Mediated and Moderated Drivers of Behavioural Intention and Behavioural Willingness: An Investigation Among Online Gambling and Household Energy Customers

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Abstract

How is it possible that rational, educated, and tempered beings, who can put a man on the moon and split the atom, can still buy something we later regret? The present research explores factors in an inherent dual-process model that considers the reactive (Type 1) and contemplative (Type 2) nature of consumer behaviour. The research therefore asks: What model of psychological factors can help explain purchase decision-making behaviour in an online gambling and household energy context? More specifically, it focuses on:

- What role do reflective and reactive purchase decision-making play as drivers of behavioural intention and willingness?
- What is the role of customer loyalty? What are its drivers and how does it impact behavioural outcomes?
- What role does perceived risk play in behavioural intention and willingness?

A review of the literature on dual-process models together with that of identified drivers that include customer satisfaction, corporate reputation, customer loyalty and perceived risk, allowed for the generation of a research model and set of direct, moderated and mediated hypotheses as follows:

H1a: The stronger the prototype perceptions, the stronger the behavioural intention.

H1b: The stronger the prototype perceptions, the stronger the behavioural willingness.

H2a: The stronger the customer loyalty, the stronger the behavioural intention to purchase.

H2b: The stronger the customer loyalty, the stronger the behavioural willingness to purchase.

H3: The stronger the corporate reputation, the stronger the customer loyalty.

H4a: The stronger the overall customer satisfaction, the stronger the customer loyalty.

H4b: The stronger the overall customer satisfaction, the stronger the corporate reputation.

H4c: The stronger the encounter satisfaction, the stronger the customer loyalty.

H4d: The stronger the encounter satisfaction, the stronger the overall satisfaction.

H5a: The positive effect of customer loyalty on behavioural intention is negatively moderated by perceived risk.

H5b: The positive effect of customer loyalty on behavioural willingness is negatively moderated by perceived risk.

To test the research model data was collected from two sample surveys of online gambling and household energy customers in the UK. Analyses are undertaken using SmartPLS in both sectors with the findings supporting all the hypotheses except H1a in the household energy sector and H5b in both sectors.

The research suggests that consideration of the more reactive behavioural willingness and the more reflective behavioural intention processes together with customer satisfaction, corporate reputation and customer loyalty, can provide strategic benefits to marketing and operational decision-making. A few demographic factors that include age and education, have been found to significantly impact behavioural willingness and behavioural intention, particularly in the online gambling context. Both contexts provided support of perceived risk weakening behavioural intention.

Dedication

To the memory of my older brother Lea York. He was instrumental in my formative years in Canada and taught me the valuable lessons of building snow forts, skiing and how to shoot a pellet gun among other critical life functions. Lea's taste in music was impeccable and his memory for the arts was uncanny. He was a voracious reader and under different circumstances, he would have made a fine scholar. May he rest in peace.

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Chapter 1

INTRODUCTION

For a long time, the assumption in marketing and consumer behaviour has been that customer purchasing decision making is primarily rational. As a result, many of the consumer behaviour models that seek to explain consumer intention, considered as the last step before actual purchasing (Ajzen, 1985; 1991), have adopted models that sought to identify constructs deemed to be rational drivers of consumer intention. Attitude theory (Fishbein, 1967) that evolved into the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and Theory of planned Behaviour (TpB) (Ajzen, 1991) provide a clear example of this. However, the lack of inclusion of other psychological concepts that include loyalty, reputation and satisfaction, together with an excessive focus on rationality in decision making, necessitates that an alternative means of behavioural prediction be considered. In this respect, Perugini and Bagozzi (2001) have proposed significant amendments to TpB to include the formation of “desires” that act as an antecedent to intention as well as the inclusion of “frequency of past behaviours”.

A construct that is linked to a more intuitive basis of decision making is that of willingness. Unfortunately, the willingness literature indicates that many authors use the terms willingness and intention interchangeably (e.g., De Massis et al., 2014; Horton & Horton, 1991; Kim & Park, 2009). Indeed, willingness as a concept, lacks clarity in theory and application (e.g., Briggs et al., 2005; Conrad, 2013; van den Berg & van der Velde, 2005) but initial theoretical grounding for the separation of willingness and intention comes from the Elaboration Likelihood Model (ELM) (Cacioppo & Petty, 1984; Petty & Cacioppo, 1986). An important aspect of

willingness is that it cannot be said that it can be entirely influenced by the contemplative nature of a subject (e.g., Gollwitzer, 2012). Indeed, Rendina et al. (2017, p.122), argue that willingness "involved a more ideal scenario" and is markedly different from intention which "was more real world" and more closely aligned with goal striving and volition (Bagozzi & Dholakia, 1999). Thus, when attempting to predict behaviour, it may be necessary to consider more than just behaviour intention and willingness provides a construct that can play a significant role (Gibbons et al., 1998a). The Prototype Willingness Model - PWM (Gibbons & Gerrard, 1995; Gibbons et al., 1998b) builds on ELM and dual-process theories that recognizes that decisions do not always stem from deliberative processes. The PWM recognises two paths to behaviour. The first consists of a 'reasoned action path' where outcomes follow theories like TRA and TpB and the second follows a "social reaction path" where decisions happen faster, without the depth of consideration associated with the former (Elliott et al., 2017; Gibbons et al., 2009). A further important consideration in rational and emotive customer decision making is the role of perceived risk as this can act in facilitating or inhibiting action (Loewenstein et al., 2001; Windschitl, 2002).

In building such a dual-type theory model, it may prove useful to take cognisance of the role of loyalty, corporate reputation and satisfaction that represent constructs that can be expected to play a role in decision making. Customer loyalty manifests itself at various levels that include application at a brand, organisational, employee and store level. The conceptualisation by Oliver (1999) of customer loyalty recognizes the evolution in loyalty thinking that has taken place over the years. Initially a behavioural approach to loyalty was adopted that argues that attitudinal and cognitive considerations were to be ignored. Loyalty was determined simply based on observable purchase behaviour. Day (1969) was among the first to argue that loyalty should be considered as consisting of both attitudinal and behavioural

criteria. Dick and Basu (1994) proposed the notion of relative attitude and repeat patronage as integral parts of customer loyalty with cognitive, affective, and conative antecedents. However, Oliver (1999) argues for a framework for customer loyalty that consists of a cognition, affect, and conation sequence where these stages are integral phases of customer loyalty rather than antecedents. Oliver (1999; 2014) envisages that as customers engage with the firm and its products their accumulated satisfaction impacts customer loyalty.

Fombrun and Shanley (1990) popularised the importance and role of corporate reputation as underpinned by signalling theory. Corporate reputation is recognised as providing a backdrop for repeat sales and can support building customer loyalty (Christian, 1959). Oliver (2014) provides a process conceptualisation of customer satisfaction that can encompass different 'viewpoints' that range from satisfaction at an individual level to that at societal level. At each level of satisfaction different antecedents and consequences come into play. The focuses at the individual level of satisfaction helps explain consumer decision making. Oliver (1977; 1980) makes use of the expectation-disconfirmation paradigm to explain the interaction among attitudes, satisfaction, and intentions. The importance of customer satisfaction, corporate reputation, and customer loyalty, together with their inclusion with dual-type theory underlines the focus of the research. It seeks to determine what model of psychological factors can help explain purchase decision making behaviour and what role customer satisfaction, corporate reputation and customer loyalty can play in such a model. It is intended to conduct the research in a service context and the next section sets out to provide a typological framework for the research.

1.1. Service Based Offerings

Services marketing is an integral part of marketing that has become increasingly important with the growth of the services economy aided in no small part by the development of online services. The service sector has exhibited huge growth over the years and in many developed countries represent the larger part of Gross Domestic Product (GDP). By way of example, in the United States the service sector share of GDP in 2020 stood at 76.89% (Statistica, 2020). Service based offerings meet the key distinguishing features promulgated for services, namely: (1) intangibility, (2) inseparability, (3) variability, and (4) perishability. The distinction between service and product offerings is one of degree and most offerings represent a combination of both a tangible product and an intangible service. However, when the core of the offering is a service rather than a tangible, the offering is treated as a service. The growth in service based offerings in the market has led Vargo and Lusch (2004) to argue for a paradigm shift toward what they describe as a 'service dominant logic'. They hold that value is co-created by the customer as part of the exchange, and that marketing should therefore not focus on the product itself but on what the product does for the consumer, from a consumer's point-of-view. Given the importance and increased dominance of the service sector, the dual-type model and psychological factors that can help explain purchase decision making behaviour employed in this research will utilise a service context.

There have been various attempts at providing service typologies aimed at helping marketers better understand the characteristics of services. Such classifications can support the development of relevant theories for specific service types allowing for the formulation of meaningful strategies and the implementation of supporting plans. The service literature

provides numerous examples of such typologies, some based on intuitive reasoning (e.g., Bowen, 1990) and some on the basis of empirical investigations (e.g., Kellogg & Chase 1995; Silvestro et al., 1992). Bowen (1990) proposes a service typology based on the degree of customer orientation exhibited during the service encounter. The author defines and uses seven service attributes to identify three clusters of services including high contact, customised personal services; moderate contact, semi-customised non-personal services; and moderate contact, standardised services. The strategic implications of this classification scheme are said to include market segmentation, enhancing customer satisfaction and building customer loyalty. On the other hand, Kellogg and Chase (1995) provide a service typology based on elements of customer contact. It is argued that this typology should enable service managers to gain a deeper understanding of customer contact to implement improvements in service quality and service system design.

Silvestro et al. (1992) provide a service typology using two dimensions. One dimension looks at whether the service provider has a focus that is people or equipment based, while the second dimension considers whether the customer base consists of few or many customers. These two dimensions are used to identify three types of service providers. The first, termed professional services, is characterised by having few customers that require a people focus involving customised transactions with relatively long customer contact times. The second represent mass services characterised by equipment-based services with many customers. Mass services can be distinguished by generally offering low levels of customisation. A third grouping is an in-between category that is termed service shop involving medium use of technology and people interaction and an intermediate number of customers.

The grouping of mass services described in the typology by Silvestro et al. (1992) is interesting. However, Ng et al. (2007) observe that the focus of the mass services category described by Silvestro et al. (1992) is restricted to telecommunications and public transport services that are equipment-oriented and essentially utilitarian in character. Ng et al. (2007) focuses on mass services and propose a broader typology consisting of two macro-level dimensions consisting of 'purpose of consumption' (utilitarian or hedonic) and 'service delivery' (collective or individual) – Figure 1.01. Therefore, while the mass services category in Silvestro et al. (1992) considers only utilitarian type of mass services, Ng et al. (2007) argue that some mass service offerings can also be hedonic. To determine whether a product is utilitarian or hedonic it is necessary to assess the core benefit of the service product. Utilitarian offerings can be expected to be more rational and functional. Ng et al. (2007) also add the dimension of service delivery of mass services that can be collective or individual. An example of collective service delivery would be a football match that requires attendees to undertake consumption at a set point in time. Collective service delivery is characterised by having a stipulated start and end time set by the service provider. Individual mass services, on the other hand, are those, which allow consumers to determine their own time of consumption.

Figure 1.01

Typology of Mass Services (Ng et al., 2007, p.475)

Service Delivery	Purpose: Hedonic	Purpose: Utilitarian
Collective	Football match	Household energy
Individual	Online gambling	Mobile telephony

Figure 1.01 provides examples of mass services in each of the quadrants. As stated above football games are hedonic but collective as they have a stipulated start and end time set by the service provider. However, household energy is utilitarian as although the customer has some control over switching on or off certain fixture or appliances, full control over service provision rests with the energy supplier. On the other hand, something like online gambling is very much a hedonic pursuit where individual customers can determine their own time of consumption. Finally, mobile telephony is also individual but utilitarian as full control over service provision rests with the telecommunications supplier.

While additional examples of mass services are possible to consider, this study focuses

on two quadrants in the matrix by Ng et al., (2007), namely household energy provision that is collective and utilitarian and online gambling that is individual and hedonic. These represent service providers that are on one diagonal of the typology matrix. It is possible to consider the other diagonal of the typology or service providers in more than two quadrants but there are constraints of resources that need to be considered. The choice of online gambling and household energy are examples of very diverse providers in the service sectors that have exhibited considerable change and growth in recent years. These developments have come about because of various occurrences that include advancement in online technology, changes in regulatory frameworks and liberalisation. Yet, the present research is not about the Internet, the paradigm shifts it has created in gambling and household energy, or the perceived convenience it has introduced to the lives of the consumer. It is instead about understanding consumers' purchase decision making as it relates to these two diverse verticals and the nature of the drivers that influence behaviours toward their commoditised offerings. The next two sub-sections provide a brief overview of both the online gambling and residential energy sectors, and this is followed by a presentation of the research focus and research questions for this study.

1.1.1. The Online Gambling Sector – Characteristics and Marketing

To many, the online world of gambling is virtually unknown. However, the growth of the Internet has revolutionised the sector and today "anyone who has an Internet connection and wants to gamble can do so" (Fasman, 2010). Online gambling is global and part of an ever-growing entertainment industry. The Internet has made it possible to bet on a horse anywhere in the world, enter a poker tournament 24/7/365 or enjoy shouting BINGO while clutching a mobile phone in one's hands. It is estimated that the global online gambling industry will continue its

rapid ascension with an enviable CAGRA of 11.5% over the next five years and reach an estimated annual revenue of US$127.3 billion by 2027 (Grand View Research, 2020). For most gamblers, the industry provides an entertainment value that can be enjoyed with an almost libertarian element of freedom. Of course, this is only true if one does not happen to be a problem gambler, gambling addict, an at-risk type or just prone to bad decisions. The emergence of problem gambling as a public health issue in many countries has received overwhelming attention in the gambling literature (e.g., Auer & Griffiths, 2013; Bowden-Jones & George, 2015; Gainsbury et al., 2014; Griffiths, 2013; Griffiths et al., 2009; Petry, 2005; Philander & MacKay, 2014; Walker, 1992; Wardle et al., 2011). However, investigations of problem gambling in populations suggest its prevalence globally as ranging between 0.12% to 5.8%. The problem gambling rates are estimated at between 0.12% to 3.4% in Europe, at 2% to 5% in North America and at 0.5% to 5.8% in Asia (Calado & Griffiths, 2016). Most countries have a gambling industry regulator. The UK and Sweden have two of the most proactive regulators in the industry. The United Kingdom Gambling Commission (UKGC) together with the Responsible Gambling Safety Board (set up in 2018 and subsequently renamed the Advisory Board for Safer Gambling - ABSG), act as the UK watchdog for the industry.

Despite problem gambling and robust regulation, online gambling firms pursue strong customer acquisition strategies aimed at building a large customer base. The principal marketing focus of online gambling firms consists of organic and/or affiliated marketing activities. Organic traffic arises from Internet surfers who are attracted to the home site of the online betting firm through activities that include search engine optimisation (SEO), TV, newspaper, social media advertisements, word-of-mouth (WOM) and direct mail. The principal distinguishing feature of organic traffic is that players and the revenues they generate for the gambling firm, are untethered and free from commission. By contrast, affiliated traffic is

generated by specialised online firms (affiliates) of seasoned online marketing professionals who develop marketing activities that 'refer' players to online gambling operators. Example sites include www.casinomeister.com, www.gambling.com, and www.casinoonline.co.uk. However, the players acquired from affiliates carry a heavy financial obligation for online gambling firms as they need to pay affiliate host sites for the traffic generated. This is typically done in one of three ways. The first and most common approach consists of a straight revenue share deal with some online gambling operators paying affiliates as much as 50% of the lifetime revenues generated by the gambler. The second is a cost per acquisition (CPA) rate which means that once the affiliate is paid for by the online gambling firm, there are no other expenditures due. The third method is a hybrid involving a smaller CPA plus a revenue share which typically results in a much lower percentage of revenue paid to the affiliate.

1.1.2. The UK Household Energy Sector - Characteristics and Marketing

In 1996, the UK energy market experienced a jolt, not from suppliers or powerplant failures, but from regulatory reform which granted access to the market to new entrants, opening a competitive landscape that was once dominated by a crown corporation or two (Giulietti et al., 2005). Twenty years later, consumers can choose from 40 suppliers who can meet their requirements for both gas and electricity (Ofgem, 2021c). The Department for Business, Energy, and Industrial Oversight (BEIS) reports the presence of 26.7 million metered electricity accounts and 22.1 million gas meters as of June 2021. The average annual tariff for dual fuel residential consumers in the UK is of £1138 (Ofgem, 2021a). Regulation of the energy market in the UK is the responsibility of The Wholesale Energy Market Integrity and Transparency (REMIT) division within Ofgem. Table 1.01 shows that the residential energy market represents an annual spend of over £30.487 billion that roughly represents 2.5% of total

spend in the UK. Table 1.01 also indicates that the total value of gas and electricity consumed has remained relatively flat over the last nine years. However, the data indicate a shift in consumption patterns from gas, which is down 28% from its peak in 2013, to electricity, which is up 22% since 2012. The 'Big Six' energy providers account for 70% of customers while the remaining 30% are split among the remaining smaller players.

Table 1.01

Nine-year Rolling Average (2012-2020) of Residential Energy Consumption in the UK (Source: Ofgem.co.uk)

Year	Gas (£ million)	Electricity (£ million)	All Fuel and Power (£ million)	% Change from Nine Year Average
2012	£15,863	£15,163	£31,026	1%
2013	£16,683	£16,170	£32,853	7%
2014	£14,163	£15,378	£29,541	-4%
2015	£14,514	£15,435	£29,949	-3%
2016	£14,508	£15,924	£30,432	-1%
2017	£12,906	£16,048	£28,954	-6%
2018	£14,101	£17,230	£31,331	2%
2019	£13,943	£18,201	£32,144	5%
2020	£12,065	£18,422	£30,487	-1%

Household energy is an essentially homogenous product provided by an industry where competition results from an engineered process and the freedom of choice that is provided may not yield the customer outcomes that were first desired (Giulietti et al., 2005). The primary considerations of household energy customers for selecting one energy provider over another are reported to be price, customer satisfaction, online advice, and support (Cyrus, 2021). Another commonly available source cites price, customer service, green sourcing, fixed rates, well-known firm, and no early contract exits fees, as the aspects considered by customers when selecting their household energy supplier (Moneysavingexpert.com, 2021). Given the commodity nature of the residential energy product, it is no surprise that price is reported as the

primary selection criterion considered by many consumers. Household energy contracts in the UK are often based on a ‘fixed-term energy tariff’, where consumers lock in at an agreed energy price for a fixed time. Littlechild (2020) reports that 71% of customers seeking a utility provider made use of price comparison websites of which many are available online (e.g., Confused.com, 2021.; Moneysupermarket.com, 2020; Ukpower.co.uk, 2019; Uswitch.co.uk, 2021; Which.co.uk, 2021) and accredited by Ofgem (Ofgem, 2021c).

In marketing household energy products, the top providers have employed a myriad of techniques ranging from the highly personalised door-to-door strategies as well as the application of marketing automation and effective use of customer journeys to retain, acquire and win back customers (Virley et al., 2018). An emphasis on energy from sustainable sources and a pro-environmental stance have also been suggested, but Frederiks et al. (2015) report that education programmes and mass media campaigns that are focused on environmental sustainability and related attitudes are ineffective at producing the desired behavioural change intentions. Annual customer perceptions survey reports show relatively low levels of trust for providers with that of 2018, the last year that Ofgem provided customer trust ratings, showing low trust levels among 68% of customers (Ofgem, 2021a; Williams & Waring, 2018). Such low trust scores can lead to the erosion of transactional relationships, impacting overall satisfaction and ultimately loyalty (Henderson et al., 2011). Yet, 73% of customers report being satisfied overall, 18% said they were neither satisfied nor dissatisfied and just 9% claimed to be dissatisfied (Ofgem, 2021b). This suggests that although customers may distrust their energy provider, given the commodity nature of the product they are still satisfied, and loyalty or habit underlines their behaviour (Neal & Wood, 2009). Indeed, a full 22% of the UK residential energy customers have never switched providers. Presumably these are mostly the original British Gas customers.

1.2. Rationale and Focus of the Research

Various studies in marketing have sought to enhance the predictive capabilities of psychological concepts and models in understanding antecedents to purchase behaviour. Purchase behaviour intention, which is considered the last stage before actual behaviour, has therefore received considerable attention in the consumer behaviour and marketing literature. Theories like TRA (Fishbein & Ajzen, 1975), provided empirical support for predicting behaviours (Sheppard et al., 1988). However subsequent research recognised that TRA lacked sufficient measurement of beliefs or internal locus of control that are also deemed important in human decision making. Therefore, the subsequent TpB (Ajzen, 1985) sought to remedy this by also including perceived behavioural control (PBC) to provide a better prediction of intention and behaviour (Madden et al., 1992). TRA and TpB suggest rational decision making in purchase decision making but the recognition that decision making is not only rational gave rise to alternative models like the Elaboration Likelihood Model - ELM (Petty et al., 1983; Cacioppo & Petty, 1984; Petty & Cacioppo, 1986) and other dual-process theories including the Prototype Willingness Model - PWM (Gibbons & Gerrard, 1995). In PWM, PBC are replaced by prototype perceptions that are directly linked to behavioural willingness and both behavioural intention and behaviour willingness are envisaged as leading to purchasing behaviour (Elliott et al., 2017; Gerrard et al., 2008).

Customer loyalty is often used by both academics and practitioners to explain customer behaviour. The concept has had varied conceptualisations often derived from different theoretical underpinnings and resulting in multiple operationalisation possibilities. Moreover, in

both the online gambling and household energy sectors extricating loyalty from compulsivity and habituated behaviours may present some additional challenges. Customer loyalty has received considerable attention in the marketing literature because it has beneficial consequences in terms of preference, intention, purchase behaviour and word-of-mouth (Copeland, 1923; Brown, 1953; Day, 1969; Jacoby & Chestnut, 1978; Dick & Basu, 1994; Wiedmann et al., 2018). Moreover, customer satisfaction and corporate reputation act as drivers to customer loyalty **(**Oliver, 1977; Oliver, 1980; Oliver, 1993; Oliver et al., 1997; Oliver, 1999; Oliver, 2014; Walsh & Beatty, 2007; Walsh et al., 2009a). Another important construct in customer decision making is the role of perceived risk in facilitating or inhibiting action (Loewenstein et al., 2001; Windschitl, 2002). However, few of the behaviour outcome models distinguish between rational intention and emotional willingness to explain customer behaviour and these models often do not consider the role of customer loyalty and its antecedents of customer satisfaction and corporate reputation or the role of perceived risk in arriving at the purchase decision. Therefore, the broad research question and associated sub-questions of this research are:

What model of psychological factors can help explain purchase decision making behaviour in an online gambling and household energy context?

More specifically…

- ***What role do deliberative and intuitive purchase decision making play as drivers of behavioural intention and willingness?***
- ***What is the role of customer loyalty? What are its drivers and how does it impact behavioural outcomes?***

- ***What role does perceived risk play in behavioural intention and willingness?***

With these research questions in mind, a review of the literature is undertaken which starts by looking at the various theories that seek to explain consumer purchase behaviour. A distinction is drawn between theories such a TRA and TpB that assume a thoughtful or reflective approach that result in behavioural intentions, and dual-process theories like ELM and PWM that emphasise the role of prototype perceptions and behavioural willingness in purchase behaviour outcomes. It then proceeds to consider customer loyalty with its drivers of customer satisfaction and corporate reputation and its effect on purchase behaviour outcomes. In the case of customer satisfaction, a distinction is drawn between transaction satisfaction and overall satisfaction. Finally, the role of perceived risk is also considered. These constructs are employed to develop a research model outlining a nomological net of psychological factors that presents expected relationships and interactions.

The resultant research model with its underpinning in the literature, provides a theoretical framework that can support a better understanding of the decision process undertaken by customers in arriving at their purchasing decision. The identified constructs are operationalised, and data are collected from UK customers of online gambling and household energy firms. Online gambling and household energy consumers are chosen as two distinct service providers with whom to conduct this study because although they are both quasi-commodities, they possess significantly different characteristics and belong to different quadrants in the mass services typology. Online gambling is an individual, hedonic, pursuit while household energy is a collective, utilitarian offering. The data collected is analysed using

Smart PLS that allows testing the hypothesised relationships in the research model for each sector and across sectors. Identifying the drivers for each vertical together with a comparison of results across sectors, provides a rich understanding of the purchase decision making behaviour of customers in these sectors. Therefore, besides contributing to theoretical development, the findings can potentially also provide practical recommendations to management and regulators of online gambling and household energy firms.

Chapter 2

LITERATURE REVIEW

This chapter starts by looking at behavioural intention and willingness as important outcomes preceding behaviour. It proceeds to look at customer loyalty, corporate reputation and satisfaction as important drivers of behavioural intention and willingness. Finally, the role of perceived risk and its expected relationships with these constructs is considered. Over time, the constructs considered demonstrate an evolution in both their conceptualisation and operationalisations. The literature review seeks to identify the theoretical grounding of these constructs and ascertain what are defensible conceptualisations and impacts to propose a research model.

2.1. Behavioural Intention and Behavioural Willingness

Behaviour has been a keenly studied topic for thousands of years and has been among the chief concerns of the great philosophers. Plato, Aristotle, Hume and later Kahneman (2003), suggest that there exists a duality in the cognitive process that leads to a behaviour (1) a starting point (Plato as cited by Fleischacker, 2020), (2) a process by which a matter of choice is interpreted and considered (Aristotle as cited by Smith, 2020), (3) a series of contextually relevant considerations evoked (Hume as cited by Morris, 2021) (4) and though this may be effortless (effortful) an overt behaviour is, or is not taken (Kahneman, 2003). These developments provide a good starting point to consider what constitutes mindfulness or automation of choice with respect to consumer decision-making. Understanding factors that influence behavioural outcomes, in the context of behaviours associated with consumerism has

received much attention and behavioural intention has been at the forefront. However, recent research has also distinguished and highlighted the role of behavioural willingness in conjunction with prototypes or perceptions of perceived prototypical behaviours. The first two sections therefore proceed to look at behavioural intention and willingness and how researchers have conceptualised and distinguished between them.

2.1.1. Behavioural Intention

Social psychology suggests that intention is the last stage in the mental process before actual behaviour (Ajzen, 1985; 1991). Gibbons et al. (1998b, p.321) describe intentions as:

> *"plans that have been formulated in order to achieve a particular goal state through certain instrumental actions. They involve contemplation of the behaviour and, usually, of its consequences*".

This description of intention uses the terms 'contemplation' and 'consequences' to infer the subjective reflection and prior formation of attitudes as well as the post-behavioural evaluation on the activity. The definition by Gibbons et al. (1998b) is useful because it highlights the interaction between contemplation of both the action itself and the outcome

Attitude theory by Fishbein (1967) suggested the existence of a relationship between attitude and behaviours (the A-B relationship). This is further elaborated in the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975) which adds social norms to predict behavioural intention and outcomes in choice situations - see Figure 2.01. Their research showed that social norms and situational influences have the greatest impact on the decision-

making process. An interesting aspect of this research stream is the reported strong relative impact of “personal normative beliefs” (Fishbein & Ajzen, 1975, p.414) on behavioural intent compared to the less impactful attitudes and the normative beliefs of friends. Fishbein and Ajzen (2011, p.252), note that:

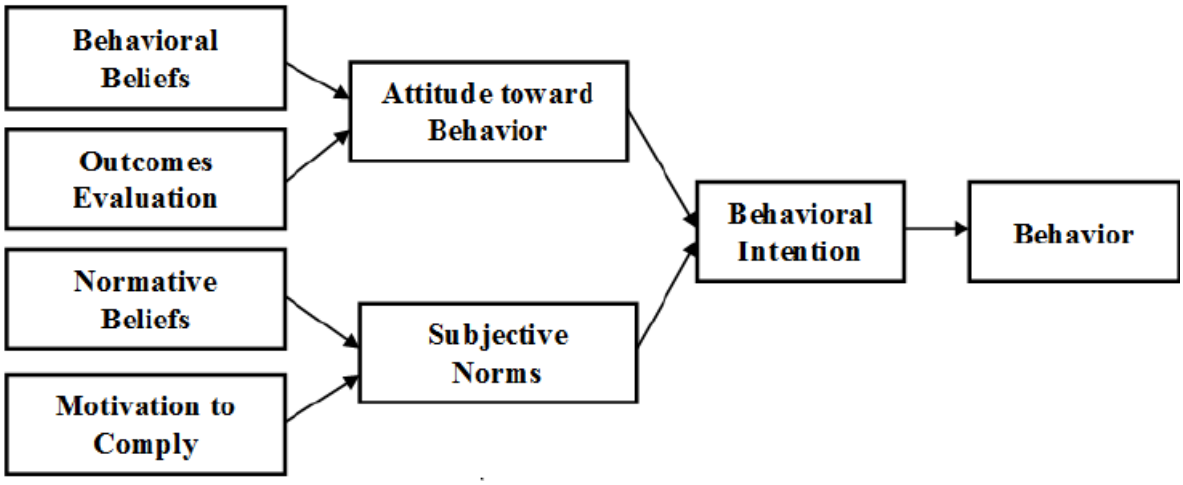
> *“In our reasoned action approach, we start from the behavior and look for the behavior’s proximal antecedents: intentions; attitudes toward the behavior, perceived norms, and perceived behavioral control; as well as the underlying behavioral, normative, and control beliefs.”*

In TRA, it is evident that the authors sought to identify predictive factors that influence intent and behaviour, similar tenets are displayed in the work by Day (1969), who sought to establish an attitudinal model for the measurement of forces on customer loyalty. Fishbein and Ajzen (1975) suggest that a number of dimensions may have an effect on attitude (or affect) and should be considered when attempting to predict behaviour of choice or intent. Thus, for example, behavioural belief is characterised by highly “subjective probability estimates on the part of the consumer attaching the object to some attribute” (Fishbein & Ajzen, 1975, p.12). Baggozi (1981, p.625) reports that attitude has a moderate impact on intention which translates to a “relatively small”, yet statistically significant, impact on behaviour. The research by Bagozzi (1981) is noteworthy because it is one of the earliest studies that adopts generalisable measures in capturing attitudes and intent using the TRA model. The research findings show that between 8% - 22% of variance in proximal behaviours and 30% - 32% of variance in distal behaviours are explained by attitudes and intentions. Moreover, Bagozzi (1981) cites Tversky and Kahneman (1974), to highlight the challenge people have in making probabilistic judgements and argues that this may result in conceptual and measurement challenges to researchers. Figure 2.01 depicts the original conceptualisation of TRA proposed by Fishbein

and Ajzen (1975) highlighting affect and norms (attitude toward behaviour, and subjective norms) as key drivers of behavioural intention. Given the general applicability of this theory and its potential to predict behaviour, TRA has inspired countless applications in different contexts including those on loyalty and different behaviour outcomes (e.g., Back & Parks, 2003; Gounaris & Stathakopoulos, 2004; Ha, 1998; Suh & Youjae, 2006).

Figure 2.01

Theory of Reasoned Action Model (Fishbein & Ajzen, 1975, p.334)



Fishbein and Ajzen (1975, p.12) suggest that "*intentions may be viewed as a special case of beliefs, in which the object is always the person himself and the attribute is always the behaviour.*"

In TRA, the authors envisage that attitudes and subjective norms are antecedents to intentions, which in turn, are predictive of behaviour. The authors propose that TRA is highly predictive for behaviours relating to a single act (e.g., buying a new bike, buying a new mobile phone,

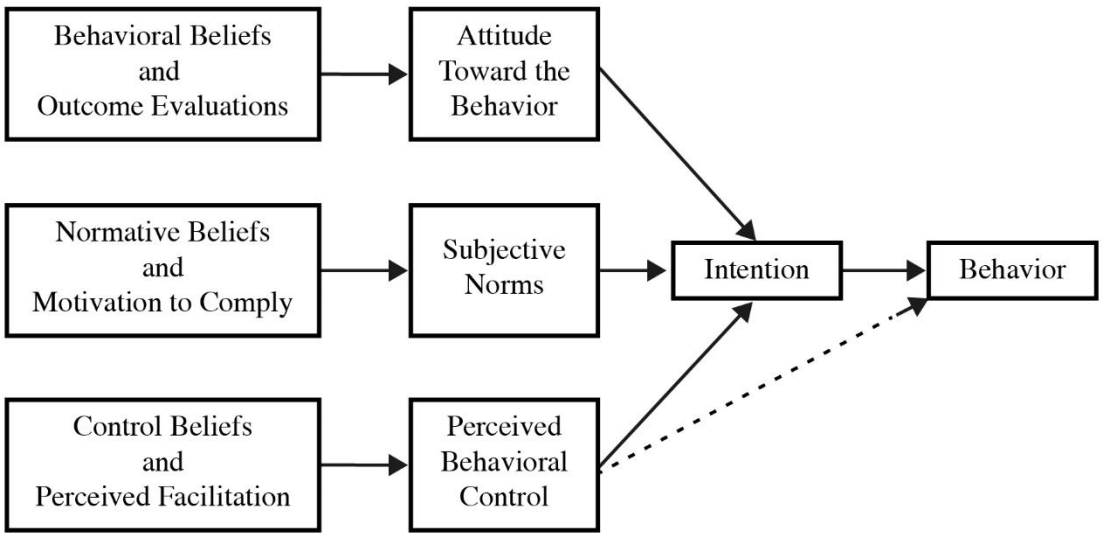
applying to a school). However, TRA experiences weaker outcomes when measuring longitudinal behaviours that require subjective consistency, especially those associated with goal intentions (e.g., cycling to work every day, reducing CO^2 footprint). Sheppard et al. (1988, p.325) note that these weaker outcomes may arise because respondents may display one or more of the following characteristics: (1) incomplete subjective volitional control, (2) the situation investigated involves a choice problem not explicitly addressed by Fishbein and Ajzen (1975), and (3) the subjective assessment is 'impossible' due to missing information. Further criticism that has emerged from various applications of TRA is whether the intention that is being captured consists of actual intentions to perform a behaviour or whether this represented a subjective estimation of the likelihood of goal achievement. Notwithstanding these concerns, behavioural intention is seen as a reasonable predictor of both behaviours and goals (Sheppard et al., 1988). TRA has also been criticised by Trafimow (2009), who echoes the observations of earlier writers (Liska,1984; Miniard & Cohen, 1981; Ogden, 2003; Smedslund, 2000). Thus, citing the work by Ogden (2003) and Smedslund (2000), Trafimow (2009) argues that the theory is not falsifiable and that TRA struggles to create a distinction between attitudes and subjective norms. Moreover, Bagozzi et al. (1992) show that personality attributes (not included in TRA) can affect behavioural intentions only if they affect the attitudinal and normative elements or their relative weights. Their regression results suggest the strongest direct link to predicting behaviours is with past behaviour ($\beta = 0.59$; $p<.001$) (Bagozzi et al., 1992, p.513).

To overcome some of these concerns, Ajzen (1985) proposed the Theory of planned Behaviour (TpB), that incorporates perceived behavioural controls (PBC) – Figure 2.02. PBC collectively encompasses actual subjective control beliefs over the situation which include environmental factors under the control of the subject, namely: opportunity, time, money, skills, and cooperation of others (Ajzen, 1991). The TpB model suggests that behavioural beliefs act

as an antecedent to attitude toward the behaviour. However, this relationship was found to exhibit temporal fluctuations which suggests that experience with the subject matter was causing a “fluid relationship”, where beliefs at time T1 were a predictive factor of attitude but not necessarily at T2 (Armitage & Conner, 1999). These authors propose possible solutions for this fluidity and how it might be addressed by researchers.

Figure 2.02

Theory of Planned Behaviour (Ajzen, 1991, p.182)



Like TRA, TpB has been widely used in numerous applications including leisure choice (e.g., Ajzen & Driver, 1992), driving violations (e.g., Elliott et al., 2003), health behaviour (e.g., Godin & Kok, 1996), hotel choice (e.g., Han et al., 2011), hunting (e.g., Hrubes et al., 2001) and

shareholder behaviour (e.g., Caruana et al., 2006). Overall, the meta-analysis by Armitage and Conner (2001) based on findings from 185 studies, reports that the TpB model can account for 39% and 27% of the variance in intention and behaviour, respectively.

Notwithstanding its explanatory ability, TpB has also received considerable criticism. For example, Wegner (2003, p.2) notes that "the experience of consciously willing an action is not an indication that the conscious thought has caused the action" and further adds that causal affects are nothing more than "resignation to determinism" (Wegner, 2017, p.333). Sparks and Shepherd (1992) argue that TpB lacks a self-identity process; Beck and Ajzen (1991) observe that it does not consider moral norms; Terry and O'Leary (1995) hold that it fails to distinguish between self-efficacy and perceptions of control and Parker et al. (1995, p.129) argue that it overlooks anticipated emotions associated with factors of "internalized morals" and "anticipated regret".

Perceived behavioural control is the key differentiating factor between TRA and TpB and this varies "across situations and actions" (Ajzen, 1991, p.183). It is comprised of both an internal locus and the perception of environmental factors required in the behaviour. For example, an elderly person may have excellent leadership qualities (internal locus) but because a hiring manager is weary of the applicant's age, the elderly applicant will never have a chance to work for the firm (low behavioural control). Bagozzi (1992, p.181) suggests that PBC "is thought to take into account personal deficiencies or external obstacles that possibly might thwart the performance of an act". Bagozzi (1993, p. 217) who defined volition as "the power of …determining: will", criticised the attitude (TRA) and judgment / choice (Elaboration Likelihood Model) models as offering poor behaviour prediction where volitional choice was a factor.

Warshaw and Davis (1985, p.215) defines behavioural intention as “the degree to which a person has performed a *conscious plan* to perform some specified future behaviour.” Behavioural intention represents the overall subjective evaluation of the behaviour in question, it is the perception of the meritorious factors both positive and negative and comprises the perceived self-control over the considered behaviour (Conner & Sparks, 2005). Bagozzi and Warshaw (1990, p.128) identify several scenarios of intended behaviour that are more or less feasible, based on perceived constraints or end-state goals, and note that “there are numerous contexts in which lack of willpower and unconscious habits can prevent a conscious desire to consume or avoid consuming”. In the TpB model, PBC impacts both behavioural intention and behaviour. There also exists a self-efficacy link to behavioural intention which is suggestive of subjective intention having an increased likelihood of resultant behaviour if the perceived behaviour is positively valenced (socially) and achievable (psychologically) (Atkinson, 1957; Bandura, 1986). This is where factors other than those measured in intention and PBC might be influencing behaviour, thus rendering TpB less effective:

> *“It should be noted that past behaviour fails to meet one of the criteria for inclusion in the TpB, namely the requirement that it constitute a causal antecedent of intention. It is difficult to argue that the performance of a behaviour in the past directly causes a person’s current intention.”* (Ajzen, 2011, p.1120)

The present research recognises Ajzen’s position that past behaviour influences attitudes toward a behaviour but do not influence the intention directly. However, latent satisfaction resulting from a past behaviour can hardly be impactful if it remains unrecognised and a trigger or cue alerts the subject to react. Bratman (1984) postulates that intentions “characterize our actions and our mental state” (p.375) and proposes a subjective duality, distinguishing between intending to behave and behaving intentionally. This duality concept of

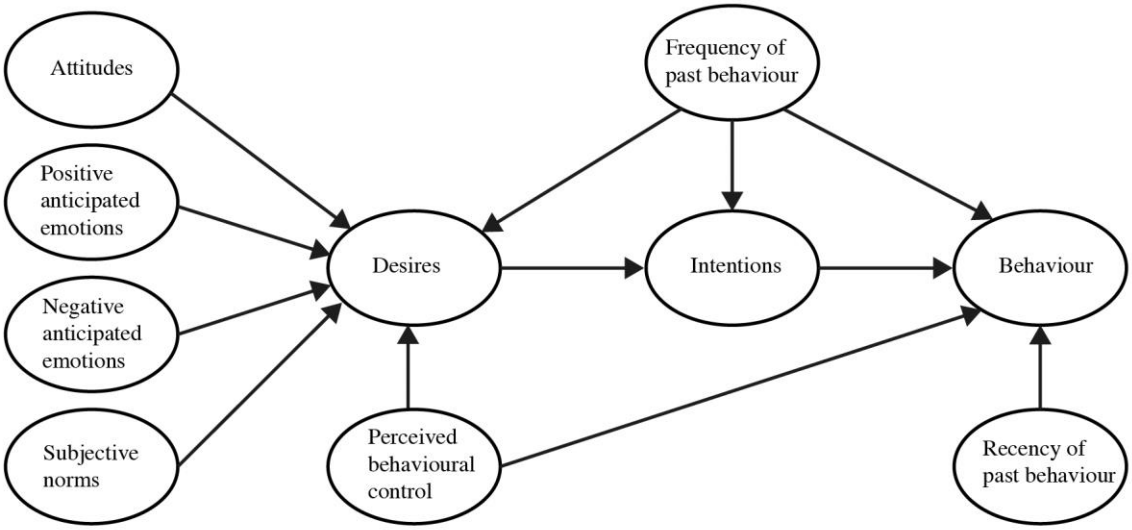
intention raises the issue as to whether behaving intentionally is a function of premeditation or an impulsive response. Behaviour, which was intended, has been successfully accounted for with TpB (Armitage & Conner, 2001). However, the lack of consideration of historical behaviours and an excessive focus on psychological factors, with disregard for immediate social influences and a lack of applicability in longitudinal studies, necessitates that an alternative means of behavioural prediction be considered. In this respect, Tversky and Kahneman (1974, p.1131) note that:

> *"…heuristics are highly economical and usually effective, but they lead to systematic and predictable errors. A better understanding of these heuristics and of the biases to which they lead could improve judgments and decisions in situations of uncertainty."*

These authors further argue that because cognitive thought might not always be a factor in pursued behaviour, rational thinkers often make judgments by using a series of heuristics which are influenced by subjective biases (Tversky & Kahneman, 1973). This is somewhat like the belief that a full moon drives irrational behaviours, aka lunacy. Circumstances influenced by heuristics or biases render the capture of intention outcomes even more challenging. Perugini and Bagozzi (2001) propose "theory deepening" and put forward their Model of Goal-Directed Behaviour (MGB) - Figure 2.03. This involves significant amendments to TpB to include the formation of "desires" that act as an antecedent to intention as well as the inclusion of "frequency of past behaviours". Results for the MGB demonstrate an improved efficacy over TpB.

Figure 2.03

Model of Goal-Directed Behaviour (Perugini & Bagozzi, 2001, p.80)



2.1.2. Behavioural Willingness

The willingness literature indicates that many authors use the terms willingness and intention interchangeably (e.g., De Massis et al., 2014; Horton & Horton, 1991; Kim & Park, 2009). A look at the 30,300 works returned in a *Google Scholar* search conducted in July 2019, offers further confirmation that the term has often been loosely used. Certainly, part of the popularity of using the term “willingness to” over “intention to” is undoubtedly the perceived syntactic freedom that the former provides rather than any clear differentiation between willingness and intention. Indeed, willingness as a concept, lacks clarity in theory and application.

2.1.2.1. Different Types of Behavioural Willingness

A perusal of the papers returned from the *Google Scholar* search indicates the breadth of use of the term willingness suggesting several different types of willingness. A detailed review of the papers identified 15 examples that have specifically used “willingness to” perform some human activity as the focus of the research - Table 2.01. Unfortunately, as noted by one of these authors, the specific conceptual framework for willingness has been overlooked or amalgamated into intention, for example, MacIntyre et al. (1998, p.548). Table 2.01 indicates no general identifiable theory underpinning willingness. Indeed, the fifteen studies analysed make use of dozens of different theories from (i) economics, (ii) cognitive and social psychology, and (iii) consumer behaviour.

Table 2.01

Willingness Omnium-gatherum of Academic Research and Identified Theories

Source(s)	Conceptual Framework(s)	Willingness Applications
Hanemann (1991) Homburg, Koschate and Hoyer (2005) Freeman, Song, Liang and Timmins (2019)	Environmental Economic Theory (Neoclassical) Expectation Disconfirmation Paradigm Econometrics, Hedonic Theory and Framing Theory	Willingness to Pay[1]
Hanemann (1991) Yang, Vosgerau and Lowenstein (2013) Ohtomo and Hirose (2007)	Environmental Economic Theory (Neoclassical) Agenda-setting (Framing theory) Theory of Reasoned Action / Theory of Planned Behaviour	Willingness to Accept[2]
Montada, Kals and Becker (2007)	Expectancy-Value, Theory of Reasoned Action and Rubicon Model of Action	Willingness for Continued Social Commitment (WCC)
Parent, Plangger and Bal (2011)	Resource Based View Theory	Willingness to Participate (Social Media)
Shavers, Lynch and Burmeister (2002)	Cultural Theory, Normative Theory and Stakeholder Theory	Willingness to Participate (Medical Studies)
Williams and Zinkin (2008) Sweetin, Knowles and Summey (2013)	Stakeholder Theory, Resource Based View Theory and Identity Theory	Willingness to Punish the Corporate Brand for Corporate Social Responsibility
Zakay, Ellis and Shevalsky (2004)	Social Cognitive Theory and Signalling Theory	Willingness to Learn (from experience)
McCroskey and Richmond (1990) MacIntyre, Dörnyei, Clément and Noels (1998)	Psychodynamic Theory (Psychosocial), Trait Theory, Personality Theory and Process Theory.	Willingness to Communicate (Communication Behaviours and Spoken Language)
Burgoon (1976)	Psychodynamic Theory, Trait Theory and Personality Theory	Unwillingness to Communicate
Raban and Rafaeli (2007)	Social Exchange Theory, (Heider's) Balance Theory, Consistency Theory, Equity Theory	Willingness to Share Information
Rabin (1993, p.3)	Game Theory and Equity Theory	Willingness to Help (Fairness Equilibrium)
Chan and Marafa (2017)	Stakeholder Theory and Modernization Theory	Willingness to Stay (Lodging)
Rutherford, Boles, Barksdale and Johnson (2006)	Social Exchange Theory	Willingness to Remain (Propensity to Stay, Supplier Relationship)
Wang and Lamb (1983)	Social Exchange Theory and Cultural Theory	Willingness to Buy (Foreign vs. Domestic)
Barber, Taylor and Strick (2009)	Involvement Theory and Process Theory	Willingness to Purchase (Corporate Social Responsibility)
Maxwell (2002)	Social Exchange Theory, Distributive Justice Theory, Economic Theory (of Self Control), Transaction Utility Theory, Norm Violation Theory, Equity Theory, Process Theory, Cognitive Dissonance Theory, Framing Theory and Attribution Theory	Willingness to Purchase (Pricing Fairness)

Notes: (1) Willingness to pay is the most frequently occurring in the willingness category. (2) Willingness to accept is correlated to willingness to pay in the field of economics.

(a) Willingness in Economics

Two types of "willingness to" that have received considerable attention in economics namely Willingness to Pay (WTP) and its counterpart, Willingness to Accept (WTA). A *Google Scholar* advanced search conducted in July 2019, that required WTP be in the title, provided 11,800 articles (15,400 articles as of October 30, 2021) or just over one-third of all the "willingness to" titled research papers in *Google Scholar* database. A similar search for WTA provided just 787 articles (1040 articles as of October 30, 2021). WTP and WTA are used in conjunction with one another in 24.5% of the cases while 255 of the 1040 WTA articles also contain WTP in the titles. Analyses by year indicates that WTP has been growing in popularity as a research topic - Table 2.02.

Table 2.02

Willingness to Pay in the Titles of Academic Publications (Source: Google Scholar 1900 – 2021)

Year	Research articles indexed as Willingness to Pay
1900 - 1979	47
1980 - 1989	188
1990 - 1999	1040
2000 - 2009	3470
2010 - 2019	6610
2020 – Oct.30 2021	1800

The idea that consumers are subjectively rational has been a pervasive theory in economics for centuries (Smith, 1776 as cited by Fleischacker, 2020). In his critique of the purely rational models as employed in economic studies, Thaler (2000) identifies *homo economicus* as bound to cost-benefit analysis, an evaluation of alternatives and optimal choice, leaving little or no room for affect. Such an approach is reflected in theories like expected utility theory and Bayes rule (Thaler, 2000). In looking at WTP and WTA, Hanemann (1991) adopts a purely economic "rational theory" perspective to argue that willingness to pay should be equivalent to willingness to accept, thus:

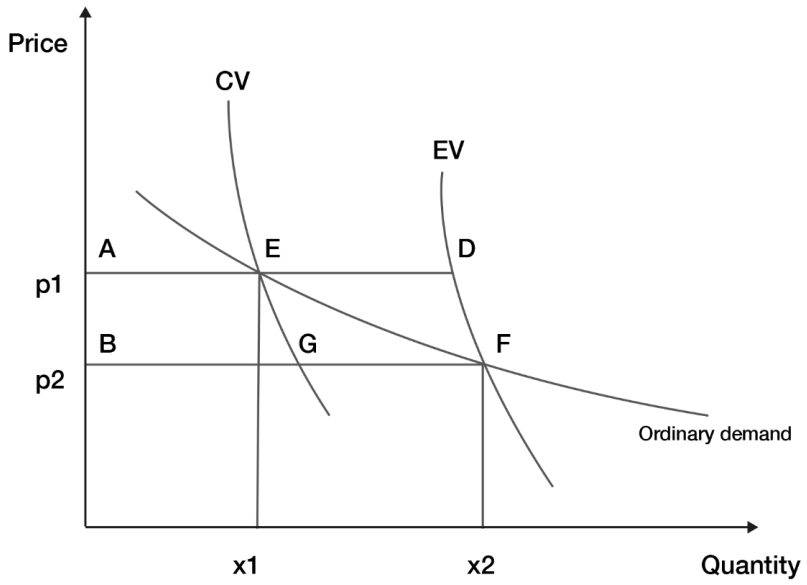
> "*The conventional welfare measures for price changes are the compensating (C) and equivalent (E) variations, which correspond to maximum amount an individual would be willing to pay (WTP) to secure the change or the minimum amount she would be willing to accept (WTA) to forego it.*" (Hanemann, 1991, p.635)

Such a perspective is grounded in rational economic theory (Dupuit, 1844) as well as utilitarianism which assumes that a consumer experiences a hypothesised sentiment of surplus or deficit in the exchange process. Ekelund (2000) seeks to explain the marginal demand curve and uses the work by Dupuit (1844) to argue that there can be "no utility other than that for which people are willing to pay." In the WTP / WTA axiom a customer has a finite WTP that is constrained by personal wealth and a hypothetically infinite WTA especially if a loved one is involved (Lehmann, 1995). Research by economists in this field is based primarily on the original work by Hicks (1939) and later by Willig (1976), who proposes a welfare system consisting of compensating (C) and equivalent (E) variations that result in a consumer surplus. Willig (1976) consideration of consumer surplus makes use of Compensating Variation (CV) and Equivalent Variation (EV), where CV is defined as a return to a state of welfare or "original utility" after the change occurs (improvement or degradation) while EV refers to a return to the welfare state "If" the event occurs (p.590). Changes in these increases and decreases of

welfare result in the hypothetical notion of consumer surplus (or deficit) which is not dissimilar to Oliver's (1977) work on disconfirmation. Therefore, in a gain situation resulting from a fall in price, the maximum amount a consumer is WTP (CV) and the minimum amount the consumer would be WTA (EV) are represented by the left and right compensated demand curves shown respectively along the ordinary demand curve - Figure 2.04. A decrease in price from p_1 to p_2 results in a welfare effect represented by EG that corresponds to WTP surplus. In addition, the area ADFB corresponds to customers WTA, so that the difference, represented by decrease along the curve, DF represents the consumer's surplus. This surplus is a disconfirmatory response on the part of the consumer with respect to the perceived value received from a product or service in an exchange situation. (Hanemann, 1991, p.646) observes that substitution effects have been found to have a greater impact on the relation between WTP and WTA than income effects which helps to explain the "empirical divergences" in the WTA / WTP research.

Figure 2.04

Welfare Effects and Consumer Surplus (Willig, 1976, p.592)



In their quest for precision, economists have tended to present models that oversimplify a situation. Indeed, Thaler (2000) and other behavioural economists, have increasingly recognised the need to also incorporate the irrationality of agentic behaviours and integrate normative and descriptive techniques in their work.

(b) Willingness in Cognitive and Social Psychology

Many of the earlier psychological theories can be categorised as motivationally driven process theories e.g., Expectancy-Value Theory (Atkinson, 1957); Cognitive Dissonance Theory (Festinger, 1957); Balance Theory (Heider, 1958); Attribution Theory (Kelley, 1967); and Expectancy-Disconfirmation Paradigm (Oliver, 1977; 1980). These theories provide a set of assumptions about the subjective cognitive processes that take place when an objective situation presents itself. These theories have proved useful in the generation of sound concepts that have helped academics to operationalise appropriate measures. The underlying processes are based on the logical foundations of intended goal-states driven by desirability and tend to assume a step-like process of feasibility cognitions. For example, Gollwitzer (2012) preferred to apply Lewin's (1951) "tension system", which in not dissimilar to willingness or what he termed "volition." This volition is said to be influenced by a "tension" causing element, that is subjectively profound enough to create an objective pursuit in the form of action, that may be intentional or unintentional (Gollwitzer, 2012, p.527). Thus, the need to survive starvation (willingness concept) might supersede one's intention not to steal if a meal can be pilfered. Moving beyond hypothetical life and death situations, willingness finds further theoretical grounding in the expectancy disconfirmation paradigm (Cardozo, 1965; Olshavsky & Miller, 1972; Oliver, 1977; 1980). Progressive positive disconfirmation increases the subjective willingness to pay for a product (Homburg et al., 2005). Similarly, positive disconfirmation in price fairness correlates to a higher willingness to buy while cognitive dissonance resulting from

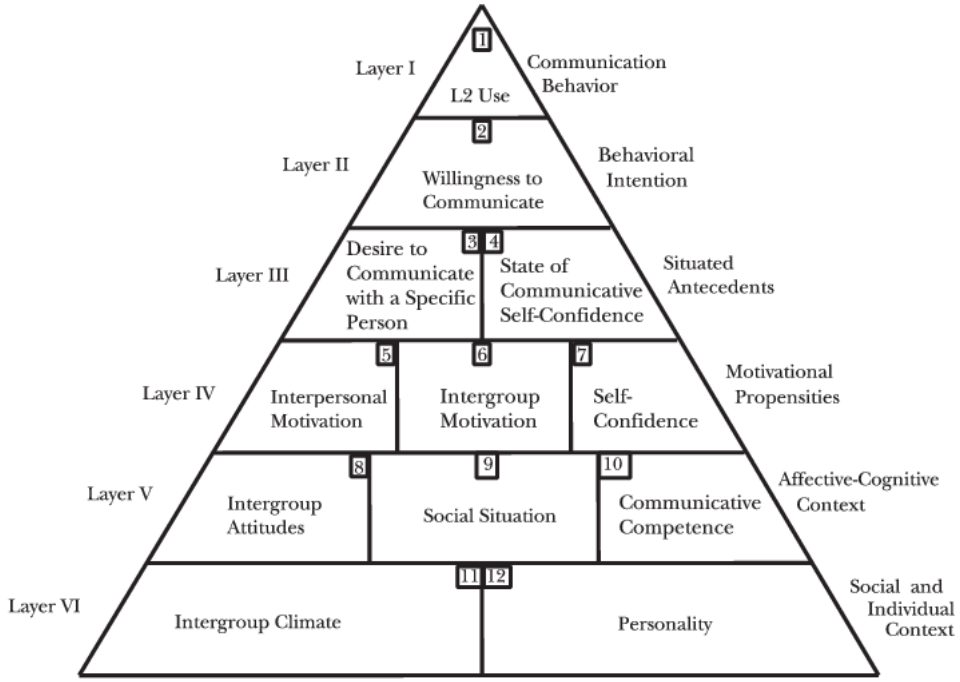
perceived pricing unfairness results in lower willingness to buy (Maxwell, 2002). Raban, and Rafaeli (2007) who looked at willingness to share information, use positive disconfirmation and balance theory and report that an increase in willingness to share information contributes to improved self-image because of social acceptance of shared ideals, that are rooted in self-interest. The theoretical psychological frameworks presented in this sub-section are primarily based on subjective response to stimuli that follow process theory and are principally concerned with self-interest.

As evidenced by the grounding theories discussed above, it cannot be said that willingness can be entirely influenced by the contemplative nature of a subject. As is often the case, agentic volition is influenced socially through participation in what is generally accepted as the mundane, repetitive, highly learned and predictive elements of our life that are involved when we speak to one another. The agentic self, steeped in a near ubiquity of communication hurdles (Burgoon, 1976; McCroskey & Richmond, 1990) can seamlessly weave its way through conversations with wives, co-workers, teachers and so on with precision, yet no one provides a handbook on “small-talk”. Rather these skills are born of years of repetitive experiences and our willingness to adhere to socially governed, unspoken rules of conduct is the norm. Burgoon (1976) highlights “sociological and psychological variables” that play an important role in the “predisposition” of subjective oral communication behaviours. Those who refuse to comply are labelled anomic / alienated and a failure to adopt societal norms suggests a higher likelihood of displaying an unwillingness to communicate because of a “perceived denial of communications” from peer groups. McCroskey and Richmond (1990), who also look at willingness to communicate suggest that interpersonal communication is of critical importance and that societal norms provide significant value for judgments based on one’s communication behaviour. McCroskey and Richmond (1990) refer to verbal communications as a highly

volitional act and note that non-verbal cues are “subject to less volitional control” (p.20). Indeed, the cognitive nature of human communication can become so habituated that almost no thought is required and willingness to communicate is driven primarily by personality and situation. The psychosocial theories established by Erikson (1959; 1966), help to explain some of the pre-conscious and conscious subjective influences in the community which affect willingness to communicate (WTC). This has been loosely defined by MacIntyre et al. (1998, p.547) as a “readiness to enter discourse at a particular time with a specific person or persons, using a second language”. These authors provide a heuristic model of variables that influence WTC as shown in Figure 2.05. The model provides a noticeable balance of psychological and social psychological influences affecting willingness, which they describe as an intention. The researchers identify intrinsic and extrinsic factors that they suggest have an impact on WTC. This research specifically addresses communication in a second language (L2) citing fundamental social psychological features such as introversion and self-esteem factors. In their findings these authors suggest that 60% of variance in WTC is explained by the variables in the model.

Figure 2.05

The Heuristic Model of Variables Influencing Willingness to Communicate (MacIntyre et al., 1998, p. 547)



Zakay et al. (2004) attempted to identify which factor had the greatest impact on "willingness to learn" from experience (in management), through an operationalised study giving managers case scenarios highlighting positive and negative cues, which they termed Early Warning Indicators (EWI). Although the authors do not specifically state the grounding of their research, it draws on the triadic model of "reciprocal causation" (Bandura, 1986) which simply states that the "self-system is both a product and producer of influences" (Bandura, 1984, p.508). Zakay et al. (2004) conclude that when management were successful in their endeavours, they tended to expect the outcome, whereas failures resonated and caused them to learn from their behaviour.

Much of the research that exists in the field of social psychology has analysed rational subjective response using behavioural models like TRA (Fishbein & Ajzen, 1975) and TpB (Ajzen, 1985) to measure attitude toward a behaviour concerning a product and corresponding purchase intention. Hansen (2008) uses the TpB model in consumer behaviour to investigate the associative response of participants Willingness to Buy (WTB) groceries online. He considers three situations (1) those who have not purchased anything online, (2) those who have experience shopping online but have not specifically purchased groceries online and (3) those who have purchased groceries online. Hansen's (2008) "attitude toward" shows the strongest impact on WTB (β = .679, p<.01) (p.134) and the net result appears to be a traditional application of TpB. Where WTB has been used in place of Ajzen's (1985) TpB outcome of intention, arguably Hansen is also measuring behavioural intentions and not willingness.

The above shows that willingness has been looked at in social and cognitive psychology in various forms that include willingness to communicate, learn, remain, buy or purchase. Other types of willingness have also been considered. These include:

1. Willingness to commit - The degree to which a stakeholder is inclined or disposed to be obligated to expend time, effort, and/or resources to fulfil the terms of a proposal (Briggs et al., 2005).
2. Willingness to use - The extent to which an individual has a positive attitude toward using a new technology (Conrad, 2013).
3. Willingness to be flexible - An attitude characterised by the readiness of an employee to change tasks or jobs within the organisation (van den Berg & van der Velde, 2005).

In each of these cases the theoretical underpinning used has varied considerably. Some authors have treated willingness as a type of attitude while others see it as a separate and distinct willingness construct. Willingness research is characterised by an emphasises on a varying degree of readiness to act that is recognised and supported by Gibbons and Gerrard (1995) who identify prototype familiarity as a key driver of willingness, that is in turn a predictor of behaviour. Gibbons and Gerrard (1995, p.506) define the reaction to the prototype as:

> "*the more favourable and similar to the self the individual's image of that representative is, the more willing the person is to be included in that category of people and to convey that image to others – which is what will happen if he or she does perform the behavior.*"

2.1.2.2. Behavioural Intention, Behavioural Willingness and Prototype Perceptions

This section seeks to identify and consider how theorists from different disciplines have sought to separate behavioural intention from behavioural willingness and to establish real ontological distinctions that allow for sound theoretical development. To do this we look at theories and models that emphasise rational reasoning in determining behavioural intention as is the case with TRA and TpB. We also consider situations where decisions happen faster, without the depth of consideration associated with rational reasoning, as is the case with the central and peripheral routes involving a "continuum of attitude change phenomena" (Cialdini et al.,1981, p.392). This "continuum" is formalised as the Elaboration Likelihood Model - ELM (Petty & Cacioppo, 1986; 1996) that provides the root framework for the more recent applications of so-called dual-process theories (Evans & Stanovich, 2013) and the Prototype Willingness Model - PWM (Gibbons & Gerrard, 1995).

Hoch and Loewenstein (1991) note that early models of consumer behaviour do not consider the role of hedonic motivations and the fact that consumers increasingly buy what they "want" not just what they "need". The authors seek to better understand this dichotomous relationship that consumers have when making their buying decisions and use the notion of "interests" and "passions" from Hirschman (1977). Hoch and Loewenstein (1991) compared interest and passion dimensions with "hot" and "cold" cognitions (Abelson, 1963) that makes customers subjectively unpredictable; where "hot" means they are influenced by their emotions while "cold" refers to those who process cognitively without emotional interference. This concept of unpredictable behaviour in a consumer scenario is potentially closely linked to willingness in the sense that certain behaviours are more impulsive and based on reference points. Hoch and Loewenstein (1991) suggest that this subjectively involves "less concern with absolute attainments relative to some psychologically relevant comparison point" (p.494). It is this subjective attention to a reference point, possibly price, environmental concern, or a desire to "fit in", by consumers that is more influenced by their implicit sentiments rather than their controlled cognitions. However, Baumeister et al. (1998) suggest a wilful exertion of self-control, that consists of a "master schema that makes use of information about how to alter one's own response" (p.775), preventing subjective indulgence in wild overspending on hedonic goods that often provide only a short-lived feeling of satisfaction (Baumeister, 2002).

Various researchers have looked at those behaviours that are emotionally driven rather than cognitively derived. Resultant actions are characterised by a lack of control with reference to sentiment and are by their nature "unplanned, spontaneous impulse(s)" (Baumeister, 2002, p.670). The interplay of impulse and self-control influencing buying behaviour suggests that not all impulses are irresistible and conversely, that buying behaviour is not necessarily the result of deliberative contemplation of goal-states. There are numerous studies that have identified

behavioural patterns in which irrational behaviours such as impulsivity (Baumeister, 2002; Vohs & Faber, 2007), lack of will power (Hoch & Loewenstein, 1991) and conspicuous consumption (Rucker & Galinsky, 2009) are identified as factors that bear strong resemblance to consumer willingness. However, there exists limited research in consumer behaviour that specifically investigates willingness.

Rendina et al. (2017, p.122), argue that willingness "involved a more ideal scenario" and is markedly different from intention which "was more real world" and more closely aligned with goal striving and volition (Bagozzi & Dholakia, 1999). Willingness is a separate higher order construct distinct from intention (Gibbons et al., 1998a) which shares more similarity to motivations and expectancy value; defined as the "likelihood of a particular behavior (given an opportunity)" (p.1166). The meta-analysis by Rivis et al. (2006) shows that not all decisions are rationally motivated and that while the presentation of certain risk images can instil positive evaluations (or willingness), these may still not result in preventing risky behaviours (p.497). These findings are further supported by the earlier work by Rivis and Sheeran (2003) on the descriptive norm-intention relationship which suggest that health-risk associations have a stronger impact on behaviours than health-promoting activities. This is because "health-risk behaviours are more enjoyable than health promoting behaviours" (Rivis & Sheeran, 2003, p.229). Thus, when attempting to predict behaviours, it may be necessary to consider more than just behavioural intention (Gibbons et al., 1998a). Moreover, the antecedents to intention in TRA and TpB did not provide sufficient explanation of the behavioural intention outcome (Rivis & Sheeran, 2003) and this has led to calls for the inclusion of willingness or prototype willingness in future health risk behaviour and health-protective behaviour studies (Rivis et al., 2006, p.497).

Initial theoretical grounding for the separation of willingness and intention comes from the Elaboration Likelihood Model (ELM) (Cacioppo & Petty, 1984; Petty & Cacioppo, 1986). ELM provides a framework for the measurement of persuasion effects and the interpretation of communications aimed at influencing attitudes. The authors distinguish between “central” and “peripheral” routes, with central routes requiring more cognitive effort while the peripheral route is more automatic in response. In essence, ELM reflects dual-type theories like dual-process theory (James, 1890) and dual-systems theories (Evans & Stanovich, 2013). Dual-process and dual-systems theories are termed “dual-type” theories with ‘Type 1’ referring to the broadly “intuitive” and ‘Type 2’ referring to “reflective” theories (Evans & Stanovich, 2013, p.225). This intuitive-type processing (Evans & Stanovich, 2013) is referred to throughout the present research as *reactive*, in keeping with the suggested language of Gibbons and Gerrard (1995) and the concept of behavioural willingness’ relationship to proximal opportunity which may be “reacted” upon due to a variety of situational influences.

Dual-type theory suggests that humans possess two distinct patterns of perceptive reaction. The first emphasises the rational minded response (or the ‘central route’ in the ELM model) where the brain draws from experience and logic, is calculative, and through reflection on possible outcomes, opts for a measured course of action or premeditative response behaviour (Fishbein & Ajzen, 1975). The outcome of these reflective processes are logically driven behavioural intentions which in the TpB-type models are inclusive of factors like age and experience and can lead to significant behavioural prediction with reported correlations (Armitage & Conner, 2001) between behavioural intention and actual behaviour ranging from “0.46 to 0.58” (p.486).

In the second pattern of perceptive reaction referred to as the ‘peripheral route’ in ELM or Type 1 (Evans & Stanovich, 2013), heuristics play an important role (Tversky & Kahneman, 1973). Indeed, Tversky and Kahneman (1973) establish the notion that seldom are people fully aware of how their subjective impressions are formed but offer “representativeness”, “availability” and “anchoring” (p.1131) of these impressions as tenets of heuristics. In this theorised state of reaction there is less rationale, and the reactive response is not a cognitively controlled response but an impulsive evaluation of the surface level stimuli being interpreted by the brain. Evans and Stanovich (2013) provide elaboration of dual-process and dual-systems reasoning processes, as shown in Table 2.03.

Table 2.03

Clusters of Attributes Frequently Associated with Dual-Process and Dual-System Theories of Higher Cognition (Evans & Stanovich, 2013, p.225)

Type 1 process (Intuitive)	Type 2 process (Reflective)
Defining features	
Does not require working memory	*Requires working memory*
Autonomous	*Cognitive decoupling: mental simulation*
Typical correlates	
Fast	Slow
High capacity	Capacity limited
Parallel	Serial
Nonconscious	Conscious
Biased responses	Normative responses
Contextualized	Abstract
Automatic	Controlled
Experience-based decision-making	Consequential decision-making
Independent of cognitive ability	Correlated with cognitive ability
System 1 (old mind)	System 2 (new mind)
Evolved early	Evolved late
Similar to animal cognition	Distinctively human
Implicit knowledge	Explicit knowledge
Basic emotions	Complex emotions

The Prototype Willingness Model - PWM (Gibbons & Gerrard, 1995; Gibbons et al., 1998b) builds on ELM and dual-process theories. In PWM, Gibbons et al. (1998b, p.321) highlight the role of willingness and note that willingness:

"*does not involve goal states, plans or instrumental actions. Compared to intentions, BW (behavioural willingness) involves relatively little forethought, which means less consideration of outcomes or consequences.*"

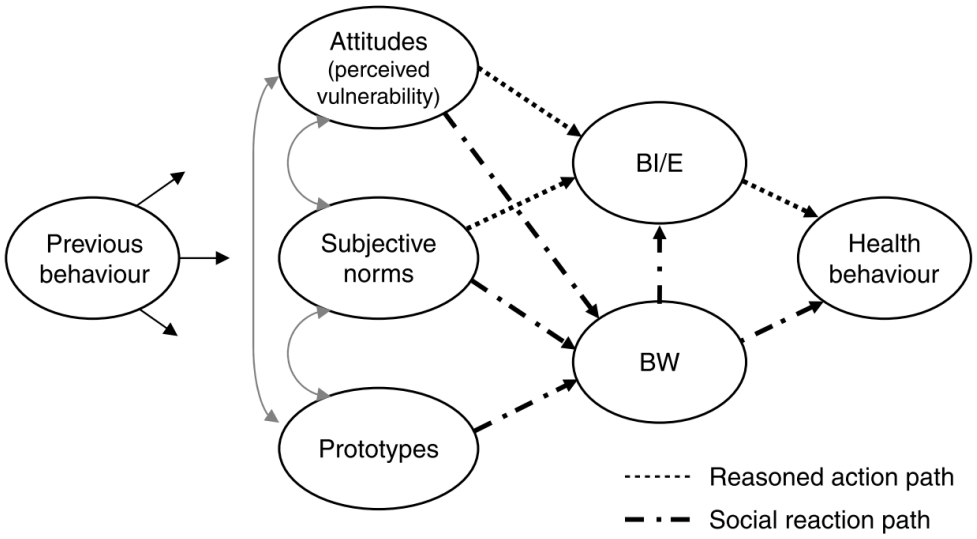
PWM recognizes that decisions do not always stem from reflective processes, especially in the case of youth behaviour (e.g., drinking and driving, unsafe sex, alcohol consumption and drug use). PWM is inspired by TpB with prototypes (or prototype perceptions) replacing perceived behaviour control (PBC) and the addition of behavioural willingness and previous behaviour as antecedent variables impacting the final behaviour outcome. The evolution in PWM caters for a limitation of TRA and TpB recognised by Ajzen (1991), Armitage and Conner (1999) and Albarracin et al. (2005). In this respect, Albarracín et al. (2005, p.74) observes that "It is true that much of the research conducted in the framework of theories of reasoned action and planned behavior has devoted little attention to the role of emotion in the prediction of actions."

The PWM recognises two paths to behaviour. The first consists of a 'reasoned action path' where outcomes follow theories like TRA and TpB associated with Type 2 situations. The second is made up of a "social reaction path" (Gibbons et al., 1998b) associated with Type 1 situations where decisions happen faster, without the depth of consideration associated with Type 2. Moreover, the "social reaction path" (Gibbons et al., 1998b) that emphasises reactive decision-making in PWM shows prototype perceptions as drivers of behavioural willingness – see Figure 2.06. Prototype perceptions consist of positive or negative valences attached to cognitive representations (i.e., prototypes) that people hold for typical members of particular social categories (e.g., the typical drinker). Therefore, Pomery et al. (2009, p.895) suggest that prototype perceptions "represent distinct images of the type of person who engages in particular risk behaviors". Two types of prototype perceptions are typically studied in PWM models. First, prototype 'favourability' perceptions that consist of the extent to which individuals' positively or

negatively evaluate the prototype and second, prototype 'similarity' perceptions that consist of the extent to which an individual believes they are similar to the prototype (Elliott et al., 2017). Gibbons et al. (2009) hold that the inclusion of prototype perception and behavioural willingness "can improve the predictive power of these theories (expectancy-value)" (p.243). Behavioural willingness is envisaged to encompass "an openness to risk opportunity" (Gibbons et al., 2009, p.236).

Figure 2.06

The Prototype / Willingness Model (PWM) (Gibbons et al., 2009, p. 237)



Gerrard et al. (2008, p.30) list the characteristics that help distinguish willingness from intention – Table 2.04. While these characteristics are by no means exhaustive or represent hard and fast rules with respect to processing "Types", Types 1 and 2 processes need not be treated as being mutually exclusive of one another, and that in all likelihood, there is considerable overlap between the two (Kahneman & Frederick, 2002). Understanding how

Types 1 and 2 in ELM and ‘reasoned action’ and ‘social reaction’ paths in PWM interact with one another helps underpin the differences between behavioural intention and behavioural willingness.

Table 2.04

Adaptation of Dual-process Associations of Willingness and Intentions (Gerrard et al., 2008, p.30)

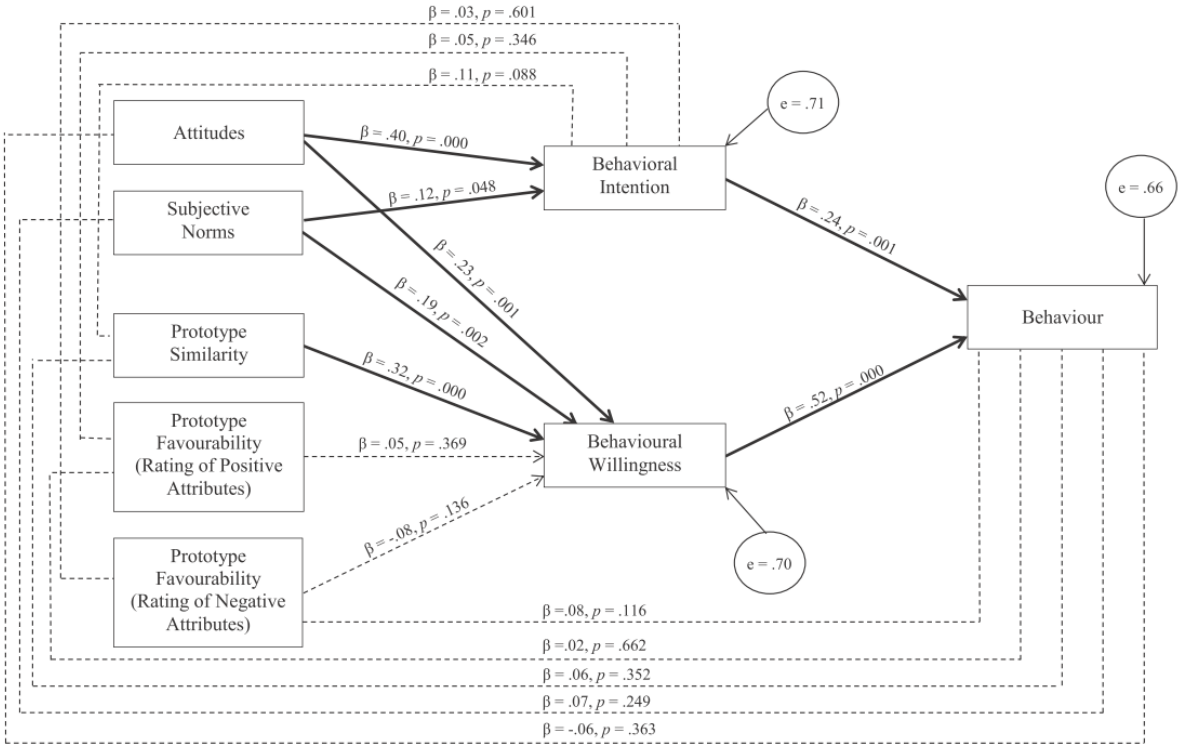
Willingness – Heuristics – Type1	Intention – Analytic – Type2
Affective	Cognitive
Identification (Image-based)	Identification (Rule-based)
Intuitive	Rational
Means – End	End – Means
Reactive	Reasoned
Routine	Unusual
Socially Influenced	Cognitively Influenced

Elliott et al. (2017) use PWM to argue that intentions are not the sole driver of behaviour and express the importance of considering behavioural willingness as an important driver of behaviour. Elliott et al. (2017, p.736) define behavioural willingness as “a general openness to behave that increases the likelihood of a behaviour when an individual encounters ‘facilitating situations’”. By way of example, the authors argue that “under certain circumstances (e.g., when a driver is late or in a hurry), individuals can perform a behaviour (e.g., break the speed limit) for

which they may not have formed a prior intention. Instead, the execution of the behaviour is a ‘reaction’ to the encountered situations” (Elliott et al., 2017, p.736). Their empirical research shows that behavioural willingness has a stronger impact on behaviour (β = .52, p<.001) than behavioural intention (β = .24, p<.001) – Figure 2.07. In the PWM model as applied to driver speeding behaviour, Elliott et al. (2017) also consider the impact of prototype perceptions of similarities and favourability (positive and negative) on behavioural willingness but report that only prototype perceptions of similarity has a significant effect on behavioural willingness (β = .32, p<.001). Moreover, their model and results show no relationship between behavioural willingness and behavioural intention.

Figure 2.07

Operationalised Prototype Willingness Model (Elliott et al., 2017, p.743)



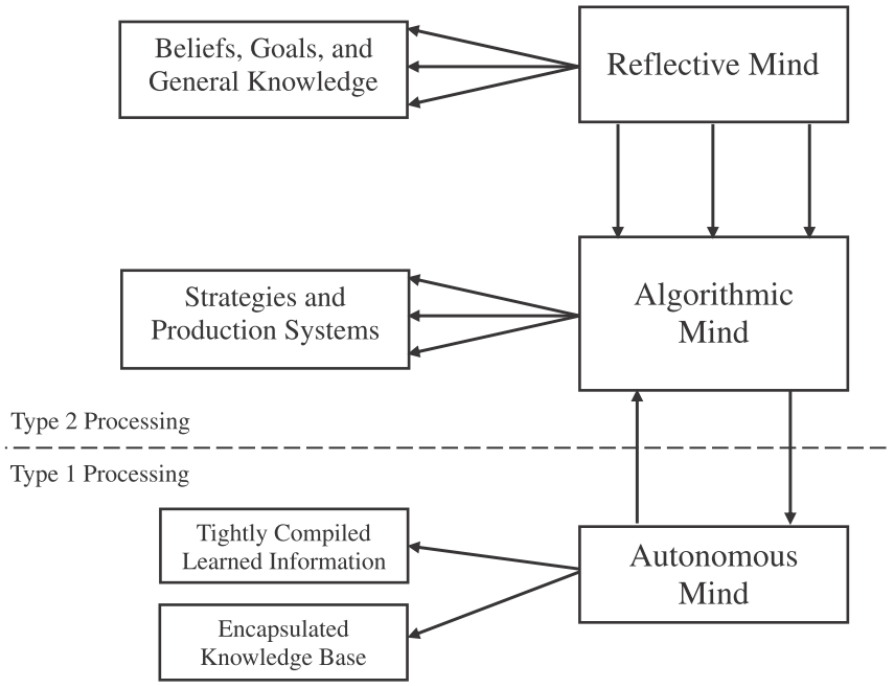
Note. Lines with arrowheads indicate hypothesised relationships. Bold lines indicate significant paths. Dotted lines indicate non-significant paths. Covariances between the predictors of behavioural intention/willingness and between behavioural intention and behavioural willingness are not shown for presentational reasons only. $R^2_{\text{(total direct and indirect effects)}} = 0.89$.

The absence of a significant relationship between behavioural willingness and behavioural intention demonstrated by Elliott et al. (2017) may be an oversimplification. Stanovich et al. (2011) provide a visual representation of Types 1 and 2 processing and their interrelation – Figure 2.08. Therefore, the autonomous mind (in Type 1 processing) is used to access “evolutionarily-compiled” and easily retrievable information arising “due to overlearning and practice” (Stanovich et al., 2011 p.107). On the other hand, the algorithmic mind (in Type 2 processing) is reserved for complex and cognitively demanding tasks involving temporal

controls required in “production system rules for sequencing behaviours” (Stanovich et al., 2011, p.107) that occurs in for example, the planning for retirement. The sharing of information, primarily from the autonomous mind to the algorithmic mind as a “preattentive process” (p.107) would suggest, that there might exist a relationship among a proposed reactive process like willingness and the more reflective intention.

Figure 2.08

Knowledge Structures – Tripartite Framework (Stanovich et al., 2011, p.107)



TpB models tended not to consider behavioural willingness when measuring the impact of behavioural intention on behaviour but other models, especially PWM, have looked at behavioural intention, behavioural willingness, and behaviour concurrently. The PWM (Gibbons & Gerrard, 1995; Gibbons et al., 2009) and subsequent research (Elliott et al., 2017) provide

empirical support for the distinction between behavioural willingness and behavioural intention with prototype perceptions acting as driver of behavioural willingness along the “social reaction pathway”. This social reaction pathway has similarities to the ELM by Petty et al. (1983) peripheral route and Type 1 or autonomous processing as suggested by Evans & Stanovich (2013). The earlier applications of PWM (Gibbons et al., 1998b) envisages a link between behavioural willingness and behavioural intention, but this link is not supported empirically in Elliott et al. (2017). On this basis we therefore expect that behavioural willingness does not impact behavioural intention directly, but prototype perceptions act on behavioural willingness to impact final behaviour. We also expect a direct link between prototype perceptions and behavioural intention, therefore:

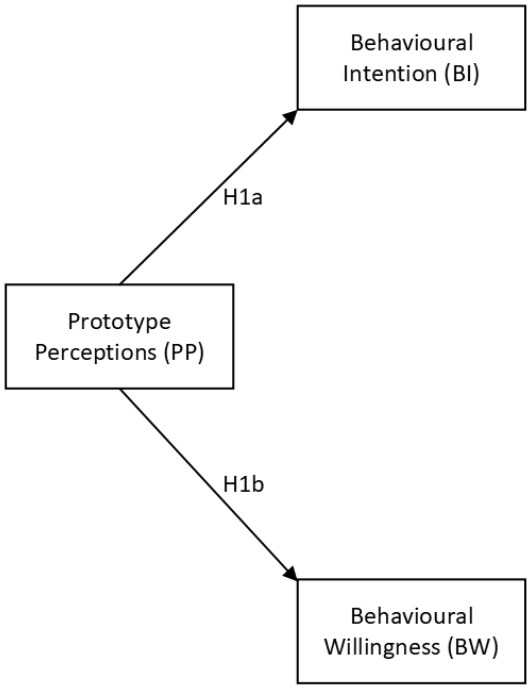
H1a: The stronger the prototype perceptions, the stronger the behavioural intention.

H1b: The stronger the prototype perceptions, the stronger the behavioural willingness.

These relationships are depicted in Figure 2.09.

Figure 2.09

Research Model of Relationships 1



2.2. Customer Loyalty

The concept of customer loyalty has received considerable attention in the literature, not least because it is known to have desirable outcomes in terms of positive word-of-mouth and repeat purchasing. Customer loyalty manifests itself at various levels that include application at a brand, organisational, employee and store level. The increased attention that customer loyalty has received over the years has also helped to provide a much richer conceptualisation. This section commences by tracing the historical development and concept enrichment that has taken place and outlines the evolution, conceptualisation, and operationalisation of customer

loyalty. In the context of this evolution, antecedents that are identified as having the greatest impact on customer loyalty are discussed while key consequences of customer loyalty are also highlighted.

2.2.1. 1923 to 1968: A Behaviour Approach to Customer Loyalty

Almost 100 years ago, the paper titled *Consumer's Buying Habits* by Copeland (1923) was possibly the first article to identify concepts that are akin to loyalty. In his study, the author classifies goods into three groups: convenience, shopping, and specialty goods, indicating that all three types can exist in both branded and unbranded form. Copeland emphasises the importance of branding and its emergence as an attribute that influences consumer attitudes. This takes place initially through recognition, then, if the previous encounter with the brand was positive, through preference. It is noted that this process can vary according to the category of goods. The final insistence stage can be said to represent the loyalty stage and occurs when the consumer accepts no substitute save for urgent situations (Copeland,1923).

Research on customer loyalty continued to evolve over time and later work conducted by Brown (1953) sought to investigate customer loyalty toward a brand in the fast-moving consumer goods market. Brown (1953, p.255) holds that a brand loyal customer:

> *"is one who tends to repurchase a particular brand because of some real or imaginary superiority attributed to that brand."*

Brown (1953, p.255) observes that “Loyalty is low where product entries are frequent” and suggests that competitive efforts could negatively impact loyalty. Brown’s research also distinguished among undivided, divided, unstable and no loyalty customers that could be used as a basis for segmentation. His research was sparse on theory. However, his operationalisation focused on behavioural metrics that used “relative frequency” or repeat purchase behaviour which were gathered by analysing repeat purchase patterns. Brown posits that one of the consequences of loyalty is greater market share.

Later research sought to provide greater depth to the concept of brand loyalty. Thus, Tucker (1964, p.32) provides a conceptualisation that highlights “biased choice” and argues that:

> “*Brand loyalty is conceived to be simply biased choice or behaviour with respect to branded merchandise*”

Both Brown (1953) and Tucker (1964) adopted a behavioural approach and argue that attitudinal and cognitive considerations were to be ignored and that consumers’ outcome behaviour should be used as the sole predictor of loyalty status. In his research, Tucker (1964) investigated the impact of variations in discounts and premiums and concluded that price was the most important aspect that conditioned customer behaviour. The definition of customer loyalty by Farley (1964) highlights the amount of time spent considering a particular purchase and the dollar value of that purchase. Rather than emphasise price, Farley’s research suggests that behavioural outcomes are influenced by perceived brand preference and are mediated by ‘importance’. His operationalisation of loyalty considered price, market share held by the brand, share of same store sales in the vertical for the brand and availability. Like Brown (1953), Farley

(1964) also argues that customer loyalty is negatively affected by the availability of many substitutes.

Up to the mid 1960's, a behavioural approach predominated, and loyalty studies primarily focused on variables that were measured through outcomes that could be observed in the form of "in-store" behaviours, such as repeat purchase patterns. Most often, loyalty was considered in circumstances when consumers had one or more brands to choose from, irrespective of whether there existed a real difference in the performance of the product on offer. McConnell (1968) holds that brand preference can still be established even when there are no performance differences among products. McConnell (1968) envisaged that both preference and quality contributed to loyalty and in the case of quality, he argues that "when differences in products are difficult to perceive, price is a cue correlating highly to quality" (p.14). In his work, McConnell (1968) attempted to replicate the practitioner's experience of "branding", by using an experiment intended to simulate the consumer's decision-making process when given a choice situation. To test his hypotheses, he applies a discount to brands with a lower price point and to brands perceived to be of lower quality. His research demonstrated that consumers would develop a preference for a commoditised product that was branded as "premium" through manipulation of its price and suggests that this preference is an identifiable contributor to brand loyalty. This is one of the earliest examples in the field of loyalty research where an experimental design was adopted.

The loyalty studies described above all adopted a classical conditioning approach (Watson, 1924). Therefore, the conceptual definition of customer loyalty envisaged that loyalty could be inferred from behaviour outcomes. This behaviourist perspective saw researchers

focussing on behavioural outcomes measured in terms of observable repeat purchase outcomes occurring in response to changes in one or more variables such as price, availability, and importance. In the behaviourist tradition, what occurs inside the mind of the customer is ignored.

2.2.2. 1969 to 1990: Toward a Cognitive Definition of Customer Loyalty

Real advancement in loyalty theory began to take shape when a cognitive perspective started to replace the earlier behaviourist perspective. One of the earliest proponents of such an approach in loyalty was Day (1969) who proposed an attitudinal component arguing that: "loyalty should be evaluated with both attitudinal and behavioral criteria" (p.30) and that "once attitudinal criteria are imposed, loyalty becomes a brand-specific concept" (p.30). He envisaged customer loyalty as a fluid concept and the attitude toward a brand as a dynamic rather than a static event. Therefore, Day (1969, p.34) described brand loyal customers *as* those:

> *"committed to the value and price appeal of the brand by being confident that they have judged the brand correctly, coupled with the perceived need to economize."*

Day (1969, p.30) holds that "loyalty should be evaluated with both attitudinal and behavioral criteria" and suggests that customers exhibiting spurious loyalty were more susceptible to variety seeking behaviour. He reports that almost 30% of repeat purchases, previously considered to represent loyal customers, were willing to switch if there was a reasonable alternative available at the same price. One important aspect noted in the research was that customers considered a low number of alternative product offerings. Day (1969, p.35) further notes that "strong affective orientation toward the brand narrows his (the customer's)

perceptual judgment" and therefore once a positive attitude, or "affect" for a brand is established, the consumer is far less likely to consider alternatives. In his empirical investigation of the concept, Day (1969) utilises multiple regression equations to identify drivers of loyalty. He reports that the resultant loyalty outcome score from his antecedent variables is more reliable than simply measuring repeat purchase behaviour. His work suggested that habitual purchases may be a result of consumers economising on their time. Day (1969) is often regarded as the first work to consider both attitudinal and behavioural aspects of loyalty (Fournier & Yao, 1997; Gremler & Brown, 1996; Rundle-Thiele, 2005). With customer loyalty primarily envisaged as an attitude, research has developed in a direction that considers other psychological elements.

Jacoby and Kyner (1973, p.1) observed that "while operational definitions abound, there are no conceptual definitions of brand loyalty". They criticise earlier research for being too focused on "overt purchase acts" and for a lack of conceptual depth on customer loyalty. Jacoby and Chestnut (1978) undertake an extensive literature review and consider some 53 different models or approaches to customer loyalty, highlighting the relative strength of any measurement used. Their work represented a comprehensive review of the literature on customer loyalty from the 1920's through the 1970's. Their review indicates that more than 60% of all operational definitions focused only on behavioural attributes, meaning they were based on actual purchase behaviour or reports of it. Indeed, 33 of the 53 studies identified, focused on a behaviour dimension only and twelve studies recognised an attitudinal dimension only. Their evaluation of the behavioural indices used in previous studies emphasised the lack of a logical conceptual underpinning evident in most of these studies. Jacoby and Chestnut (1978, p.74) point out that:

> *"without an explicit conceptual definition to serve a guiding function, it is easy to see how operational definitions often generate problems both by including inconsequential or*

irrelevant elements while at the same time ignoring important aspects of the phenomenon under consideration."

At the time of the research, in 1978, only eight studies could be identified that applied a composite approach identifying the existence and/ or measurement of both an attitudinal and a behavioural component to loyalty. Therefore, Jacoby and Kyner (1973, p.2) highlight six criteria considered necessary and collectively sufficient for conceptually defining brand loyalty, as follows:

"Brand loyalty is (1) the biased (i.e., non-random), (2) behavioral response (i.e., purchase), (3) expressed over time, (4) by some decision-making unit, (5) with respect to one or more alternative brands out of a set of such brands, and (6) is a function of psychological (decision-making, evaluative) process."

These criteria are intended to satisfy the descriptive functions of theory and to separate it from what is important and what is not, thereby providing the "building blocks" of theory. This conceptual definition of loyalty offers a significant improvement on earlier work as it effectively shifts the focus away from measured behavioural outcomes in terms of purchase sequences. It also builds on the work by Day (1969) as it recognises the function of the psychological process and attitudinal focus by this author. Jacoby and Kyner (1973) also make the point that for loyalty to be present there must also be the possibility for disloyalty and that both should be measurable. The authors observe that where there exists a greater number of alternatives and the buyer has at some point experienced cognitive dissonance (Festinger, 1957), the buyer becomes cautious and seeks to avoid its recurrence thereby exhibiting brand loyalty for trusted alternatives.

Holbrook (1978) suggests that the attitudinal multi-attribute models of the 1970's were primarily based around a conative factor or intent to purchase, an affective factor or sentiment toward a brand and cognitive factor or an awareness of a brand. Research by Jacoby and Chestnut (1978), make use of the earlier definition of loyalty (Jacoby & Kyner, 1973) and echo Holbrook's sentiment arguing for the importance of considering three aspects, namely: beliefs, states of affect and behavioural intention. The researchers suggest that each aspect by itself is an indicator of brand choice but when considered concurrently they create a stronger relationship.

2.2.3. 1991 to 2020: Toward a Richer Understanding of Customer Loyalty

Dick and Basu (1994) recognise that prior research on customer loyalty has focussed primarily on static relationships and propose an attitudinal framework that supports the position that customer loyalty is not just about repeat patronage. The framework by Dick and Basu (1994, p.102) suggests a 'relationship based' encounter established by "the relationship between relative attitude and repeat patronage". When relative attitude is favourable and social norms and situational influences have been satisfied, loyalty or "repeat patronage" may occur. In the conceptualisation by Dick and Basu (1994, p.99):

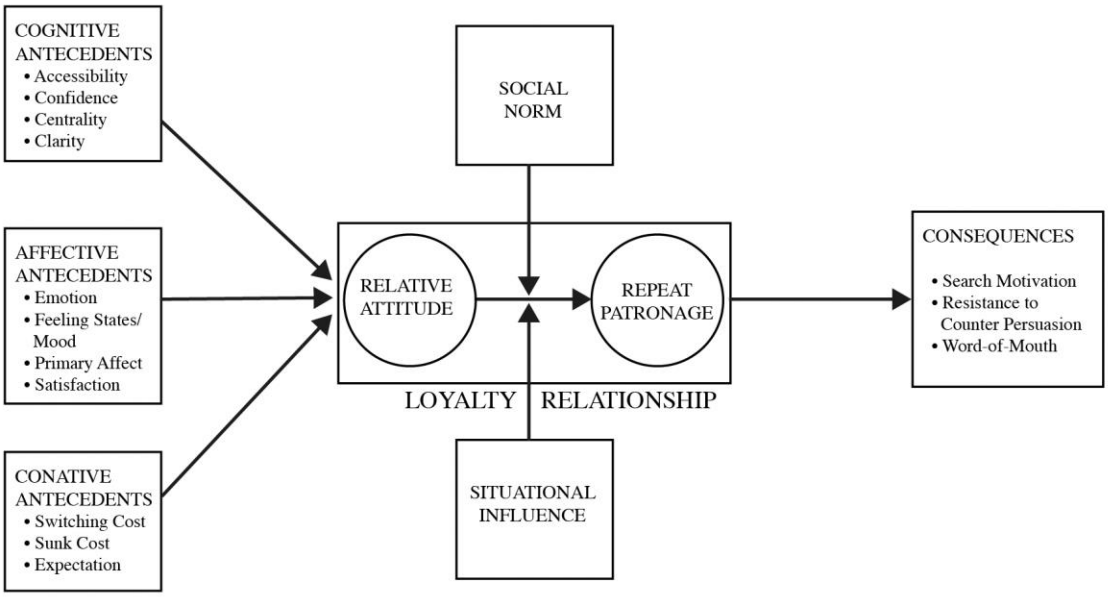
> *"Customer loyalty is viewed as the strength of the relationship between an individual's relative attitude and repeat patronage."*

Their framework offers a rich explanation of the formation of attitudes prior to the consumer exhibiting repeat purchase behaviour in the context of a loyalty relationship – Figure 2.10.

Relative attitude is driven by three sets of antecedents that Dick and Basu (1994) group under cognitive, affective, and conative headings. The cognitive element is comprised of accessibility, confidence, centrality, and clarity. These elements focus on the breadth of considerations the consumer subconsciously and consciously experiences in the formation of their decision to purchase. For instance, accessibility represents the ease with which the recall process occurs in the subject's mind as they are forming their purchase decision, which can range from inaccessible (not in the realm of comprehension) to automatic (purchase made habitually). This recall process is an important consideration for practitioners, as the evoked set enables the consumer to optimise the effort required to make a purchase decision. Cohen and Areni (1991) posit the affective elements consist of emotion, feeling states or mood, primary affect, and satisfaction. Cohen and Areni (1991) hold that affect is a "valenced feeling state" (p.191) that relates to the subject's retrieval of sentiment toward a product as opposed to the more calculative state of cognition. Dick and Basu (1994) describe how satisfaction results from expectations being matched to perceived performance, in turn creating affect. Affect is therefore seen as a dynamic function that improves, stays the same, or deteriorates with each subjective engagement with the brand. Finally, the conative elements represent the third set of variables proposed by the authors. These encompass the behavioural disposition of the subject and consist of switching costs, sunk costs and expectations. Switching costs are an important consideration because of the impact they have with the consumer when considering transition to an alternative. These impairments to variety seeking have been found to positively affect behavioural loyalty (Dick, 1995).

Figure 2.10

Conceptual Framework of Customer Brand Loyalty (Dick & Basu, 1994, p.100)



The antecedents outlined in the model proposed by Dick and Basu (1994) provide a valuable addition to the overall conceptual development of customer loyalty because of the depth that the framework provides. The suggested formation of the relative attitude via the various antecedents uniquely positions the characteristics for consideration and expectation on the part of the consumer prior to the act of patronage and establish a connection to the earlier notions about intention and willingness. The proposed framework incorporates several elements from TRA (Fishbein & Ajzen, 1975); most notably the aspect of social norms; the idea that prior to the overt behaviour of purchasing, there might be referent considerations on the mind of the subject which would in turn affect their purchase attitude; and influence the intent of repeat patronage.

Oliver (1999) highlights the importance of Dick and Basu's (1994) antecedent model as he also employs a framework that consists of a cognition – affect – conation sequence but differs in that he envisages these stages as integral phases of customer loyalty rather than antecedents. Therefore, Oliver (1999, p.34) proposes a conceptual definition of customer loyalty as:

> *"A deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour."*

This conceptual definition of customer loyalty is not dissimilar to that used earlier by Jacoby and his co-authors (Jacoby & Chestnut, 1978; Jacoby & Kyner, 1973) that envisaged the need to satisfy six criteria for loyalty to be deemed present. A direct comparison of the two definitions is provided in Table 2.05.

Table 2.05

Contrast of Conceptualisation of Loyalty by Jacoby and Chestnut (1978) and Oliver (1999)

Jacoby and Chestnut (1978, p.80)	Oliver (1999, p.34)
1) Biased	Deeply held commitment
2) Behavioural response	Rebuy or repatronise
3) Expressed over time	Consistently in the future
4) By some decision-making unit	A preferred product or service
5) With one or more options	Despite situational influences and marketing efforts having the potential to cause switching behaviour
6) Psychological – decision making process	Repetitive same-brand or same-brand set purchasing

Oliver seeks to explain loyalty using first a four-phased (Oliver, 1999) and later a five-phased (Oliver, 2014) process consisting of a cognitive, affective, conative and fortitude phases that lead to a final action phase, as follows:

Phase 1 – Cognitive Loyalty

Oliver (1999) characterises the initial phase of “Cognitive Loyalty” (p.36) as embracing the customer’s preference of one brand over another. At this early loyalty stage, consumers themselves may not be fully cognisant of their decision to select one brand over another but there exists a credence that one brand will be superior to another. Oliver (1999) suggests that information drives this aspect and may include perceived attributes such as price, packaging, advertising claims and word-of-mouth referred to as “attributes” (p.35). This cognition is more

likely to be important for consumers during the search phase and in the early stage of a relationship with a product.

Phase 2 – Affective Loyalty

Oliver (1999) holds that the second "Affective Loyalty" (p.36) phase occurs when the consumer develops feelings (affect) toward a brand because of a single or cumulative satisfactory encounters. These positive emotions create a stronger bond with the brand, but the resultant outcome is not undivided loyalty since, as Oliver (1999, p.35) states "large percentages of brand defectors claim to have been previously satisfied with their brand." Given the lack of true depth in the relationship between the brand and the consumer, both cognitive and affective loyalty are susceptible to switching behaviours.

Phase 3 – Conative Loyalty

Oliver (1999) suggests that the third, "Conative Loyalty" (p.36) phase results when consumers' behaviour is consistent with their intent to repurchase a chosen brand. This phase is driven by perceived satisfaction with earlier purchases. In this phase the consumer exhibits a commitment to rebuy and is far less likely to seek out the information that would lead to switching behaviour. The author suggests this is not true loyalty but is similar instead to motivation or intent to rebuy.

Phase 4 – Fortitude

Oliver (2014) adds "Fortitude" as a fourth phase to his loyalty model, which is "achieved when the consumer fervently desires the consumable in a prohibitive, exclusive relationship"

(p.439). He argues that this phase is a natural occurrence that is experienced by the consumer and not one induced by a marketer. Oliver (2014, p.445) further argues that:

> "*At the lowest levels of fortitude, the consumer has only brand-related information. At the deepest levels of fortitude, the consumer has developed both the action inertia ... and also a fierce defence against competitive encroachment that approaches "blind faith."*

Phase 5 - Action

The moment of purchase is described by Oliver (1999) as the final 'Action phase' (p.36) of loyalty and represents purchase behaviour. This phase is derived from "action control" (Kuhl & Beckman, 1985) and reflects the purchase behaviour outcome envisaged in TRA and TpB (Fishbein and Ajzen, 1975; Ajzen, 1985; Ajzen, 1991). It is characterised by inertia and the overt act of purchase itself where the customer has demonstrated cognitive, affective, conative or fortitudinous loyalty prior to the action. Oliver (1999, p.36) identifies two key elements that are critical in this stage, namely: customers' "readiness to act" and "overcoming of obstacles". The author argues that regardless of purchase complexity, the 'action phase' requires that these two key elements be satisfied and at least one of the three identified "phases of loyalty" needs to have been observed. Oliver (2014) also proposes a measure of loyalty composed of five, single items to capture each of the different loyalty phases identified in his research.

2.2.4. Empirical Applications of Oliver's Conceptualisation of Customer Loyalty

The process model proposed by Oliver (1999) has been used in several studies (e.g., Caruana, 2002). However, the 'Fortitude' phase identified in Oliver (2014) does not appear to have featured yet. Thus, McMullan and Gilmore (2003) apply Oliver's (1999) phases of loyalty together with situational influences and marketing tactics, wherein the authors provide support for the psychometric properties of the measures used to capture their constructs. In a later paper, McMullan (2005) again utilises Oliver's (1999) four-stage measure to test the impact of loyalty sustainers and vulnerabilities and concludes that "Loyalty is present only when there is evidence of each of the four phases" (p.478).

Another application of Oliver's (1999) four-phase model is that by Evanschitzky and Wunderlich (2006) where the authors present a thorough literature review and focus on the impact of personal characteristics (age, gender, income, and education) and situational characteristics (expertise, price orientation, critical incident recovery and loyalty card membership) on the loyalty process. Evanschitzky and Wunderlich (2006) suggest that the different phases of loyalty be conceptualised as follows; cognitive loyalty as an evaluation of attribute performance, affective loyalty as an evaluation of a person's global affect or feeling state, and conative loyalty as intention to continue purchasing together with a deep commitment for the retail location (p.332). Also, the authors define the action phase of loyalty in terms of behaviour only, noting that intention to purchase and the overcoming of obstacles is not present in their work (Evanschitzky & Wunderlich, 2006, p.341).

Another application of the phases model by Oliver's (1999) is by Yuksel et al. (2010) who investigate tourism destination attachment and apply a model to identify emotional attachments (affect) that may be present when consumers are considering holiday choices. Yuksel et al. (2010) focus on the cognitive, affective, and conative phases of "place attachment" and consider antecedent drivers for Place Dependence, Affective Attachment and Place Identity (p.281). Their investigation suggests that cognitive and affective loyalty are positively impacted by consumer's "place attachment", with customer satisfaction partially mediating the effect on affective and conative loyalty. Oliver's process model with its different phases of loyalty has received considerable attention in marketing and related literature and his models are rich in explanatory terms and highly generalisable but they are challenging to operationalise correctly (Yuksel et al., 2010).

2.2.5. Customer Loyalty and Customer Brand Engagement

Customer Brand Engagement (CBE) has been used in strategic marketing synonymously or as an alternative to customer loyalty, particularly by practitioners. Hollebeek (2011, p.790) conceptualises brand engagement as "the level of an individual customer's motivational, brand-related and context-dependent state of mind characterised by specific levels of cognitive, emotional and behavioural activity in direct brand interactions". Where "direct" brand interactions refer to physical contact-based interactions, versus indirect interactions, like mass media. Hollebeek (2011) proposes a conceptual model that links CBE, composed of cognitive, emotional and behaviour components, in a two-way effect with what the researcher terms "occurrence of flow" comprised of a variety of touch points between the customer and the brand. Hollebeek (2011) has encouraged CBE in the academic literature but it is clear her

conceptual model for CBE is ‘inspired’ in no small manner by Oliver’s (1999) four-phase model and by Oliver’s (2014) schemata linking satisfaction to the loyalty process model.

Similarly, De Villiers (2015) has proposed the notion of consumer brand enmeshment (CBEM). Again, the author never cites Oliver, but the studies on which he grounds CBEM and the authors he cites (Bowden-Jones, 2009; Carter, 2008; DeWitt et al., 2008; Hollebeek, 2011; Palmatier et al., 2006; van Doorn et al., 2010) have their work grounded in Oliver’s earlier work on the cumulative loyalty (1999) process model. Indeed, by way of example, the three-dimensional matrix de Villiers (2015) provides as one of the figures in his paper uses cognitive, affective, and conative descriptors for its axis that have been relabelled as engagement instead of loyalty. De Villiers (2015, p.1961) suggests that this metatheoretical work supports “the complexity of the antecedent conditions, the interaction between consumer antecedents (A to F); the impact of context and channels on the brand-consumer inter-action antecedents; and the effect of various antecedents in the active/passive engagement property space on CBEM.” CBE and CBEM both highlight the complexity associated with concepts analogous to loyalty, in particular highlighting the antecedent path models as they relate to the latent constructs. This complexity of consumer behaviour with respect to brand interaction has been highlighted by several researchers (e.g., Jacoby & Chestnut 1978; Oliver, 1980; Hollebeek, 2011; De Villiers, 2015). In essence this stream of research (CBE and CBEM) fails to provide a strong distinction from the customer loyalty conceptualisation provided by (Oliver, 1999; 2014).

2.2.6. Customer Loyalty, Behavioural Intention and Behavioural Willingness

At least one facet of loyalty that has remained unchanged from Copeland's (1923) study on "buying habits" through to Oliver's (1999; 2014) process definition of loyalty is that the concept continues to be of interest. Attention to the topic remains considerable because of the practical role it plays in both the world of academia (Copeland, 1923; Brown, 1953; Day, 1969; Jacoby & Chestnut, 1978; Dick & Basu, 1994; Oliver, 1999; 2014) and in the world of business (Drucker, 1963; Kotler, 2002; Keller, 1993; Griffin et al., 1995; Reichheld & Schefter, 2000). The preceding review of the literature on customer loyalty provides an overview of the evolution of the concept. Customer loyalty is an intangible that represents a social phenomenon which has proven challenging to define and more difficult still to measure. It is therefore worth emphasising that in most of the loyalty papers, the theoretical underpinnings are often not specifically stated. As noted by Jacoby and Chestnut (1978) conceptual definitions lacking a strong theoretical grounding continue to result in a broad range of ideas on the topic of loyalty often with inadequate theory and measurements in place. Oliver's (1999; 2014) process driven concept of loyalty identifies the progressive or stepped nature of customer loyalty with its different phases. Process theory underpins the customer loyalty studies by both Oliver (1999; 2014) and Dick and Basu (1994) and identify several antecedents and consequences to customer loyalty.

In the previous section we use dual-process / dual-system theory (Bratman, 1984; Evans & Stanovich, 2013) and PWM (Gibbons & Gerrard, 1995; Gibbons et al., 2009) to differentiate between behavioural intention and behavioural willingness. While the effect of customer loyalty on behavioural intention is supported in the literature by various studies (e.g., Wiedmann et al., 2018; Walsh et al., 2009b), its effect on behavioural willingness has received minimal attention. However, the potential impact of customer loyalty on behavioural willingness is recognised by

Haase et al. (2018, p.565) who note that “it is not enough to consider only one system to fully understand the consumer” and for the need to also consider consumers’ evaluation results from cognitive information processing that can be either reactive (implicit) or reflective (explicit) as in the case of Types 1 and 2 (Evans & Stanovich, 2013). Moreover, given the importance of the reactive linkages identified in PWM, it is expected that customer loyalty is also likely to impact behavioural willingness.

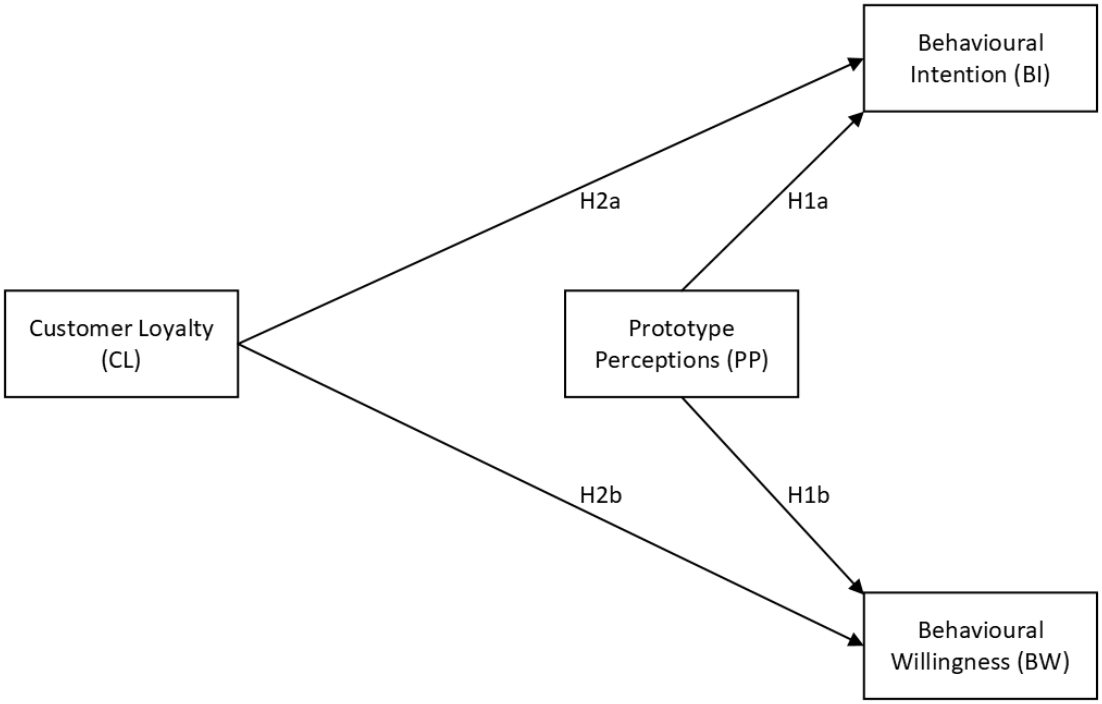
Therefore:

> **H2a:** The stronger the customer loyalty, the stronger the behavioural intention to purchase
>
> **H2b:** The stronger the customer loyalty, the stronger the behavioural willingness to purchase

These cumulative relationships included are shown in the model in Figure 2.11. In the next sections we look at customer satisfaction and corporate reputation as antecedents to customer loyalty that can also be incorporated in the research model.

Figure 2.11

Cumulative Research Model of Relationships 2



2.3. Corporate Reputation

Corporate reputation has attracted a great deal of attention by both academics and practitioners. In considering corporate reputation this section proceeds over time to look at the evolution and current thinking about the construct.

2.3.1. 1959 to 1989: The Foundation of Corporate Reputation

One of the earliest writings on corporate reputation is that by Christian (1959) who looked at the role of corporate reputation of suppliers among buyers in a business to business

(B2B) context. Christian (1959, p.80) observes that: “The product image or brand image is often the key ingredient to long-term success in the consumer market-place.” The author holds that every company has an image or character (reputation) that is positive, negative, or unclear and each of these resonates with other corporate clients. An important aspect of this work is the emphasis that even in an industrial context, the act of purchasing was shifting from rational (tangible) to emotional (intangible) motives. Christian (1959) posits that purchasers would be looking to establish in their minds whether a seller’s reputation was positive, thereby reducing fear of making a mistake and rendering the purchase decision simpler. Another key aspect of this paper is the author’s identification of different “publics” that are affected by the corporation, comprising customer-prospect groups, stockholders, employees, dealers, suppliers, financial groups, plant-town communities, and government. He holds that in the B2B context, the most important public would be the customer-prospect public. Christian (1959, p.80) recognised the advantages of corporate reputation and argues that: “A good corporate reputation provides a backdrop for sales aimed at building customers and not simply single sales.” An important aspect of the writing by this author was the identification of “brand image”, which he conceptualises as something that is constructed and measurable. Christian (1959, p.80) asserts that this image is constructed by “management decisions, specific objectives, program of action, internal educational program and a program for measuring and evaluating”.

An important development in corporate reputation thinking came about, in 1971, when the Committee for Economic Development (CED) in the United States highlighted the need for corporate responsibility and reputation management. Leaders of major companies around the world were beginning to be influenced by notions of “publics” (Christian, 1959), “stockholders” (Friedman, 1962; 2020) and “constituencies” (CED, 1971). Up until the mid-80’s the research in the field of corporate reputation focussed mostly on the strategy behind such measures to

increase sales (Christian, 1959), satisfy regulatory obligations (CED, 1971) or maximise profits for stockholders (Friedman, 1962; 2020). These studies often highlighted one dominant beneficiary over others. Therefore, in Christian's (1959) work the customer is the ultimate beneficiary, for CED society was the primary beneficiary of the activities of corporations; while Friedman (1962) held that stockholders should be the only intended beneficiary of the firm. In line with this thinking, the emphasis on different stakeholders suggests that rather than having a single corporate reputation, firms may hold different corporate reputations depending on the perception of each stakeholder group (Freeman, 1984).

2.3.2. 1990 to 2020: Increased Interest in Corporate Reputation

Charles Fombrun, who co-founded the Reputation Institute, has provided an important impetus to the development of corporate reputation. The paper by Fombrun and Shanley (1990) that appeared in *Fortune* Magazine represents one of the more recognised early studies on corporate reputation that opened the way to further work by other academics. This work took a broad approach and looked at responses from 4000 executives. However, it was limited in that responses focused only on firms in each respondents' particular sector. Fombrun and Shanley (1990) popularised the function of corporate reputation as provided by Spence (1974, p.111) who argues that:

> *"All this depends on the consumer seeing the firm as a coordinated agent and not a loose connection of productive units. Variance in the quality of products under a particular brand name, experienced by the consumer, will destroy the inference and the firm's ability to benefit from the increasing returns to a generalized reputation for quality. Hence firms will advertise themselves as purposeful monoliths."*

This perspective is underpinned by signalling theory and indicates that a favourable corporate reputation can have numerous beneficial consequences. Fombrun and Shanley (1990) highlight some of the benefits of this market signalling that includes an ability to communicate product superiority to consumers; allow firms to charge a premium price; attract better talent; improve access to investment capital; and indicate positioning in the industrial social system (p.233). Fombrun and Shanley (1990) also describe the ways in which information is disseminated, or rather signalled (Spence, 1974) and interpreted by various audiences, which Fombrun and Shanley (1990) variously (and interchangeably) refer to as publics (p.234), constituencies (p.234) and stakeholders (p. 234).

The process conceptualisation of customer loyalty by Oliver (1999; 2014) envisages that as customers engage with the firm and its products their accumulated satisfaction impacts loyalty. Similarly, Fombrun and Shanley (1990, p.235). suggest that “reputations represent publics’ cumulative judgments of firms over time”. This position is reflective of the earlier work by Wilson (1985) who likened reputation management to that of a sequential game, highlighting that players’ strategies are often influenced by what they know and what they do not, but that they can be observed and just as in a reputation, past action is often assumed to be an indicator of future behaviour. Wilson’s game-theoretic model is rooted in economics and was intended to demonstrate the role of reputational effects in a dynamic competitive business environment.

Fombrun and Shanley (1990) proposed fourteen hypotheses based on the notion that firms compete for reputation in a market characterised by incomplete information. Their operationalisation of corporate reputation grounded in signal theory suggests that audiences would interpret varied information signals emanating from the firm concerning markets,

accounting, institutional aspects, and strategy of the firm. The interpretation and reaction to these signals highlights the wide variety of dimensions used by Fombrun and Shanley (1990) in their measurement of corporate reputation. It can be noted that many of the factors included in this operationalisation are related to the financial performance of the firm and their operationalisation has been criticised as measuring little beyond financial performance (Fryxell & Wang, 1994). In addition, Wartick (2002, p.382) mentions interrater group differences as a potential weakness of the *Fortune* data gathering technique used by Fombrun and Shanley (1990). Wartick (2002) highlights three major oversights in the development of a relevant theory of corporate reputation. The first weakness he notes is a lack of "meaningful distinction" (p.373) for corporate reputation, highlighting the flagrant use of synonymous terms within the context of corporate reputational research that lack formal definition. The second criticism concerns the distinct lack of acceptable operationalisation and lack of empirical measurement validity. In this respect, Wartick (2002) suggests the inclusion of explicit statements of what he refers to as the "grand aggregation" (p.376) or the stakeholder group's perspective adopted i.e., whether owners, employees, customers, suppliers or community. The third criticism concerns the lack of theoretical development in the field. Additional concerns expressed by Wartick (2002) include his observation that corporate reputation is used interchangeably with terms like identity, image, prestige, goodwill, esteem and standing (p.373).

Bromley (2000, p.241) highlights the lack of consistency in the way these terms are used and seeks to differentiate among them by proposing the following definitions:

> *"(1) 'corporate identity' defined as the way key members (of the organization) conceptualize their organization*
>
> *(2) 'corporate image' defined as the way an organization presents itself to its publics, especially visually, and*

(3) 'corporate reputation' defined as the way key external stakeholder groups or other interested parties actually conceptualize that organization."

2.3.3. Distinguishing Corporate Identity, Corporate Brand and Corporate Image from Corporate Reputation

The concept of corporate reputation has shown resilience as it continues to gain attention while the foundations of this concept continue to develop through a multitude of theories. The continued increase in attention to corporate reputation has supported the evolution of the concept, driven by practical application at the behest of academics (Bennett & Kottasz, 2000). Barnett et al. (2006) suggest that corporate reputation could be identified both as an asset, valued for its strategic significance, as well as a judgment made by observers. This point of view as well as the use of interchangeably applied terms like identity, image, prestige, goodwill, esteem and standing has created confusion about corporate reputation (Wartick 2002). As a result, numerous papers have sought to clarify the conceptual and operational foundations of corporate reputation (e.g., Abratt & Kleyn, 2012; Barnett et al., 2006; Walker, 2010; Wartick, 2002).

Abratt and Kleyn (2012) provide a useful overview that distinguishes among corporate identity, corporate brand, image, and corporate reputation where identity and brand are envisaged as being overlapping components that result in overall corporate reputation. Abratt and Kleyn (2012, p.1051) define corporate identity as "an organisation's strategic choices and its expression thereof" which suggests that a company is in control of its identity. Moreover, the authors note that the corporate brand represents a series of intended communications that are

created corporately with strategic intent that seek to align the corporate brand's visual cues, personality, promises and communication. The absence of a consensus on the conceptualisation of these different concepts prompted the authors to provide a schema to clarify the different concepts – Figure 2.12.

Figure 2.12

Corporate Identity, Corporate Brand and Corporate Reputation: An Integration (Abratt & Kleyn, 2011, p.1050)

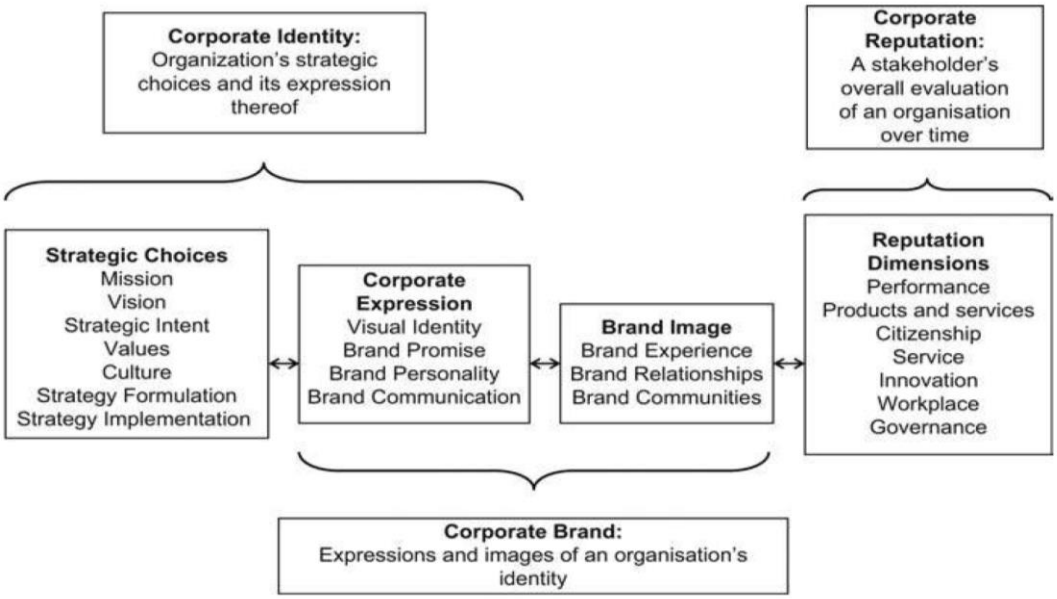


Table 2.06, from Fombrun (2012) and Table 2.07 from Rindova et al. (2005) provide some idea of the challenge in arriving at a broadly agreed definition of corporate reputation. Clearly, not all the mentioned authors and theories contribute equally to the development of the concept, but the tables highlight the diversity of theoretical grounding with which this subject has been approached.

Table 2.06

Corporate Reputation: Definitions, Antecedents and Consequences (Fombrun, 2012, p.110)

Reference	Key Frame / Concept	Key Predictions and Findings
Barnett et al. (2006) Walker (2010)	Defining Reputation	A corporate reputation is a collective judgment about a company based on assessments of its financial, social and environmental impacts over time.
Albert & Whetten (1985) Whetten & Godfrey (1998)	Identity Theory	Organizational identity describes the features of companies that are central, enduring and distinctive.
Spence (1974) Weigelt & Camerer (1988) Schlenker (1980)	Signalling / Impression Theory	Companies signal their features in order to influence the behaviour of competitive stakeholders. Reputations are attributes ascribed to a firm based on its past actions.
Carroll & McCombs (2003) Carroll (2010)	Agenda Setting Theory	The media influence the perceptions of companies by affecting their visibility and the salience of features consumers associate with those companies.
Barney (1991) Amit & Shoemaker (1993) Roberts & Dowling (2002)	Resource Based Theory	The foundation of competitiveness lies in a company's ability to control unique bundles of material, human and locational resources.
DiMaggio & Powell (1983) Oliver (1997) Scott (2003)	Institutional Theory	A firm's sustainable advantage depends on its ability to manage the institutional context of its resource decisions.
Freeman (1984)	Stakeholder Theory	Stakeholders are interested parties who stand to lose or gain by the success or failure of a firm.
Rindova et al. (2006) Rao (1994)	Social Construction Theory	Reputations are socially constructed: Stakeholders make sense of strategic signals emanating from companies seeking to influence observers.
Fombrun & Shanley (1990) Fombrun (1996) Fombrun & van Riel (2004) Gardberg & Fombrun (2006)	Reputation, Performance and Intangible Assets	Reputation is influenced by advertising, profitability, citizenship, diversification, and its inversely related to financial risk.
van Riel & Fombrun (2007)	Corporate Communication & Reputation	An integrated view of corporate communications theories and their relationship to reputation.
Aaker (1991) Keller (1998) Hatch et al. (2000)	Brand, Identity and Culture	Companies build distinctive reputations and positions through 'expressiveness'.
Abrahamson & Fombrun (1994) Rindova & Fombrun (1999)	Macro Culture & Cognitive Competitive Advantage	Companies inhabit socio-cultural environments from which they draw legitimacy and which they influence to create distinctiveness, attract resources, and build competitive advantage.
Suchman (1995) Deephouse & Carter (2005) King & Whetten (2008)	Legitimacy & Reputation	Legitimacy emphasizes the social acceptance that comes from adhering to social norms and expectations, whereas reputation emphasizes comparisons among organizations.

Table 2.07

Discipline and Corporate Reputation Definitions (Rindova et al., 2005, p.1036)

Research Area	Definition of Reputation	Type of Perceptions Equated with Construct	Examples of Studies
Management			
Economics/game-theory perspective	An attribute or a set of attributes ascribed to a firm, inferred from the firm's past actions	Assessments of a relevant attribute(s)	Weigelt & Camerer (1988) Hayward & Boeker (1998) Stuart (2000)
	An observer's impression of an actor's disposition to behave in a certain manner	Assessments of a relevant attribute(s)	Clark & Montgomery (1998)
Institutional perspective	Public's cumulative judgments of firms over time; a global perception	Collective knowledge and recognition	Fombrun & Shanley (1990) Roberts & Dowling (2002)
	Stakeholders' knowledge and emotional reactions—affect, esteem—toward a firm	Collective knowledge and recognition	Hall (1992) Fombrun (1996) Deephouse (2000)
Marketing perspective	Level of awareness that a firm has been able to develop for itself and for its brands; fame	Collective knowledge and recognition	Hall (1992) Shamsie (2003)
Economics	Consumers' expectations and beliefs about a firm's products quality	Assessments of a relevant attribute(s)	Shapiro (1982, 1983) Allen (1984)
	A rival's perceptions about the likelihood an incumbent will behave in certain way	Assessments of a relevant attribute(s)	Kreps & Wilson (1982) Milgrom & Roberts (1982)
Sociology	A prevailing collective agreement about an actor's attributes or achievement based on what the relevant public "knows" about the actor	Collective knowledge and recognition	Lang & Lang (1988) Camic (1992)
	A characteristic or an attribute ascribed to an actor on the basis of its past actions	Assessments of a relevant attribute(s)	Raub & Weesie (1990) Kollock (1994)
Marketing	Estimation of the consistency over time of an attribute of an entity	Assessments of a relevant attribute(s)	Herbig & Milewicz (1995)
	Consumers' impressions of a company that is producing and selling a given product or brand	Collective knowledge and recognition	Goldberg & Hartwick (1990)
	Perceptions and beliefs about a firm based on previous interactions	Assessments of a relevant attribute(s)	Campbell (1999) Prabhu & Stewart (2001)
	Public esteem or high regard	Collective knowledge and recognition	Weiss, Anderson, & MacInnis (1999)

In 1997, Fombrun and van Riel launched and edited the *Corporate Reputation Review* where, in an introductory paper the authors recognise that corporate reputation is approached from several perspectives. In their pursuit to improve the body of knowledge about corporate reputation, Fombrun & van Riel (1997) provide a definitional starting point by adopting the definition provided by Fombrun and Rindova (1996) which states that:

> "*A corporate reputation is a collective representation of a firm's past actions and results that describes the firm's ability to deliver valued outcomes to multiple stakeholders. It gauges a firm's relative standing both internally with employees and externally with its stakeholders, in both its competitive and institutional environments."* (Fombrun & Rindova 1996; as cited by Fombrun & van Riel, 1997, p.10)

The above conceptual definition of corporate reputation is assumed in this research.

2.3.4. Theories of Corporate Reputation

Corporate reputation has been underpinned by different theoretical perspectives, but two that stand out in the marketing field are Signalling theory (Spence, 1974), and TpB (Ajzen, 1985). Both involve a subjective evaluation of the intended outcomes in arriving at an assessment of corporate reputation.

(a) Signalling Theory

Fombrun and Shanley (1990) use signalling theory (Spence, 1974) to argue that reputations are "outcomes of a competitive process in which firms signal their key characteristics to constituents to maximize their social status" (Fombrun & Shanley, 1990, p.234). Spence (2002) reflects upon his earlier works in market signalling and suggests that "It should be noted that the information carried by the signal can be productive in itself. This will occur if there is a decision that is made better or with greater efficiency" (p.450). Control of signalling elements resides within the corporation but in most cases a certain degree is mandated by the jurisdiction in which the corporation resides, unless for example they remain a privately held company, wherein signalling in general is often limited to press releases at the behest of management and advertising. However, as Spence (1973, p.357) notes; what may be

an “observable” aspect may not be “alterable”. Reception and interpretation of these signals will vary by stakeholder groups (Freeman, 1984) and at an individual level depending on ones’ perspective (Lewis, 2001, p.31). This supports the view that firms do not have a single reputation, but many reputations, that vary by each stakeholder’s impressions of the information perceived to be relevant to it. This lends support to the earlier suggestion by Wartick (2002) to specify the stakeholder perspective being adopted when looking at corporate reputation.

(b) Theory of Planned Behaviour

Hall (1992) who looked at intangible resources held by firms identified (a firm’s) reputation as the “knowledge and emotions held by individuals” (p.138). In this attitudinal perspective of corporate reputation, Hall (1992) highlights the value of the corporate reputation as being the cognitive and affective perceptions of the collective stakeholder group(s). The literature provides limited evidence of an operationalisation and measurement of corporate reputation as an attitude. Given the centrality of customers to an organisation’s reputation, a conceptualisation that captures an attitudinal metric, which can be gathered and presented empirically can be effective. Moreover, rather than focusing on the signals sent by the firm, it adopts the perspective of the customer and looks at their effect toward the firm. Caruana et al. (2006) use such an attitudinal conceptualisation of corporate reputation grounding it in TpB (Ajzen, 1985). They argue that such an approach to corporate reputation necessarily adopts a particular stakeholder’s perspective. In line with TpB, Caruana et al. (2006) argue for a unidimensional construct of corporate reputation and use attitudinal items as a direct measure of corporate reputation of a firm among shareholders. Caruana et al. (2006) hold that for theory development purposes, measuring corporate reputation as a unidimensional attitude provides the most parsimonious approach (p.433). Brown (1995) adopts a similar attitudinal approach to capturing corporate reputation in a business-to-business context.

2.3.5. Corporate Reputation and Customer Loyalty

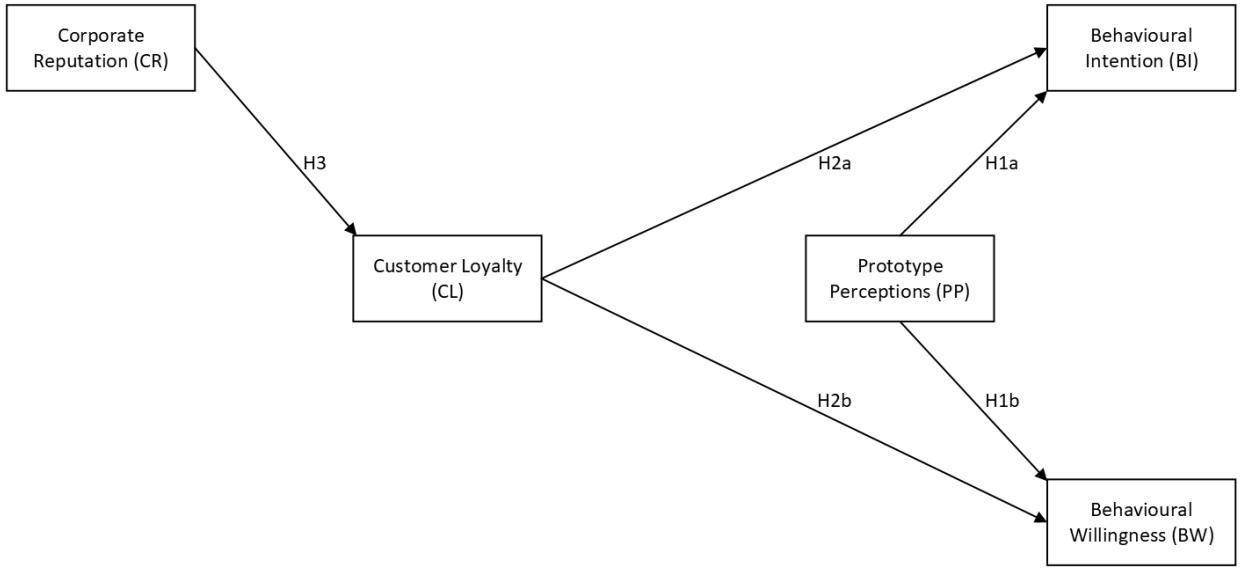
Ali et al. (2015) conducted a meta-analytic review of 101 papers on corporate reputation and identify future corporate financial performance, customer trust, customer commitment and customer loyalty as consequences. Walsh et al. (2009b, p.192) provide support for a positive link between corporate reputation and loyalty (β = .87, p<.01). Additional support for the link comes from Bartikowski & Walsh (2011, p.41) who look at banking, retailing and restaurant customers perceptions of reputation across three countries and find a significant, direct effect from corporate reputation to customer loyalty (β = .79, p<.01). Therefore:

H3: The stronger the corporate reputation, the stronger the customer loyalty.

The cumulative research model showing the hypothesised linkages so far is now shown in Figure 2.13.

Figure 2.13

Cumulative Research Model of Relationships 3



2.4. Customer Satisfaction

Oliver (2014) envisages satisfaction as a broad concept that can employ different 'viewpoints' that range from satisfaction at an individual level to that at societal level, each of which have their antecedents and consequences. Satisfaction at these different viewpoints has been presented by Oliver (2014) as shown in Table 2.08. The present research focuses on the "Individual: Time accumulated" (in bold) viewpoint that emphasises summary satisfaction (or customer satisfaction) as its core concept.

Table 2.08

Vertical and Horizontal Views of Customer Satisfaction (Oliver, 2014, p.8)

Viewpoint	Antecedents	Core Concept	Consequences
Individual: One Transaction	Performance or service encounter	Transaction-specific satisfaction	Complimenting, complaining, Word-of-mouth
Individual: Time accumulated	**Accumulated performance history**	**Summary satisfaction**	**Attitude, loyalty, switching**
Firm's customers in the aggregate	Reputation product quality, promotion	Average satisfaction, repurchase rates, competitive ranking	Share, profits
Industry or commercial sector	Average quality, monopoly power	Consumer sentiment	Regulation, taxation
Society	Product and service variety, average quality	Psychological well-being	Tranquillity, productivity, social progress, alienation, consumerism

This section starts by looking at the conceptualisation of customer satisfaction and proceeds to look at antecedents and consequences particularly customer loyalty. It distinguishes between transaction and overall satisfaction and provides hypotheses linking these to customer loyalty.

2.4.1. Conceptualisation of Customer Satisfaction

Oliver (1977; 1980) adopted the expectation-disconfirmation paradigm of customer satisfaction (originally proposed by Cardozo, 1965 and Olshavsky & Miller, 1972) to explain the interaction among attitudes, satisfaction, and intentions. The process outlined suggests that pre-purchase attitude or expectation, is subsequently modified by the satisfaction derived from the act of purchase. This leads to a reformulated post-purchase attitude that is impacted by positive or negative disconfirmation. Oliver (1977; 1980) argues that positive or negative disconfirmation

is an appropriate concept to consider since it captures an “abstract affect”. Oliver (2014, p.7) defines customer satisfaction as:

> *“the consumer’s fulfilment response. It is a judgment that a product / service feature, or the product / service itself, provided (or is providing) a pleasurable level of consumption related fulfilment, including levels of under- or overfulfillment.”*

Giese and Cote (2000, p.1) note that “literature and consumers both view satisfaction as a summary affective response varying in intensity” which supports the claim of cumulative satisfaction Oliver (1999; 2014) and the continuum argument by Dick and Basu (1994). Oliver (2014) introduces “behaviour” of non-processing which he suggests highlights the possible existence of a subconscious process, he terms “latent satisfaction” (p.352) which he defines as “a lack of awareness of one’s state of satisfactions” (p.379). Specifically, Oliver (2014) uses electricity as an example of low or passive involvement product, arguing that its provision is a foregone conclusion, yet when a power cut occurs, this generates a (presumably negative) response (p.16).

2.4.2. Antecedents to Customer Satisfaction

The “Vertical and Horizontal Views of Customer Satisfaction” (Oliver, 2014, p.8) identifies accumulated performance history as antecedent to satisfaction. In essence this encompasses a broad range of issues that drive satisfaction. The American Customer Satisfaction Index (ACSI) model suggests there are three antecedents to overall customer satisfaction, namely: perceived quality, perceived value, and customer expectations (Fornell et al., 1996). The authors identify perceived value as possibly mediating the effects of customer expectations and perceived quality on customer loyalty. Moreover, Oliver (2014) conceptualises

a process model depicting the relationship among transactional satisfaction, leading to cumulative satisfaction and ultimately to behavioural loyalty (Woodruff et al., 1983; Walker, 1995). The enduring nature of this process model is underpinned by its continued wide adoption among researchers. For example, Engler et al. (2015) question the efficacy of online "star product ratings" that feature on many websites and instead argue for use of the expectation / disconfirmation model which is shown as providing a more accurate reflection of the real satisfaction experienced by the consumer. However, it has been suggested that the results of the expectation / disconfirmation model (Oliver, 1977) may be less efficacious than perceived quality as a predictor of satisfaction (Anderson et al., 1994).

2.4.3. Customer Satisfaction and Customer Loyalty

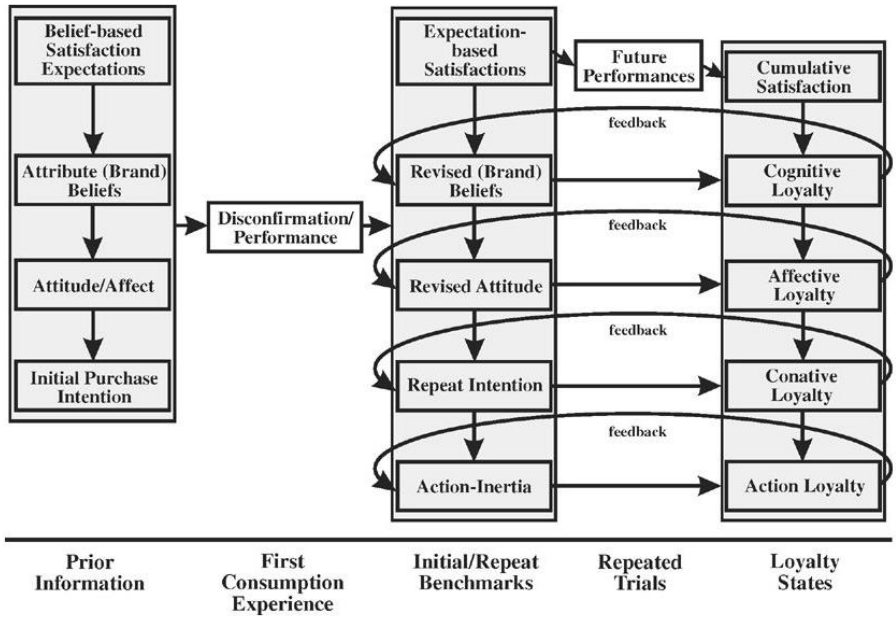
The link of customer satisfaction to customer loyalty is well supported in the academic literature (e.g., Anderson & Sullivan, 1993; Caruana, 2002; Bloemer & Casper, 1995; Giese & Cote, 2000; Jones & Sasser, 1995; Oliver 2014; Reichheld, 1993; Reichheld & Sasser, 1990; Zeithaml et al., 1996). Even in an online context, customer satisfaction is reported as being a superior predictor of customer loyalty particularly for high involvement products (Castañeda, 2011). Given the link of customer satisfaction to customer loyalty, there are copious examples of firms who invest in customer satisfaction enhancing measures in their desire to achieve greater customer loyalty (e.g., Gupta & Sharma, 2009; Gustafsson & Johnson, 1997; Müller, 1991).

Oliver (2014) who grounds his work in process theory provides an explanation of how satisfaction drives customer loyalty. Oliver (2014) views the process of growth (or retraction) of satisfaction with the experience of an exchange among the consumer and the firm resulting in

an increase or decrease of customer loyalty – Figure 2.14. Oliver (2014) refers to this sequential cognitive process as “belief updating” and his depiction of the customer satisfaction concept reflects the expanding capacity of subjective beliefs or judgments as well as their hypothesised cyclical effects on customer loyalty.

Figure 2.14

The Cycle of Satisfaction-based Loyalty (Oliver, 2014, p.425)



Mano and Oliver (1993) attempt to distinguish hedonic and utilitarian effects on satisfaction, wherein they argue that utilitarian affects are more closely aligned with a cognitive function while hedonic effects are more a function of attitudinal affect. Mano and Oliver’s (1993, p.462) findings suggest that consumers can be just as satisfied with low-involvement products as they are with high-involvement products as in both cases this involves an evaluative judgment of need satisfaction. This perspective is also supported by Westbrook (1987), who

suggests that a dual-process model might be beneficial when considering satisfaction and "that a parsimonious two-dimensional representation may suffice for understanding post-purchase process" (p.267). Oliver et al. (1997, p.328) report that "satisfaction was found to be also (in addition to delight) a function of disconfirmation, thus suggesting its dual cognitive and affective basis". The notion of cumulative satisfaction proposed by Oliver (2014) is supported by Bolton (1998) who highlights that customers who have longer relationships tend to "weight heavily" their prior cumulative satisfaction effects, particularly with higher utility products.

Jones and Sasser (1995) hold that customer loyalty is almost entirely influenced by customer satisfaction and posit that satisfaction levels, which they suggest can range from dissatisfied to completely satisfied, are directly translated into loyal behaviour, and repeat purchases. Indeed, Picón et al. (2014, p.749) argue that loyalty cannot be achieved through switching costs and observe that:

> *"…loyalty should not merely equate to obliging customers to remain with a provider because of strong impediments to switching but should rather be a consequence of the customer's will to remain in the relationship."*

Affective responses take place over time and are influenced by interaction with the product. It involves an evaluation process (Bearden & Teel, 1983) or a response to an evaluation process (Oliver & Swan, 1989). On the basis of the above, it is expected that:

H4a: The stronger the overall customer satisfaction, the stronger the customer loyalty

2.4.4. Customer Satisfaction and Corporate Reputation

The link between customer satisfaction and corporate reputation has received limited attention. Anderson et al. (1994) suggest the two are intrinsically linked and note that there may be evidence of a reciprocal relationship (e.g., Helm & Tolsdorf, 2013) between them whereby an increase in customer satisfaction can enhance overall reputation while a strong corporate reputation may in turn create a "halo effect" through positive influence on consumers. Walsh et al. (2006, p.420) investigate corporate reputation among customers of a single energy company in Germany and suggest "power supply companies need to focus their marketing interest more strongly on increasing and monitoring customer satisfaction". Walsh et al. (2009b, p.192) consider the issue of whether corporate reputation is an antecedent or consequence of customer satisfaction and argue that "it is likely that customers will attribute a good reputation to a company that fulfils or exceeds their expectations". Walsh et al. (2009b) use the conceptualisation and five-dimension operationalisation of corporate reputation in Walsh and Beatty (2007) to provide support and show that customer satisfaction has a positive impact on corporate reputation (β = .46, p<.01). Based on the above, we hypothesise that:

> **H4b:** The stronger the overall customer satisfaction, the stronger the corporate reputation.

2.4.5. The Role of Encounter Satisfaction

The 'cycle of satisfaction-based loyalty' model, shown in Figure 2.14 above, suggests that it is possible to distinguish between transaction and overall satisfaction. Oliver (2014) suggests that overall satisfaction is formed cumulatively over a series of transactions rather than

from a single discrete transaction. This is supported by Bolton (1998) who argues that customer satisfaction is based on repeat encounters that are cumulative in effect and therefore result in an overall disposition of satisfaction or dissatisfaction (Rust & Oliver, 1994, p.81). This distinction highlights the relevance of two perspectives of satisfaction that consider both an individual encounter satisfaction and an overall satisfaction. In addition, the literature reviewed provides strong support for customer satisfaction acting as an antecedent to customer loyalty. Therefore, while distinguishing between overall and encounter customer satisfaction we also hypothesise that:

H4c: The stronger the encounter satisfaction, the stronger the customer loyalty.

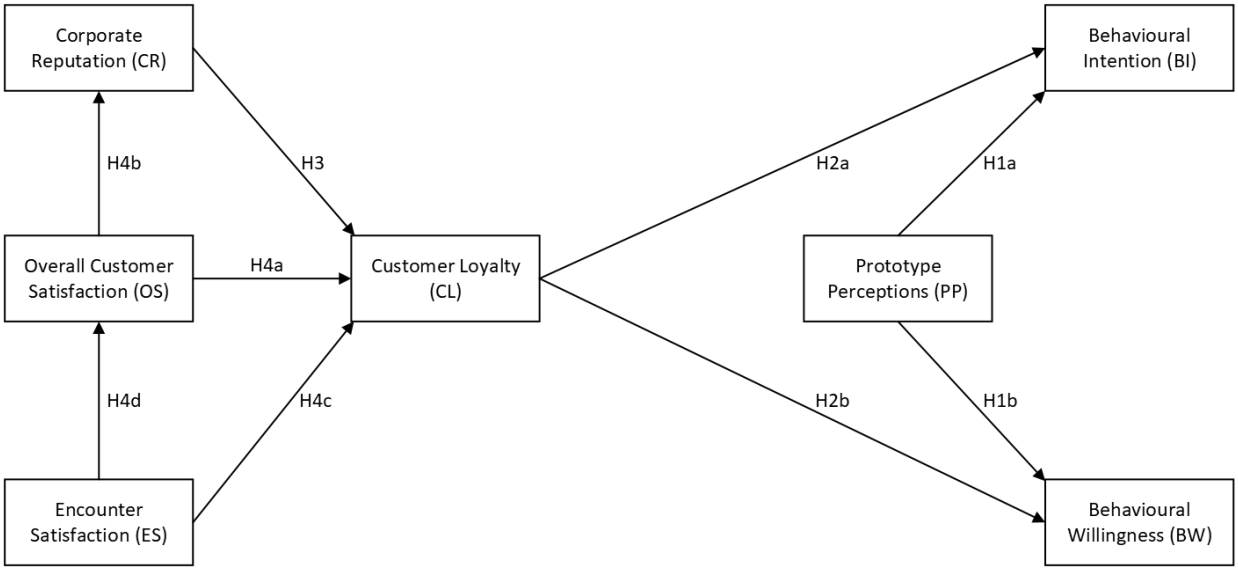
In addition, based on the 'cycle of satisfaction-based loyalty' model described, it is possible that the effect of encounter satisfaction on customer loyalty occurs via overall customer satisfaction, therefore:

H4d: The stronger the encounter satisfaction, the stronger the overall satisfaction.

The cumulative resultant research model is depicted in Figure 2.15.

Figure 2.15

Cumulative Research Model of Relationships 4



2.5. Perceived Risk

The term “risk” is frequently applied to a variety of scenarios where there exists an element of chance, probability, expectations, or potential harm. Risk is very much present in many decisions that the consumer makes. Indeed, Bauer (1960 p.24 as quoted by Ricciardi, 2008 p.86), notes that:

> “*Consumer behaviour involves risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant. At the very least, any one purchase competes for the consumer’s financial resources with a vast array of alternative uses of that money.*”

Therefore, in acceptable-risk problems a decision choice between alternatives needs to be made that considers values and beliefs (Fischhoff et al., 1978).

Starr (1969) was one of the early authors on risk analysis who emphasised the criteria of "benefit relative to the cost" (p.1232). He held that the perception of risk in society involves trial and error that is followed by a set of post-implementation corrective actions. Although the work by Starr (1969) was widely criticised, his research along with that by Bauer (1960) ushered in the adoption of multivariate techniques that sought to provide empirical analyses of everyday risks in life.

Risk taking theory began developing with academics like Taylor (1974) who recognised that "Raymond Bauer first formally proposed that consumer behaviour be viewed as risk taking in 1960." (p.54). Taylor's (1974) work sought to deepen the theory around Bauer's (1960) stance focusing risk on the uncertainty that a consumer faces with respect to the consequences of making or putting off a choice. Soon, cognitive maps of attitudes toward and perceptions of risk (Fischhoff et al., 1978) were able to build on the axioms of choice and uncertainty proposed in the work by Taylor (1974). These models of risk perception are among the earlier works on perceived risk, uncertainty avoidance and acceptable risk levels and their consequential outcomes.

Jacoby and Kaplan (1972), who also built on the earlier work by Bauer (1960), observed variances in consumers assessment of perceived risk for consumer goods ranging from sports cars to deodorant. The authors conceptualise overall perceived risk as being driven by five independent risk dimensions consisting of financial, performance, physical, psychological and

social risk. A stepwise regression of the five dimensions with overall perceived risk across twelve product categories showed that the highest increase in R^2 resulted from performance (β = .43), followed by social (β = .12), financial (β = .03), physical (β = .02) and psychological (β = .01) risk dimensions. Sitkin and Pablo (1992) offer a reconceptualised model of the determinants of risk behaviour that provides a number of propositions where risk behaviour is driven by risk propensity and risk perception that are in turn each driven by a number of variables.

In looking at risk behaviour, several studies emphasise a subjective affect component and objective cognitive assessment component of risk consequences. Keller et al. (2012) who examine the theoretical approaches applied by others to risk perception in the last 40 years argues that appraisal theory "provides an integrative perspective of affect and cognition in environmental risk perception" (p.238). Appraisal theory suggests that cognition together with subjective affect, play important roles in the emotions that are related to risk perception. The subjective affect toward risk, posits that not all risks are perceived equally, with consistency of differentiation being presented across gender and race. In this respect, Slovic (2010) notes that hierarchical and individualistic outlooks decrease the sensitivity toward risk. Therefore, individuals from egalitarian and communitarian societies exhibit greater sensitivity toward the perception of potential harm from these risks. He called this the "white-male effect" (Slovic, 2010, p.174), noting that this group were consistently the least concerned with each (and every) risk that looked at whether this was environmental, gun or abortion related risk.

Zajonc (1980) holds that risk affect is "post-cognitive" and highlights reactive states of liking, disliking, preference, pleasure or displeasure as being "based on a prior cognitive

experience." Moreover, Zajonc (1980) posits that affect is "not confined to social perception" (p.153) and that for affect to occur, an objective evaluation need not be fully complete. Zajonc (1980) further suggests the possibility to "like something or be afraid of it before we know precisely what it is and perhaps even without knowing what it is" (p.154). Loewenstein et al. (2001, p.267) argue for two components of perceived risk and observes that:

> *"Virtually all current theories of choice under risk or uncertainty are cognitive and consequentialist. They assume that people assess the desirability and likelihood of possible outcomes of choice alternatives and integrate this information through some type of expectation-based calculus to arrive at a decision."*

However, Loewenstein et al. (2001) argue that subjective anticipatory emotions are immediate visceral reactions (e.g., fear, anxiety, dread) and unlike Slovic et al. (2007) suggest that these visceral reactions represent crude but fast type of decision-making based on a "subtle feeling" (p.1334) that is triggered by an image and results in an "affect heuristic" (p.1335). This conditioning can be likened to an inclination to act one way or the other based on a near instantaneous evaluation of probable outcomes. A similar position is proposed by Damasio (1994, p.105) who explains:

> *"Acquired knowledge is based on dispositional representations in higher-order cortices and throughout many gray-matter nuclei beneath the level of the cortex. Some of those dispositional representations contains records for the imageable knowledge that we can recall and which is used for movement, reason, planning, creativity; and some contain records of rules and strategies with which we operate on those images. The acquisition of new knowledge is achieved by continuous modification of such dispositional representations."* (Damasio, 1994, p.105)

Loewenstein, et al. (2001, p.267) observes that most of the studies in the field of risk perception have adopted a 'consequentialist' approach that involves a subjective approximation of the risk / reward trade-off. This risk / reward evaluation necessarily assumes a cognitive "weighing of the options" (Barnett & Breakwell, 2001, p.175) at an agentic level and is largely influenced by experience with the particular or similar risks. This perspective is closely aligned with EV theories, intention-based models like TRA (Fishbein & Ajzen, 1975) and the health belief model (Becker, 1974). Here the subjective evaluation results in an intention to perform a specific behaviour. Like Slovic (2010), the research by Loewenstein et al. (2001) differentiates between "anticipated" and "anticipatory" behaviour, where risk is akin to emotion states or feelings, hypothesised to be an immediate or an evaluative response to stimuli supported by the "dispositional representations" (p.105) as suggested by Damasio (1994).

Fischhoff (2008) identifies two possible approaches to decision-making. The first is grounded in psychophysics with individuals subjectively having sufficient cognitive understanding of their respective wants and expectations and in these circumstances, Fischhoff 2008, p.16) suggests "people know roughly what they want". The second response is derived subjectively which despite a lack of prior knowledge, forces a preferential objective assessment to be made based on estimations of similar "basic values" (p.16). This appraisal approach is like the "rules and strategies" (p.105) process proposed by Damasio (1994) as well as to the fuzzy trace application of estimations or "gist" (Reyna & Brainerd, 1991, p.249) and the heuristics method, rooted in judgment and decision-making by Tversky and Kahneman (1973).

Given the conceptualisations of risk behaviour proposed in the literature, its measurement has often proved challenging. To overcome some of these concerns Windschitl

(2002) propose a perceived risk likelihood measure having two distinct components - beliefs about the objective probability of a hazard and intuitive feelings about one's vulnerability to the hazard. His alternative two-item measure is shown to be able to overcome some of the limitations encountered with many of the other measures employed to capture perceived risk.

TpB and later models (e.g., TAM, UTAUT) suggest a a role for risk perception in behavioural intention linked to users' confidence in the usefulness of a technology. This also holds for dual-process models that include PWM, with their incorporation of behavioural willingness besides behavioural intention. Casidy and Wymer (2016) provide support for a moderator effect of risk in the link between loyalty and willingness to pay in an online context. It is expected that perceptions of risk will moderate the link of customer loyalty to both the willingness and intention of consumers to undertake a particular purchase. Therefore:

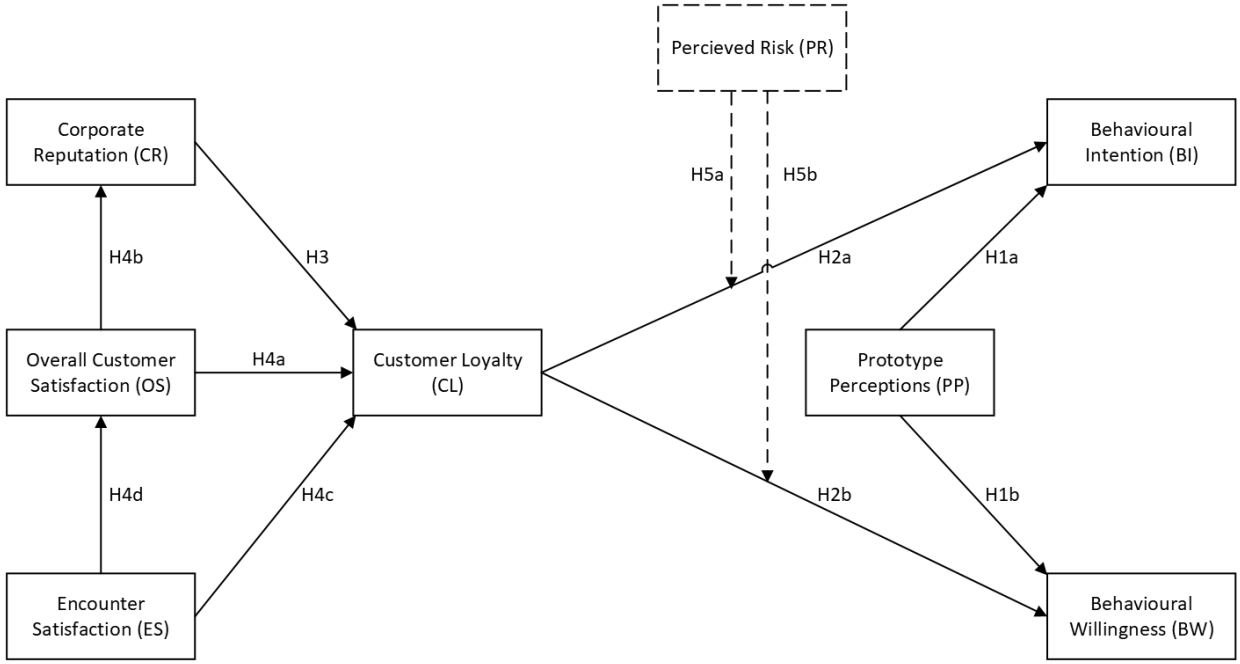
H5a: The positive effect of customer loyalty on behavioural intention is negatively moderated by perceived risk.

H5b: The positive effect of customer loyalty on behavioural willingness is negatively moderated by perceived risk.

The final research model showing all the accumulated linkages discussed in the hypotheses is shown in Figure 2.16, with perceived risk's moderating effects shown by dashed lines.

Figure 2.16

Final Research Model



Chapter 3

METHODOLOGY

Methodology represents a set of guidelines for conducting research that have been developed over time and accepted within the academic community. The term comes from the Latin *methodologi,* which refers to the application of abstract logical principles in the production of knowledge. This methodology chapter seeks to show the transformative process of science employed in this research. Therefore, in section 3.1, the research philosophy decision arguing for the adoption of a positivist as against an interpretivist approach is considered while section 3.2 describes the research design process. Section 3.3 considers research method issues that include questionnaire design, construct operationalisation, sample selection, piloting, data collection, data cleansing, sample frame, common method bias, software and statistical methods used in the analyses. Finally, section 3.4 discusses ethical considerations for the present research.

3.1. Research Philosophy

A commitment to paradigms consisting of “clearly defined, existing concepts” (Neuman, 2014, p.64) is suggested as fundamental to meaningful research. Therefore, in the literature review a structured, formal scientific approach consisting of constructs and measures from previously defined and empirically tested academic research is used (Kuhn, 1962). This approach seeks to establish a deeper understanding of human behaviour in the veritable ubiquity of behavioural measures, relating to the social sciences and more specifically to

consumer behaviour. Burrell and Morgan (2004, p.25) describe positivism as "characterised by a concern for providing explanations of the status quo, social order, consensus, social integration, solidarity, need satisfaction and actuality" and interpretivism "as the sociology of regulation through its subjectivist approach to the analysis of the social world at the level of subjective experience" (p.28) as two primary paradigms. The authors also argue that paradigms are influenced by the regulation and radicalisation of human behaviours as well as by the subjectivity and objectivity of the epistemology of the behaviours in question.

(i) Positivism

In the seventeenth century, Galileo is said to have stated that "the laws of nature are mathematical" (Cassirer, 1942, p.5). Indeed, Guba and Lincoln (1994 p.105) note that "Mathematics is often termed the 'queen of the sciences", while physics and chemistry are referred to as "hard" sciences. This is because in the "hard" sciences, the measures employed are often precise, allowing hypotheses to be supported with a high degree of certainty and retesting yields consistent results. A requirement for such high degree of precision in business research is challenging (Bryman & Bell, 2015). Notwithstanding, through varied nomenclature, the academic pursuit of "paradigmatic hegemony" (Lincoln et al., 2011) quietly rolls along as social scientists often deride those efforts that fall outside their chosen philosophy. The pursuit of a "positivist social science" approach (Neuman, 2014, p.102) in academia is said to provide a "worldview" (Cresswell 2009, p.6) that is based on objectivity, detachment and a focus on "real reality" (Guba & Lincoln, 1994, p.108). However, researchers often struggle to "establish clarity" (Lincoln & Guba, 2011, p.164) in their chosen (or manufactured) sociological paradigmatic perspective. This struggle results from the rich tapestry of underlying assumptions made by previous researchers on which the studies are grounded. Geertz (1980, p.165) points out that even researchers themselves find it "difficult to label" their work within a singular genre of

academia. For budding researchers this further contorts the establishment of an empirical model based on a singular philosophy or paradigm, particularly of measurement of human behaviour. To make matters worse, these models remain largely contested (or flatly rejected) by members of the natural science community (Latour, 2000). No matter the paradigms applied, the findings may yield results that are immeasurable, difficult (or impossible) to repeat or return an answer to a question not worth asking in the first place. Geertz (1980, p.167) observes that social science researchers do not "need to mimic physicists" Therefore, although there exists, no unified law in social sciences, researchers can still adopt the "proprieties of composition, inquiry and explanation" when developing models with factors of measurement that can be suggestive of practical theory and predictive modelling.

"Marketing science has been organized around the exchange paradigm" (Achrol & Kotler, 2011, p.35). Therefore, the interwoven patchwork of theories, detailed in the literature review is in this tradition. The research model proposed provides a nomological net on which to establish measures. Such a positivist approach emphasises adherence to causal laws and empirical observations as outlined in "A System of Logic" (Mill, 1843; as cited by Neuman, 2014, p.97). Moreover, Sarantakos (2005, p.34) notes that:

> *Positivism is often taken to be identical to a quantitative methodology because it contains the ontological and epistemological prescriptions that show how this methodology should conduct research. Quantitative research is equally often taken to be identical to positivist research for the same reasons.*

Sarantakos (2005) also highlights ten principles of positivism that are shown in Table 3.01. These principles expect the researcher to not only state the role of methodology but also to adhere to its prescriptions (Bryman & Bell, 2015).

Table 3.01

The Ten Principles of Positivism (Sarantakos, 2005, p.34)

1.	***Objectivism***	Adheres to the notion of objective reality and absolute truths.
2.	***Empiricism***	Claims that knowledge comes through sense experience.
3.	***Quantitativism***	Stresses the value of accuracy, precision, and measurement.
4.	***Objectivity***	Discourages subjectivity in the process of social research.
5.	***Value-Neutrality***	Maintains that facts should be kept apart from values.
6.	***Anti-rationalism***	Rejects the notion that knowledge comes from reason.
7.	***Universality of Science***	Asserts that the methods of the physical sciences are applicable also in the social sciences.
8.	***Deduction / Induction***	Employs a design based on deduction and produces inductive generalisations.
9.	***Determinism***	The world is deterministic, following strict causal laws, and if these laws are discovered social life can be predicted and controlled.
10.	***Design***	Employs a strict design planned and constructed prior to the commencement of research.

(ii) Interpretivism

Interpretivism represents an alternative paradigm that focuses on “value-relevant” research, that is far removed from the “value-free” requirements of positivism. This qualitative, non-positivist approach relies upon ontological inputs provided by the researcher. Therefore, according to Aliyu et al. (2014, p.83) it is through the “means of his or her intellect”, that the researcher transforms “doxa” (that which is believed to be true) into episteme (that which is known to be true)” so that this knowledge, if presented inscrutably, becomes communally recognised for its relative interpretation (Goles & Hirschheim, 2000, p. 250).

Kvale (1994, p.150) posits the interpretivist approach to be “knowledge covering general truths, or the operations of general laws especially as obtained through some scientific method”. The author also suggests that the definition of science is imprecise and while this may be contentious to some, he clearly argues that science “should produce knowledge, and this knowledge should be new, be systematic and be obtained methodically” (p.150). In interpretivism this knowledge is to be driven by subjectivism and constructed with a stated epistemological stance. It is the researcher’s modus operandi to apply and reference their own symbolic interaction principles for creating and recreating knowledge (Blumer, 1969; 1986). The adoption of an interpretivist perspective can be influenced by several reasons that include lack of access to large data sets and a perception that a positivist approach does not necessitate strong methodological underpinnings.

The scientific objective of this research is to systematically test hypotheses grounded explicably in theory. The deductive and causal nature of the proposed concepts as indicated in the research model derived from the literature review, suggests that this is best achieved not through an interpretive but through a positivist approach.

3.2. Research Design

The research design indicates what the research is about and provides a description of how the design corresponds to the formal intentions of the research question and hypotheses (de Vaus, 2002). Table 3.02 highlights some common functions of the research process that are

typical of qualitative and quantitative researchers (Neuman, 2014). A primary difference between the two is that qualitative researchers can exert more flexibility at different stages of the research process.

Table 3.02

Quantitative Research versus Qualitative Research (Neuman, 2014, p.176)

Quantitative Research	Qualitative Research
Researchers test hypotheses that are stated at the beginning	Researchers capture and discover meaning once they become immersed in the data
Concepts are in the form of distinct variables	Concepts are in the form of themes, motifs, generalizations, and taxonomies
Measures are systematically created before data collections and are standardized	Measures are created in an ad-hoc manner and are often specific to the individual setting or researcher
Data are in the form of numbers from precise measurement	Data are in the form of words and images from documents, observations, and transcripts
Theory is largely causal and deductive	Theory can be causal or noncausal and is often inductive
Procedures are standard, and replication is frequent	Researchers are particular, and replication is very rare
Analysis proceeds by using statistics, tables, or charts and discussing how what they show relates to hypotheses	Analysis proceeds by extracting themes or generalizations from evidence and organizing data to present a coherent, consistent picture.

Neuman (2014) provides a framework that further helps distinguish between pursuing qualitative and quantitative research. Table 3.03 shows that the approach of the researcher to

the “method” adopted is distinguishable through the process of knowledge gathering and application.

Table 3.03

Quantitative versus Qualitative Methods (Neuman, 2014, p.107)

Quantitative Method	Qualitative Method
Measure objective facts	Construct social reality, cultural meaning
Focus on variables	Focus on interactive processes, events
Reliability the key factor	Authenticity the key factor
Value free	Values present and explicit
Separate theory and data	Theory and data fused
Independent of context	Situationally constrained
Many cases, subjects	Few cases, subjects
Statistical analysis	Thematic analysis
Researcher detached	Researcher involved

An adherence to logical empiricism continues to be the most popular methodological approach in the field of marketing science. The research model being considered cuts across research streams. Therefore, Aboelela et al. (2007, p.341) note that interdisciplinary research is:

> *“…based upon a conceptual model that links or integrates theoretical frameworks from those disciplines, uses study design and methodology that is not limited to any one field, and requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process.”*

To help combat challenges of integration, Love (2002, p.346) has suggested three steps: (1) mapping and comparing research designs, (2) key issue identification and (3) application of clear definitions and concepts. The tendency to struggle with cross-disciplinary or multiple paradigm research is not a new phenomenon. The present research seeks to avoid the pitfalls underlined by Sajtos and Magyar (2016, p.3187), namely:

1) Deficiencies in formative, composite, and single-item measurement models (Hair et al., 2019; Jarvis et al., 2003; Roberts & Thatcher, 2009).
2) Disciplinary conventions, habits of the individual researcher as influenced by the academic's "social origins" (Bourdieu, 1984, p.12) as well as reductionist views motivated by institutional isomorphism (DiMaggio & Powell, 1983, p.149).
3) A lack of specific *a priori* criteria and a reduction of factor indeterminacy (Rigdon et al., 2019).

Lewis and Grimes (1999, p.673) observe that multi-paradigm inquiry is on the rise and with it, a series of hurdles created by the disparate views of paradigmatic groundings, seemingly at odds with one another. This is also the case with the research model proposed that incorporates the constructs of customer satisfaction, corporate reputation, customer loyalty, perceived risk, and their hypothesised relationship with prototype perceptions, behavioural willingness, and behavioural intentions. The incorporation of different paradigms in a common measure closely parallels the definition of metaparadigm by Lewis and Grimes (1999, p.673) that can provide a more "holistic view" inclusive of both "disparity" and "complementarity". The literature review has mapped and compared prior researchers' designs, identified critical works that established key issues and focused on clear conceptualisations of the constructs. This adherence to established constructs helps to further the science that a broad range of academics have worked to establish in their respective fields. Although, metatheoretical

analyses can be found across some of the identified fields (e.g., Armitage & Conner, 1999; Howard & Sheth, 1969), a model observing the afore mentioned seven constructs remains unique.

3.3. Research Method

The most common methods for data collection include experiments, surveys, archival analysis, history, and case study (Bryman & Bell, 2015). The nature of the present research necessitates a survey methodology that consists of multi-item measures forming the constructs. The measures chosen are identified from the literature for their sufficiency of grounding, psychometric measurement properties and nomological network. Piloting and correctional assertions to the items in the measures are identified while the sample selected is clearly defined from the perspective of generalisability on the given populations. Data gathered through surveys is often flawed due to errors that include common method bias and respondent error, therefore data cleansing and processing techniques are applied and documented. An overview of the sample characteristics for the two contexts that are investigated is also included. Finally, the software used to process the research model and the statistical methods that will be applied in the analysis chapter are presented.

3.3.1. Questionnaire Design

A self-completion questionnaire was chosen over other alternatives. The advantages and disadvantages are highlighted by Bryman and Bell (2015). The advantages include cheaper

cost, ease of administration, absence of interviewer effects and convenience for respondent groups (p.240). The disadvantages are that it is not possible to prompt respondents to answer questions or clarify issues when collecting a data and that it may not be appropriate for some kinds of respondents (p.241). In looking at questionnaire items, the operational set of guidelines by Johnson et al. (2011) shown in Table 3.04 were employed.

Table 3.04

Shoulds and Should Nots of Writing a Survey (Johnson et al., 2011, p.76)

Shoulds of Writing Survey Questions
1. Questions should be focused on a single issue.
2. Questions should be brief.
3. Questions should be interpreted the same way by all respondents.
4. Questions should use words understood by the respondents.
5. Questions should be grammatically simple to the degree possible.
Should Nots of Writing Survey Questions
1. Questions should not be based upon assumptions.
2. Questions should not go beyond the respondent=s ability or experience.
3. Questions should not use a specific example to represent a general case.
4. Questions should not ask respondents to recall specifics when generalities are likely to be recalled.
5. Questions should not require respondents to guess a generalization.
6. Questions should not ask for details that can not be provided.
7. Questions should not use words that overstate the condition.
8. Questions should not include ambiguous wording.
9. Questions should not be double-barreled.
10. Questions should not lead respondents to particular answer.
11. Questions should not have loaded or value laden wording or phrases.

Since the intention was to test the model in two contexts, the relevance of the questionnaire to respondents was established via a set of filter questions. Therefore, with respect to the online gambling questionnaire, the qualification process asked three questions. (1) Do you gamble online (yes / no), if yes, the participant was allowed to move to the next question. In (2), the participant was then asked to select their favourite gambling type (sports, casino, slot machines, lottery, bingo, poker and other) from a list. In (3), the survey management tool (SmartSurvey, 2020) used “piping” and based on the previous response, the participant was

taken to a list of popular online gambling brands. As an example of this flow, if a respondent answered yes to the first question, selects sports betting as their favourite type and then proceeds to select William Hill from the online gambling brands listed, the respondent was allowed to proceed with completing the questionnaire.

In the case of the household energy questionnaire, participants were asked two questions: In (1) respondents were asked whether they have a residential energy account, and if in the affirmative, (2) to select their provider. Here, a further qualifier was not deemed necessary since in the case of energy firms there exist three possible categories, namely: gas only, electricity only, and gas and electricity, but the survey was not concerned with distinguishing among these.

The instructions provided to the participants were made as clear as possible so that respondents could easily complete the entire questionnaire. Indeed, less than 5% of each of the online gambling and household energy respondents, who answered yes to the qualifying questions did not proceed to complete the entire questionnaire. Additionally, scattered throughout the questionnaire, respondents were requested to answer three questions to test their cognitive participation. Over 95% of respondents answered these questions in an “acceptable” manner. By way of example, one question in the online gambling survey asked respondents which website they would use if their preferred online gambling website was unavailable. A similar approach was adopted in the household energy questionnaire. Participating respondents were required to answer all questions before they could move from one page to the next.

3.3.2. Operationalising the Measures

The constructs and measures used in developing the research instrument are taken from previously tried and tested measures for each of the eight constructs as follows:

1. Behavioural Intention (BI) operationalised by applying a 4-item measure accompanied by 5-point, Likert scales (1 = Strongly disagree to 5 = Strongly agree) from Elliott et al. (2017).
2. Behavioural Willingness (BW) operationalised using a 3-item measure accompanied by 5-point, Likert-type scales (1 = Not at all willing to 5 = Willing) from Elliott et al. (2017).
3. Prototype perceptions (PP) identified as a formative measure, operationalised using 3 items accompanied by 5-point Likert-type scales (PP1: 1 = Not at all sensible to 5 = Sensible, PP2: 1 = Not at all successful to 5 = Successful, PP3: 1 = Selfish to 5 = Unselfish) from Gerrard et al. (2008).
4. Perceived Risk (PR) operationalised using a 2-item measure accompanied by 7-point, Likert-type scales (1 = Highly unlikely to 7 = Highly likely) from Windschitl (2002).
5. Customer Loyalty (CL) operationalised using a 4-item measure consisting of four dimensions for cognitive, affective, conative and action loyalty accompanied by 7-point, Likert-type scales (1 = Strongly disagree to 7 = Strongly agree) from Harris and Goode (2004).
6. Corporate Reputation (CR) operationalised using a 4-item measure using a 7-point, semantic differential scales from Brown (1995).
7. Overall Satisfaction (OS) operationalised using a 4-item measure accompanied by 7-point, Likert-type scales (1 = Strongly disagree to 7 = Strongly agree) from Oliver and Rust (1994).

8. Encounter Satisfaction (ES) operationalised using a 4-item measure accompanied by 7-point, Likert-type scales (1 = Strongly disagree and 7 = Strongly agree) for three questions and one semantic differential question from Oliver and Rust (1994).

Item details with adaptations in wording appear in Tables 3.05 and 3.06 for the online gambling and household energy surveys, respectively.

Table 3.05

Operationalised Measures for Online Gambling Survey Participants

Construct	Name	Measurement Items	Scale
Behavioural Intention (BI) (Elliott et al., 2017)	**BI1**	I intend to gamble online over the next month.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
	BI2	I plan on gambling online over the next month	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
	BI3	I want to gamble online over the next month.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
	BI4	I would like to gamble online over the next month.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
Behavioural Willingness (BW) (Elliott et al., 2017)	**BW1**	Suppose you are on a losing streak, how willing are you to continue to bet?	5-point, Likert (1 Not at all Willing, 5 Willing)
	BW2	Would you be willing to continue gambling, if you had a specific need for that money other than for gambling?	5-point, Likert (1 Not at all Willing, 5 Willing)
	BW3	Imagine that you can observe other players on the website accelerating their bets, to what extent would you be willing to continue to gamble?	5-point, Likert (1 Not at all Willing, 5 Willing)
Prototype Perceptions (PP) (Gerrard et al., 2008)	**PP1**	(Use this scenario to answer next three questions) Take a moment and think about someone your age, who gambles online with a high frequency, let's say at least, everyday. We are not interested in anyone specific, just a typical high-frequency online gambler: How sensible would you say they are?	5-point, Likert (1 Insensible (Not at all Sensible), 5 Sensible)
	PP2	How successful would you say they are?	5-point, Likert (1 Not at all Successful, 5 Successful)
	PP3	How selfish would you say they are?	5-point, Likert (1 Selfish, 5 Unselfish)
Perceived Risk (PR) (Windschitl, 2002)	**PR1**	How likely are you to get "A Good Deal" when you commit to an online gambling website?	7-point, Likert-type (1 Highly Unlikely, 7 Highly Likely)
	PR2	How likely is it that your online gambling provider is giving you the "Best Value"?	7-point, Likert-type (1 Highly Unlikely, 7 Highly Likely)
Customer Loyalty (CL) (Harris & Goode, 2004)	**CL1**	I will continue to choose "stated provider" over competitors.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	CL2	I like the service features offered by "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	CL3	I believe the service characteristics provided by "stated provider" are well suited to my needs.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	CL4	I have repeatedly found that "stated provider" is better than others.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
Corporate Reputation (CR) (Brown, 1995)	**CR1**	Compared to other companies in the online gambling sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Reliable, 7 The Absolute Most Reliable)
	CR2	Compared to other companies in the online gambling sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Reputable, 7 The Absolute Most Reputable)
	CR3	Compared to other companies in the online gambling sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Believable, 7 The Absolute Most Believable)
	CR4	Compared to other companies in the online gambling sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Trustworthy, 7 The Absolute Most Trustworthy)
Overall Satisfaction (OS) (Oliver & Rust, 1994)	**OS1**	Based on all of your own experience, how would you describe your overall satisfaction with the services provided by "stated provider"?	7-point, Likert-type (1 Very Dissatisfied, 7 Very Satisfied)
	OS2	Based on all of your own experiences with "stated provider", I am:	7-point, Likert-type (1 Very Dissatisfied, 7 Very Satisfied)
	OS3	Compared to other similar online gambling websites that you have used, how would you rate your satisfaction with "stated provider"	7-point, Likert-type (1 Very Dissatisfied, 7 Very Satisfied)
	OS4	In general, I am satisfied with "stated provider"	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	**ES1**	I was satisfied with my last engagement with "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	ES2	During the last occasion, I was satisfied with my decision to be a consumer of "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	ES3	My decision to use "stated provider" was a wise one.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	ES4	During my last encounter, I felt I had done the right thing with "stated provider".	7-point, Likert-type (1 Definitely Discontinue, 7 Definitely Continue)

Table 3.06

Operationalised Measures for Household Energy Consumer Survey Participants

Construct	Name	Measurement Items	Scale
Behavioural Intention (BI) (Elliott et al., 2017)	**BI1**	I intend to remain with my chosen supplier for the next year.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
	BI2	I plan to continue to use "stated provider" for the next year.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
	BI3	I want to stay with "stated provider" for the next year.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
	BI4	I intend to stay with "stated provider" for the next year.	5-point, Likert (1 Strongly Disagree, 5 Strongly Agree)
Behavioural Willingness (BW) (Elliott et al., 2017)	**BW1**	Suppose you find an energy provider that offers a better "most important factor", how willing are you to switch?	5-point, Likert (1 Not at all Willing, 5 Willing)
	BW2	How willing would you be to continue with your current energy provider, if you thought they were going to be improving their "most important factor"?	5-point, Likert (1 Not at all Willing, 5 Willing)
	BW3	Imagine that other customers are able to get better "most important factor" with another provider, how willing would you be to remain with your current provider?	5-point, Likert (1 Not at all Willing, 5 Willing)
Prototype Perceptions (PP) (Gerrard et al., 2008)	**PP1**	Take a moment to think about neighbours whose energy consumption is significantly higher than yours (two to three times more) and exhibit limited consideration for "most important factor". Use this scenario to answer the next three Questions: How sensible would you think they are?	5-point, Likert (1 Insensible (Not at all Sensible), 5 Sensible)
	PP2	How successful are they?	5-point, Likert (1 Not at all Successful, 5 Successful)
	PP3	How selfish are they?	5-point, Likert (1 Selfish, 5 Unselfish)
Perceived Risk (PR) (Windschitl, 2002)	**PR1**	How likely are you to get "A Good Deal" when you commit to an energy provider?	7-point, Likert-type (1 Highly Unlikely, 7 Highly Likely)
	PR2	How likely is it that your energy provider is giving you the "Best Value"?	7-point, Likert-type (1 Highly Unlikely, 7 Highly Likely)
Customer Loyalty (CL) (Harris & Goode, 2004)	**CL1**	I will continue to choose "stated provider" over competitors.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	CL2	I like the service features offered by "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	CL3	I believe the service characteristics provided by "stated provider" are well suited to my needs.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	CL4	I have repeatedly found that "stated provider" is better than others.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
Corporate Reputation (CR) (Brown, 1995)	**CR1**	Compared to all other companies in the Energy Sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Reliable, 7 The Absolute Most Reliable)
	CR2	Compared to all other companies in the Energy Sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Reputable, 7 The Absolute Most Reputable)
	CR3	Compared to all other companies in the Energy Sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Believable, 7 The Absolute Most Believable)
	CR4	Compared to all other companies in the Energy Sector, how would you rate "stated provider"?	7-point, Likert-type (1 The Absolute Least Trustworthy, 7 The Absolute Most Trustworthy)
Overall Satisfaction (OS) (Oliver & Rust, 1994)	**OS1**	Based on all of your own experience, how satisfied overall are you with the energy services provided to you by "stated provider"?	7-point, Likert-type (1 Very Dissatisfied, 7 Very Satisfied)
	OS2	Based on all of my own experience with "stated provider" I am	7-point, Likert-type (1 Very Dissatisfied, 7 Very Satisfied)
	OS3	Compared to other similar energy companies that you have used, how would you rate your satisfaction with "stated provider" ?	7-point, Likert-type (1 Very Dissatisfied, 7 Very Satisfied)
	OS4	In general I am satisfied with "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	**ES1**	I was satisfied with my last engagement with "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	ES2	During the last occasion, I was satisfied with my decision to be a consumer of "stated provider".	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	ES3	My decision to use "stated provider" was a wise one.	7-point, Likert-type (1 Strongly Disagree, 7 Strongly Agree)
	ES4	During my last encounter, I felt I had done the right thing with "stated provider".	7-point, Likert-type (1 Definitely Discontinue, 7 Definitely Continue)

All the above instruments have reported acceptable psychometric characteristics in terms of internal reliability and validity. In addition, demographics and classificatory variables were also collected for age, gender, marital status, occupation, education, nationality.

Furthermore, online gambling respondents were also asked how many online gambling accounts they held while household energy respondents were asked what factor is most important to them when choosing an energy provider.

Since samples are being collected from UK respondents, the use of English in the questionnaire matches the language of the targeted population. Moreover, the Office of National Statistics, UK, provides a considerable amount of secondary data that allows access to data indicators that can provide support to test the generalisability of the research (Bryman & Bell, 2015).

3.3.3. Sampling Contexts

The research model proposed necessitates data collection from two different market contexts, namely online gambling and household energy consumers. This will allow testing of the research model in each separate context while it will also allow for cross market equivalence testing of the model.

Online gambling is a product characterised by low involvement/ high engagement. Involvement relates to the amount of cognitive load placed on the subject, thus in online gambling, low involvement results because the brain is ‘on autopilot’. The low involvement characteristic suggests reactive response to this product is more likely driven by affect or via the peripheral route rather than by reflective consideration of specific characteristics of the product itself (Petty et al., 1983; Malär et al., 2011; Zaichkowsky, 1986; 1994). Moreover, online gambling platforms represent a commoditised offering that provides a varied choice for brand

selection, while sharing a common underlying software, plugins, and financial processing systems (Gambling.com, 2021). Online gambling is high engagement because most players interact with the product/ brand relatively frequently, often more than three times a week (Brodie et al., 2013).

The household energy product differs and is characterised by high involvement/ low engagement. Household energy has typically been a product where customers do not exhibit a high degree of self-congruence with the providers (Aaker, 1999). However, this may be changing as energy companies increasingly seek to engage more frequently via community and interactive usage measures (Ofgem, 2021c). Notwithstanding, household energy remains a situationally congruent product that allows customers to conform to established baselines of price and provider stability (Aaker, 1999). Therefore, once the service is installed, it (1) requires little input from the consumer; (2) the product is a commodity; (3) is high involvement requiring subjective evaluation, often based on price, and (4) it is a low engagement product with 66% of customers reported as not engaging with their provider over a three-month period (Ofgem, 2021b).

3.3.4. Piloting the Questionnaire

Piloting helps the researcher identify issues with the “flow” of the questionnaire (Bryman & Bell, 2015, p.272). The initial online gambling questionnaire was piloted among 30 participants, all highly familiar with the online gambling sector. A follow-up telephone call was made with each participant to ask which questions they found difficult or unclear. Those questions which were identified as in some way problematic were removed or in the cases of

misinterpretation, the language was simplified to reduce cognitive load on participants (Brosnan et al., 2021). The data collected for the constructs deemed reflective were subject to principal component / exploratory factor analyses (PCA / EFA) followed by varimax and oblimin rotations in SPSS which allowed preliminary investigation of “complimentary variable patterns” (Wold et al., 1987, p.37). Initial results obtained were encouraging and indicated acceptable loadings.

The piloting of the energy questionnaire was first conducted with a smaller group of participants than was the case with the online gambling questionnaire since many of the questions remained unaltered. Participants in the pilot study consisted of five friends and family who are known to have energy accounts in the UK market. The piloting undertaken showed that a few of the altered questions from the online gambling survey remained unclear and did not yield interpretable response. Corrective measures were taken to clarify the wording and the pilot was re-run with a larger sample of 100 participants. This again showed that there remained some doubt about the questions dealing with behavioural intention as the questions seemed repeated. Modifications were made to the wording of the questions and the piloting was re-run one final time with the original group of five participants who confirmed suitability.

The final survey instrument, exclusive of filter questions, consisted of a total of 38 items which included 28 items which corresponded to the operationalised measures, three cognitive load questions together with seven demographic/ classificatory items.

3.3.5. Data Collection

Sampling bias is a key concern that needs to be considered (Bryman & Bell, 2015). Minimising errors resulting from sampling and data collection increases generalisability of a study. The sampling procedure identified sampling frames for the UK online gambling and household energy consumption populations that are as closely matched to the characteristics of the target populations as possible.

Data collection occurred during the second wave of the Covid-19 pandemic. This created some problems with firms previously agreeing to support the research dropping out which required a search for alternative partners. The intended data collection commencement target for the online gambling survey was 29th February, 2020 with completion after 30 days. The pandemic was at a critical stage in March, 2020 and after much toing and froing the attempt to collect data via these gambling firms had to be abandoned on 18th June, 2020. A repeat situation occurred with two additional companies who again cited the pandemic as the reason for being unable to proceed.

In these circumstances it was decided to subcontract data collection to a commercial research firm *Smart Survey* (Smart Survey, 2020) rather than collect data via online gambling firms. The research firm was able to provide access to pre-qualified respondent databases. Since the primary focus of this research firm is the UK market, they were ideally suited for collecting the data for the present research. Further credibility for the firm came from their ability to ensure IP restrictions and tracking of users thereby preventing the same respondent from completing the survey, multiple times.

The order placed with *Smart Survey* was for the collection of 700 responses for each of the online gambling and household energy contexts. Participants came from the databases held by *Smart Survey* for the contexts being investigated. Data gathering from online platforms for research has been gaining support in recent years because of its ability to recruit and compensate participants who are identified as representative of a researcher's chosen context (Goodman & Paolacci, 2017).

3.3.6. Data Cleansing

Walfish (2006) presents a succinct perspective on the more commonly applied methodologies for data cleansing by quantitative researchers. The author suggests potential reasons for the presence of outliers that include recording errors, measurement errors and respondent carelessness. Removal of outliers has gained considerable attention in the last two decades as the robustness of software has increased alongside the complexity of the statistical models used (Jayakumar & Thomas, 2013). Walfish (2006) suggests that the researcher should initially undertake a visual detection of deviation but should then use one or more statistical techniques for outlier reduction. This approach depends on the type and complexity of the data gathered (Todeschini et al., 2013). High dimensionality data presents potential complications for outlier detection since distribution-based outlier detection methods are (1) univariate in nature, (2) lack *a priori* knowledge about distribution causing difficulty in practical applications, (3) are largely dependent on the distribution chosen to "fit" the data (Li et al., 2019; Zhang & Wang, 2006).

Visual and statistical techniques were used for data cleaning in this research. Visual data cleaning included fixing of structural errors by identifying and clarifying what the intended response was. Therefore, respondent data belonging to the online gambling group and the household energy group, gathered in *Smart Survey*, was assessed via responses to any of the posted questions requiring a free written response (e.g., What age were you at your last birthday?) for the following questionable responses:

- uniformity of questions where the respondent indicated; “I don’t know”, “not sure”, “unsure” and similar responses. These responses were modified to “Unsure”
- uniformity of questions where the respondent indicated; “I wouldn’t”, “would wait for my site” and “none”, These responses were modified to “None”
- Year of birth input by respondent instead of age in years, were corrected to the appropriate age in years.

In addition, irrelevant or unengaged respondents or those whose data responses could reasonably be deemed non-participative were also scrutinised. Therefore, non-participatory behaviour resulting from “straight-lining” (Herzog & Bachman, 1981, p.551) was examined and dealt with by deletion of respondents. Straight-lining is a phenomenon that occurs as an outcome of responder fatigue, resulting in decreased engagement with the questionnaire. Such behaviour is often encountered when conducting research with any homogenous group (Herzog & Bachman, 1981). The number of non-participatory respondents removed were 79 and 88 for the online gambling and household energy datasets, respectively.

Besides, the visual data cleansing described above, statistical analyses of outliers was also undertaken. Table 3.07 shows the frequency of visual and statistical item removals performed from the datasets for online gambling and household energy respondents. The total

responses removed through visual inspection and application of the Mahalanobis Distance processes was 13 and 31 for the online gambling and household energy datasets, respectively.

Given that data collection consisted of a total of 700 online gambling and 700 household energy survey responses, the cleaning operation resulted in a net total of 621 (88.7%) and 612 (87.4%) valid replies for the final online gambling and household energy datasets, respectively.

Table 3.07

Summary of Manual and Statistical Item Removals Undertaken

	Online Gambling	Household Energy
Time and Irrelevant or unengaged	66	57
Time only	2	4
Mahalanobis Distance	1	10
Time and Mahalanobis Distance	4	4
Time and irrelevant or unengaged and Mahalanobis distance	6	13
Total	79	88

3.3.7. Validation of Samples

The process of identifying an applicable or generalisable set of data to work with requires a focus on validity principles of precision, accuracy, and relevance (Sarantakos, 2005). Besides the data cleaning procedures described, a common error in survey data that also needs to be considered is non-response bias. This can occur when recipients of a survey indulge in “selective non-response” (Feskens et al., 2008, p.387). Three main steps have been applied to mitigate non-response bias in this research: (1) use was made of survey panels with

participants who are known to utilise the product verticals, (2) validation of participants via one or more qualifying questions, (3) ensuring familiarity and engagement by requiring participants to name their current provider and their first-choice alternative if their current provider was unavailable.

Correct coding of data is a critical step for the researcher as it serves two purposes. First it allows the researcher to quantify fields that were subjectively variable to the respondent. Secondly, it provides a series of validation techniques wherein the researcher can assess the similarity of respondent characteristics to those of the general population from which the sample population is a subset. The coding of demographic and classificatory variables utilised in the present research follow that of the UK, Office for National Statistics (ONS). Such a procedure facilitates investigation of the external validity of the samples collected (Bryman & Bell, 2015).

External validity was tested with the demographic variables for gender and occupation. In 2018 UK women, account for 49.4% of the UK population (ONS, 2019). Table 3.08 provides male and female gender distribution for the online gambling and household energy datasets compared with national percentages. The results indicate a marginally higher number of female respondents in both samples.

Table 3.08

Male and Female Gender Distribution for Online Gambling and Household Energy Compared with National Percentages (ONS, 2019)

Gender	Online Gambling sample (n=621)	Household Energy sample (n=612)	Average of the two samples	UK Population (2018)
	%	%	%	%
Female	54.9	46.8	50.9	49.4
Male	45.1	53.2	49.1	50.6

The occupation of respondents was sorted into the nine standard occupational codes (SOC) used by the ONS (ONS, 2020) shown in Table 3.09. Percentage comparisons of occupational roles by gender for respondents from the online gambling and household energy datasets with national percentages from ONS (ONS, 2020) are shown in the bar-charts in Figures 3.01 and 3.02, respectively. Visual inspection of these bar-charts shows that while the percentages by category are not an exact match, they are close. Taken together the results for gender and occupation provide support for the external validity of the two datasets collected.

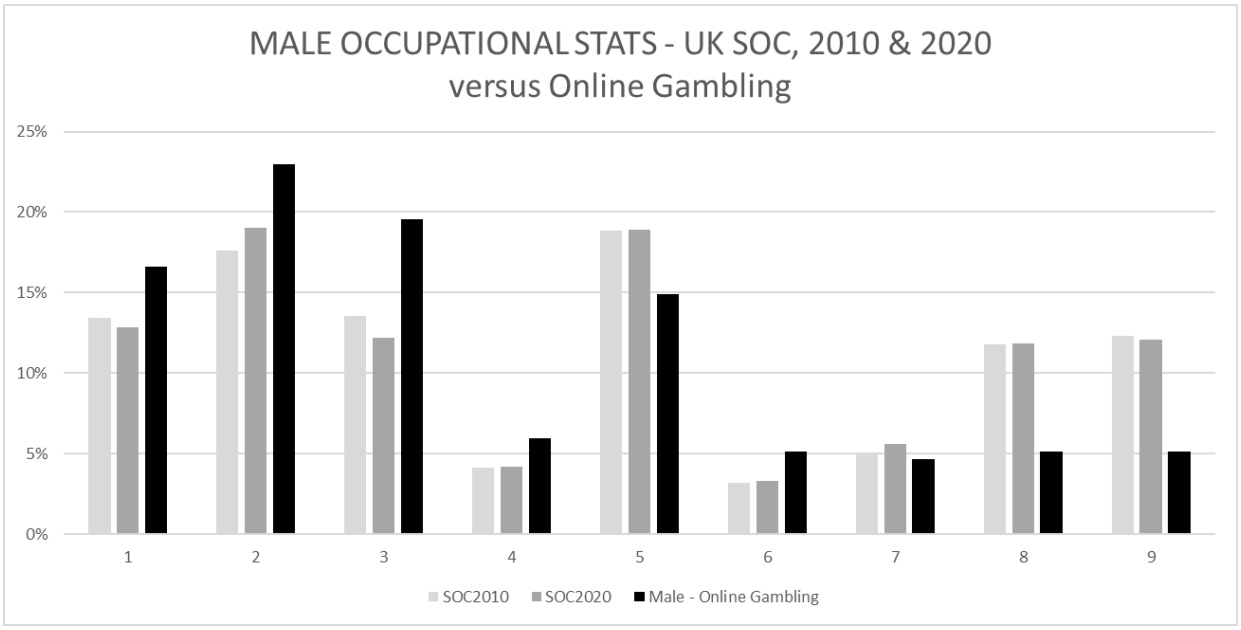
Table 3.09

ONS General Nature of Qualifications, Training and Experience for Occupations in SOC 2020 Major Groups: Categories (1 to 9) (ONS, 2020)

Major group		General nature of qualifications, training and experience for occupations in the major group
1	Managers, directors and senior officials	A significant amount of knowledge and experience of the production processes and service requirements associated with the efficient functioning of organisations and businesses.
2	Professional occupations	A degree or equivalent qualification, with some occupations requiring postgraduate qualifications and/or a formal period of experience-related training.
3	Associate professional occupations	An associated high-level vocational qualification, often involving a substantial period of full-time training or further study. Some additional task-related training is usually provided through a formal period of induction.
4	Administrative and secretarial occupations	A good standard of general education. Certain occupations will require further additional vocational training to a well-defined standard (e.g. office skills).
5	Skilled trades occupations	A substantial period of training, often provided by means of a work based training programme.
6	Caring, leisure and other service occupations	A good standard of general education. Certain occupations will require further additional vocational training, often provided by means of a work-based training programme.
7	Sales and customer service occupations	A general education and a programme of work-based training related to sales procedures. Some occupations require additional specific technical knowledge but are included in this major group because the primary task involves selling.
8	Process, plant and machine operatives	The knowledge and experience necessary to operate vehicles and other mobile and stationary machinery, to operate and monitor industrial plant and equipment, to assemble products from component parts according to strict rules and procedures and subject assembled parts to routine tests. Most occupations in this major group will specify a minimum standard of competence for associated tasks and will have a related period of formal training.
9	Elementary occupations	Occupations classified at this level will usually require a minimum general level of education (i.e. that which is acquired by the end of the period of compulsory education). Some occupations at this level will also have short periods of work-related training in areas such as health and safety, food hygiene, and customer service requirements.

Figure 3.01

Male and Female Occupational Statistics from Online Gambling Compared with National Percentages (ONS, 2020).



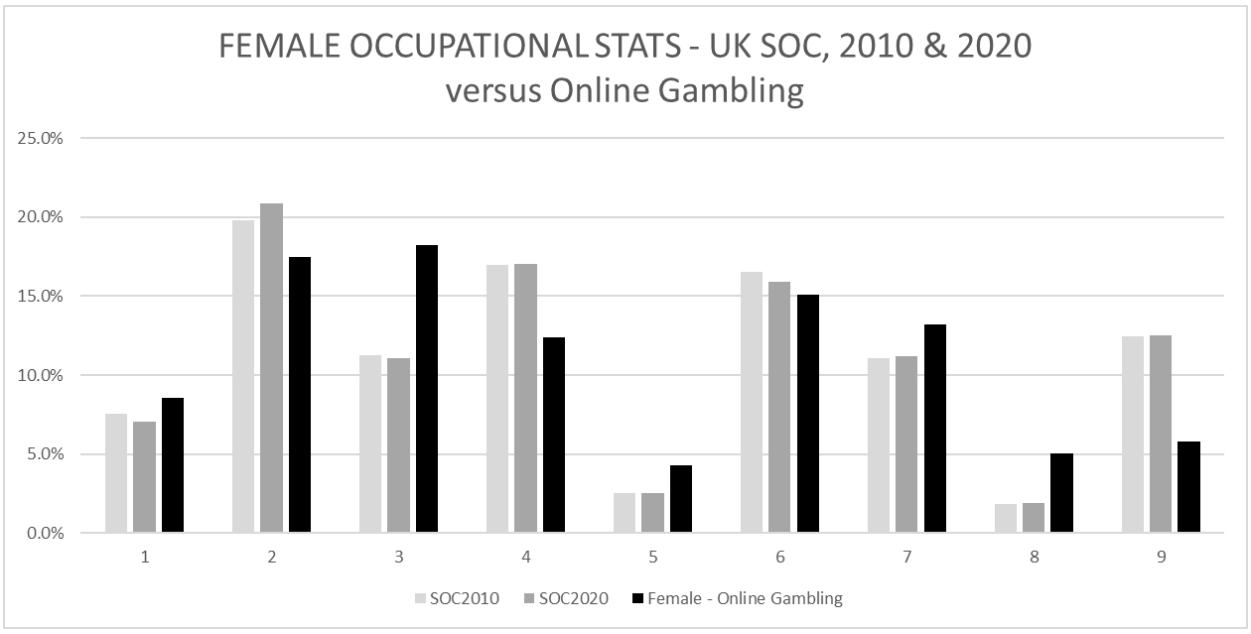
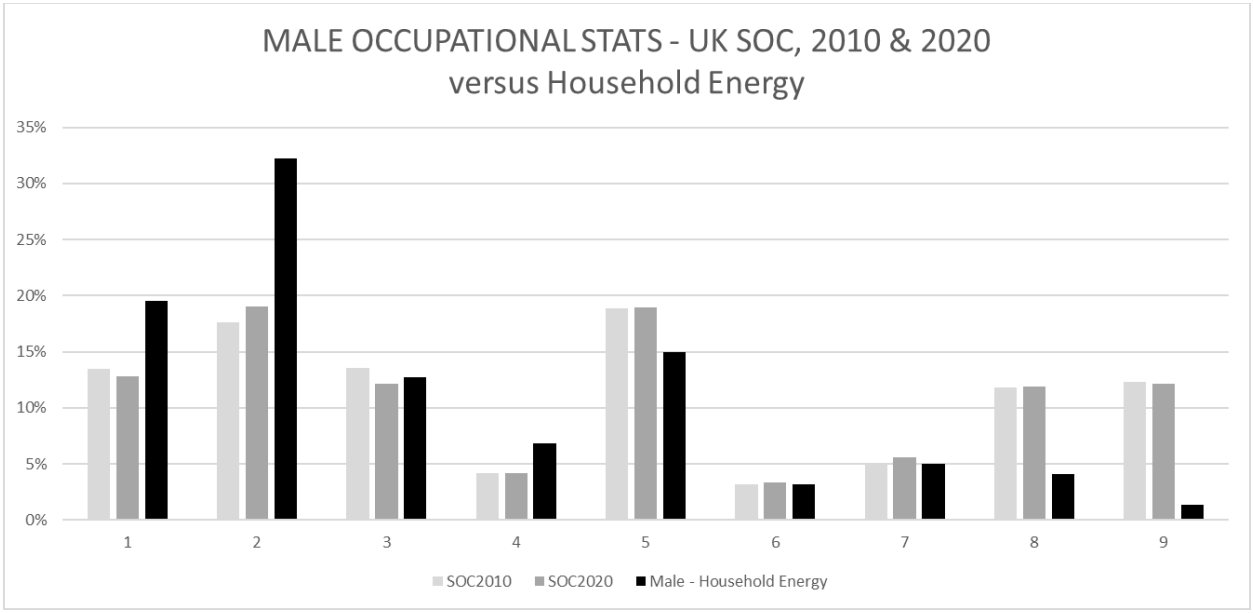
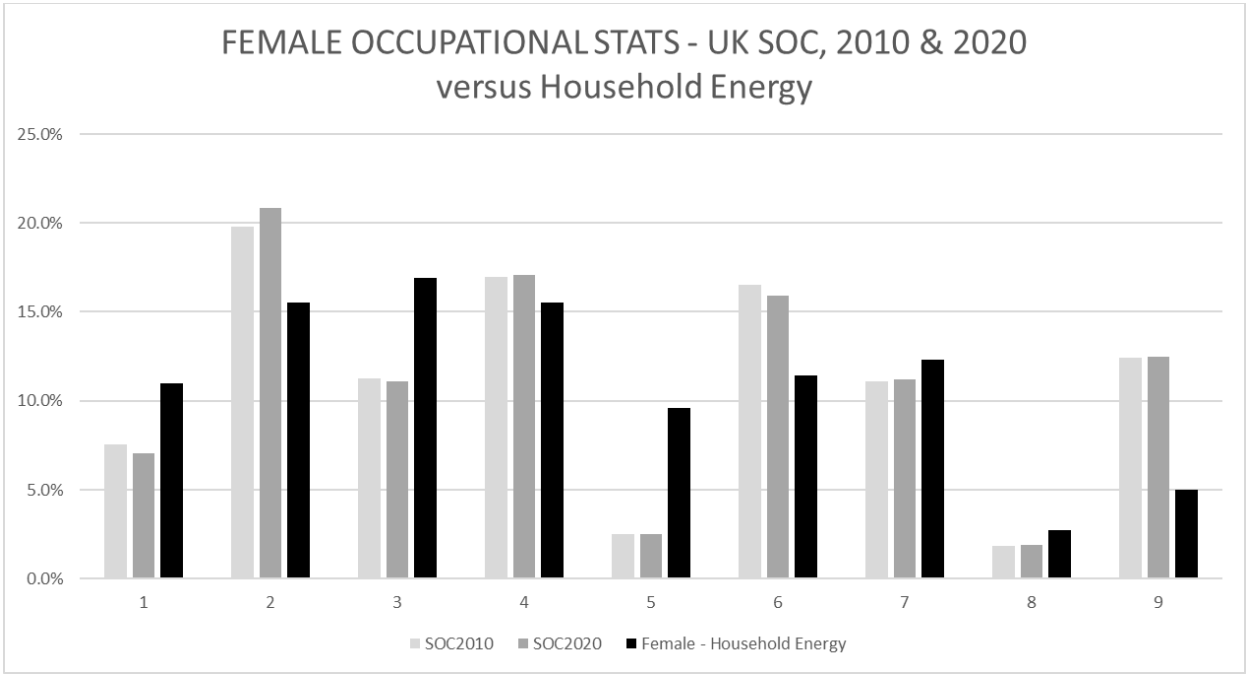


Figure 3.02

Male and Female Occupational Statistics from Household Energy Compared with National Percentages (ONS, 2020)





3.3.8. Common Method Bias

The researcher adopting a positivist approach, needs to build a psychometrically sound measurement instrument that synthesises the properties of a trait in a format which can be expressed empirically (Campbell & Fiske, 1959). These same authors also note that "formulation of trait will usually include implicitly the proposition that this trait is a response tendency which can be observed under more than one experimental condition and that the trait be meaningfully differentiated from other traits" (Campbell & Fiske, 1959, p.100). Indeed, common method bias (CMB) defined as "systematic variance" attributable to common measurement artifacts that alter (e.g., inflate or deflate) correlations in the underlying constructs is a potential error in questionnaire design and data collection that needs to be considered (Chin et al., 2012).

MacKenzie and Podsakoff (2012) consider the effects of common method bias and suggest it plays a considerable role in the outcomes of research often inflating the variance in a typical measure by 18 to 32% and covariance between constructs by 27 to 304%. Rather than apply post-hoc controls, researchers need to address such concerns by applying *a priori* methodological actions to the data gathering process. These actions include pretesting, respondent selection, clarity of questions and language used, a focus on current states, and simplification of the language used to reduce the cognitive load on the participants (MacKenzie & Podsakoff, 2012). The present research has adopted these actions and as described above has tested the questions with several participants from each of the two data collection groups.

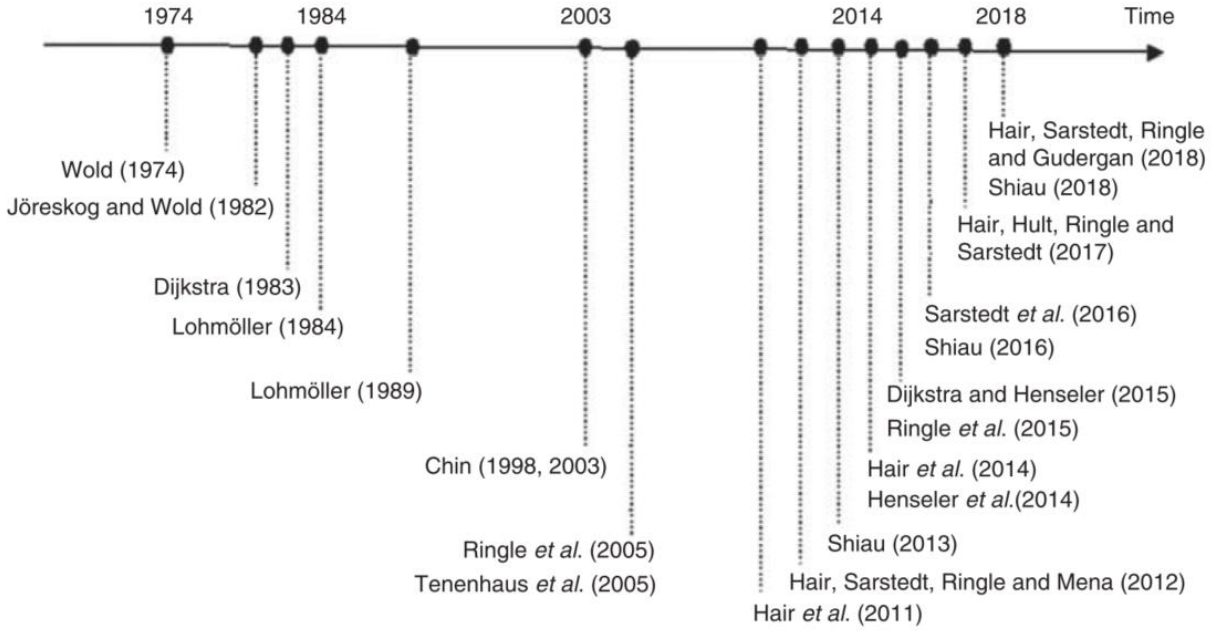
Harman's "one factor test" (Podsakoff & Organ, 1986) using exploratory factor analyses was also conducted as a *post-hoc* test. Results from the analyses undertaken separately on the two data sets indicated distributed variance loadings on multiple factors across both the online gambling and the household energy datasets. Despite the limitations of the one factor test as noted by Podsakoff et al. (2003), taken together with the *a priori* measures undertaken, these actions provide comfort that common method bias is unlikely to be a major concern.

3.3.9. Analyses Software and Procedures

SPSS version 28 is used for the basic data analyses while multi-variate, variance-based, structural equation modelling (SEM) with the application of the partial least squares (PLS) is used to estimate and test the hypothesised relationships in the causal research model. Figure 3.03 provides an overview of the development and diffusion of PLS-SEM in academia. It underlines the increased adoption of PLS-SEM by authors in recent years.

Figure 3.03

Development and Diffusion of PLS SEM (Shiau et al., 2019, p.399)



The assessment of measures to support the presence of acceptable psychometric properties of instruments used to capture constructs has previously often been undertaken using confirmatory factor analysis (CFA) in covariance-based structural equation modelling (CB-SEM). This technique is used on reflectively measured constructs to establish item reliability, construct reliability, convergent and discriminant validity together with goodness of fit (GFI) indices. However, the research model in this study also includes a formative measure for one of its constructs, and therefore PLS-SEM is more appropriate. In PLS-SEM, confirmatory composite analysis (CCA) is instead used to test the psychometric properties of the instruments used. CCA represents a more recently developed approach for the confirmation of measurement models. An advantage of CCA, that is relevant to this research is that it can handle both reflective and formative measures (Hair et al., 2020). Moreover, the sensitivity of

the CCA technique is ideally suited for measuring effect among constructs (Henseler et al., 2016a).

The composite causal model of this research necessitates structural model assessment using path analysis techniques available in PLS-SEM. This type of analyses is referred to as a non-symmetrical approach for component-based path modelling, which has been identified as a new “composite-based path modelling” method (Dolce et al., 2017, p.153). The most popular PLS-SEM software in use is Smart-PLS (Ringle et al., 2015). Other alternative PLS-SEM software offering similar suites of analytics tools for data observations and modelling include Warp PLS and Visual PLS.

Type I and Type II errors are standard considerations for any quantitative research. Type I error (α or alpha error) is known as the “false positive” error, wherein the null hypothesis is rejected but is correct. Reduction of Type I errors is undertaken by minimising the significance level. In the present research the cut-offs are *<0.05, **<0.01 and *** 0.001. Type II error is known as the false negative error (β or beta error) wherein the null hypothesis that is actually false is not rejected. To reduce the likelihood of Type II, sufficient sample sizes have been employed. An important consideration in any research relates to statistical power which is intimately linked to sample size. A common rule of thumb for deciding on the sample size is the 10-times rule method (Barclay et al., 1995). In PLS SEM this rule was adapted as 10 times the largest number of formative indicators used to measure a single construct or 10 times the largest number of structural paths directed at a particular construct in the structural model (Hair et al., 2017, p.24). In the literature, tables are provided that suggest the minimum sample size

required to ensure a particular statistical power. For example, the table by Hair et al. (2017) shows that a sample of 256 provides a statistical power of 0.8 with a significance level of 0.01.

To investigate the sample size issue further, an *a priori* power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2009) to determine the minimum sample size to test the hypotheses of the study. Results indicate the required sample size to achieve 80% power for detecting a medium effect, at a significance criterion of α = .05, was *N* = 319. When metrics of statistical power are achieved, Hair et al. (2017) suggest that PLS-SEM is appropriate for both exploratory and confirmatory research. The resultant power for the two data sets collected, consisting of a sample size of *n*= 621 and *n* = 612 for the online gambling and household energy populations, respectively, provide a power statistic of .999 which is more than adequate to test the hypotheses of the study.

A concern highlighted in the use of PLS-SEM is the issue of Goodness of Fit measures that are provided in assessing models investigated with CB-SEM but not with PLS-SEM. Since PLS-SEM does not provide Goodness of Fit measures, it has been suggested that PLS-SEM is unfit for testing theory and confirmation, but proponents of PLS-SEM have instead proposed SRMR as an alternative model fit measure (Hair et al., 2019). Moreover, researchers question altogether the appropriateness of CB-SEM Goodness of Fit measures in PLS-SEM. This is because while in CB-SEM models the algorithm seeks to “minimise the divergence between observed and estimated covariance matrices” linked to the Chi-square goodness of fit measure, this process is rendered without use in PLS-SEM (Hair et al., 2019, p.7).

To test invariance among the two population contexts investigated, use is also made of multi-group analysis (MGA) in Smart-PLS. The identification of measurement invariance among groups is critical to outcome validity and conclusory statements (Henseler et al., 2016b). In addition, measurement invariance of composite models (MICOM) is undertaken as part of the multigroup analysis (MGA) procedure. MICOM is one of those measurement steps which is frequently overlooked by researchers, with variables often not modelled as composites (Henseler et al., 2016b).

3.4. Ethical Considerations

Confidentiality, and sometimes also anonymity, are key considerations for research conducted in the social sciences, particularly when dealing with psychologically sensitive issues, as is the case with problem gambling. Confidentiality and anonymity of sources are ensured to minimise any potential impact on participants. These two aspects have been carefully considered at both pre- and post-research stages. While the household energy research and data collection provide minimal ethical issues the data collection among online gambling customers is more sensitive. Ethical data collection involved ensuring informed consent, confidentiality and right to withdraw. These requirements are rooted in the American Psychological Association and British Psychological Society ethical guidelines and are important aspects of any data collection involving gamblers. A further duty of the researcher is to “avoid moral panics” which can be overcome by avoiding questions focusing exclusively on the negatives associated with online gambling (Wood & Griffiths, 2007).

Furthermore, the code of ethic at the University of Malta requires that the legal, regulatory, and ethical requirements in Malta and in the country where the research takes place be met. Therefore, clearance for the intended research methodology was sought and obtained from the ethics board at the University of Malta on May 28th, 2020. The principle of "do no harm", as well as honouring the integrity and dignity of participants needed to be satisfied. To ensure informed consent and to safeguard participants' right to privacy and data protection, during the data collection process, the researcher opted not to collect any specific or cross-referenceable information that could identify respondents. Moreover, the research undertaken is purely academic and does not provide personal gain for the researcher nor material benefit for the University of Malta.

Chapter 4

ANALYSES

The analyses consist of eight sections. It starts in section 4.1 by providing descriptive statistics for all the items and respondent characteristics collected for the online gambling and household energy data sets. In section 4.2 the alternative CB-SEM and PLS-SEM analyses tools available for analysing the multistage causal research model that is being tested are considered and the decision to adopt the SmartPLS version of PLS-SEM is explained. The measurement and structural models resulting from the SmartPLS analyses are examined in Sections 4.3 and 4.4 while sections 4.5 and 4.6 investigate the mediated and moderated aspects of the research model. Section 4.7 explores measurement invariance across the online gambling and household energy data sets while Section 4.8 undertakes crosstabulations of the constructs in the model with the demographic characteristics collected.

4.1. Descriptive Statistics

Descriptive data for the demographic and classificatory variables collected are shown in Table 4.01. Respondents for both datasets collected are predominantly British, and broadly represent the characteristics of age, gender, marital status, education, and occupation expected in the population. However, the online gambling data consists of respondents in lower age and single (marital status) categories than those in the household energy data.

Table 4.01

Descriptive Statistics for the Demographic and Classificatory Variables Collected (part 1 of 2)

Age Groups	Online Gambling		Household Energy	
	Frequency	Percent	Frequency	Percent
Under 24	81	13.0%	51	8.3%
25 - 34	169	27.2%	118	19.3%
35 - 44	171	27.5%	150	24.5%
45 - 54	94	15.1%	127	20.8%
55 - 64	96	15.5%	141	23.0%
65 and older	10	1.6%	25	4.1%
Total	621	100.0%	612	100.0%

Gender	Online Gambling		Household Energy	
	Frequency	Percent	Frequency	Percent
Male	280	45.1%	292	46.8%
Female	341	54.9%	320	53.2%
Other	0	0.0%	0	0.0%
Total	621	100.0%	612	100.0%

Marital Status	Online Gambling		Household Energy	
	Frequency	Percent	Frequency	Percent
Single, Never Married	273	44.0%	241	39.4%
Married	293	47.2%	314	51.3%
Separated	11	1.8%	5	0.8%
Divorced	33	5.3%	39	6.4%
Widowed	11	1.8%	13	2.1%
Total	621	100.0%	612	100.0%

Education Level Attained	Online Gambling		Household Energy	
	Frequency	Percent	Frequency	Percent
Entry level - Entry level functional or essential skills, Entry level awards and diplomas, Entry level certificates (ELCs), Entry level English for foreign language speakers (ESOL), Skills for Life	24	3.9%	18	2.9%
Level 1 - GCSE (grades D, E, F or G), Level 1 functional or essential skills, Level 1 awards and diplomas, Level 1 certificates, Level 1 National Vocational Qualification (NVQ), Music grades 1, 2 and 3, Level 1 ESOL	55	8.9%	50	8.2%
Level 2 - GCSE (grades A*, A, B or C), O level (grades A, B or C), Grade 1 at CSE level, Level 2 functional or essential skills, Level 2 awards and diplomas, Level 2 certificates, Level 2 NVQ, Music grades 4 and 5, Intermediate apprenticeships, Level 2 ESOL	95	15.3%	88	14.4%
Level 3 - A level (grades A, B, C, D or E), Advanced subsidiary (AS) level, Tech level, Applied general, Level 3 awards, diplomas and certificates, Level 3 NVQ, Music grades 6, 7 and 8, Advanced apprenticeships, Access to higher education diploma, International Baccalaureate diploma, Level 3 ESOL	147	23.7%	128	20.9%
Level 4 - Higher national certificate (HNC), Certificate of higher education (CertHE), Level 4 awards, Level 4 diplomas, Level 4 certificates, Level 4 NVQ, Higher apprenticeships	53	8.5%	50	8.2%
Level 5 - Foundation degree, Higher national diploma (HND), Diploma of higher education (DipHE), Level 5 awards, diplomas and certificates	36	5.8%	41	6.7%
Level 6 - Bachelor's degree (with or without honours), Graduate diploma, Graduate certificate, Degree apprenticeship	143	23.0%	150	24.5%
Level 7 - Master's degree, Integrated master's degree	54	8.7%	64	10.5%
Level 8 - Doctorate or PhD	9	1.4%	14	2.3%
Unanswered	5	0.8%	9	1.5%
Total	621	100.0%	612	100.0%

Table 4.01

Descriptive Statistics for the Demographic and Classificatory Variables Collected (part 2 of 2)

Nationality	Online Gambling		Household Energy	
	Frequency	Percent	Frequency	Percent
British	577	92.9%	560	91.5%
Non-British	44	7.1%	52	8.5%
Total	621	100.0%	612	100.0%

Occupation	Online Gambling		Household Energy	
SOC Levels	Frequency	Percent	Frequency	Percent
1 - Managers, Directors and Senior Officials	61	9.8%	67	10.7%
2 - Professional Occupations	99	15.9%	105	15.3%
3 - Associate Professional Occupations	93	15.0%	65	8.5%
4 - Administrative and Secretarial Positions	46	7.4%	49	6.7%
5 - Skilled Trades Occupations	46	7.4%	54	6.8%
6 - Caring, Liesure and Other Service Occupations	51	8.2%	32	7.3%
7 - Sales and Customer Service Occupations	45	7.2%	38	5.9%
8 - Process, Plant and Machine Operatives	25	4.0%	15	4.0%
9 - Elementary Occupations	27	4.3%	14	5.3%
10 - Unemployed / Disability	100	16.1%	124	19.5%
11 - Retired	28	4.5%	49	9.9%
Total	621	100.0%	612	100.0%

Descriptive data for the constructs for both the online gambling and household energy samples appear in Tables 4.02 and 4.03, respectively. Means for the individual items are generally higher for the online gambling than the household energy data but the latter often exhibit higher standard deviations. In terms of kurtosis, the data generally exhibits values < 3 suggesting a rather flat type of distribution. The exception are the three behavioural intention items in the online gambling data set that are > 3 which indicates a peaked distribution. Skewness values that exceed $\pm$ 1 indicate high skewness (Bulmer, 1979). This is generally not the case with the data for the individual items. However, the behavioural intention items in the online gambling data and two of the overall satisfaction items in the household energy data exceed the threshold. Given the nature of the construct being measured such a skewness result can be expected.

Two of the behavioural willingness and one prototype perception items needed to be deleted. The PWM (Gibbons & Gerrard, 1995) has previously been primarily applied to risk behaviour among adolescents and their willingness to participate with health-related activities

concerning tobacco, alcohol (including drinking and driving), illicit drug use and unprotected sex (Todd et al., 2016). This research extends the PWM to risk behaviour in an online gambling context and to a behaviour of necessity represented by the household energy context. In looking at the measurement model in SmartPLS, the estimates of loadings and significance for the behavioural willingness items were supported in the online gambling data as the 0.708 threshold (Lohmöller, 1989, as cited in Hair et al., 2017) was exceeded. Items not meeting this criterion were deleted because of reliability issues. A similar situation resulted in the case of the prototype perceptions construct. Here, the measurement model results showed that the PP3 item in the online gambling data was acceptable ($\beta = 0.486$, $t = 5.772$, $p < 0.05$) but in the household energy sample the same item was not ($\beta = 0.253$, $t = 1.731$, $p > 0.05$). In both cases, the problematic behavioural willingness and the prototype perceptions items are dropped so that the final model might be taken forward.

Table 4.02

Descriptive Statistics – Constructs Means, Standard Deviations, Kurtosis and Skewness for the Online Gambling Dataset (n=621)

Construct	Name	Type	Mean	St. Dev.	Kurtosis	Skewness
Behavioural Intention (BI) (Elliott et al., 2017)	**BI1**	Reflective	3.866	0.568	5.577	-1.603
	BI2		3.899	0.557	5.366	-1.437
	BI3		3.828	0.577	5.337	-1.641
	BI4		3.866	0.533	5.457	-1.467
Behavioural Willingness (BW) (Elliott et al., 2017)	**BW1**	Reflective			Deleted	
	BW2				Deleted	
	BW3		3.105	1.093	-0.374	-0.298
Prototype Perceptions (PP) (Gerrard et al., 2008)	**PP1**	Formative	2.723	1.149	-0.823	0.172
	PP2		2.881	0.978	-0.450	-0.123
	PP3				Deleted	
Perceived Risk (PR) (Windschitl, 2002)	**PR1**	Reflective	4.717	1.159	0.964	-0.519
	PR2		4.974	1.144	0.324	-0.338
Customer Loyalty (CL) (Harris & Goode, 2004)	**CL1**	Reflective	5.446	1.074	0.689	-0.647
	CL2		5.609	1.047	0.624	-0.696
	CL3		5.277	1.154	-0.310	-0.240
	CL4		5.599	1.084	0.391	-0.637
Corporate Reputation (CR) (Brown, 1995)	**CR1**	Reflective	5.246	1.017	0.117	-0.047
	CR2		5.262	1.015	0.550	-0.385
	CR3		5.227	1.039	-0.131	-0.205
	CR4		5.262	1.113	-0.217	-0.187
Overall Satisfaction (OS) (Oliver & Rust, 1994)	**OS1**	Reflective	5.665	1.034	0.884	-0.755
	OS2		5.681	1.006	1.057	-0.780
	OS3		5.654	1.029	0.007	-0.533
	OS4		5.810	1.020	0.660	-0.819
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	**ES1**	Reflective	5.390	1.107	0.289	-0.528
	ES2		5.557	1.053	0.526	-0.671
	ES3		5.477	1.099	0.085	-0.529
	ES4		5.441	1.099	-0.111	-0.449

Table 4.03

Descriptive Statistics – Constructs Means, Standard Deviations, Kurtosis and Skewness for the Household Energy Dataset (n=612)

Construct	Name	Type	Mean	St. Dev.	Kurtosis	Skewness
Behavioural Intention (BI) (Elliott et al., 2017)	**BI1**	Reflective	3.775	0.985	0.053	-0.598
	BI2		3.824	0.978	-0.012	-0.608
	BI3		3.776	1.003	-0.147	-0.547
	BI4		3.792	0.982	-0.007	-0.596
Behavioural Willingness (BW) (Elliott et al., 2017)	**BW1**	Reflective			Deleted	
	BW2				Deleted	
	BW3		3.023	1.133	-0.761	0.023
Prototype Perceptions (PP) (Gerrard et al., 2008)	**PP1**	Formative	2.484	1.268	-0.907	0.440
	PP2		3.067	1.036	-0.253	-0.143
	PP3				Deleted	
Perceived Risk (PR) (Windschitl, 2002)	**PR1**	Reflective	4.961	1.276	0.572	-0.638
	PR2		4.742	1.395	0.070	-0.418
Customer Loyalty (CL) (Harris & Goode, 2004)	**CL1**	Reflective	5.109	1.352	0.718	-0.741
	CL2		5.160	1.346	0.855	-0.775
	CL3		4.799	1.412	0.091	-0.403
	CL4		4.792	1.417	0.120	-0.416
Corporate Reputation (CR) (Brown, 1995)	**CR1**	Reflective	4.881	1.114	0.974	-0.262
	CR2		4.951	1.135	0.757	-0.315
	CR3		4.908	1.170	0.570	-0.356
	CR4		4.887	1.252	-0.686	0.109
Overall Satisfaction (OS) (Oliver & Rust, 1994)	**OS1**	Reflective	5.278	1.398	0.692	-0.943
	OS2		5.327	1.360	1.248	-1.127
	OS3		5.270	1.361	0.729	-0.926
	OS4		5.408	1.415	1.071	-1.134
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	**ES1**	Reflective	5.142	1.415	0.559	-0.845
	ES2		5.219	1.356	0.833	-0.885
	ES3		5.252	1.338	0.609	-0.747
	ES4		5.221	1.350	0.619	-0.783

Table 4.04

Means and Standard Deviations for Constructs and their Correlation Matrices for Online Gambling and Household Energy Data

	Mean	SD	Mean	SD	**BI**	**BW**	**PP**	**PR**	**CL**	**CR**	**OS**	**ES**
BI	15.459	1.952	15.167	3.789		.179**	.155**	.352**	.361**	.325**	.363**	.346**
BW	3.100	1.093	3.020	1.133	.308**		.408**	.341**	NS	.118**	.098*	.099*
PP	5.604	1.915	5.551	2.063	.148**	.356**		.299**	NS	.080*	NS	.130**
PR	9.691	2.072	9.703	2.413	.423**	.194**	.162**		.561**	.579**	.582**	.591**
CL	21.931	3.642	19.861	4.997	.729**	.335**	.229**	.600**		.719**	.754**	.754**
CR	20.998	3.605	19.628	4.077	.601**	.270**	.252**	.600**	.804**		.708**	.693**
OS	22.810	3.684	21.283	5.269	.675**	.219**	.110**	.569**	.856**	.759**		.850**
ES	21.865	3.829	20.833	5.080	.679**	.211**	.128**	.600**	.854**	.755**	.924**	

Correlation for online gambling above diagonal that for household energy below diagonal

**= p<.01; * p<.05; NS= Not significant

The means and standard deviations for the individual constructs and the correlation matrices for both datasets are quite like each other. Therefore, in both cases, the strongest correlations are between encounter and overall satisfaction while customer loyalty has strong correlations with corporate reputation, overall customer satisfaction and encounter satisfaction. Interestingly, in the online gambling data, prototype perceptions do not exhibit statistically significant correlations with customer loyalty and overall satisfaction but do exhibit statistically significant correlations with these constructs in the household energy data set.

4.2. PLS-SEM versus CB-SEM Analyses

The research model of this study requires the analyses of multistage effects that can be achieved using structural equation modelling (SEM). To do so it is necessary to choose between covariance based (CB-SEM) and partial least squares (PLS-SEM) structural equation modelling. One of the main reasons often given for using PLS-SEM software is to test models using small sample sizes or secondary data (Hair et al., 2017). Neither is an issue in the current research. However, Hair et al. (2019) provide other important reasons for preferring SmartPLS (the most popular software version of PLS-SEM) over CB-SEM that are relevant in this research.

First, SmartPLS should be used when the data demonstrates peaked and skewed distributions with non-normal data. SmartPLS includes bias-corrected and accelerated (BCa) bootstrapping that can minimise these effects by adjusting confidence intervals for skewness (Hair et al., 2019). For univariate distributions, the parameters are $\pm$ 1 for Skewness and $\pm$ 7 for Kurtosis while for multivariate data the parameter for Kurtosis is $\pm$ 20. To investigate the distribution of the data collected, *WebPower* software (www.psychstat.org) was used to apply Mardia multivariate analysis (Mardia, 1970) on the two datasets collected. The results in Table 4.05 show the presence of non-normal distribution data reflected in the kurtosis of the behavioural intention measure. This non-normal distribution of data provided the first basis of support for preferring PLS-SEM over CB-SEM.

Table 4.05

Distribution of Data Collected – Mardia Univariate and Multivariate Analysis

Construct	Context	Skewness	SE Skew	Kurtosis	SE Kurt
Behavioural Intention (BI)	Online Gambling	-1.573	0.098	7.018	0.196
	Household Energy	-0.591	0.099	0.060	0.197
Behavioural Willingness (BW)	Online Gambling	-0.298	0.098	-0.374	0.196
	Household Energy	0.023	0.099	-0.761	0.197
Prototype Perceptions (PP)	Online Gambling	-0.018	0.098	-0.606	0.196
	Household Energy	0.258	0.099	-0.594	0.197
Perceived Risk - Likelihood (PR)	Online Gambling	-0.353	0.098	0.642	0.196
	Household Energy	-0.427	0.099	0.267	0.197
Customer Loyalty (CL)	Online Gambling	-0.572	0.098	1.228	0.196
	Household Energy	-0.715	0.099	1.006	0.197
Corporate Reputation (CR)	Online Gambling	-0.153	0.098	0.227	0.196
	Household Energy	-0.032	0.099	0.232	0.197
Overall Satisfaction (OS)	Online Gambling	-0.768	0.098	1.118	0.196
	Household Energy	-1.134	0.099	1.282	0.197
Encounter Satisfaction (ES)	Online Gambling	-0.464	0.098	0.357	0.196
	Household Energy	-0.852	0.099	0.932	0.197
Mardia's Multivariate Skewness and Kurtosis		**b**	**z**	**p-value**	
Skewness	Online Gambling	6.502	672.966	0.000	
	Household Energy	5.371	547.803	0.000	
Kurtosis	Online Gambling	101.197	20.880	0.000	
	Household Energy	94.622	14.298	0.000	

Hair et al. (2017) highlighted additional reasons for preferring PLS-SEM over CB-SEM that are relevant to the circumstances of this research. These include that the model in this study is complex as it involves mediation, moderation, and two verticals. SmartPLS allows both moderator analyses of interactions among constructs and multigroup analysis. Moreover, SmartPLS can also deal with formative measures which is the case with one of the constructs in this research (Hair et al., 2019, p.14). In this respect, SmartPLS offers confirmatory tetrad analysis (CTA) as a validation technique to identify and validate hypothesised formative constructs (Hair et al., 2019, p.9). CTA is a powerful test because it overcomes limitations regarding distributional assumptions by including a bootstrapping routine to assume sampling from the empirical distribution (Bollen & Stine, 1990, p.118). This empirical non-distributional assumption is performed by CTA in the SmartPLS application (Gudergan et al., 2008). The

results from the CTA undertaken provides support for the formative nature of the prototype perceptions construct. Finally, the research model in this study seeks theory development which the composite analysis features in SmartPLS can identify and quantify. Therefore, given the causal nature of the research, its model complexity, the theoretical extensions being pursued, the presence of a formative construct, amongst others, makes SmartPLS well suited for conducting the analysis of the data collected.

4.3. Examining the Measurement Model

Measuring the consistency and reliability of a model, requires an analysis of items used to represent an accurate measure of a concept (Hair et al., 2020). Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and to a lesser extent, Confirmatory Composite Analysis (CCA) are common methods employed to investigate the psychometric properties of measures. Hair et al. (2020, p.103) provide a comparison of the three analyses options. EFA is a multivariate statistical method generally employed in building new theory where there may not yet be hypothetical boundaries in place. The process is supported by the recent response to criticism of PLS for exploratory research by Henseler et al. (2014). EFA enables data reduction and is often applied to understand and estimate the effect of items on unmeasured latent constructs (Hayton et al., 2004). On the other hand, CFA is generally applied when there already exists an underlying theoretical construct in place that allows testing of linear invariance among measures or traits (Reise et al., 1993). CCA, is a more recent technique provided as part of the development of SmartPLS, that is conceptually distinct from CFA (Hair et al., 2012; Rigdon, 2012; Rigdon, 2014; Schuberth et al., 2018, Henseler & Schuberth, 2020). CCA allows for the investigation of formative measures of constructs (Hair et al., 2017) and is used in this

research to assess each of the seven reflectively measured constructs and one formatively measured construct that make up the measurement model in this study.

The assessment of the measurement model used in this study requires following procedures for the assessment of the reflective and formative measures employed.

4.3.1. Reflective Measures

The CCA assessment of the reflective part of the model follows the procedure indicated by Hair et al. (2020). Tables 4.06 and 4.07 provide the results obtained for steps 1 to 5 consisting of (1) estimates of loadings and significance, (2) indicator reliability (3) composite reliability (4) average variance extracted (AVE's) and (5) HTMT for discriminant validity.

Estimates of loadings and significance is assessed by inspecting the outer loadings for each measure that must exceed the 0.708 threshold (Lohmöller, 1989, as cited in Hair et al., 2017). Indicator reliability is assessed using the traditional measure for internal consistency known as coefficient alpha or more colloquially referred to as Cronbach's Alpha (Cronbach, 1951; Nunnally, 1967) which needs to exceed 0.7 (Nunnally & Bernstein, 1994). However, more recently it has been suggested that the composite reliability measure provided by PLS SEM (with a value >0.7) is more appropriate for consistency as it consider the weightings of the indicator variables (Chin, 1998; Dijkstra & Henseler, 2015). Moreover, psychometric measurements must meet standard criteria in terms of convergent and discriminant validity. Convergent validity is assessed using the average variance extracted (AVE). The AVE assesses the degree to which correlation is present among the items in the construct and should support the theoretical relationships as identified in the literature review (Hair et al.,

2017). To establish convergent validity, the square of the outer loadings is used, resulting in an AVE that needs to exceed the 0.5 threshold, meaning that the measure is capturing more than half of the indicator variance (Henseler et al., 2015). The heterotrait-monotrait ratio of correlations (HTMT) facility in SmartPLS is used to assess discriminant validity (Henseler et al., 2015). Discriminant validity has previously often been measured using the Fornell-Larcker criterion (Fornell & Larcker, 1981) that assesses the empirical uniqueness of the constructs (and items) as used in a model. In the application of PLS SEM, HTMT is proposed as a more precise and appropriate application that demonstrates increased efficacy (Hair et al., 2017; Voorhees et al., 2016). Tables 4.06 and 4.07 show that the criteria for (1) estimates of loadings and significance, (2) indicator reliability (3) composite reliability (4) average variance extracted (AVE's) and (5) HTMT for discriminant validity are all supported for all items and their constructs across the two data sets.

In addition, two final steps need to be considered that involve an assessment of the nomological net as well as the predictive validity of the two final outcomes of behavioural intention and behavioural willingness. The former has been discussed and supported in the literature review while the latter is supported from the fact that the measures used have all previously been successfully employed in different studies.

Table 4.06

Loadings, Estimates, Reliabilities, AVE and Discriminant Validity – Online Gambling

Construct	Type	Name	Loading	CI-LOW (5.0%)	CI-UP (95.0%)	T-Statistics	P-Values	Cronbach's Alpha	ρA (Rho-A)	Comp Rel.	AVE	Discriminant Validity Confidence Interval Does not Include 1.
Behavioural Intention (BI) (Elliott et al., 2017)	Reflective	**BI1**	0.861	0.819	0.896	44.174	0.000	0.897	0.898	0.928	0.763	Yes
		BI2	0.865	0.818	0.900	40.409	0.000					
		BI3	0.874	0.829	0.907	44.566	0.000					
		BI4	0.894	0.859	0.921	57.126	0.000					
Behavioural Willingness (BW) (Elliott et al., 2017)	Reflective	**BW1**			Deleted							Yes
		BW2			Deleted							
		BW3	1.000	1.000	1.000							
Perceived Risk (PR) (Windschitl, 2002)	Reflective	**PR1**	0.896	0.860	0.916	63.939	0.000	0.765	0.767	0.895	0.810	Yes
		PR2	0.904	0.879	0.924	80.188	0.000					
Customer Loyalty (CL) (Harris & Goode, 2004)	Reflective	**CL1**	0.841	0.806	0.870	51.893	0.000	0.856	0.858	0.903	0.699	Yes
		CL2	0.865	0.839	0.889	68.535	0.000					
		CL3	0.814	0.776	0.844	47.252	0.000					
		CL4	0.822	0.787	0.853	49.093	0.000					
Corporate Reputation (CR) (Brown, 1995)	Reflective	**CR1**	0.891	0.870	0.907	95.287	0.000	0.886	0.900	0.921	0.746	Yes
		CR2	0.898	0.879	0.914	100.082	0.000					
		CR3	0.887	0.864	0.906	81.709	0.000					
		CR4	0.773	0.716	0.816	29.910	0.000					
Overall Satisfaction (OS) (Oliver & Rust, 1994)	Reflective	**OS1**	0.903	0.881	0.922	86.829	0.000	0.923	0.923	0.945	0.812	Yes
		OS2	0.922	0.904	0.936	117.912	0.000					
		OS3	0.885	0.858	0.906	71.658	0.000					
		OS4	0.895	0.871	0.914	80.837	0.000					
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	Reflective	**ES1**	0.876	0.848	0.897	70.386	0.000	0.902	0.902	0.931	0.772	Yes
		ES2	0.896	0.875	0.913	92.650	0.000					
		ES3	0.866	0.840	0.888	70.503	0.000					
		ES4	0.877	0.853	0.898	76.908	0.000					

Table 4.07

Loadings, Estimates, Reliabilities, AVE and Discriminant Validity – Household Energy

Construct	Type	Name	Loading	CI-LOW (5.0%)	CI-UP (95.0%)	T-Statistics	P-Values	Cronbach's Alpha	ρA (Rho-A)	Comp Rel.	AVE	Discriminant Validity Confidence Interval Does not Include 1.
Behavioural Intention (BI) (Elliott et al., 2017)	Reflective	**BI1**	0.949	0.931	0.961	128.847	0.000	0.972	0.973	0.979	0.921	Yes
		BI2	0.967	0.958	0.974	236.631	0.000					
		BI3	0.951	0.940	0.960	183.594	0.000					
		BI4	0.973	0.965	0.979	274.166	0.000					
Behavioural Willingness (BW) (Elliott et al., 2017)	Reflective	**BW1**			Deleted							Yes
		BW2			Deleted							
		BW3	1.000	1.000	1.000							
Perceived Risk (PR) (Windschitl, 2002)	Reflective	**PR1**	0.860	0.799	0.898	34.799	0.000	0.774	0.858	0.895	0.810	Yes
		PR2	0.939	0.918	0.954	103.651	0.000					
Customer Loyalty (CL) (Harris & Goode, 2004)	Reflective	**CL1**	0.886	0.860	0.907	75.442	0.000	0.926	0.926	0.947	0.818	Yes
		CL2	0.921	0.906	0.934	124.111	0.000					
		CL3	0.909	0.890	0.924	106.970	0.000					
		CL4	0.901	0.880	0.917	97.254	0.000					
Corporate Reputation (CR) (Brown, 1995)	Reflective	**CR1**	0.937	0.924	0.947	159.527	0.000	0.899	0.939	0.930	0.772	Yes
		CR2	0.935	0.915	0.948	114.254	0.000					
		CR3	0.932	0.916	0.945	125.722	0.000					
		CR4	0.684	0.608	0.743	20.300	0.000					
Overall Satisfaction (OS) (Oliver & Rust, 1994)	Reflective	**OS1**	0.951	0.936	0.961	150.575	0.000	0.965	0.965	0.975	0.906	Yes
		OS2	0.957	0.944	0.966	173.906	0.000					
		OS3	0.940	0.925	0.953	133.329	0.000					
		OS4	0.960	0.949	0.968	197.833	0.000					
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	Reflective	**ES1**	0.919	0.901	0.934	107.785	0.000	0.949	0.949	0.963	0.866	Yes
		ES2	0.941	0.927	0.953	138.468	0.000					
		ES3	0.924	0.908	0.938	120.364	0.000					
		ES4	0.938	0.924	0.950	141.805	0.000					

4.3.2. Formative Measure

The assessment of the formative measure of the prototype perceptions construct in the two datasets follows the five-steps procedure in Hair et al. (2020, p.105) consisting of testing for (1) convergent validity, (2) indicator multicollinearity, (3) size and significance of indicator weights, (4) contribution of indicators (size and significance of loadings) and (5) assessing the predictive validity.

Results of the assessment criteria are shown in Table 4.08. In establishing convergent validity, the normal process of including a reflectively measured variable has been side-stepped in preference to an EFA on the items which identifies the indicators as being correlated as they demonstrate scores above the required 0.708 threshold. Indicator multicollinearity was assessed using VIF which is below the recommended score <5 (Hair et al., 2012). The size (t-values) and statistical significance (p-values) of the weights together with contribution of indicators (size and significance of loadings) has also been included. Finally, predictive validity is also supported by the fact that the measure has been previously successfully employed in different studies.

Table 4.08

Results for Assessment of Formative Measure (Prototype Perceptions)

Formative Construct	Indicators	EFA Loading (Convergent Validity)	VIF (Collinearity)	Outer Weights (Outer Loadings)	95% BCa Confidence Interval	t Value	p Value	Significance (p<0.05)?
Online Gambling - Prototype Perceptions	PP1	0.880	1.622	0.611 (0.920)	[0.364, 0.815]	5.262	0.000	Yes
	PP2	0.890	1.622	0.499 (0.877)	[0.263, 0.732]	4.109	0.000	Yes
	PP3			Deleted				
Household Energy - Prototype Perceptions	PP1	0.892	1.560	0.920 (0.995)	[0.696, 1.089]	9.140	0.000	Yes
	PP2	0.866	1.560	0..125 (0.676)	[-0.164, 0.413]	0.848	0.397	No
	PP3			Deleted				

These results provide support for the psychometric properties for the formative construct of prototype willingness. Taken together, the results reported above, provide support for the psychometric properties of the reflective and formative measures used in the measurement model for the two data sets investigated in this research. Therefore, it is possible to proceed to analyse the structural model of this study.

4.4. Examining the Structural Model

In undertaking structural model analyses the constructs in the model need to be assessed using the procedure indicated by Hair et al. (2020). This requires the researcher to (1) evaluate structural model collinearity, (2) examine size and significance of path coefficients (3) examine the coefficient of determination (R^2) of endogenous variables (in-sample prediction), (4) examine f^2 effect size in-sample prediction and (5) consider the predictive relevance of Q^2 (for in-sample prediction).

4.4.1. Evaluating Structural Model Collinearity

Structural model collinearity requires assessment of inner model and outer model collinearity as shown in the results in Tables 4.09 and 4.10. Using Smart PLS, the present research applied bootstrapping settings; two-tailed, bias corrected (BCa), 95% confidence interval and 5000 subsamples as suggested by Hair et al. (2019) for the testing of the structural model.

Structural collinearity is assessed in PLS SEM using the variance inflation factor (VIF) scores with tolerance for this score suggested at under 5 (Hair et al., 2012) or 10 (James et al., 2013, p.102) and higher scores indicating a problematic amount of power collinearity. Table 4.09 provides support for the absence of inner model collinearity with VIF scores in the 5 to 10 range only for customer loyalty with overall and encounter satisfaction in the household energy dataset. In the case of the outer model collinearity analyses in Table 4.10, one of the items for intention (BI4) exceed the VIF index of 10 but this is expected as the intention items BI2 and BI4 in the household energy dataset employ very similar wording and have almost identical means and standard deviations. However since, all other VIF values are very much within acceptable thresholds, it is possible to proceed to examine the size and significance of path coefficients.

Table 4.09

Structural Model Collinearity - Inner Model Collinearity Assessment

Construct	Context	Behavioural Intention	Behavioural Willingness	Customer Loyalty	Corporate Reputation	Overall Satisfaction
Prototype Perceptions	Online Gambling	1.120	1.119			
	Household Energy	1.060	1.056			
Perceived Risk	Online Gambling	1.625	1.625			
	Household Energy	1.616	1.610			
Customer Loyalty	Online Gambling	1.525	1.484			
	Household Energy	1.722	1.663			
Corporate Reputation	Online Gambling			2.205		
	Household Energy			2.747		
Overall Satisfaction	Online Gambling			4.030	1.000	
	Household Energy			7.378	1.000	
Encounter Satisfaction	Online Gambling			3.889		1.000
	Household Energy			7.252		1.000

Table 4.10

Structural Model Collinearity - Outer Model Collinearity Assessment

Construct	Measurement Item	Online Gambling VIF	Household Energy VIF
Behavioural Intention (BI) (Elliott et al., 2017)	BI1	2.402	6.698
	BI2	2.504	9.463
	BI3	2.598	6.537
	BI4	2.928	10.533
Behavioural Willingness (BW) (Elliott et al., 2017)	BW1	Deleted	Deleted
	BW2	Deleted	Deleted
	BW3	1.000	1.000
Prototype Perceptions (PP) (Gerrard et al., 2008)	PP1	1.622	1.560
	PP2	1.622	1.560
	PP3	Deleted	Deleted
Perceived Risk (PR) (Windschitl, 2002)	PR1	1.624	1.663
	PR2	1.624	1.663
Customer Loyalty (CL) (Harris & Goode, 2004)	CL1	2.108	2.945
	CL2	2.258	3.918
	CL3	1.836	3.569
	CL4	1.906	3.090
Corporate Reputation (CR) (Brown, 1995)	CR1	2.708	4.658
	CR2	2.938	4.354
	CR3	2.678	4.103
	CR4	1.770	1.497
Overall Satisfaction (OS) (Oliver & Rust, 1994)	OS1	3.302	6.132
	OS2	3.834	6.836
	OS3	2.764	5.059
	OS4	2.917	7.125
Encounter Satisfaction (ES) (Oliver & Rust, 1994)	ES1	2.854	4.194
	ES2	3.125	5.252
	ES3	2.438	4.117
	ES4	2.631	4.829

4.4.2. Coefficient of Determination of Endogenous Variables and Predictive Relevance

It is widely accepted that structural models are reflected in the hypothesised pathways defined as a result of the literature review and methodology applied. In structural model assessment, the coefficient of determination (R^2), predictive relevance (Q^2) and path

significance are the reported outcomes noted. Results for these are presented in Tables 4.11 and 4.12.

The coefficient of determination (R^2) is the “most often used metric to assess structural model prediction” (Hair et al., 2020, p.106). Therefore, goodness of the model fit is reflected in the strength of each path which is indicated by the value of R^2 for each of the endogenous variables together with its statistical significance. Table 4.11 shows that these values for the exogenous variables in the model across the two samples are not small and are all significant. However, it needs to be borne in mind that caution is required in making inferences about these effects to a general population. R^2 values reported are primarily valid for ‘in-sample’ predictions and these values need to be compared to outcomes from other similar research. This is because variance in R^2 may occur because of context or differences in the measures employed (Hair et al., 2020).

Predictive relevance (Q^2) is another measure of in-sample prediction. It results from the analyses application of ‘blindfolding’ in the Smart PLS software. Resultant output values greater than 0 are meaningful, while values greater than 0.25 and 0.50 represent medium and large effect sizes (Hair et al., 2020, p.107). The results for Q^2 in Table 4.11 show that values are primarily in the medium and large effect range.

Table 4.11

Results for Coefficient of Determination (R^2) and Predictive Relevance (Q^2)

Construct	Context	R^2	BCa 95% Confidence Intervals	Q^2	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Behavioural Intention	Online Gambling	0.188	[0.111, 0.286]	0.138	0.047	4.026	0.000
	Household Energy	0.537	[0.472, 0.592]	0.489	0.030	17.974	0.000
Behavioural Willingness	Online Gambling	0.232	[0.161, 0.290]	0.216	0.033	7.033	0.000
	Household Energy	0.207	[0.135, 0.271]	0.187	0.036	5.801	0.000
Customer Loyalty	Online Gambling	0.663	[0.598, 0.716]	0.457	0.030	21.912	0.000
	Household Energy	0.807	[0.767, 0.838]	0.656	0.018	45.140	0.000
Corporate Reputation	Online Gambling	0.514	[0.450, 0.575]	0.377	0.032	16.127	0.000
	Household Energy	0.615	[0.561, 0.663]	0.464	0.026	24.093	0.000
Overall Satisfaction	Online Gambling	0.725	[0.675, 0.766]	0.585	0.023	31.708	0.000
	Household Energy	0.854	[0.824, 0.880]	0.769	0.014	59.719	0.000

4.4.3. Examination of f^2 Effect Size for In-sample Prediction

Another measure of in-sample prediction comes from the f^2 values of the individual pathways investigated and referred to as “effect size” (Hair et al., 2020, p.107). Values between 0.02 up to 0.15 are considered small, those between 0.15 to 0.35 medium, and those above 0.35 are large effects (Cohen, 1988, p.477).

Table 4.12

Results of f^2 Examination

Path / Relationship	Context	f2 effect size	CI BCa Lower Bound 2.5%	CI BCa Upper 97.5%	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
PP --> BI	Online Gambling	0.008	-0.040	-0.005	0.007	1.112	0.266
	Household Energy	0.000	-0.046	0.062	0.002	0.057	0.955
PP --> BW	Online Gambling	0.119	0.144	0.144	0.032	3.702	0.000
	Household Energy	0.118	0.175	0.175	0.035	3.413	0.001
CL --> BI	Online Gambling	0.042	0.042	0.042	0.021	1.991	0.047
	Household Energy	0.677	0.616	0.680	0.095	7.161	0.000
CL --> BW	Online Gambling	0.015	0.028	0.027	0.010	1.517	0.129
	Household Energy	0.051	0.067	0.067	0.022	2.274	0.023
CR --> CL	Online Gambling	0.136	0.183	0.183	0.037	3.703	0.000
	Household Energy	0.235	0.220	0.220	0.049	4.830	0.000
OS --> CL	Online Gambling	0.053	0.066	0.066	0.022	2.441	0.015
	Household Energy	0.060	0.053	0.053	0.028	2.145	0.032
OS --> CR	Online Gambling	1.058	0.640	0.640	0.137	7.700	0.000
	Household Energy	1.598	0.727	0.727	0.174	9.180	0.000
ES --> CL	Online Gambling	0.071	0.110	0.110	0.025	2.786	0.005
	Household Energy	0.069	0.107	0.107	0.028	2.444	0.015
ES --> OS	Online Gambling	2.630	0.797	0.797	0.304	8.648	0.000
	Household Energy	5.859	0.891	0.891	0.686	8.543	0.000
PR --> BI	Online Gambling	0.026	-0.005	-0.005	0.015	1.759	0.079
	Household Energy	0.001	-0.050	0.085	0.003	0.184	0.854
PR --> BW	Online Gambling	0.082	0.133	0.133	0.026	3.113	0.002
	Household Energy	0.000	-0.079	0.108	0.003	0.054	0.957

4.4.4. Standardized Root Mean Square Residual (SRMR) Criteria

For completeness, the Standardized Root Mean Square Residual (SRMR) which acts as a metric of 'fit' in PLS-SEM is also provided. SRMR has been suggested as a goodness of fit criteria for PLS SEM (Henseler et al., 2016b). The metric has received cautionary approval for its applicability as a "model fit" criterion that is of value in PLS-SEM, in contrast to CB-SEM where several goodness of fit metrics are computed and strict adherence criteria are mandated (Hair et al., 2019). In accordance with the suggestion of Henseler et al. (2016) as well as the additional criterion of robustness checks suggested by Hair et al. (2019), the Standardized Root Mean Square Residual (SRMR) Criteria is therefore also provided. Table 4.13. shows the

'original samples' column provides values that are less than 0.08 (Hu & Bentler, 1999), thereby meeting the established SRMR criteria.

Table 4.13

SRMR Results

Context	Model	Original Sample (O)	Sample Mean (M)	95%	99%	is < 0.08
Online Gambling	Saturated Model	0.043	0.027	0.030	0.032	Yes
	Estimated Model	0.061	0.035	0.041	0.046	Yes
Household Energy	Saturated Model	0.046	0.025	0.029	0.031	Yes
	Estimated Model	0.063	0.031	0.036	0.039	Yes

4.4.5. Size and Significance of Path Coefficients

The hypotheses of this research from the literature review conducted in chapter 2 dealing with direct effects are listed below and the relevant results are shown next to each hypothesis and in Table 4.14:

H1a holds that the stronger the prototype perceptions, the stronger the behavioural intention. This hypothesis is supported in the online gambling data ($\beta = 0.084$, $t = 2.396$, $p < .05$) but not in the case of the household energy data ($\beta = -0.008$, $t = 0.294$, $p > .05$).

H1b holds that the stronger the prototype perceptions, the stronger the behavioural willingness. This hypothesis is supported in both the online gambling data ($\beta = 0.320$, $t = 8.320$, $p < .001$) as well as the household energy data ($\beta = 0.315$, $t = 7.801$, $p < .001$).

H2a holds that the stronger the customer loyalty, the stronger the behavioural intention to purchase. This hypothesis is supported in both the online gambling data ($\beta = 0.228$, $t = 4.350$, $p < 0.001$) and in the household energy data ($\beta = 0.734$, $t = 23.759$, $p < 0.001$).

H2b holds that the stronger the customer loyalty, the stronger the behavioural willingness to purchase. While the hypothesis is supported in the household energy context ($\beta = 0.264$, $t = 4.912$, $p < 0.001$) the relationship appears to be marginally negative in the online gambling context ($\beta = -0.134$, $t = 3.152$, $p < 0.01$). The beta is however small but positive at the 99% confidence limits.

H3 holds that the stronger the corporate reputation, the stronger the customer loyalty. This hypothesis is supported in both online gambling ($\beta = 0.319$, $t = 8.615$, $p < 0.001$) and household energy ($\beta = 0.353$, $t = 10.828$, $p < 0.001$) context.

H4a holds that the stronger the overall customer satisfaction, the stronger the customer loyalty. This hypothesis is supported in both the online gambling ($\beta = 0.267$, $t = 5.335$, $p < 0.001$) and in the household energy ($\beta = 0.292$, $t = 4.579$, $p < 0.001$) context.

H4b holds that the stronger the overall customer satisfaction, the stronger the corporate reputation. This hypothesis is supported in both online gambling ($\beta = 0.717$, $t = 32.204$, $p < 0.001$) and in the household energy ($\beta = 0.784$, $t = 48.092$, $p < 0.001$) context.

H4c holds that the stronger the encounter satisfaction, the stronger the customer loyalty. This hypothesis is supported in the online gambling ($\beta = 0.304$, $t = 5.839$, $p < 0.001$) and in the household energy ($\beta = 0.310$, $t = 5.168$, $p < 0.001$) context.

H4d holds that the stronger the encounter satisfaction, the stronger the overall satisfaction. This hypothesis is supported and exhibits the strongest effect in both the online gambling ($\beta = 0.851$, $t = 63.287$, $p < 0.001$) and in the household energy ($\beta = 0.924$, $t = 119.324$, $p < 0.001$) context.

Table 4.14

Size and Significance of Path Coefficients

Hypotheses	Pathway / Relationship	Context	β	BCa 95% Confidence Intervals	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Sig.
H1a	PP --> BI	Online Gambling	0.084	[0.015, 0.151]	0.035	2.396	**0.017**	*
H1a		Household Energy	-0.008	[-0.008, -0.063]	0.027	0.294	0.768	ns
H1b	PP --> BW	Online Gambling	0.320	[0.239, 0.392]	0.038	8.320	**0.000**	***
H1b		Household Energy	0.315	[0.235, 0.394]	0.040	7.801	**0.000**	***
H2a	CL --> BI	Online Gambling	0.228	[0.127, 0.330]	0.052	4.350	**0.000**	***
H2a		Household Energy	0.734	[0.674, 0.793]	0.031	23.759	**0.000**	***
H2b	CL --> BW	Online Gambling	-0.134	[-0.216, -0.052]	0.043	3.152	**0.002**	**
H2b		Household Energy	0.264	[0.155, 0.356]	0.054	4.912	**0.000**	***
H3	CR --> CL	Online Gambling	0.319	[0.244, 0.390]	0.037	8.615	**0.000**	***
H3		Household Energy	0.353	[0.287, 0.417]	0.033	10.828	**0.000**	***
H4a	OS --> CL	Online Gambling	0.267	[0.169, 0.362]	0.050	5.335	**0.000**	***
H4a		Household Energy	0.292	[0.170, 0.419]	0.064	4.579	**0.000**	***
H4b	OS --> CR	Online Gambling	0.717	[0.671, 0.759]	0.022	32.204	**0.000**	***
H4b		Household Energy	0.784	[0.749, 0.814]	0.016	48.092	**0.000**	***
H4c	ES --> CL	Online Gambling	0.304	[0.209, 0.407]	0.052	5.839	**0.000**	***
H4c		Household Energy	0.310	[0.191, 0.425]	0.060	5.168	**0.000**	***
H4d	ES --> OS	Online Gambling	0.851	[0.822, 0.875]	0.013	63.287	**0.000**	***
H4d		Household Energy	0.924	[0.908, 0.938]	0.008	119.324	**0.000**	***
Moderating	PR --> BI	Online Gambling	0.184	[0.091, 0.278]	0.048	3.825	0.000	
Moderating		Household Energy	-0.020	[-0.092, 0.048]	0.036	0.574	0.566	
Moderating	PR --> BW	Online Gambling	0.321	[0.228, 0.410]	0.047	6.830	0.000	
Moderating		Household Energy	-0.014	[-0.107, 0.084]	0.048	0.286	0.775	

Significance: * = p <0.05; ** = p <0.01; *** p <0.001

4.5. Examining Mediation Effects

Table 4.14 provided hypotheses testing of the direct causal effects identified in the research model. It is also evident from the research model that there are some relationship effects that perform a mediation role. The results in Table 4.15 show that the effect of encounter satisfaction on customer loyalty is partially mediated via overall satisfaction (ES→OS→CL). The effect is statistically significant in both the online gambling (β = 0.228, t = 5.331, p < 0.01) and the household energy (β = 0.270, t = 4.569, p < 0.01) contexts. In addition, the mediation effect of overall customer satisfaction on customer loyalty is mediated by corporate reputation (OS→CR→CL). There is a statistically significant partial mediation effect in both the online

gambling (β = 0.228, t = 8.531, p < 0.01) and in the household energy (β = 0.277, t = 10.721, p < 0.01) context.

Table 4.15

Mediation Effects in the Research Model

Path	Context	Total Effect	T-Statistic	P-Values	Direct Effect	T-Statistic	P-Values	Complimentary Mediation	Effect	T-Statistic	P-Values	Serial Mediation	Effect	T-Statistic	P-Values
ES-->CL	Online Gambling	0.726	30.483	0.000	0.304	5.839	0.000	ES -> OS -> CL	0.228	5.331	0.000	ES -> OS -> CR->CL	0.194	8.497	0.000
	Household Energy	0.837	55.130	0.000	0.310	5.335	0.000		0.270	4.569	0.000		0.256	10.597	0.000
OS-->CL	Online Gambling	0.495	9.544	0.000	0.267	5.168	0.000	OS -> CR -> CL	0.228	8.531	0.000				
	Household Energy	0.569	9.460	0.000	0.292	4.579	0.000		0.277	10.721	0.000				

4.6. Examining Moderation Effects

Moderation analysis was performed to evaluate the moderating role of perceived risk on the impact of customer loyalty on behavioural intention and behavioural willingness indicated by hypotheses **H5a** and **H5b** in the research model which state:

> **H5a:** The positive effect of customer loyalty on behavioural intention is negatively moderated by perceived risk.
>
> **H5b:** The positive effect of customer loyalty on behavioural willingness is negatively moderated by perceived risk.

In the case of **H5a**, results show that perceived risk has a small but negative significant moderation effect on the link of customer loyalty on behavioural intention providing support for the hypothesis in both the online gambling (β = -0.089, t = 2.053, p <0.05) and the household energy (β = -0.050, t = 2.381, p < 0.05) contexts. However, In the case of **H5b,** the effect of perceived risk on the relationships between customer loyalty and behavioural willingness shows

no statistically significant moderation effect in both the online gambling and household energy contexts, thereby providing no support for **H5b** – Table 4.16.

Table 4.16

Moderation Effects in the Research Model

Hypotheses	Pathway / Relationship	Context	β	BCa 95% Confidence Intervals	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
H5a - Moderation	CL-->Mod(PR) --> BI	Online Gambling	-0.089	[-0.169, -0.005]	0.043	2.053	**0.040**
H5a - Moderation		Household Energy	-0.050	[-0.093, -0.011]	0.021	2.381	**0.017**
H5b - Moderation	CL-->Mod(PR) --> BW	Online Gambling	0.005	[-0.044, 0.070]	0.029	0.166	0.869
H5b - Moderation		Household Energy	-0.031	[-0.099, 0.034]	0.034	0.919	0.358

4.7. Measurement Invariance of Composite Models (MICOM)

Measurement invariance (or equivalence) refers to whether an instrument is interpreted in the same way across different groups of individuals or populations. Failure to establish data equivalence is a potential source of measurement error because of discrepancies between what is intended to be measured and what is actually measured. This accentuates the precision of estimators, reduces the power of statistical tests of hypotheses, and provides misleading results (Henseler et al., 2016). Although, invariance testing is primarily applied to multi-national studies to establish precision of the estimators investigated (Diamantopoulos & Papadopoulos, 2010) the procedure can also be employed to test a common model across two different populations in the same country as is the case in this research. When measuring invariance between groups "optimal" results should (1) maintain familywise error rate, (2) yield an acceptable level of statistical power, and (3) not be reliant on distributional assumptions (Henseler et al., 2016b, p.425).

A three-step procedure is required for testing invariance in SmartPLS using MICOM. This requires analyses of (1) configural invariance, (2) compositional invariance, and (3) the equality of composite mean values and variances (Matthews, 2017).

The first step in MICOM is not established from the statistical output of SmartPLS but requires an inspection of the model set-up. Configural invariance is supported by the application of identical indicators across the two data groups, an identical data treatment and an identical algorithm setting for each dataset group (Henseler et al., 2016b; Matthews, 2017). These actions in this first step have been undertaken and provide support for configural invariance.

To test steps 2 and 3, the “Permutations” setting in the SmartPLS often referred to as the “statistical workhorse” (Ringle et al., 2015), is employed. While there are many researchers who have attempted to apply MICOM, these have often overlooked the critical step of running 5000 instead of 500 (the default) iterations to minimise invariance (Matthews, 2017). This procedure of running 5000 iterations has been adopted by the present research. In Step 2, SmartPLS returns permutation-based confidence intervals that allow determining if a construct has correlations in both the online gambling and the household energy group that are significantly lower than one. Therefore, Hair et al. (2017), hold that in assessing step 2 the 5% quantile should be smaller than that of the original correlation for each construct, and if the original correlation and correlation permutation mean are both equal to 1, the permutation p-values should be greater than 0.05. Table 4.17 shows that the first requirement is practically met for prototype perceptions (PP) and perceived risk (PR) and all the others have their original correlation and correlation permutation mean both equal to 1. However, customer loyalty (CL)

and corporate reputation (CR) have permutation p values that are well below the .05 threshold. These findings indicate that compositional invariance is only partially supported. In these circumstances equality of composite mean values and variances cannot be investigated, and measurement invariance is not established.

Table 4.17

Investigating Compositional Invariance in MICOM Step 2

Construct	Original Correlation	Correlation Permutation Mean	Quantile (5%)	Permutation p-Values
BI	1.000	1.000	1.000	**0.342**
BW	1.000	1.000	1.000	**0.065**
PP	0.950	0.987	0.951	0.050
PR	0.997	0.999	0.997	0.048
CL	1.000	1.000	1.000	0.005
CR	0.999	1.000	1.000	0.001
OS	1.000	1.000	1.000	**0.223**
ES	1.000	1.000	1.000	**0.206**

4.8. Cross Tabulation

To investigate any effects of the six demographic and classificatory variables collected on the constructs in both datasets, one-way ANOVAs and independent sample t-tests were conducted. As well as one classificatory variable pertaining to the online gambling exclusively and one classificatory variable exclusive to the household energy group.

(1) Age Groups

In the online gambling data set, there were originally six age-groups, and this was reduced to five as the 65+ category (6) contained only 10 respondents. This category was merged with the 55-64 (5) category to create a new 55+ category of 106 respondents. Cross tabulation employing a one-way ANOVA of age groups as a factor with the eight constructs as dependent variables show statistically significant differences in means with respect to behavioural intention

($F_{(4,616)}$ = 3.540, p<.01), behavioural willingness ($F_{(4,616)}$ = 8.772, p<.001) and prototype perception ($F_{(4,616)}$ = 8.708, p<.001) with higher mean scores provided by those 25 to 34 years of age. In the household energy dataset, age groups exhibited statistically significant differences in means in the case of behavioural willingness ($F_{(5,606)}$ =7.101; p<.001) and prototype perceptions ($F_{(5,606)}$ =14.607, p<.001). Again, the highest mean scores were provided by those 25 to 34 years of age.

(2) Gender

In the online gambling data set, cross tabulation accompanied by independent sample t-test for gender as grouping variable and the eight constructs as test variables indicated statistically significant differences in the means for behavioural intention ($t_{(619)}$ =2.854; p<.01), behavioural willingness ($t_{(597)}$ =2.274; p<.05) and perceived risk ($t_{(604)}$ =2.852; p<.01) with higher scores provided by male respondents in all three cases. However, in the household energy data set, no statistically significant difference in means between male and female respondents resulted.

(3) Marital Status

In the case of marital status, the two main categories of respondents are those who are single, never married and those that are married. The other categories are small and therefore instead of a one-way ANOVA, cross tabulation with an independent sample t-test for the two marital status groups with the eight constructs was undertaken. Results show a difference in perceived risk ($t_{(555)}$ = -2.549; p<.05) with married respondents showing higher mean scores than those who are single, never married. The household energy respondents exhibited no statistically significant difference for these two marital status groups across the eight constructs.

(4) Nationality

In both the online gambling and the household energy data set, cross tabulation accompanied by independent sample t-test of British against non-British respondents. Among the online gambling respondents, BW exhibited significant differences ($t_{(53)}$ =-3.228; p<.01) with non-

nationals exhibiting higher mean scores. In the household energy context, PR demonstrated significant differences ($t_{(67)}$ =-2.806; p<.05) with non-nationals exhibiting higher mean scores than UK nationals.

(5) Education

To ensure that each category has a minimum of 30 respondents, the original nine categories were regrouped into seven. 'Entry Level' and those with 'Level 1 GCSE' education were merged into one category for both online gambling (n=79) and household energy (n=68), as were 'Level 7 Master's' and 'Level 8 Doctorate' were merged into another single category for both online gambling (n=63) and household energy (n=78). In the online gambling data set, cross tabulation with a one-way ANOVA of education with the eight constructs exhibited statistically difference in means in behavioural intention ($F_{(6,609)}$ =2.311; p<.05) and behavioural willingness ($F_{(6,609)}$ =2.142; p<.05) with those with masters and PhD showing the highest intention scores. In addition, prototype perceptions ($F_{(6,609)}$ =2.921; p<.01) exhibited statistically significant differences in means with highest means associated with UK education Level 4 respondents. However, there were no significant differences among the groups in the household energy context.

(6) Occupation

The occupation categories are reduced from the original 11 to 9 categories so that the 'Process, plant and machine operators' category is combined with the 'Elementary occupations' category while the 'Pensioners' category is excluded. The first is done to achieve frequencies greater than 30 in the resultant category in both datasets and in the case of the latter this could not be combined with another category in a meaningful way. In the online gambling data set, cross tabulation with a one-way ANOVA of occupation categories with the eight constructs exhibited a statistically significant effect for all variables except prototype perceptions. Therefore, behavioural intention ($F_{(8,584)}$ = 2.218; p<.05), behavioural willingness ($F_{(8,584)}$ = 2.983; p<.01),

customer loyalty ($F_{(8,584)}$ = 2.884; p<.01), corporate reputation ($F_{(8,584)}$ = 3.463; p<.01), overall satisfaction ($F_{(8,584)}$ = 2.799; p<.01), encounter satisfaction ($F_{(8,584)}$ = 3.521; p<.01) and perceived risk ($F_{(8,584)}$ = 3.612; p<.001), all exhibit statistically significant differences across the nine categories. Results show that the highest mean scores for behavioural intention, behavioural willingness, corporate reputation and perceived risk are coming from 'managers, directors and senior officials' while in the case of prototype perceptions the highest mean score belongs to the sales and 'customer service' occupations. In the case of customer loyalty, overall satisfaction and encounter satisfaction, the highest means are from those in the 'associate professional' occupations group. In the household energy sector, there is only a significant difference in means for perceived risk ($F_{(8,554)}$ = 1.962; p<.05) with those in the 'associate professional' occupations group exhibiting the highest mean scores.

(7) Number of Accounts Held (online gambling respondents only)

In the case of online gambling, it is common in the UK to have more than one online gambling account. This is reflected among respondents with only 31% indicating they had a single account. For the performance of a one-way ANOVA, the categories of the number of accounts held ranges from 1 to 5. Therefore, behavioural willingness ($F_{(4,561)}$ = 4.794; p<.01), prototype perceptions ($F_{(4,561)}$ = 6.692; p<.001), customer loyalty ($F_{(4,561)}$ = 3.721; p<.01), corporate reputation ($F_{(4,561)}$ = 2.750; p<.05), overall satisfaction ($F_{(4,561)}$ = 3.630; p<.01), and encounter satisfaction ($F_{(4,561)}$ = 3.057; p<.05) all exhibit statistically significant differences across the five categories. Those who have five accounts exhibited the highest behavioural willingness and the lowest scores in behavioural intentions, customer loyalty, corporation reputation, overall satisfaction, and encounter satisfaction. Those with four accounts exhibited the highest mean scores for behavioural intentions and prototype perceptions.

(8) Most Important Factor (household energy respondents only)

The “most important factor” mentioned were (1) price, (2) environmental stewardship, (3) support for social causes in the community, (4) customer support and (5) ease of switching. To establish groups >30, the environmental stewardship category was merged with support for social causes in the community to form a new ‘environmental and community’ category. The results showed significant differences across the four groups for each of behavioural intention ($F_{(3,592)}$ = 6.394; p<.001), behavioural willingness ($F_{(3,592)}$ = 14.739; p<.001), prototype perceptions ($F_{(3,592)}$ = 7.572; p<.001), customer loyalty ($F_{(3,592)}$ = 13.489; p<.001), corporate reputation ($F_{(3,592)}$ = 6.363; p<.01), overall satisfaction ($F_{(3,592)}$ = 4.720; p<.01), encounter satisfaction ($F_{(3,592)}$ = 4.724; p<.01) and perceived risk ($F_{(4,561)}$ = 4.574; p<.01). Those who identified price and ease of switching as their most important factor exhibited lower mean scores for every construct.

Chapter 5

Conclusion

Advances in psychology and marketing theory together with the availability of data and robust statistical modelling software are helping researchers and practitioners gain a better understanding of the psychological and behavioural elements that drive consumer behaviour. The dual-process theory framework has been developed in a health-related context. The present research applies a dual-process model to gain a broader understanding of consumer decision-making in the two notably distinctive mass services sectors of online gambling and household energy. The two chosen sectors provide consumers with different choice decisions since online gambling is a hedonic/ individual mass service while household energy is a utilitarian/ collective mass service.

5.1. Summary of Findings

The research set out to answer the broad question that asked: "**what model of psychological factors can help explain purchase decision making behaviour in an online gambling and household energy context**?" The broad general question asked was complemented by three related sub-questions.

The first sub-question asked: **"What role do deliberative and intuitive purchase decision making play as drivers of behavioural intention and willingness?"** A review of the literature was undertaken that showed that models proposed in theories such as TRA (Fishbein

& Ajzen, 1975) and TpB (Ajzen (1985) provide valuable predictive capabilities for rational, reflective, or “deliberative” purchase decision making. However, heuristics involving “cognitive shortcuts” have also been highlighted in Prospect Theory (PT) (Tversky & Kahneman, 1979) and in the ELM (Cacioppo & Petty, 1984) as a possible second route to purchase decision making. Both PT and ELM suggest intuitive purchase decision making to optimise processing capacity by quickly executing probability judgments based on experience or crude subjective assessments of similar situations. These crude assessments may be based on the retrieval of a prototype, a mental image, or calculable assessment of situational similarity to which the subject has either a favourable or unfavourable inclination. PWM (Gibbons & Gerrard, 1995). PMT like PT and ELM, is grounded in expectancy-value theory (Atkinson, 1957), and proposes a dual-processing model involving a fast, intuitive, Type 1 (Evans & Stanovich, 2013) and a slower, reflective, Type 2 processing. The PWM has been shown to be particularly viable in better predicting health behaviours among youth with respect to; smoking, drinking, drug use and sex. In dual-processing, it is theorised that a “reflective process” transpires in the brain and from this theoretical point forward, a decision begins to form based on motivational factors, defined as epistemic values and goals (Evans and Stanovich, 2013, p.230). The model adopted in this research recognises these two alternative or concurrent routes to purchase decision-making and tests these in both an online gambling and household energy context.

The second sub-question looks at the role of customer loyalty in decision making. It asks: “**What is the role of customer loyalty? What are its drivers and how does it impact behavioural outcomes?”** Customer loyalty is conceptualised as an attitude-type, construct and customer encounter and overall satisfaction together with corporate reputation are identified as drivers of customer loyalty. Possible behavioural outcomes of customer loyalty are also proposed.

The third sub-question looks at the role of perceived risk in decision making. It asks: "**What role does perceived risk play in behavioural intention and willingness?"** The theoretical dual-process decision featuring customer loyalty and prototype perception impacts behavioural intention and willingness. The research identifies perceived risk as moderating the relationship of customer loyalty on both behavioural intention and behavioural willingness.

These three sub-questions and the subsequent literature review led to the identification of applicable constructs in a dual-process framework that resulted in a research model and a set of related hypotheses as listed below:

H1a holds that the stronger the prototype perceptions, the stronger the behavioural intention.

H1b holds that the stronger the prototype perceptions, the stronger the behavioural willingness.

H2a holds that the stronger the customer loyalty, the stronger the behavioural intention to purchase.

H2b holds that the stronger the customer loyalty, the stronger the behavioural willingness to purchase.

H3 holds that the stronger the corporate reputation, the stronger the customer loyalty.

H4a holds that the stronger the overall customer satisfaction, the stronger the customer loyalty.

H4b holds that the stronger the overall customer satisfaction, the stronger the corporate reputation.

H4c holds that the stronger the encounter satisfaction, the stronger the customer loyalty.

H4d holds that the stronger the encounter satisfaction, the stronger the overall satisfaction.

H5a: The positive effect of customer loyalty on behavioural intention is negatively moderated by perceived risk.

H5b: The positive effect of customer loyalty on behavioural willingness is negatively moderated by perceived risk.

Generally, the results of this study support the dual-process approach with the identified relationships largely holding across both the online gambling and residential energy contexts investigated. H1a suggests only a small relationship exists for the link between (PP → BI: $\beta=0.084$, $t=2.396$, $p<0.05$) for online gambling but no relationship for the household energy context (PP → BI: $\beta=-0.008$, $t=0.294$, p=ns). On the other hand, H1b offers support for PP → BW in both contexts with online gambling exhibiting an almost identical beta value of the relationship (PP → BW: $\beta=0.320$, $t=8.320$, $p<0.001$) to that in the household energy sector (PP → BW: $\beta=0.315$, $t=7.801$, $p<0.001$). The findings support the underlying dual-process approach where prototype perceptions manifest a stronger relationship along the reactive pathway PP → BW (Gibbons & Gerrard, 1995). Therefore, the results extend the role of prototype perceptions beyond the health context to the contexts investigated in this research.

H2a considers the link between CL → BI which is supported in both the online gambling data (CL → BI: $\beta = 0.228$, $t = 4.350$, $p < 0.001$) and in the household energy data (CL → BI: $\beta = 0.734$, $t = 23.759$, $p < 0.001$). H2b considers the effect of CL → BW and shows that the hypothesis is supported in the online gambling context with a small but surprisingly negative beta value, (CL → BW: $\beta = -0.134$, $t = 3.152$, $p < 0.01$). The negative effect suggests that once the customer has intuitively decided to proceed, past loyalty is overridden, and the customer is willing to plough ahead. Indeed, the negative effect reported between CL → BW for the online gambling context suggests some sort of thrill of going against the rational. This is not the case in the household energy sector, where the effect of CL → BW is positive as expected (CL → BW: $\beta = 0.264$, $t = 4.912$, $p < 0.001$). The high beta score of the effect of customer loyalty on behavioural intention and to a lesser extent on willingness underline the importance of customer loyalty in the household energy sector. The results also provide additional support for a dual-process effect, with customer loyalty which is considered a more deliberate process, having a stronger impact on behavioural intention than on behaviour willingness in both sectors.

The results of the effect of the constructs acting as drivers to customer loyalty investigated show all these to be significant. Generally, the strength of the relationship is identical in both contexts with the household energy context demonstrating marginally stronger effects. Therefore, in the case of the satisfaction variables, H3 that looks at the effect of CR → CL is supported in both online gambling (CR → CL: $\beta = 0.319$, $t = 8.615$, $p < 0.001$) and household energy context (CR → CL: $\beta = 0.353$, $t = 10.828$, $p < 0.001$). H4a which considers the effect of OS → CL is supported in both the online gambling (OS → CL: $\beta = 0.267$, $t = 5.335$, $p < 0.001$) and in the household energy context (OS → CL: $\beta = 0.292$, $t = 4.579$, $p < 0.001$). H4b which looks at OS → CR is also supported in both online betting (OS → CR: $\beta = 0.717$, $t = 32.204$, $p < 0.001$) and in the household energy context (OS → CR: $\beta = 0.784$, $t = 48.092$, $p <$

0.001). H4c that considers the effect of ES → CL is supported in the online gambling (ES → CL: β = 0.304, t = 5.839, p < 0.001) and in the household energy context (ES → CL: β = 0.310, t = 5.168, p < 0.001). H4d which looks at ES → OS link is supported with high beta scores in both the online gambling (ES → OS: β = 0.851, t = 63.287, p < 0.001) and in the household energy context (ES → OS: β = 0.924, t = 119.324, p < 0.001).

Elliott et al. (2017) captures perceived risk as a probabilistic judgment of the likelihood that the identified risk could manifest in a behavioural choice situation. The present research shows some support for this perspective in the form of a moderating effect. Thus, H5a provides support for a small but negative significant moderation effect of CL → BI in both the online gambling (β = -0.089, t = 2.053, p < 0.05) and the household energy contexts (β = -0.050, t = 2.381, p < 0.05). However, H5b shows no significant effect of perceived risk on the relationships between CL → BW in both the online gambling and household energy contexts. This result suggests that in arriving at behavioural willingness the fact that the decision is primarily intuitive completely overrides risk considerations.

Evans and Stanovich (2013) suggest that “dual modes” are influenced by an increase in thoughtfulness as we age or increase our formal education while both Gibbons and Gerrard (1995) and Evans (2003) suggest that age directly influences behavioural intentions and behavioural willingness. The cross tabulation of the five age categories with BI, BW, and PP show statistically significant differences in means for BI ($F_{(4,616)}$ = 3.540, p<.01), BW ($F_{(4,616)}$ = 8.772, p<.001) and PP ($F_{(4,616)}$ = 8.708, p<.001) in the online gambling context but in the six categories for the household energy context only BW ($F_{(5,606)}$ =7.101; p<.001) and PP ($F_{(5,606)}$ =14.607, p<.001) are significant. In both contexts the highest mean scores were provided by

those who are relatively young in the 25 to 34 years age group. The cross tabulation of level of education with BI, BW, and PP shows statistically significant differences for the context of online gambling with BI ($F_{(6,609)}$ =2.311; p<.05) and BW ($F_{(6,609)}$ =2.142; p<.05), with those with a masters and PhD showing the highest scores for both. In the case of prototype perceptions ($F_{(6,609)}$ =2.921; p<.01) the highest mean scores are related to those associated with the UK Level 4 education. There were no significant differences between the groups in the household energy context.

5.2. Implications for Theory

An overall comparison of the results in the model across the two contexts shows that the model provides a good fit in both contexts considered providing support for model generalisation. More specifically, in both contexts the left-hand side of the model that includes encounter satisfaction, overall satisfaction corporate reputation, and customer loyalty provide very similar betas and R^2 values with particularly strong links between encounter and overall satisfaction and overall satisfaction and corporate reputation. In the right-hand side of the model that consists of customer loyalty, prototype perceptions, behaviour intention, behaviour willingness and perceived risk the model presents beta values for linkages that exhibit some divergence. The salient differences are that the effect of prototype perceptions on behaviour intentions is much stronger among customers in the household energy than in the online gambling sector and the statistically significant beta effect of customer loyalty on behaviour willingness is negative in online gambling and positive for household energy. A key question here is whether these differences in the beta effects in the model are because the two contexts are typologically different with online gambling being individual/hedonic while household energy

is collective /utilitarian? An informed guess would appear to suggest that this is the case, but it is difficult to settle this conclusively without further replication.

A meta-analysis on the direct effects of PP on BI and BW reports an average beta value of 0.21 ($p<0.001$) for PP on BI and 0.20 ($p<0.01$) for PP on BW (van Lettow et al., 2016, p.32). With beta scores of .32 and .31 ($p<0.001$) for the effect of PP on BW and beta scores for the effect of PP on BI of .08 ($p<0.05$) and no significant effect for online gambling and household energy respectively, our results provide higher scores for the effect of PP on BW and lower ones for the effect of PP on BI. Gambling is generally an impulsive pursuit (Hing et al., 2018) and the significant effect of PP on BI reported in the online gambling context may be coming from the more experienced gamblers who may be taking a rather more deliberative approach. Variations in results have given rise to calls for a "dual-process 2.0" (de Neys & Pennycook, 2019) model but this may be a little hasty given that "dual-modes" represent a continuum for Type 2 thinking that may be impacted with an increase in thoughtfulness as customers age or increase their formal education (Evans, 2003; Evans & Stanovich, 2013; Gibbons & Gerrard, 1995). This position is supported by the findings in the crosstabulations reported above. Overall, the results provide support for the relevance of a dual-process model in the online gambling and household energy contexts considered.

Customer loyalty is a focal construct in the model developed for this research. The results provide support for the nomological net of the drivers of encounter satisfaction, overall satisfaction, and corporate reputation as they impact customer loyalty and how they interact among themselves. More interestingly, the beta scores of the links are very similar across the contexts investigated suggesting strong support for the nomological net of the customer loyalty

drivers as proposed. The serial mediation effect (Zhao et al., 2010) measured by ES→OS→CR→CL ($\beta = 0.194$, $t = 8.497$, $p < 0.001$) together with two complimentary mediations ES→OS→CL ($\beta = 0.228$, $t = 5.331$, $p < 0.001$) and ES→CL ($\beta = 0.304$, $t = 5.839$, $p < 0.001$) provides for a strong total effect of ES→CL ($\beta = 0.726$, $t = 30.483$, $p < 0.001$) in the context of online gambling. In the context of household energy, the serial and complimentary mediations create an even stronger effect of ES→CL ($\beta = 0.837$, $t = 55.130$, $p < 0.001$). The resultant high beta scores for the mediation effects confirm and provide additional support for the relevance and ability of encounter and overall satisfaction (e.g., Jones & Suh, 2000) together with corporate reputation (e.g., Caruana & Ewing, 2010) to explain a high level of variance in customer loyalty.

The model further investigates the outcome effect of customer loyalty on both behavioural intention and behavioural willingness. The relationship of customer loyalty to behavioural intentions is not new *per se*. Oliver (2014, p.434) suggests conative loyalty as the "behavioral intention" stage resulting from subjective brand preference and commitment to repeat purchase a brand. However, a concurrent investigation of the effect of customer loyalty on behavioural intentions and behavioural willingness across multiple contexts represents a useful addition to our understanding of the consequences of customer loyalty. In the household energy context, the impact of customer loyalty on behaviour intention ($\beta = 0.734$, $t = 23.759$, $p < 0.001$) and behaviour willingness ($\beta = 0.264$, $t = 4.912$, $p < 0.001$) are both positive with the impact on behaviour intention being significantly stronger. However, in the online gambling context, the impact of customer loyalty on behavioural intentions is positive ($\beta = 0.228$, $t = 4.350$, $p < 0.001$) while that with behavioural willingness is negative ($\beta = -0.134$, $t = 3.152$, $p < 0.01$). The latter finding is counter intuitive but suggests respondents may have volition effects that provides excitement for acting intuitively and contrary to loyalty by going with the offer of

competitors. The finding opens the way for investigating moderating variables that may be impacting the customer loyalty to behaviour willingness link. Possible moderating variables include perceived fairness, anticipated enjoyment, and subjective norms (Konietzny et al., 2018; Konietzny & Caruana, 2021).

A further enhancement to understanding customer loyalty outcomes comes from an investigation of the effect of perceived risk on the impact of customer loyalty on both behaviour intention and willingness. The role of perceived risk in a dual-process and PWM has received scant attention. The results show that in all cases where perceived risk is significant, its effect is to reduce the impact of customer loyalty on the outcome variables. These findings support earlier findings in the literature that suggest that perceived risk acts as a moderator for the impact of customer loyalty on willingness to pay (Casidy & Wymer 2006). This research looks at the impact of perceived risk as a moderator on the effect of customer loyalty not only on behavioural willingness but also on behavioural intention. The findings show that the moderation effect of perceived risk is not significant with behavioural willingness but is in the expected negative direction for behavioural intention in both online gambling ($\beta = -0.089$, $t = 2.053$, $p < 0.05$) and household energy ($\beta = -0.050$, $t = 2.381$, $p < 0.05$). It suggests that once customers decide to follow an intuitive decision, risk is not factored in.

A further important contribution to the theory comes from the support provided to the generalisability of the measures employed. The measures used have exhibited strong psychometric properties in the rigorous testing in the assessment of the measurement model conducted as part of the SmartPLS analyses for both the online gambling and the household energy datasets. This suggests that the measures of the constructs can be used effectively in future tests of theoretical relationships.

5.3. Implications for Management

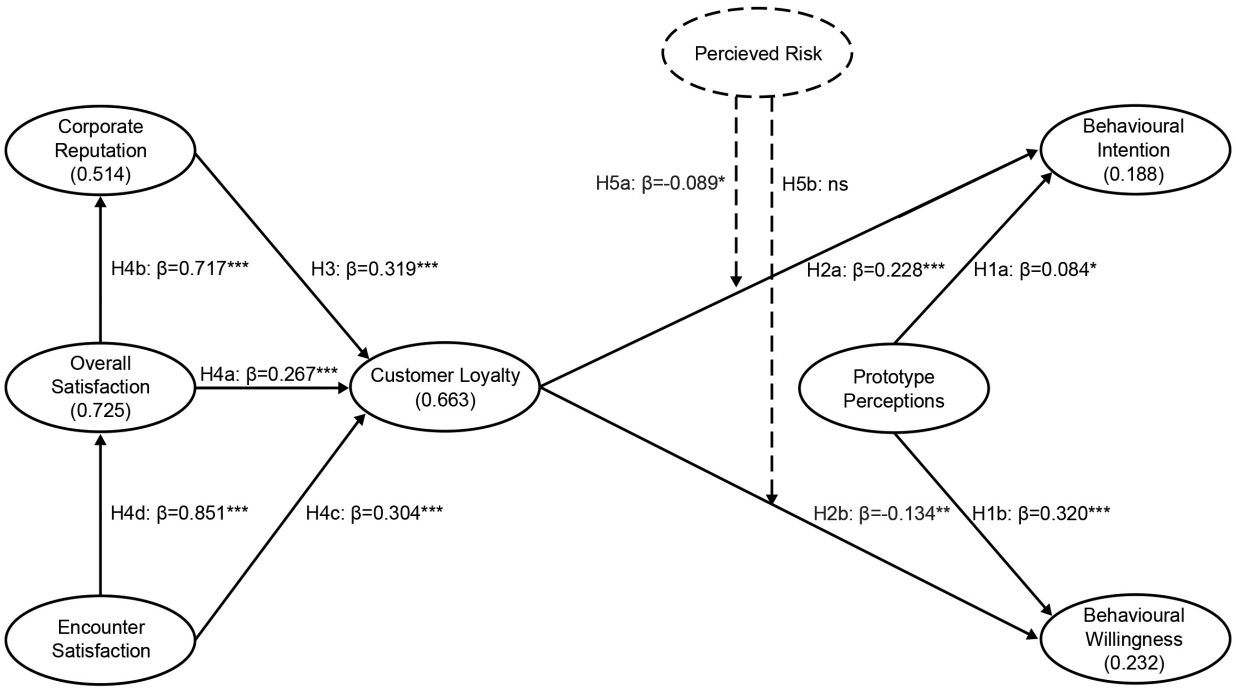
The present research has identified a model that represents a step forward in providing a broader explanation of the variance in the drivers that lead to decision making in the two sectors investigated. This study highlights a number of implications for management from a marketing perspective. An important implication of the present research is the relevance of dual-process models that encompass both behavioural intention and behavioural willingness in understanding consumer decision making. The findings suggest that managers should include behavioural willingness (Type 1, fast and reactive) and the role of behavioural intention (Type 2, slower and deliberative) decision making in any consideration that seeks to influence behaviour in both online gambling or household energy. Given these two different contexts the implications for each vertical will be addressed separately. This is followed by a sub-section that addresses the customer retention strategy implications of the present research and another on implications for online gambling regulators.

5.3.1. Implications for Online Gambling Operators

The results of the research model for online gambling are summarised in diagrammatic format in Figure 5.01.

Figure 5.01

Model of Psychological Factors in Decision Making for Online Gambling



Note. The direction of the arrows indicates the direction of the hypothesised effect. The number inside the construct is the R2 value.
Dashed line indicates a moderationg effect. Where "ns" appears, the relationship is not significant.
* = p<0.05
** = p<0.01
*** = p<0.001

The model and results demonstrate a tendency for consumers to act from both a position of willingness (Type 1) as well as intentions (Type 2). This would suggest that in the marketing of online gambling products, managers would do well to also consider intuitive (Type 1) decision-making. Indeed, the results suggest that when acting via willingness (Type 1), customers pay minimal attention to loyalty and ignore risk. In these circumstances, the motive appears to be hedonic where excitement, enjoyment and fun take over. The fact that typologically online gambling can be described as individual/ hedonic means that technology is

critical to providing a service that is controlled and can be tailored by the customer to their needs and that the service is high in experience qualities where enjoyment of the activities the technology provides can be assured. The betting games on offer by online gambling firms are not unique and represent quasi-commodity offerings. Management's challenge is to implement interaction software that has the capacity to provide an enjoyable experience to customers without violating the advertising rules of the Industry Group for Responsible Gambling (IGRG, 2022). These marketing activities can include the use of cross-channel marketing tools that seek to elicit the desired direct response from customers. Examples include; TV, email, social media, SMS and push notification systems that enable in-app interaction. Moreover, the prototypes (or message) encoded in this media can be reflective of the prototypes that are identifiable in the model as being effective. These include focusing on the target audience and their typical "hot-buttons", as for example by using advertising that highlights FOMO (Fear Of Missing Out) for the 18-24 and 25-34 categories.

Beyond these broad implications resulting from the typology characteristics of online gambling, the model results suggest the possibility of the existence of two main customer segments in online gambling. The first consists of customers who are out to 'beat the odds'. These tend to be deliberative in their behavioural intentions and for whom customer loyalty plays a reasonably important role, but these customers are not influenced by prototype perceptions of other customers as their focus is beating the odds. The second segment is the more 'hedonic' grouping that are driven by excitement, enjoyment, and fun. For these customers, loyalty is not an issue and part of the excitement may be going against any notion of loyalty, but they do care about what their peers think, and prototype perceptions are therefore significant. These customers are quite willing to switch. The presence of these two segments may explain why the industry needs to continuously undertake sales promotion activities that offer inducements for customers to switch.

Organic and affiliated traffic are the two principal sources of traffic generation in online gambling. Organic traffic provide online gambling firms with higher margins as the operator bears no obligation to pay a conversion fee to an affiliate and/or a percentage of Net Gaming Revenue (NGR). Organic traffic which includes the utilisation of SEO, TV adverts, betting shops and customer retention activities, are arguably more appropriate for the 'beating the odds' customer segment. On the other hand, affiliate traffic which is more focused on switching customers by offering sales promotion inducements may be more appropriate for the hedonic customer segment. Indeed, it may be that these same promotion activities aimed at generating switching erode customer loyalty as customers know that online gambling firms will provide incentives and may therefore reason that their best strategy is to look out for the best deal.

The results of the cross-tabulations show that behavioural intention and behavioural willingness are stronger among older and more experienced players who have a positive history with the brand. For this older cohort the importance of customer loyalty and a "satisfied customer" should not be underestimated. The results suggest that those seeking to beat the odds are likely to be older players while those who are in it for the hedonic experience are likely younger. For the beating the odds segment, customer loyalty has an important impact on behavioural willingness, therefore firms would do well to devote resources to encounter satisfaction and overall satisfaction together with corporate reputation as these are found to impact customer loyalty significantly. The findings suggest that management pursuing the 'beating the odds' segment of customers should invest in supporting strategies that focus on customer satisfaction at each interaction and overall and on ensuring a strong corporate reputation. Constant monitoring of feedback including posting of user generated content can act as a useful early warning system that may indicate developing challenges in satisfaction

and corporate reputation that can be expected to reflect themselves in customer loyalty and behavioural intention declines. Ensuring systems that support customers' ease of interaction and enjoyment can also be useful activities in support of customer satisfaction. Moreover, although service quality, or its online version e-service quality, has not been considered in the model, it is known to be an important driver of customer satisfaction and ensuring e-service quality during customer interface can be a useful area for managerial focus. Indeed, the encounter satisfaction construct may in fact be capturing service quality. In addition, marketing activities aimed at supporting corporate reputation that emphasise trustworthiness and fairness may be useful activities in support of corporate reputation. Besides, actions that encourage sustainability of player patterns and avoidance of harm to players among those exhibiting excessive play, represent an important aspect for sustaining corporate reputation. For customers in the hedonic segment satisfaction, corporate reputation and loyalty are very much less important.

The model can be tested across samples of customers originating from organic traffic and affiliated traffic. The use of the model for these two types of customers can provide indication of the existence of a 'beat the odds' and a 'hedonic' segments linked to organic and affiliate traffic and whether the resultant levels of behavioural intention justify paying for affiliate generated customers. Moreover, the sources of organic traffic, whether SEO, TV adverts, or betting shops, can be compared to identify the potential quality of the traffic generated and this can be used to make predictions about future indicators of customer long-term value. Besides, a longitudinal application of the model can help assess the quality and volatility of traffic flows to ascertain critical variables to improve managements' capability to direct market spend to traffic from affiliated or organic sources.

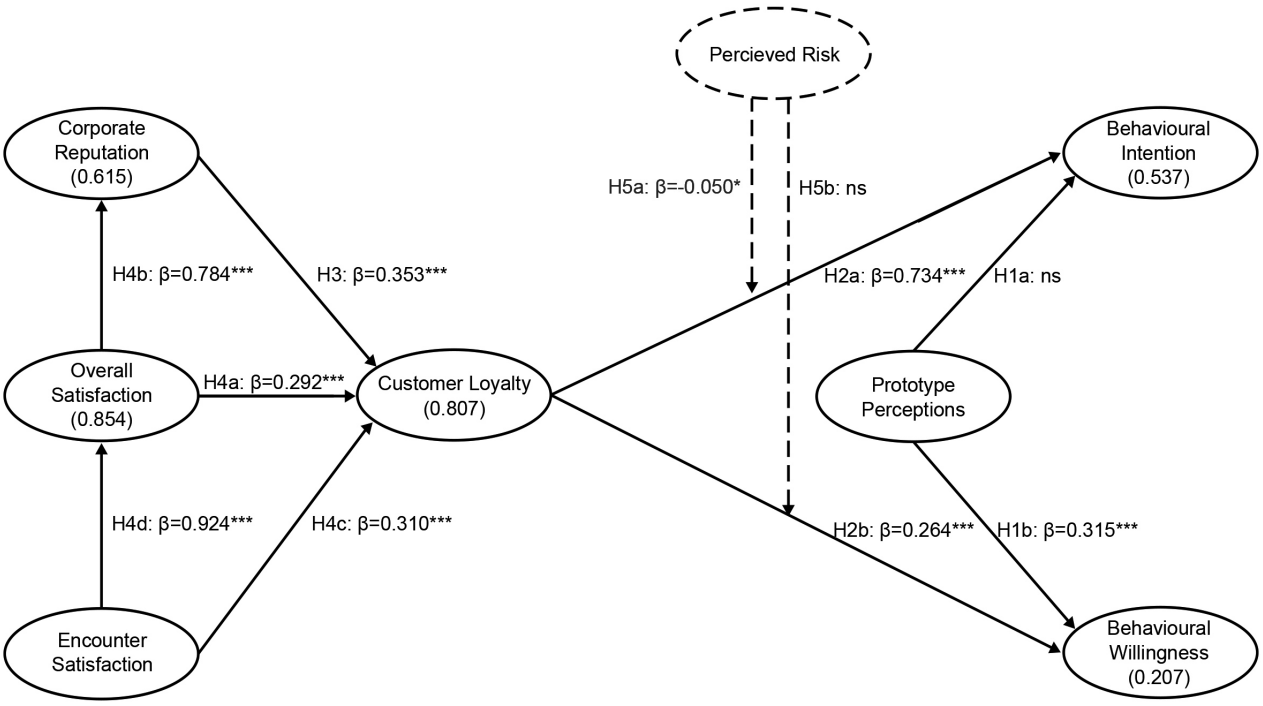
The present model can also be used by management at online betting firms as a diagnostic tool and applied longitudinally at a corporate (or brand) level to monitor the scores of the constituent constructs over time. If the scores for the constructs are not improving, the model may be used to investigate areas of underperformance so that the firm may take corrective action across or for particular demographic segments. Empirical measurement allows for benchmarking to occur and can aid overall corporate direction with respect to critical strategic functions such as corporate reputation and customer loyalty. In addition, the levels of behavioural intention and behavioural willingness of customers along with their demographic characteristics can provide useful segmentation tools if employed in cluster analyses with a view to identifying customer groupings that can be profitably targeted.

5.3.2. Implications for Household Energy Providers

The results of the research model for household are summarised in diagrammatic format in Figure 5.02.

Figure 5.02

Model of Psychological Factors in Decision Making for Household Energy



Note. The direction of the arrows indicates the direction of the hypothesised effect. The number inside the construct is the R2 value. Dashed line indicates a moderationg effect. Where "ns" appears, the relationship is not significant.

* = p<0.05

** = p<0.01

*** = p<0.001

Household energy and customer behaviours associated with the sector are strongly ingrained in deliberative processes and most consumers appear to regard this product offering with considerable attention. This is demonstrated from the strong effect of customer loyalty on behavioural intention which exhibits a nearly three-fold higher impact than on behavioural willingness. Customers spend more time considering the product offering and weighing options before finally deciding. During this contemplation-period, access to an array of online comparison sites are available allowing for “side by side” price comparison of the different product offerings available. Although price is reported as the most prominent factor in customer

decision-making, for most customers the decision is not unidimensional. Managers in the energy market would do well to break away from the 'side by side' comparison that currently dominates competition and highlight that excellence cannot be compared in a tabular format. Rather it needs to be demonstrated day in and day out, by firms putting their customers and the environment at the forefront of their endeavours. Although, this is perhaps easier said than done, the present model allows energy companies to apply the model over time (longitudinally) with various subsets of their customers to identify the different yardstick for satisfaction, corporate reputation and customer loyalty among different customer groups.

The research model also shows that perceived risk has a negative impact on behaviour intention in the household energy sector. Lowering perceived risk in this sector has traditionally been pursued via competitive pricing. However, since the selection of an energy provider by customers is not unidimensional the retention of customers in a saturated marketplace with over 40 providers cannot similarly be focused solely on price comparisons. Indeed, the pursuit of alternative "value for money" offerings that emphasises non-price variables has received limited focus.

The fact that typologically household energy can be described as collective/ utilitarian means that technology must be able to meet consumer demand irrespective of peaks and troughs while the service managers need to emphasise service attributes in their communication. The situation is particularly challenging in household energy as the commodity nature of the product limits the ability of managers to highlight functional elements although, testimonials, and the provision of functional information about the network in terms of stability can prove useful. However, a key decision variable concerns the price charged. Software that

can allow for better monitoring of consumption and tariffs that provide customers with an ability to shift their consumption to lower tariffs period may provide a useful segmentation basis that can provide household energy firms with a competitive edge. The results show that customer loyalty is high in the household energy sector and positively impacts both behavioural willingness and behavioural intention suggesting that investment in its drivers by managers can significantly impact switching temptations.

A desensitisation to price can be achieved via marketing communications and channel adequacy. TV and print media can be employed with the older demographics while social media and direct advertising via the web can be used with younger demographics. Both customer satisfaction and corporate reputation have been shown to have a strong impact on customer loyalty and ultimately on behaviour intention. Therefore, besides the cost to the end-user, the marketing communication message can enhance customer satisfaction by highlighting the possibility of adopting smart meters that provide customers with the ability to optimise their energy usage. In addition, marketing activities can be pursued that strengthen corporate reputation by providing excellence via transparency in pricing, outstanding customer support, environmental stewardship, and emphasising community involvement and local employment for communities.

The application of the present model longitudinally over time can provide insights by allowing monitoring of customers from acquisition and through their lifecycle journeys. Energy firms currently adopt various marketing techniques that include everything from door to door, TV, and comparison websites to attract new customers. Longitudinal applications of the model can instead allow for customer retention by identifying customers that exhibit waning customer

loyalty and could be considering switching to a competitor. Since the retention of existing customers and those on the brink of defection is more important than the attraction of new customers, longitudinal replication of the model can help identify customers with lower customer loyalty scores before they move to an alternative provider.

5.3.3. Implications of the Research on Retention Strategy

This research suggests there are two distinct and measurable routes to outcome behaviour consisting of the more thoughtful behavioural intention and the more reactive behavioural willingness route. Reactive prototypical responses are shown to influence behavioural willingness in both the online gambling and household energy contexts. Moreover, the role of customer loyalty represents a pivotal construct in decision making in both sectors considered.

The research suggests that context plays a key role in ascertaining whether the notion of a “single-brand loyal customer” behaviour as proposed by Uncles et al. (2003, p.296) represents a realistic target for managers. Certainly, in the online gambling context, a segment of customers exhibit only spurious loyalty as evidenced by respondents who hold several concurrent accounts. Indeed, only 192 (31%) of respondents in the sample collected for online gambling hold a single account. On the other hand, in the household energy sector over 90% of respondents have a single active account at any point in time. It needs to be recognised that customer loyalty is not absolute and while a certain brand or brands can be preferred, the variety seeking drive among consumers inevitably results in a degree of switching. The extent of switching undertaken is determined by the effort and cost with which this is possible and how easily available and attractive alternatives are. Clearly these characteristics are more prevalent

in the online gambling sector than in the household energy sector. Hotels are a good example of an even higher level of switching ease. Patrons often have a restricted number of hotels that they prefer which they switch among depending on occasion, location, time of year and other considerations such as personal or business factors. Occasionally, consumers will also try new hotels which may make it to their subjective preferred short-list. Complete loyalty is practically unachievable among variety-seeking human beings and as the saying goes, 'if you want 100% loyalty, you should get a dog!'

The findings show that in online gambling characterised by multi-brand alternatives and effortless switching with minimal cost, managers need to focus on pursuing a share of wallet retention strategy. However, the findings suggest that pursuing customer loyalty may be more appropriate for customers comprising the 'beating the odds' segment rather than the hedonistic customer segment. The pursuit of share of wallet efforts is true of countless sectors, whether hotels, food, clothes and many more. Similarly, a monotheistic retention strategy that strives to gain a singular attachment to a brand are appropriate in the household energy context where effortless switching among brands is not practical and only one account is feasible. Such contexts are less common but include insurance, mobile providers and religion. Share of wallet retention strategies recognise that customers are transient and there is a need for managers to focus on constant reactivation programmes with frequent promotions and predictive modelling focused on churn risk factors. In monotheistic retention strategies where a single-account holder is prevalent, management needs to focus on their most loyal groups and foster brand advocates. Although household energy is not a particularly exciting product, corporate energy brands can be outstanding by highlighting the value they represent, their impact on the planet and the service they provide. This can encourage customers to support their chosen brand despite the competitive disruptions coming from other service providers.

At the heart of retention strategies there is a need for service interaction systems built around databases that facilitate the sending and receiving of communications with customers. Just as a company with no voice cannot be heard, so too a silent customer slips quietly away. The present model highlights critical insights into factors leading to purchase behaviour that have strategic implications. Managers need to develop customer journey tools that map the flow of relationships and enable the timely transmission of integrated marketing communications that are relevant to different stages in the customer lifecycle.

Finally, the research model may be applied to a current database of active and / or inactive customers to investigate differences in outcomes. The company can identify key groups of customers that exhibit varying customer loyalty scores that drive behavioural intention and behavioural willingness. These identified groups can then be targeted with the appropriate channels and marketing content that is most relevant to achieve retention and purchase. Moreover, the ES→OS→CR→CL relationships can be monitored over time to provide an ongoing scorecard of the firm's success in influencing customers. This monitoring can also assist in the identification of customers that can be best targeted with marketing messages.

5.3.4. Implications for Online Gambling Regulators

An interesting feature of this research is the support it provides for the negative impact that perceived risk has on the link between customer loyalty and behavioural intention and willingness in both the online gambling and household energy contexts. The bottom line is that in a gambling context these risks exist and need to be made clear to participants. The aspect of

risk clarity has important implications for online gambling regulators. Therefore, regulators can apply this model to better understand the impact of perceived risk across different types of online gambling that include sports betting, casinos, and lotteries to determine whether risk perceptions are declining over time. Online gambling regulators can undertake communication campaigns to sensitise customers and underline the inherent risk of gambling. Higher perceived risk among customers will lower gambling intention. However, risk is not really an issue with customers in the 'hedonic' segment and regulators would do better to seek restrictions over the interface to render online betting less enjoyable, exiting and fun! Reducing peer approval can also reduce behavioural willingness and highlighting the negative consequences of gambling may represent a worthwhile pursuit by regulators.

Any campaign undertaken needs to identify the correct level of fear. It is known that the relationship between the level of fear in a message and acceptance or persuasion is curvilinear. This means that message acceptance increases as the amount of fear used rises, but only to a point. Beyond that point, acceptance decreases as the level of fear rises. Fear appeals have both 'facilitating' and 'inhibiting' effects. Low levels of fear have facilitating effects, which attracts attention and interest in the message and may motivate the receiver to act to resolve the threat. Thus, increasing fear from low to moderate can result in increased persuasion. However, high levels of fear, can produce inhibiting effects, whereby the receiver may emotionally block the message by tuning it out, perceiving it selectively, or denying the arguments outright. Therefore, before deciding to use a fear appeal-based message strategy, regulators should consider how fear operates, what level to use, and how different target online gambling audiences may respond.

5.4. Limitations of the Study

This research has several limitations that need to be highlighted. First, the model inevitably has specification error as it is always possible to consider additional explanatory constructs. By way of example, Konietzny and Caruana (2021, p.61) provide a “Gambling Intention Model” (GIM) based on UTAUT 2 that includes factors of perceived fairness and anticipated enjoyment that increases the explanatory beta to the gambling behaviour intention outcome from 0.17 (in UTAUT2) to a high of 0.39 (in GIM). Neither of these constructs are incorporated in the present research but demonstrate the types of constructs which might help to improve the overall result, at least in an online gambling context. Yet unfortunately, these same additional constructs may not be appropriate to explain behavioural intention in a household energy context.

Second, although the prototype perception construct has been used in both the online gambling and the household energy model, its operationalisation is problematic. Therefore, although steps were taken during the analyses stage that involved the deletion of items to improve the reported psychometric properties, this came at the cost of diluting the depth of the construct. A related concern is identified in the construct of behavioural willingness. The willingness construct represents an interesting addition that helps with the development of a dual-process model, yet the conceptualisation and operationalisation of the construct are at an early stage and require further elaboration. Similarly, the inclusion of risk as a moderator is useful but again the conceptualisation and operationalisation of perceived risk could benefit from further elaboration.

Third, by its very nature, the model investigated in both the online gambling and household energy sectors is of a static nature. It is known that encounter satisfaction operates on overall satisfaction and along different stages of loyalty over time. Therefore, although the antecedent variables of customer loyalty in the model explain a significant amount of variance in customer loyalty, the model may not be sufficiently capturing the dynamic nature of satisfaction and customer loyalty. The implications section suggests longitudinal applications to capture temporal effects on variance.

Fourth, the research may have issues related to common method bias. Therefore, although testing was undertaken to provide comfort that the measures used do not suffer from common method bias, as well as application of software suggested to mitigate common method bias, the presence of such error cannot be completely excluded and can have implications on the reported beta scores.

Finally, the research was conducted among respondents from the UK market. Although the two models provide quite similar results, any generalisations to other populations in other countries and other sectors needs to be undertaken with caution. To test the robustness of a model across different populations, it is necessary to investigate equivalence. Although, this research provides support for some aspects of equivalence, support for full equivalence could not be provided. This can be attributed primarily to the increased complexity associated to the psychometric nature of the model considered.

5.5. Directions for Future Research

The limitations as outlined in the previous section highlight several directions for future research. Behavioural intentions and behavioural willingness in the dual-process models can be developed further in the field of consumer behaviour. Conflicting suggestions in the literature identify a gap in the conceptual and operational applications of the link between behavioural intention and willingness. The present research adopted the position in the prototype willingness model (PWM) (Gibbons & Gerrard, 1995; Gibbons et al., 2009, p.237) that identify intention and willingness as distinct constructs and drivers of behaviour. However, meta-analyses by van Lettow et al. (2016, p.33) that focused on 69 articles (from a possible 3095) that applied the dual-process model support the Gibbons and Gerrard (1995) distinction between behavioural intention and behavioural willingness, but like Walrave et al. (2015, p.804) argue for a direct link between behavioural intention and behavioural willingness. The results of the present research as reported in the summary path models Figure 5.01 (online gambling) and Figure 5.02 (household energy) demonstrate significant correlations between both suggesting that such a direct link may be possible.

In view of this it may be worth considering these two constructs in a matrix with respondents being classified according to their different combinations of the two variables and therefore their likely behavioural outcome. The resultant categorisation shown in Figure 5.03 result in a matrix that can be used as an outcome variable in an improved model.

Figure 5.03

Alternative Outcome Variable Matrix of Behavioural Intention and Behavioural Willingness

Behavioural Willingness	Behavioural Intention: Low	Behavioural Intention: High
High	Unconvinced	Committed
Low	Indifferent	Unmotivated

While the above matrix provides an interesting possibility for re-evaluation of the behavioural willingness construct, the willingness construct together with its driver of prototype perceptions require improved conceptualisation, operationalisation, and elaboration of the nomological net. In this latter respect an interesting area for possible future research is to investigate possible linkages between customer loyalty and prototype perceptions. In addition, the perceived risk construct used in this research is generic and while it is likely that risk plays a role in many of the purchase decisions that customers make, it may be useful to look at elaborating and distinguishing different types of risks and the potential impact these may have on behavioural outcomes. A related point concerns improvements in the operationalisation and psychometric properties of the measures used in the model. While overall the measures have

performed well, those for behavioural willingness and prototype perceptions could benefit from further development.

Customer loyalty has been described as a dynamic process (e.g., Oliver 2014), yet models that are tested using SmartPLS are necessarily static in nature. In these circumstances, future research investigating the role of encounter and overall satisfaction and their interaction with customer loyalty could benefit from the adoption of an experimental methodology, or possibly neural studies, that would better allow for understanding the dynamics of encounter and overall satisfaction leading to customer loyalty. An experimental approach may also be useful for looking at actual behaviour. The current research stops at behaviour intention and behavioural willingness which are treated as the last stages before actual behaviour takes place. Experimentation can bring the aspect of actual behaviour to the model. An experimentation methodology may also be able to overcome some of the challenges arising from common method bias arising from survey research.

Although survey research raises the spectre of possible challenges arising from common method bias, if properly conducted it does provide for generalisable findings at least to the population considered. The present research provides results from samples that allow generalisability to customers in the UK in the online gambling and household energy sectors. However, further generalisation would require replication of the model in other sectors and across countries.

Finally, although the two models provide very similar results, it is difficult to conclude that the differences noted on the right-hand side of the model are necessarily originating from the fact that data was collected from customers that belong to two diverse typological mass services

categories. Replication studies that can possibly utilise the four quadrants in the mass services matrix would be useful to help settle this aspect. It may be that some of the difference may be coming from some weakness in the measures of behavioural willingness and prototype perceptions where the items used may fit customers of a particular mass service firm better than another.

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