themselves to neutralisation, a hypocritical form of consumer behaviour. In essence, hypocritical behaviour is latent and so often requires exposing by others such as marketers, as such behaviour, which has negative connotations attached, are often viewed unfavourably by society. Findings from the present study, which are supported by the literature (Focella & Stone, 2013; Rustichini & Villeval, 2014; Nilsson et al., 2017), indicate that in performing hypocritical behaviour that conflicts consumer’s initial intention, they (the consumer) intend to create a means of compromise between their self-image and the measurable payoffs, absolving themselves of their responsibility for selfish

behaviour.

The effects of neutralisation and its potential remedy in the form of hypocrisy observed in the present study indicated different effects dependent on the scenario that the respondents were exposed. This substantiates existing research which argues that the effectiveness of induced hypocrisy to counter neutralisation is dependent on situational context (Gamma et al., 2018). Indeed, in correspondence to the heuristic mechanisms identified in the research by Gamma et al. (2018), this study also confirms two main significant effects of hypocrisy. The first effect, dubbed ‘eco-citizenship’ process by the literature, may be induced through priming by reducing cognitive discomfort that is caused by hypocrisy by encouraging a behavioural change which is consistent with the consumer’s chronic tendency. The findings from the present study showed evidence of ‘eco-citizenship’ when consumers were exposed to neutralisation scenarios (i.e., when the hypocrisy is made salient) responding by reinforcing chronic sustainability-inclination when the final behaviour performed embodies chronic tendency. This method of intervention relies on a more persuasive means of stimulating the desired behaviour.

However, in instances where the initial intention was in conflict with the chronic sustainability-inclination but the final behaviour expressed the chronic tendency, consumers indicated greater acceptance of their hypocritical behaviour. This has been categorized as the ‘change in habits’ process, the activation of which induces the individual to reduce his/her cognitive discomfort by simply ignoring or discrediting the nudge and accepting the hypocritical act, thus, consumers choose to rationalize the dissonant information without having to change their behaviour. This method of intervention relies on a more informative means of stimulating the desired behaviour, reinforcing the behaviour that is being performed.

The present study provides insight into the boundaries of the utilisation of hypocrisy to bring about sustainable purchasing behaviour, by identifying both personal and situational factors as a basis for developing behavioural intervention.

6.3.3 Overt Behavioural Change

Generally, in considering the overt behavioural controls, the findings of this study highlight the importance of the nature of the product shaped by external forces to consumers when forming purchase intention.

In investigating the effect of the overt behavioural control factor in the form of product availability on purchase intention, the findings suggested that chronic sustainability-inclination is strengthened when both the sustainable and non-sustainable product alternative are physically present at retailers. This is indicative of the need for consumers to have complete information, requiring physical inspection, prior to the formation of purchase intention, as the sustainability-inclination of the consumer is only maintained (not strengthened) when only the sustainable or the non-sustainable product is physically present at the store. Further inspection of the findings on the effects of product availability on the purchase intention of sustainable product support past researchers who suggested that higher product availability may have a positive effect on purchase intention- facilitating the realization of chronic tendency (Cerri et al., 2018; Tan et al., 2018). Conversely, low product availability (or absence of the product) has the effect of inhibiting behavioural performance as initial purchase intention held by the consumer for the purchase of sustainable product becomes redundant. Nonetheless, though behavioural performance toward the purchase of the intended product is not possible when it is unavailable, its absence does strengthen the chronic sustainability-inclination of consumers, as seen through this study.

When considering the effect of product availability on the purchase intention of non-sustainable products, this study found that the presence of the non-sustainable weakens the purchase intention toward that product. This extends the research by Cerri et al. (2018) which did not account for product type, though it initially seems as though the relationship between high product availability and positive purchase intention is not observed, the exception to this can be explained by the informational cascades effect. As mentioned previously, the exception to the case as evidenced in research by Ge et al. (2009), showed that when consumers hold high knowledge of the product, the informational cascades effect is inhibited, which meant that sustainability-inclination precedes product availability, and whilst the non-sustainable product is available (i.e., considered more attractive at the time), consumers do not express interest in switching products. If anything, by limiting store inventory and selling the non-sustainable product by itself, the retailer is discouraging consumers from purchasing the available non-sustainable alternative product.

Besides the effects of product availability, the present study also investigated the effects of product accessibility on purchase intention. It should be noted that the investigation into the product accessibility—purchase intention relationship documented differing effects

depending on product type. Findings from the present study suggest that the higher the product accessibility of sustainable products, the stronger the purchase intention for sustainable products. This is supported by Jekanowski et al. (2001), who argued that a contributing factor to higher customer satisfaction is greater product accessibility comprising elements of temporal immediacy of product delivery, and stocking product at the most convenient location (often the nearest retailer). The present study showed that when the sustainable product was physically present at the retailer, regardless of whether an alternative, non-sustainable product was physically present alongside it, the chronic sustainability-inclination held by the consumers is strengthened.

However, this argument did not hold up in considering high product accessibility for the non-sustainable product alternative. When the non-sustainable product was subjected to the scenario of high product accessibility, consumers did not have their non-sustainable purchase intention strengthened. Even in the scenario where the non-sustainable product is the only product physically present at the retailers, still, consumers were not affected, as no weakening of their sustainability-inclination nor subjected to product switching by consumers was observed. This finding lends support to Kim and Jin (2018), who suggest sustainability-inclination overpowers the consumer's need for convenience—that is, when the most convenient option is presented, consumers prefer to enforce chronic tendency at the cost of starving immediate product satisfaction.

For the final overt behavioural control factor—i.e., product affordability—the findings from the investigation indicated that regardless of the cause of the price differential, whether it occurred naturally (i.e., original retail price is cheaper comparatively) or through promotional activity (i.e., discount makes product price cheaper), the sustainability-inclination of the consumer is maintained. This suggests that sustainability product attributes appeal to consumers beyond quantifiable means, as the economic consumer rationale as posited by the literature is to purchase whichever product is perceived as more affordable regardless of product type (Zsóka et al., 2013; Gleim & J. Lawson, 2014).

However, in further investigating the effect of product affordability on purchase intention for the non-sustainable product alternative, the study's findings reveal that whilst the consumers may be sustainability-inclined, the heightened inconvenience of waiting for the product to be made available again at the retailers encourages them to purchase the non-sustainable product that is available. These findings are in line with the research by Notani (1997), Jekanowski et

al. (2001), and Singh and Kathuria (2016), which showed that the relationship between product affordability and purchase intention is upheld when the product type is a non-sustainable product.

6.4 Practical implications

The present study demonstrates great potential in contributing to marketing practice. The intricacies and complexity of marketing sustainable products is overly generalized and simplified by marketers. For the most part, marketers still struggle to convince consumers that sustainable products are a viable and better valued product choice (Pickett-Baker & Ozaki, 2008; Lin & Huang, 2012; Longo et al. 2019), as these well-intended products are often being perceived as a niche product for a specific lifestyle-type consumer (Trudel et al. 2018; Longo et al. 2019), as opposed to a needed step forward for preservation in consumerism culture. Any new information that provides additional insight into how marketers can better connect with consumers to make sustainable purchase decisions is thus significant. For the present study's discussion on its theoretical implications, which itself is the result of the investigation into the effects of behavioural control factors on the purchase intention of sustainability-inclined consumers, several practical implications are derived specifically for individual marketers and sales corporations that intend to sell sustainable products and want to close the gap between forecasted sales figures (i.e., recorded intention) and actual sales figures for sustainable products (i.e., final behaviour, purchase).

A clear and overriding implication for individual marketers and sales corporations is to ensure that their marketing messages and promotional activities portray the benefits of sustainable product usage and consumption, reaffirming sustainability-inclination in consumers. When offering sustainable products at their store, marketers would need to offer a product alternative for comparison. The product alternative need not be a viable product line, it may even be a dummy product used in demonstration in product performance, the purpose of which is to provide a means of highlighting the benefits of the sustainable product to the sustainability-inclined consumer. Sustainability-inclined consumers require product knowledge and assurance that their purchase decision is making a positive impact on society, and draw conclusion through physical product comparison (Cho et al., 2018; Lin & Niu, 2018). In fact, marketers who fail to keep adequate stock of products are exposed to the risk of weakening sustainability-inclination when the intended product is not physically present at the time a purchase decision is committed to by the consumer. The present study also finds that sustainability-inclined consumers are an exceptional case to the traditional product availability–purchase intention relationship, product accessibility–purchase intention relationship, and product affordability–purchase intention relationship. The literature has posited that, in general, high levels of product availability (Joshi & Rahman, 2015; Golob et

al., 2018), product accessibility (Maas et al., 2012; Kong et al., 2016), and product affordability (Notani, 1997; Jekanowski et al., 2001; Singh & Kathuria, 2016) have been traditionally associated with cost-saving, resource efficient, and convenient attributes which contribute to higher purchase intention. However, product type, particularly consumer awareness of the sustainable products (i.e., minimum level of being able to identify the sustainable product when facing deciding between two products) is sufficient to disrupt the traditional relationships, as results indicate that consumers needs for sustainable products go beyond tangible, quantifiable needs, and immediate need satisfaction (Gleim & Lawson, 2014). Sustainability-inclined consumers are, to a certain extent, able to starve off the purchase of the sustainable product when the product is not present at physical retailers due to external influence, which implicates marketers by rendering product switching strategies designed to capture consumer purchases redundant. Efforts meant to drive sales figures to convince consumers that non-sustainable product alternatives are just as good as the intended sustainable product are ineffective and may even cause lasting and detrimental repercussions—that is, the weakening of overall chronic sustainability-inclination. A particularly effective strategy in persuading consumers to engage in purchasing the sustainable product is by strengthening purchase intention towards the purchase of the sustainable behaviour through message priming focused on informing consumers of the potential benefits accrued by enacting the purchase of the intended product, and the cost incurred by purchasing the alternative product (Hüttel et al., 2018). This implies that marketers frame their marketing communications by adopting i) headlines that emphasize both the potential benefits of purchasing the intended sustainable product and the cost incurred by purchasing the non-sustainable alternative, ii) appeal to the altruistic nature inherent in chronic sustainability-inclined consumers, and iii) draw and make explicit the comparison between the sustainable product and the non-sustainable alternative.

Furthermore, the present study finds that consumers are more likely to have stronger intention to acquire sustainable products through traditional purchasing avenues (i.e., physical retailers) rather than alternative means of product acquisition (i.e., collaborative consumption or sharing, online shopping, and rental). Indeed, consumers may fear the potential loss incurred towards their social relationships if they violate sharing norms, and the potential distrust in engaging persons' unknown to themselves (Barnes & Mattsson, 2016). This provides insight into the behavioural psychology of consumers in assessing product choice, particularly, where the purchase of the intended product is driven by altruistic motivations, but the selection of

channels of product acquisition suggests more egoistic reasoning. The findings from the present study indicates that even though consumers may hold on to their sustainability-inclination to a certain extent, by availing alternative means of product acquisition, generally, creates a risk of weakening the chronic sustainability-inclination. Thus, it may be important for marketers and sales corporations to offer traditional purchasing as opposed to collaborative consumption through sharing, renting, or online purchasing. Further studies may well consider developing a qualitative metric to identify the reasoning for this cognitive juxtaposition that consumers use to justify their purchase behaviour.

6.5 Chapter Summary

This chapter discussed the present study's findings derived from the factorial experimental results, both from the within- and between-scenario perspectives, and the implications thereof on theory and practice. More specifically, this chapter showed how the findings are in line with or in opposition to closely related findings in the extant literature. In addition to this, this chapter expressed the way in which the present study's findings contribute to current theory by advancing understanding of marketing and consumer behaviour, specifically, in how marketers should respond to cover and overt behavioural control factors to bridge the intention-behaviour gap when attempting to encouraging purchases of sustainable products. The rationales for these findings were also discussed, making reference to previous marketing and consumer behaviour studies. Thereafter, the chapter provided insight into the relevancy of the findings and their practical implications. The present study suggests that the findings may be of potential use to not only market practitioners but also to policy makers, NGOs, and environmental agencies that want to improve everyday consumption through the promotion of more sustainable products.

7 CONCLUSION

7.1 Summary

The intention–behaviour gap has been a pervasive issue that has plagued marketers and proponents of sustainable consumption behaviour for decades. Whilst consumers initially intend to purchase sustainable products, at the time of behavioural performance, they succumb to behavioural inconsistency. From a review of the literature, the present study identified the need to more acutely identify the type of behavioural control that is contributing to the behavioural-inconsistency, and how can these behavioural control be handled in order to more accurately predict purchase behaviour and contribute to the agenda for greater sustainability. This, in turn, raised two overarching research questions, namely i) how do covert and/or overt behavioural control factors affect purchase intention, and ii) how can we effectively treat covert and/or overt behavioural control factors to overcome the intention–behaviour gap?

The present study answered these research questions by using the new proposed theory of behavioural control as a theoretical lens, which posits that behavioural control, as an explanation to the intention–behaviour gap, can be categorized as either covert or overt behavioural control. The present study showed that sustainability-inclined consumers favour product attributes that go beyond quantitative measures. This remain true despite being primed to make the purchase of the sustainable product seem less appealing to consumers, as consumers would still persist in purchasing the sustainable product, which may go so far as to starve-off current consumption in anticipation of future consumption of their intended sustainable product. Additionally, sustainability-inclined consumers in considering the purchase of a sustainable product commit more easily to the purchase of the sustainable product when it is offered through traditional means of product acquisition (i.e., acquisition through product purchase) as opposed to collaborative consumption (e.g., sharing, rental) and digital (e.g., online retailing) means. To empirically document consumer’s formation of purchase intention and the effects of the prime (or treatment) on this formation, the present study proposed and tested 10 hypotheses. A factorial experimental design was utilised on a target sample consisting of 600 working adults in Malaysia, and their data was analysed using test of difference (e.g., *t*-test) to facilitate within- and between-group comparisons. The findings from the experiments provide empirical evidence to help explain the influence of covert and overt behavioural controls on consumer’s chronic predisposition to purchase sustainable products.

7.2 Research Limitations

Similar to any kind of endeavor in furthering the body of knowledge, the present study has some limitations. First, the present study's investigation in the formation of purchase intention for products only incorporated a dual-classification system to categorize products either as 'sustainable' or 'non-sustainable' typed products. The effects of the varying degrees associated with the product may provide further insight into the influential nature of 'sustainability' in forming purchase intentions.

Secondly, the present study's investigation into the effects of covert and overt behavioural controls on purchase intention only considered those behavioural controls that were most pronounced in the literature. The marketing stimuli derived from these behavioural controls do not represent an exhaustive list of independent variables that could affect the purchase intention for sustainable products, but rather, it provides examples that contextualizes the conceptual organizer of behavioural control (i.e., examples of covert and overt behavioural controls) that explains the intention-behaviour gap related to sustainable consumption behaviour. These examples, in turn, may be used as remedies through rationalized, decisive intervention strategies. Thus, there may be other relevant, more specific and isolated marketing stimuli which are not covered in the present study.

Thirdly, the dependent variable 'purchase intention' was used as a proxy for actual behaviour. Whilst this study has established the use of purchase intention as a viable predictor of actual behaviour, particularly, through the use of pre- and post-purchase intention, it may still be considered, to a certain extent, as an imperfect predictor, as opposed to the measure of the actual behaviour itself.

Lastly, the experiment only used a sample representative of the general cross-section demographic of the Malaysian population considered within the legal definition of 'working age citizens'. While the choice of this sample size was predicated on the need to satisfy the assumption of homogeneity when conducting the experiments on the homogenous respondent groups, generalizations of the study's findings should be made with care. That is, whilst the casual relationships vindicated in the present study are generalizable, these findings may differ in other countries not within the current scope of the present study due to differences in cultural characteristics (e.g., ownership culture, different degrees in price sensitivity, alternative views on collaborative consumption channels).

7.3 Future Research Directions

There are several important implications for future research derived from the present study.

A further potential extension of the findings on the covert and overt behavioural controls' influence on purchase intention would be to investigate the effect of these behavioural controls on different consumer groups (i.e., grouping respondents according to their level of sustainability-inclination, 'highly sustainability inclination', 'no sustainability-inclination'). From this perspective, the effects of the same treatments used may result in different findings for each respondents group—both for the relationship between independent (i.e., covert or overt behavioural controls) and dependent (i.e., purchase intention) variables, and in terms of priming effectiveness in treating the intention–behaviour gap.

In addition, the approach to product classification, which is currently limited to 'sustainable' or 'non-sustainable', may be further manipulated by introducing both primary and secondary attributes, such as sustainable 'hedonic' or 'utilitarian' positions (e.g., hedonic such as 'organic caviar' and utilitarian such as 'energy-saving lightbulbs') and non-sustainable 'hedonic' or 'utilitarian' positions (e.g., hedonic such as 'fur pelts' and utilitarian such as 'plastic bags'). Such complexity in treatment manipulation may lead to a more in-depth understanding of the effects of behavioural control factors on consumer's anticipated purchase intention formation in varied scenarios. This would form the basis upon which future research may study the effects of new sustainable emergent technology adoption, and the substitution effects that more sustainable alternatives may have on current consumer markets, such as those arising as a result of the Fourth Industrial Revolution (i.e., heightened integration between the physical, digital, and biological worlds).

Future research may also consider the use of semantic analysis to derive more precise message framing to illustrate the extent to which a product is sustainable and non-sustainable. This, in turn, should allow for greater accuracy and enable a more refined understanding of consumer behaviour toward sustainable and non-sustainable products.

Furthermore, investigating the proposed relationships using different national contexts should also lead to potentially new and more representative findings. This would advance knowledge in understanding how cultural context affects the consumer's perceptions of sustainable products and assists to better understand the influence of behaviour controls in varied cultures. Testing for relevancy of the varied covert and overt behavioural controls in other markets, and

allowing for cross-country comparison of intervention strategies to address the intention–behaviour gap should therefore be fruitful.

As a whole, these identified potential directions for future research should help extend the findings presented by the present study, effectively contributing to the advancement of theory and practice.

7.4 Concluding Remarks

This study contributes to a better understanding of the behavioural controls that moderate purchase intention, while also recommending ways to manipulate behavioural controls to close or open the intention–behaviour gap in efforts to facilitate an ideal shift toward more sustainable consumption behaviour. There is a need for further research to deepen the understanding of behavioural control factors on more complex forms of sustainable product types, and studying treatment effectiveness in other countries to more precisely determine the nature of behavioural control intervention strategies at a contextual level. Still, the findings from the present study should be viewed as a big first step towards growing our understanding of behavioural control within the intention–behaviour gap. Nonetheless, the study cautions against the generalization of the application of its findings through the identified limitations. More importantly, all future directions of research derived from this study are aimed at advancing theoretical knowledge and improving practices in approaching the intention–behaviour gap to promote the purchase of sustainable products. Continued use of the new proposed theory of behavioural control and its application against the intention–behaviour gap will provide valuable insights into strengthening purchase intention for sustainable products to the benefit of the consumer, the seller, and society as a whole.

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APPENDICES

Appendix 1 Consent Information Statement

Swinburne University

of Technology

Consent Information

Statement



Project Title: Consumer profiling for greater sustainability

Principal Investigator(s): Dr. Weng Marc LIM, Dr. Julian VIECELLI, Professor Dr. Miin Huui LEE, Mr. Marc Arul WEISSMANN

About the Project

Sustainable consumption is defined as consumption that meets the needs of the current generation in economically, environmentally, and socially friendly ways.

This project aims to encourage sustainable consumption in ways that satisfy different consumer needs.

This project intends to achieve its aim by developing consumer profiles using a sample of 600 consumers (between the ages of 18 - 60 in Malaysia). This means that the project will be grouping together consumers according to their similarities and differences so that good strategies can be developed to satisfy the needs of different types of consumers in economically, environmentally, and socially friendly ways.

An online survey will be administered to you if you consent to participating in this project. Questions in the survey are concise and structured. Respondents in this study are expected to answer several types of questions, as follows;

The first section contains questions to help us understand about your sociodemographics.

The second section contains questions to help us understand your perceptions

about sustainable products. The third section contains questions to help us

understand your evaluations of sustainable products.

The fourth section contains questions to help us understand your beliefs about sustainable consumption.

The fifth and last section contains questions to help us understand your evaluations under different consumption/purchasing scenarios.

Kindly note that there are no right and wrong answers. Also, we are selecting respondents for our survey at random and we do not collect identifiable personal information. Therefore, kindly be assured that your response will remain anonymous (not identifiable).

Our online survey will only be administered by our approved market surveyor: VASE

Who is responsible for the data collected in this study?

Chief Investigator:

Dr. Weng Marc LIM, Associate Dean (Business), Faculty of Business and Design, Swinburne University Sarawak

Co-Investigator:

Dr. Julian Vieceli, Director Postgraduate Education, Swinburne University Hawthorn

Co-Investigator:

Professor Dr. Miin Huui LEE, Dean, Faculty of Business and Design, Swinburne University Sarawak

Student Investigator:

Mr. Marc Arul WEISSMANN, PhD Candidate, Faculty of Business and Design, Swinburne University Sarawak.

Electronic copies of records and materials will be stored at Swinburne University Sarawak for a period of approximately five years (or more if they are required for publication).

What is expected from respondents of the study?

The project intends to better understand consumer behaviour and sustainable consumption.

You are under no obligation to participate in the study.

If you choose to participate, you can choose to opt out at any time, and thus none of your responses will be collected.

You will not receive any token appreciation if you opt out (as per standard agreement when you chose to sign up as survey participants with the independent market surveyor).

If you voluntarily participate, please be reminded that the survey may take up to 20 minutes and that your responses will not be identifiable in any way (as no personal contact information will be collected or passed onto the client – that is, the

investigators of this project) and that the results from this survey may be published by the investigators and the university who have engaged the services of the independent market surveyor.

What are the benefits for taking part in this study?

A small token of appreciation will be given by the independent market surveyor, Vase, for every voluntarily completed and submitted questionnaire.

What are the risks for taking part in this study?

There are no foreseeable risks of participating in this study.

What are your rights as a participant?

Taking part in the study is voluntary. You may choose not to take part or subsequently cease participation at any time.

For more information

This research has been reviewed and approved by the Swinburne's Human Research Ethics Committee (SUHREC), Swinburne University of Technology. If you have any further questions or concerns about this study, please contact:

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E-mail: MWeissmann@swinburne.edu.my

What if I have concerns about this research?

This project has been approved by or on behalf of Swinburne's Human Research Ethics Committee (SUHREC) in line with the *National Statement on Ethical Conduct in Human Research*. If you have any concerns or complaints about the conduct of this project, you can contact:

Ethics & Integrity Officer, Swinburne University of

Appendix 2 Questionnaire for Self-Efficacy (Group 1)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

You are aware of the impacts your purchasing behaviour have on the environment. With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, and are of similar quality.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Increasing your consumption of sustainable products benefits society and the environment. Yet, many people still consume unsustainable products which damage the environment and cause problems for the longevity of our society.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

You are aware of the impacts your purchasing behaviour have on the environment. With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, and are of similar quality.

Benefit of Using Sustainable Alternative

- **Saves on petrol**
- **Saves on mileage**
- **Preservation of unrenewable energy sources (fossil fuel)**
- **Less air pollution through exhaust fumes**
- **Less maintenance required**

3. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 3 Questionnaire for Self-Efficacy (Group 2)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

You are aware of the impacts your purchasing behaviour have on the environment. With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, but the regular model seems to offer superior comfort at the cost of greater petrol usage.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Increasing your consumption of sustainable products benefits society and the environment. Yet, many people still consume unsustainable products which damage the environment and cause problems for the longevity of our society.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

You are aware of the impacts your purchasing behaviour have on the environment. With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, but the regular model seems to offer superior comfort at the cost of greater petrol usage.

Benefit of Using Sustainable Alternative

- **Saves on petrol**
- **Saves on mileage**
- **Preservation of unrenewable energy sources (fossil fuel)**
- **Less air pollution through exhaust fumes**
- **Less maintenance required**

Costs of Using Non-sustainable Alternative

- **Higher probability of car breakdown, frequent maintenance**
- **Higher costs of refilling more petrol (less conservative petrol usage)**
- **Exhaust fumes contribute to pollution**

3. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 4 Questionnaire for Self-Efficacy (Group 3)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, and are of similar quality.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Increasing your consumption of sustainable products benefits society and the environment. Yet, many people still consume unsustainable products which damage the environment and cause problems for the longevity of our society.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, and are of similar quality.

3. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 5 Questionnaire for Self-Efficacy (Group 4)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, but the regular model seems to offer superior comfort at the cost of greater petrol usage.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Increasing your consumption of sustainable products benefits society and the environment. Yet, many people still consume unsustainable products which damage the environment and cause problems for the longevity of our society.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Regular Model	Low-Carbon Emission Model
 <ul style="list-style-type: none">• Production Emissions: 12,204 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters	 <ul style="list-style-type: none">• Production Emissions: 8,190 (Kg CO₂ equivalent)• Max Speed: 167 (Km/h)• Acceleration: 14.5 seconds (0-100 kph)• Fuel Tank Capacity: 50 liters

You have finally saved up enough money to buy yourself a new car. You will no longer need to depend on other people to drive you around, and have less to worry about in terms of your new car breaking down.

With need to buy a new car you head to your local car dealer. There is one car which meets your specifications, but it comes in two different models; a model with lower carbon-emissions, and a regular model. Apart from this, the two models on offer share the same prices, but the regular model seems to offer superior comfort at the cost of greater petrol usage.

Costs of Using Non-sustainable Alternative

- **Higher probability of car breakdown, frequent maintenance**
- **Higher costs of refilling more petrol (less conservative petrol usage)**
- **Exhaust fumes contribute to pollution**

3. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 6 Questionnaire for Neutralisation (Group 1)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the intention to buy a packet of sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). FAIRTRADE, is an international certification that guarantees better trading conditions for marginalized workers.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Government handouts are an initiative funded by taxation that allocate resources away from important public infrastructure such as education, health and general welfare, and pay it into the hands of the consumer (to do as you please). Believing that returns from taxation should be used to develop public infrastructure and still accepting government handouts by denying their negative implications is an example of hypocrisy.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the initial intention to buy a packet of regular sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). However, you decided to buy the Fairtrade sugar, due to the reassurance in terms of the social and ecological impacts associated with its production. In other words, your actual purchase of the Fairtrade sugar has differed from your original intention to buy a packet of regular sugar.

3. I am comfortable in making the purchase of the product described in the scenario above- the sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I would be more comfortable in making the purchase of the alternative product that was not available in the scenario above- the non-sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 7 Questionnaire for Neutralisation (Group 2)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the intention to buy a packet of sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). FAIRTRADE, is an international certification that guarantees better trading conditions for marginalized workers.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Government handouts are an initiative funded by taxation that allocate resources away from important public infrastructure such as education, health and general welfare, and pay it into the hands of the consumer (to do as you please). Believing that returns from taxation should be used to develop public infrastructure and still accepting government handouts by denying their negative implications is an example of hypocrisy.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the initial intention to buy a packet of Fairtrade sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). However, you decide to buy the regular packet of sugar that costs the same and is of similar quality as the Fairtrade sugar, but offers no reassurance in terms of the social and ecological impacts associated with its production. In other words, your actual purchase of the regular packet of sugar has differed from your original intention to buy a packet of Fairtrade sugar.

3. I am comfortable in making the purchase of the product described in the scenario above- the non-sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I would be more comfortable in making the purchase of the alternative product that was not available in the scenario above- the sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 8 Questionnaire for Neutralisation (Group 3)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the intention to buy a packet of sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). FAIRTRADE, is an international certification that guarantees better trading conditions for marginalized workers.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Government handouts are an initiative funded by taxation that allocate resources away from important public infrastructure such as education, health and general welfare, and pay it into the hands of the consumer (to do as you please). Believing that returns from taxation should be used to develop public infrastructure and still accepting government handouts by denying their negative implications is an example of hypocrisy.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the initial intention to buy a packet of Fairtrade sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). You decide to buy the Fairtrade sugar, due to the reassurance in terms of the social and ecological impacts associated with its production. In other words, your actual purchase of the Fairtrade sugar is in line with your initial intention.

3. I am comfortable in making the purchase of the product described in the scenario above- the sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I would be more comfortable in making the purchase of the alternative product that was not available in the scenario above- the non-sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 9 Questionnaire for Neutralisation (Group 4)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the intention to buy a packet of sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). FAIRTRADE, is an international certification that guarantees better trading conditions for marginalized workers.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Government handouts are an initiative funded by taxation that allocate resources away from important public infrastructure such as education, health and general welfare, and pay it into the hands of the consumer (to do as you please). Believing that returns from taxation should be used to develop public infrastructure and still accepting government handouts by denying their negative implications is an example of hypocrisy.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.



You need to go grocery shopping in preparation for next week. One of the items on your list is sugar.

You walk into your local supermarket with the initial intention to buy a packet of regular sugar. You notice there are two types of sugar for sale. The first is a regular packet of sugar (non-sustainable product), the second is Fairtrade sugar (sustainable product). You decide to buy the regular packet of sugar that costs the same and is of similar quality as the Fairtrade sugar, but offers no reassurance in terms of the social and ecological impacts associated with its production. In other words, your actual purchase of the regular packet of sugar is in line with your initial intention.

3. I am comfortable in making the purchase of the product described in the scenario above- the non-sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I would be more comfortable in making the purchase of the alternative product that was not available in the scenario above- the sustainable product.

Mark only one oval per row.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 10 Questionnaire for Product Availability (Group 1)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 <p>\$58 Lifetime Savings over an incandescent with the same brightness</p>
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they have two types of lightbulbs on offer. The first, is a sustainable (energy-saving) lightbulb, the other is a normal lightbulb. You have enough money to buy any of the lightbulbs.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as energy-saving lightbulbs makes a positive difference to society and the environment, however they are often sold out- thus, unavailable. Having an online shopping service that facilitates the purchase of such sustainable products makes them more available.'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 <p>\$58 Lifetime Savings over an incandescent with the same brightness</p>
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they have two types of lightbulbs on offer. The first, is a sustainable (energy-saving) lightbulb, the other is a normal lightbulb. You have enough money to buy any of the lightbulbs. The sales assistant informs you that you can also buy both the sustainable (energy-saving) lightbulb and the normal lightbulb at their online retail store. She proceeds to give you the link to their online retail store.

3. How likely will you purchase the sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you purchase the sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you purchase the non-sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 11 Questionnaire for Product Availability (Group 2)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 \$58 Lifetime Savings over an incandescent with the same brightness
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they usually have two types of lightbulbs on offer; a sustainable (energy-saving) lightbulb, and a normal lightbulb. You have enough money to buy any of the lightbulbs. However, the normal lightbulb is unavailable at this time. Only the sustainable lightbulb is available at this moment.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

‘Being sustainable, using sustainable products such as energy-saving lightbulbs makes a positive difference to society and the environment, however they are often sold out- thus, unavailable. Having an online shopping service that facilitates the purchase of such sustainable products makes them more available.’

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 \$58 Lifetime Savings over an incandescent with the same brightness
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they usually have two types of lightbulbs on offer; a sustainable (energy-saving) lightbulb, and a normal lightbulb. You have enough money to buy any of the lightbulbs. However, the normal lightbulb is unavailable at this time. Only the sustainable lightbulb is available at this moment. The sales assistant informs you that you can also buy both the sustainable (energy-saving) lightbulb and the normal lightbulb at their online retail store. She proceeds to give you the link to their online retail store.

3. How likely will you purchase the sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you purchase the sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you purchase the non-sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 12 Questionnaire for Product Availability (Group 3)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 \$58 Lifetime Savings over an incandescent with the same brightness
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they usually have two types of lightbulbs on offer; a sustainable (energy-saving) lightbulb, and a normal lightbulb. You have enough money to buy any of the lightbulbs. However, the sustainable lightbulb is unavailable at this time. Only the normal lightbulb is available at this moment.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as energy-saving lightbulbs makes a positive difference to society and the environment, however they are often sold out- thus, unavailable. Having an online shopping service that facilitates the purchase of such sustainable products makes them more available.'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 \$58 Lifetime Savings over an incandescent with the same brightness
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they usually have two types of lightbulbs on offer; a sustainable (energy-saving) lightbulb, and a normal lightbulb. You have enough money to buy any of the lightbulbs. However, the sustainable lightbulb is unavailable at this time. Only the normal lightbulb is available at this moment. The sales assistant informs you that you can also buy both the sustainable (energy-saving) lightbulb and the normal lightbulb at their online retail store. She proceeds to give you the link to their online retail store.

3. How likely will you purchase the sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you purchase the sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you purchase the non-sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 13 Questionnaire for Product Availability (Group 4)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 <p>\$58 Lifetime Savings over an incandescent with the same brightness</p>
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they usually have two types of lightbulbs on offer; a sustainable (energy-saving) lightbulb, and a normal lightbulb. You have enough money to buy any of the lightbulbs. However, neither of the lightbulbs are available at this moment, the store is sold-out.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as energy-saving lightbulbs makes a positive difference to society and the environment, however they are often sold out- thus, unavailable. Having an online shopping service that facilitates the purchase of such sustainable products makes them more available.'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Lightbulb	Energy-Saving Lightbulb
	 <p>\$58 Lifetime Savings over an incandescent with the same brightness</p>
Yearly Operating Cost - \$12.92	Yearly Operating Cost - \$3.01
Energy Usage - 60w	Energy Usage - 14w
Brightness(Lumens) - 800	Brightness(Lumens) - 800
Bulb Lifetime- 750 Hours	Bulb Lifetime - 10,000 Hours

One of the lightbulbs in your house has burnt-out. You need to purchase a new light bulb to replace the old one. Knowing this, you head to your local hardware store to buy a new light bulb.

You have the intention to buy a lightbulb. When you walk into your local hardware store, you notice that they usually have two types of lightbulbs on offer; a sustainable (energy-saving) lightbulb, and a normal lightbulb. You have enough money to buy any of the lightbulbs. However, neither of the lightbulbs are available at this moment, the store is sold-out. The sales assistant informs you that you can also buy both the sustainable (energy-saving) lightbulb and the normal lightbulb at their online retail store. She proceeds to give you the link to their online retail store.

3. How likely will you purchase the sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative from the local hardware store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you purchase the sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you purchase the non-sustainable alternative from the online retail store?
Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 14 Questionnaire for Product Accessibility (Group 1)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
	
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. Both the solar-powered grill and the charcoal-powered grill are available at this time. However, the sales assistant also informs you that a few people **in your neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

1. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you engage in sharing the sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Owning a sustainable product, such as a sustainable (solar-powered) grill, in order to be sustainable is costly and often beyond our means. However, by sharing their resources other owners of sustainable (solar-powered) grills can make it possible for others to benefit from these sustainable products, making the sustainable product physically and functionally accessible. Sharing offers an avenue for greater accessibility towards sustainable products.'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
 A black solar-powered grill with a warming rack on top, mounted on a silver metal stand with a lower shelf and wheels.	 A black charcoal-powered grill with a warming rack on top, mounted on a black metal stand with a lower wire rack and wheels.
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

SCENARIO A

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. Both the solar-powered grill and the charcoal-powered grill are available at this time. However, the sales assistant also informs you that a few people **in another nearby neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

5. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you engage in sharing the sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO B

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. Both the solar-powered grill and the charcoal-powered grill are available at this time. However, the sales assistant also informs you that a few people **in another state** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

9. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. How likely will you engage in sharing the sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO C

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. Both the solar-powered grill and the charcoal-powered grill are available at this time. However, the sales assistant also informs you that a few people **in another country** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

13. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. How likely will you engage in sharing the sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 15 Questionnaire for Product Accessibility (Group 2)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
 A black solar-powered grill with a control panel on the left side, a warming rack on top, and a lower warming rack on a stand. It has four legs and a single wheel on the right side.	 A black charcoal-powered grill with a cylindrical body, a control panel on the front, a warming rack on top, and a lower warming rack on a stand. It has four legs and two wheels on the right side.
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the resources (money) and intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the charcoal-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in your neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

1. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you engage in sharing the sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Owning a sustainable product, such as a sustainable (solar-powered) grill, in order to be sustainable is costly and often beyond our means. However, by sharing their resources other owners of sustainable (solar-powered) grills can make it possible for others to benefit from these sustainable products, making the sustainable product physically and functionally accessible. Sharing offers an avenue for greater accessibility towards sustainable products.'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
	
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

SCENARIO A

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the charcoal-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in another nearby neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

4. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you engage in sharing the sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO B

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the charcoal-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in another state** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

7. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How likely will you engage in sharing the sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO C

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the resources (money) and intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the charcoal-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in another country** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

10. How likely will you purchase the sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How likely will you engage in sharing the sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 16 Questionnaire for Product Accessibility (Group 3)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
	
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the solar-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in your neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

1. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How likely will you engage in sharing the sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Owning a sustainable product, such as a sustainable (solar-powered) grill, in order to be sustainable is costly and often beyond our means. However, by sharing their resources other owners of sustainable (solar-powered) grills can make it possible for others to benefit from these sustainable products, making the sustainable product physically and functionally accessible. Sharing offers an avenue for greater accessibility towards sustainable products.'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
 A solar-powered grill with a black metal frame, a silver base, and a black top with a warming rack. It has a side shelf and a front handle.	 A charcoal-powered grill with a black metal frame, a silver base, and a black top with a warming rack. It has a side shelf and a front handle.
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

SCENARIO A

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the solar-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in another nearby neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

4. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you engage in sharing the sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO B

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the solar-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in another state** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

7. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. How likely will you engage in sharing the sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO C

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, the solar-powered grill is unavailable at this time. But the sales assistant informs you that a few people **in another country** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

10. How likely will you purchase the non-sustainable alternative from the local hardware store?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. How likely will you engage in sharing the sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 17 Questionnaire for Product Accessibility (Group 4)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION



1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
	
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, both grills are unavailable at this time. But the sales assistant informs you that a few people **in your neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

1. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you engage in sharing the sustainable alternative for a small fee from people in your neighbourhood?

Mark only one oval per row.



No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Owning a sustainable product, such as a sustainable (solar-powered) grill, in order to be sustainable is costly and often beyond our means. However, by sharing their resources other owners of sustainable (solar-powered) grills can make it possible for others to benefit from these sustainable products, making the sustainable product physically and functionally accessible. Sharing offers an avenue for greater accessibility towards sustainable products.'

Please read and insert yourself into the hypothetical purchase scenario below, answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Solar-Powered Grill	Charcoal-Powered Grill
	
<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• No Carbon Dioxide Emissions	<ul style="list-style-type: none">• Heat Thermometer• Warming Rack• 11 pounds of Carbon Dioxide Emissions per Hour

SCENARIO A

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, both grills are unavailable at this time. But the sales assistant informs you that a few people **in another nearby neighbourhood** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

3. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you engage in sharing the sustainable alternative for a small fee from people in another nearby neighbourhood?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO B

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, both grills are unavailable at this time. But the sales assistant informs you that a few people **in another state** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

5. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How likely will you engage in sharing the sustainable alternative for a small fee from people in another state?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCENARIO C

You decided to buy a new portable grill to cook for friends and family. Knowing this, you head to your local hardware store to buy a new portable grill.

You have the intention to buy a portable grill. When you walk into your local hardware store, you notice that they have two types of grills on offer. The first, is a sustainable (solar-powered) grill, the other is a normal (charcoal-powered) grill. However, both grills are unavailable at this time. But the sales assistant informs you that a few people **in another country** are open to sharing their grills (both the solar-powered grill and the charcoal-powered grill) for a small fee. You have enough money to buy or rent (sharing it from others for a small fee) any of the grills.

7. How likely will you engage in sharing the non-sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How likely will you engage in sharing the sustainable alternative for a small fee from people in another country?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 18 Questionnaire for Product Affordability (Group 1)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 500.00, while the normal air-conditioner also costs RM 500.00.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as portable air-conditioners which conserve electricity makes a positive difference to society and the environment, however they are often not cheap. Having a rental service that allows the public to rent instead of buy such air-conditioners makes the option of using sustainable products more affordable, saving up to 50% off the retail price'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 500.00, while the normal air-conditioner also costs RM 500.00. The sales assistant informs you that the store offers a rental service for the portable sustainable (energy-saving) air-conditioner, the rental price is RM 250.00.

3. How likely will you purchase the sustainable alternative at retail price (without rental discount)?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you rent the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 19 Questionnaire for Product Affordability (Group 2)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 500.00, while the normal air conditioner costs RM 1000.00.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as portable air-conditioners which conserve electricity makes a positive difference to society and the environment, however they are often not cheap. Having a rental service that allows the public to rent instead of buy such air-conditioners makes the option of using sustainable products more affordable, saving up to 50% off the retail price'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 500.00, while the normal air conditioner costs RM 1000.00. The sales assistant informs you that the store offers a rental service for the portable sustainable (energy-saving) air-conditioner, the rental price is RM 250.00.

3. How likely will you purchase the sustainable alternative at retail price (without rental discount)?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you rent the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 20 Questionnaire for Product Affordability (Group 3)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 1000.00, while the normal air conditioner costs RM 500.00.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as portable air-conditioners which conserve electricity makes a positive difference to society and the environment, however they are often not cheap. Having a rental service that allows the public to rent instead of buy such air-conditioners makes the option of using sustainable products more affordable, saving up to 50% off the retail price'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 1000.00, while the normal air conditioner costs RM 500.00. The sales assistant informs you that the store offers a rental service for the portable sustainable (energy-saving) air-conditioner, the rental price is RM 500.00.

3. How likely will you purchase the sustainable alternative at retail price (without rental discount)?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you rent the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 21 Questionnaire for Product Affordability (Group 4)

SECTION A—DEMOGRAPHIC

Tick or write your answer to the following questions.

1. Age: _____

2. Gender: Female Male Other: _____

3. Highest education level: _____ In-progress Completed

4. Race: Chinese Malay Indian Other: _____

5. Religion: Buddhism Christianity Hindu Muslim Other:

6. Gross Salary per month:

Below RM1,000 RM1,000 – RM1,999 RM2,000 – RM2,999 RM3,000 – RM3,999

RM4,000 – RM4,999 RM5,000 – RM5,999 RM6,000 – RM6,999 RM7,000 – RM7,999

RM8,000 – RM8,999 RM9,000 – RM9,999 RM10,000 and above

7. Where do you live? Outside City/Town Centre Within City/Town Centre

8. Where do you work? Outside City/Town Centre Within City/Town Centre

SECTION B—ANTECEDENT: PERCEPTUAL EVALUATION

1. I am likely to purchase the products below.

Mark only one oval per row.

	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Agree	Strongly Agree
Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non- Sustainable Products:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C- EXTERNAL PERCEIVED BEHAVIOURAL CONTROL

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 1000.00, while the normal air-conditioner also costs RM 1000.00.

1. How likely will you purchase the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXTERNAL PERCEIVED BEHAVIOURAL CONTROL (PRIMED)

Please read the below statement before attempting the remainder of the questionnaire.

'Being sustainable, using sustainable products such as portable air-conditioners which conserve electricity makes a positive difference to society and the environment, however they are often not cheap. Having a rental service that allows the public to rent instead of buy such air-conditioners makes the option of using sustainable products more affordable, saving up to 50% off the retail price'

Please read and consider yourself being in the hypothetical purchase scenario below and answer the questions that follow to the best of your ability as to how you would respond when put in this scenario.

Normal Portable Air-conditioner	Energy-saving Portable Air-Conditioner
 <ul style="list-style-type: none">• Higher cost to operate• Recirculated Air• Regular cleaning needed• High installation cost	 <ul style="list-style-type: none">• 50% Less Energy Consumed• Natural, Clean Air• Less maintenance needed• Lower installation cost

You decided to buy a new portable air-conditioner for your house. Knowing this, you head to your local hardware store to buy a new portable air-conditioner.

You have RM 1000.00 with you and the intention to buy a portable air-conditioner. When you walk into your local hardware store, you notice that they have two types of portable air-conditioners on offer; a sustainable (energy-saving) air-conditioner, and a normal air-conditioner. The sustainable (energy-saving) air-conditioner costs RM 1000.00, while the normal air-conditioner also costs RM 1000.00. The sales assistant informs you that the store offers a rental service for the portable sustainable (energy-saving) air-conditioner, the rental price is RM 500.00.

3. How likely will you purchase the sustainable alternative at retail price (without rental discount)?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How likely will you purchase the non-sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How likely will you rent the sustainable alternative?

Mark only one oval per row.

No Chance	Almost No Chance	Somewhat Improbable	Neutral	Probable	Almost Sure	Certain
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>