

**School of Marketing**

**Conceptualising “Willingness to Sacrifice” for  
Luxury Brand Acquisition**

**Oliver Tucker**

**This thesis is presented for the Degree of  
Doctor of Philosophy  
of  
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# Statement of Original Authorship

## **Declaration**

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number **#HRE2017-0174**.

**Oliver Tucker**  
02 November 2020

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# Abstract

**Purpose:** The primary aim of this thesis is to reconceptualise the notion of “Willingness to Sacrifice”. Whilst there have been a plethora of studies that have investigated monetary sacrifice, and particularly consumers’ willingness to pay more for an offering, this is not the only element that a consumer will give up in order to obtain an offering. Other studies have looked at time sacrifice and comfort sacrifice, which are other factors consumers are willing to endure to ensure they obtain a specific offering, but equally, in their own right, they do not capture the entire picture. This thesis combines these three factors (Monetary Sacrifice, Time Sacrifice, and Comfort Sacrifice), in order to give a more complete picture of what consumers are “Willing to Sacrifice” in order to obtain an offering.

Secondarily to this, this thesis also investigates the antecedent perceptions that amalgamate to determine a consumers perception of value – namely, perceived scarcity, perceived uniqueness, and perceived quality. This thesis also investigates the idea of consumers desire, and whether this plays a mediatory role between consumers perceptions of value, and their ultimate willingness to sacrifice for a particular offering.

The research was conducted within the context of limited edition products, specifically those of a luxury nature. Luxury brands and the luxury industry is a hotbed of developing research, and whilst there have been studies looking at consumer purchasing behaviour towards lower-end products or “Fast Moving Consumer Goods”, the luxury market is vastly different in nature and in need of more research.

**Design:** The thesis comprised of three studies. The first study was the initial test of the reconceptualised “Willingness to Sacrifice”. The second study then focussed on validating the findings from the first, and the third study to further validate and generalise the findings from the initial two studies. The first two studies focussed on watches, with the third generalising the findings from goods to the service industry by looking at restaurants.

Study One investigated consumer “Willingness to Sacrifice” for limited edition luxury goods. There were two versions of the survey instrument with one using Tag Heuer as the stimulus,

and the other using Louis Vuitton. This was done to give a point of comparison within the study. Furthermore, the design of the stimulus was focussed around scarcity caused by high demand from consumers, with the respondent being told that the exact number of watches that had been made was unknown, but that it was expected to sell out quickly, due to the high demand.

Study Two aimed to validate the findings from the first study, and as such, it also focussed on Watches as the product category, and used the same two brand stimuli. However, as a point of difference from the initial study, the respondents were given a specific number of watches that had been made (2000), to investigate a “supply-side” scarcity scenario in contrast to the “demand-side” scarcity from the initial study.

Study Three aimed to generalise the findings from Studies One and Two, and as such, focussed on the service industry, specifically luxury restaurants. In this case, only one version of the survey was conducted, using a fictional restaurant as the stimulus, however in the latter part of the survey, the respondents were given a side-by-side scenario where they were told to give their responses based on two separate situations – one where reservations were allowed, and the other where there were no reservations and they would have to queue to be guaranteed a spot. This was constructed to give a point of comparison to the demand-side and supply-side scarcity scenarios from the initial two studies.

**Findings and Implications:** Over the three studies which comprised the research, the “Willingness to Sacrifice” measure and behavioural model were found to be reliable across a variety of scarcity conditions and product categories. There were a few relationships that didn’t prove to be significant under the Tag Heuer data sets in Studies One and Two – Perceived Value to Willingness to Sacrifice in Study One, and Perceived Quality to Perceived Value in Study Two, while all relationships between all variables proved to be significant in the Louis Vuitton Data sets in Study One and Two. This suggests, for goods, implications around brand extensions and how consumers determine perceptions of value, where the product is a further extension from what the brand would normally produce.

In Study Three, which was in the context of restaurants, it was found that there was no difference between reservations and no reservations scenarios, which implies that there is no harm to restaurants choosing to utilise either method that would negatively impact consumers' Willingness to Sacrifice in any way. It was also found that Perceived Food Quality positively influences Perceived Value, whilst Perceived Atmospheric Quality does not, which also has implications around how restaurants should operate when it comes to offering a product that consumers will perceive to be of high quality.

**Limitations:** This research was conducted within the context of luxury brands, and limited edition items, and as such, the results should be examined in other contexts before being used to model behaviour for goods that aren't luxurious or scarce. Likewise, this research was tested in two product categories, watches and restaurants. Whilst this gives promising direction that the model works for goods and services, it should be tested in other product categories before firm conclusions are drawn.

**Originality:** This is the first study which has looked at time sacrifice, monetary sacrifice, and comfort sacrifice all together when it comes to evaluating what consumers are willing to give up to obtain an offering. It develops a means of measuring "Willingness to Sacrifice", and a behavioural model which captures the entire process by which consumer perceived value is formed, and the resulting behavioural outcomes from that perception of value.

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# Chapter One

## Introduction

### An Introduction to “Willingness to Sacrifice”

“My family think I’m pretty stupid, but they don’t appreciate the trainers. It’s hard to understand, I suppose”. So said one shopper when interviewed by journalist Nadia Khomami (2015), while waiting in line for a limited edition release of a certain brand of sneakers. This, and many other scenarios like it, which will be outlined in the following paragraphs, begs the question: What is it that motivates certain people to wait hours – sometimes days – in lines, without decent meals, rest breaks, or sleep, occasionally in inclement weather, all so that they have an opportunity to spend excessive amounts of money to purchase a limited edition offering?

There are countless reports covering similar occasions. November 5<sup>th</sup>, 2015: For nearly 20 hours, in pouring rain, shoppers in Melbourne’s Pitt Street Mall and Sydney’s Bourke Street Mall have been patiently waiting for H&M to open their doors so they can get their hands on the limited edition release collaboration with renowned French designer Balmain (Hatch 2015, Power 2015).



1 of 6 Freelance fashion designer Bi Yue, 28, spent about \$8,000. She started queueing at 6pm on Tuesday and was in the first batch of customers who entered the store. ST PHOTO: MELISSA HENG

But their efforts seem meagre compared to the consumers in Singapore, who waited three entire days outside of H&M’s Orchard Building store for the same opportunity (Heng & Noh 2015).

**Figure 1.1: Melissa Hung and Nurulnadia Md Noh. “After 3-day queue, shoppers wipe Balmain x H&M collection off shelves”. *The Straits Times*, Nov 5, 2015**

Journalist Sara Ilyas, along with Photographer Martin Godwin, captured a fascinating snapshot of this event outside of H&M’s Regent Street store in the UK. Interviewing various queuers, they open up fascinating windows into the mindset of a handful of such consumers. One consumer revealed they had been there since 5am, and was willing to spend £200, while another had been there from Midnight, and was looking to spend as much as £1000 (Ilyas 2015). A number of the prospective shoppers revealed they had done this before for other product categories, and were willing to do so again because the quality of the offering “was too good to miss” (Ilyas 2015).



*Figure 1.2: Sara Ilyas. “Balmain x H&M: scenes from the queue”. The Guardian, Nov 6, 2015*



*Figure 1.3: Sara Ilyas. “Balmain x H&M: scenes from the queue”. The Guardian, Nov 6, 2015*



*Figure 1.4: Sara Ilyas. “Balmain x H&M: scenes from the queue”. The Guardian, Nov 6, 2015*

Footwear attracts a similar level of mania, as referenced by the shopper in *Figure 1.4*, above. In 2016, at the launch of the “Air Jordan 2 Retro”, which retailed for \$650 and came with a limited edition Air Jordan cap, people lined up as early as 5 days before the release to try and ensure they got their hands on this unique product (Addady 2016).

In 2019, the brand owned by Kanye West known as “Yeezy’s” attracted a range of seemingly extreme behaviour. At Singapore’s Jewel Changi Airport, a hotspot for a variety of luxury items for the passing travellers, prospective shoppers queued for hours for the release of the “Yeezy Boost 350 V2”, which was being sold on a “first come first serve” basis (Fasanella, 2019). The same occurred at stores in Carnaby Street, London, and in Leeds, Manchester, Dublin and Edinburgh (BBC, 2019). One devoted Father in Taiwan waited 3 days to ensure he could buy a pair for his son (Ke, 2019).

Again in 2015, another Guardian newspaper journalist interviewed shoppers who were queuing for the “Adidas Yeezy 350 Boost”, and this interview also reveals fascinating insight into the mindset of consumers with this kind of consumption behaviour. One shopper said they thought it was worth it “because the trainers are unique and there is a limited number” (Khomami 2015). Another consumer revealed they were queuing so early because the previous time they had attempted, there was over 150 people (Khomami 2015).



It is not merely clothing that causes such a reaction. Beer drinkers queued for several hours to try a special craft beer in 2017 (Fuhrmeister 2017). People in Prague queued for days to procure a limited edition “Zero Euro” bank note, celebrating the 80<sup>th</sup> birthday of singer Karel Gott, with one fan travelling 450kms and sleeping on the pavement (AFP/Saudi Gazette 2019).



A couple guard the ATM selling a “Zero Euro” souvenir banknote depicting Czech pop singer Karel Gott in honor of his 80th birthday on Sunday at the shop of a local record company, in Prague. — AFP

The bank note retailed at €2, despite the note itself carrying no monetary value, and was limited to only 5000 units produced (AFP/Saudi Gazette 2019).

***Figure 1.5: “We’ve Gott it! The Zero Euro souvenir banknote”.***

***Saudi Gazette, July 14, 2019.***

Already, it is evident that this behaviour is being exhibited by a range of consumers, from a range of backgrounds, towards a range of products, and happens irrespective of the consumers income level. There are three uniting factors that appear to drive the consumers to behave such a way: the products uniqueness, its scarcity, and their perception of its quality. It has also been shown that such consumers will engage in this behaviour regardless of weather, time, or the financial cost of the product. These factors are important to note, as they will become the foundation for the research model discussed in the following chapters.

Returning to the media coverage of this phenomena, there are a few journalists who have made pertinent observations about the origins, current status, and implications of this behaviour.

Jamie Lauren Keiles (2018), writing about the “sociocultural history of the line”, notes that the first recorded description of the line dates back to 1837, in Thomas Carlyle’s treatise on the French Revolution. Keiles notes that queues originally stemmed from the scarcity that was created by wartime conditions, noting also the role of housewives queuing for supplies in World War 2 when goods were being rationed. However, Keiles goes on to comment that the



lines born from scarcity “soon became a symbol of bloated bureaucracy”, earlier noting that while “normal queues” are a solvable problem that results from too many people and not enough checkouts, these queues are entirely voluntary and given the status-symbol they’ve come to represent, “do not want to be solved” (Keiles 2018).

Journalist Morwenna Ferrier also documented this phenomenon for the Guardian Newspaper, noting how streetwear brands and restaurants are deliberately encouraging people to queue and document their experience on social media (Ferrier 2018). Ferrier notes how people who queue for these goods or services belong to a similar community based around a shared interest, commenting how “in the last decade, another sort of queue has emerged; one that is less about the end result and more about the act itself” (Ferrier 2018).



▲ The magic of the queue ... Harry Potter fans in Piccadilly await the latest instalment.  
Photograph: Dan Chung/Guardian

The photographic example accompanying this observation shows fans of the book series “Harry Potter” dressing up in themed attire as a celebration for the books release, as shown in

**Figure 1.6:**

**Figure 1.6: Dan Chung & Morwenna Ferrier. “The ‘fun’ queue: how standing in line became an event in itself”. The Guardian, July 2, 2018.**

Each of these news stories, whilst across various years and various product categories, all capture one common behavioural response among these consumers. This then begs the question: What is it that drives some consumers to be so determined to obtain an offering, a product, or experience some event, that they are willing to go to extreme lengths to ensure that they secure that opportunity? There is a phenomenon that has been observed a number of times around the launches of certain products, like the launch of some technology or gaming

products, or the opening of a big sporting or musical event (to name just a few examples), whereby some consumers are willing to give up seemingly irrational amounts of time, money, and maybe even comfort, to ensure they are guaranteed that product or event.

### The Luxury Industry

In 2018, Bain & Company report that the overall luxury market – in which they include luxury vehicles, hospitality, and personal items – was worth an estimated €1.2 trillion globally, with “Personal Luxury Goods” being worth an “all time high” €260 billion (D’Arpizio et al 2019). Deloitte estimated that the top 100 luxury companies had generated revenues of US\$217 billion in the financial year ending June 2018 (Arienti 2019).

Within Australia, the luxury industry has grown 8.4% over the last 5 years, and will be worth an estimated \$2.5bn in 2020. Whilst this figure has largely been driven by wealthy Chinese consumers coming to Australia for their luxury purchasing, the industry is expected to grow another 7% over the next 5 years largely due to investment into flagship stores and a forecasted growth in domestic household incomes (Miller 2019).

As far as the segmentation of the industry, just under 64% of the Australian market is dominated by luxury clothing and footwear, whilst 27% of the market is luxury watches and jewellery and the remaining portion being luxury leather goods and accessories (Barry 2020). The longstanding major brand within Australia is Louis Vuitton, and whilst their market share has marginally decreased in 2020 to 14.8% from 15% in 2019, largely due to significant growth from Gucci (also an estimated 14.8% in 2020, up from 9.5% in 2019), they are still the dominant player in the Australian market (Barry 2020, Miller 2019).

Bain & Company point to an “unrivalled appetite” for luxury consumption coming from Chinese consumers as a main driver for luxury growth – with their reports estimating they are responsible for about 1/3<sup>rd</sup> of global luxury spending (D’Arpizio 2019), Deloitte point to a new demographic that might fuel future growth which they call “HENRY’s” (Deloitte 2019). The acronym for this consumer segment stands for “High-Earners-Not-Rich-Yet”, and it is this

prospective Conspicuous Consumption that is a motivation for these consumers to purchase luxury goods (Deloitte 2019).

At least, this was the projections for the luxury industry pre-COVID19. Revenue for the Australian Luxury Retailing Industry was initially forecasted to increase by 5.7%, but has since been revised to a decline of 3.8% in 2020 (Barry, 2020). The total travel ban has seen a significant fall in the industry, especially given how well supported it was by Chinese tourists, who, as outlined above, came to Australia to indulge in luxury tourism as well as shopping in Australian brick-and-mortar stores (Miller 2019).

However, there are signs of recovery. Bain & Company report that whilst the global luxury market has contracted by an estimated 25%, and could rise to as much as 35% by the end of the year, China's improved COVID19 situation is leading a revival in the industry. It is forecasted that Chinese consumers may well rise from being 11% of the market to 28% by 2025 (Bain & Company 2020). Luxury Brands increasing their online presence may also help, especially with the increased travel restrictions and various countries continuing to fluctuate in and out of lockdown. Bain & Company again forecast that online channels may represent as much as 30% of the luxury market by 2025 (Bain & Company 2020).

## Research Objectives

To guide and define the scope of the research, the following research objectives have been composed. Each of these objectives is outlined as follows:

### Objective 1

**To conceptualise “willingness to sacrifice” in the marketing literature, and create a means of measuring consumer “willingness to sacrifice”.**

The aim of this objective is to investigate the extent to which consumers are willing to:

a) Discomfort themselves in order to obtain an offering that they perceive will give them greater pleasure than the discomfort experienced; b) Give up time to wait for an offering, to ensure that they will acquire the offering; and c) Pay more for an offering, to guarantee that they will obtain that offering on its release.

### Objective 2

**To investigate the antecedent effects of perceived scarcity, perceived uniqueness, and perceived quality on the perceived value of an offering, within the context of luxury brands**

Perceived Scarcity, Perceived Uniqueness and Perceived Quality are all factors that have been highlighted in the literature as elements that in some way have an impact of the perception of quality of both a limited edition item as well as a luxury brand. As such, it makes sense to investigate them as the antecedents to Perceived Value within the context of this study.

### Objective 3

**To investigate the relationship between Perceived Value and Willingness to Sacrifice, within the context of luxury brands.**

More specifically, the purpose of this research will be to investigate the following relationships:

a) Perceived Value and Desire to Acquire; b) Perceived Value and Willingness to Sacrifice; c) Desire to Acquire and Willingness to Sacrifice; and d) Desire to Acquire as a mediator of the relationship between Perceived Value and Willingness to Sacrifice.

### Objective 4

**To investigate the differences in consumers' Willingness to Sacrifice, when purchasing limited offerings with differing forms of scarcity.**

Over the course of the various studies that will comprise this research, the final area that will be investigated is whether there a difference in behavioural responses between: a) The type of product that is scarce, i.e., Goods vs Services; and b) Differing forms of scarcity, i.e., Demand or Supply driven scarcity.

## Delimitations and Scope

To assist in understanding the parameters of this research, the following areas are outlined to establish the scope of the research. Each of the three studies that comprise the overall research are subject to the following assumptions:

1. The research is set within the context of luxury brands, or in the case of Study Three, a luxury dining experience. This research does not extend to lower end products or “Fast Moving Consumer Goods”, but exclusively focusses on established higher end products.
2. In addition to being of a luxury nature, this research is also set within the context of goods and services which are limited edition offerings. The specific cause of this limitation, and the information which is known about how limited the product is, varies between the studies, being one of the factors being examined within the study. However, due to the limited edition nature of the products being examined within the research, the findings of each of these studies should be understood within this context, as opposed to luxury brands in general.
3. There are only two different kinds of stimuli that are examined within the research. Studies One and Two examine goods, using watches as the stimulus, and Study Three examines the services industry, using a restaurant as the setting.

## Theoretical Underpinnings

There are two key theories that help to provide some context to the behaviour being examined in this thesis. Both of these theories speak of specific behavioural responses that arise from scarcity theory. They are the Theory of Psychological Reactance (Brehm 1966), and “The Scarcity Heuristic” (Ditto & Jemmott 1989; Verhallen & Robben 1995). Both of these theories are related to states of heightened motivation that consumers may enter, and the behaviours that may result from entering that motivational state.

**The Theory of Psychological Reactance** (Brehm 1966): “Reactance” is defined as being “the motivational state of the person whose freedom is threatened” (Clee & Wicklund 1980). When consumers enter a state of reactance, there is an increase in motivation that results in a motivational state within that consumer, directed at engaging in that threatened free behaviour (Clee & Wicklund 1980).

**The “Scarcity Heuristic”:** As discussed by Ditto and Jemmott (1989) and Verhallen and Robben (1995), the “Scarcity Heuristic” outlines how scarcity can lead consumers to extremes. These authors outline this behaviour, noting how the scarcity heuristic “...does not simply lead to more positive evaluations; it leads to extreme evaluations”. As such, this behaviour is thought to underpin the behaviour which is the subject of this thesis, and the research aims to shed further light on how these extreme behaviours and evaluations come to be, and are manifested in purchasing behaviour.

Psychological Reactance and the Scarcity Heuristic go hand in hand in explaining the overall behaviour being exhibited by consumers, and as such, are critical foundations upon which the following hypotheses and theoretical framework is built.

## Key Concepts and Definitions

This thesis seeks to investigate Consumers' "Willingness to Sacrifice". For the purposes of clarity, Willingness to Sacrifice is defined as being:

*"(A measure of) the extent to which an individual is willing to give up money, time, and comfort, in order to obtain an offering they perceive to be of greater value than what they gave up to obtain it".*

Other key terms are defined as follows:

**Perceived Scarcity** refers to the extent to which a consumer believes a good or a service to be limited, and is seen as an antecedent to consumers Perceived Value, based on research by Lynn (1989), and Verhallen and Robben (1995), among other authors.

**Perceived Uniqueness** refers to how rare and different a product is in the mind of a consumer, who is looking to purchase an offering to help them be perceived as unique by owning such a product. This definition is based on research by Snyder & Fromkin (1977), Belk (1988) and Aaker (1999), among other authors.

**Perceived Quality** refers to the extent to which a consumer believes a product to be of exceptional standards, and is something that is perceived to be an inherent part of the nature of a luxury brand, as is part of the definition of luxury brands by both Phau and Prendergast (2000) and Vigneron and Johnson (2004).

**Perceived Value** is defined as being "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml 1988, 14).

**Desire** is defined as being "A state of mind whereby an agent has a personal motivation to perform an action or to achieve a goal" (Perugini and Bagozzi 2004, 34).



## Research Methodology

### Research Philosophy

The research philosophy employed in this study is a pragmatic approach. Pragmatism, as defined by Saunders, Lewis and Thornhill (2009, 143), is a philosophy that “strives to reconcile both objectivism and subjectivism, facts and values, accurate and rigorous knowledge and different contextualised experiences”.

The following parts of the Pragmatic philosophy guide the research approach:

- Reality is the practical consequence of ideas;
- There is a practical meaning of knowledge in specific contexts;
- A focus on problems, practices and relevance;
- Research is initiated and sustained by the researchers doubts and beliefs;
- Research follows the research questions and objectives;
- Emphasis on practical solutions and outcomes.

(Adapted from Saunders, Lewis and Thornhill 2009, 137)

### Research Design

The research is comprised by three studies. The first examined goods, in the context of scarcity created by an overabundance of demand, using two different luxury brands as the stimulus. The second also examined goods, but in the context of scarcity caused by the supplier deliberately limiting the number of units available, using the same two luxury brands from the first study to maintain a point of continuity. Study Three examines services, and looks at both demand-driven and supply-side scarcity side-by-side.

Table 1.1 below summarises the overall design of the research, outlining what is examined within each study:

	<b>Study One (Chapter 4)</b>	<b>Study Two (Chapter 5)</b>	<b>Study Three (Chapter 6)</b>
<b>Type of Scarcity</b>	<i>Demand</i>	<i>Supply</i>	<i>Demand &amp; Supply</i>
<b>Type of Product</b>	<i>Goods</i>	<i>Goods</i>	<i>Services</i>
<b>Table 1.1: Summary of research context in each study</b>			

### Data Collection and Data Analysis

When it came to the data collection, a goal of 200 usable responses was the minimum sought for. For each study, the survey instrument was compiled and distributed via the online platform Qualtrics, to each of the parties that assisted with the data collection process.

The data for Study One was collected via trained field workers who were instructed to go to public spaces (such as shopping centres, etc), and have a systematic method of selection when it came to asking respondents to fill out the survey (for example, every 5<sup>th</sup> person to enter the store, and if rejected, begin over again). This data was collected over a period of 4 weeks.

Studies Two and Three used panel data for the data collection, collected in collaboration with a data collection company. Again, over 200 responses were collected for each of the surveys, however a vast number of the data collected ended up being unusable due to incomplete or incorrectly filled out surveys, which then required further data collection on the part of the researcher. This led to a smaller sample size in comparison to the first study, however as these studies are confirming the results of Study One, the smaller sample size was ultimately not deemed a problem.

Study One was analysed using SPSS 25 and AMOS 25, whilst Studies Two and Three were analysed initially with SPSS 25 before using WarpPLS. SPSS was used to conduct the Exploratory Factor Analysis in all the studies, whilst AMOS and WarpPLS were used to conduct the Structural Equation Modelling in the respective studies they were utilised in.

## Research Significance

### Theoretical Significance

This research is the first which looks at time sacrifice, monetary sacrifice, and comfort sacrifice, all within the same study, under the umbrella of “Consumers’ Willingness to Sacrifice”, as outlined in Research Objective 1. Whilst prior literature has identified that these three elements of sacrifice are all things consumers are willing to give up in order to obtain a scarce offering (e.g., Verhallen 1982), no research has actually examined each of these three elements together in the same study, only individually or on occasion, two of the three within the same study. As such, this research is a much needed step forward in theoretical understanding of this form of consumer behaviour.

Furthermore, this research goes beyond just examining these three elements in the one study, but actually creates a means whereby Willingness to Sacrifice behaviour is able to be captured. This measure is tested comprehensively through the three studies, and is ultimately shown to be a reliable means of capturing time sacrifice, monetary sacrifice, and comfort sacrifice, within the one measure. To have finally developed a measure that was initially called for nearly 40 years ago is a substantial contribution to marketing theory.

As per Research Objective 2, this study also examines the factors which determine a consumer’s perception of value, building on prior research examining perceived scarcity, perceived uniqueness, and perceived quality, and their relationship with perceived value. There has been previous research looking how each of these factors determine a consumers perception of value, and some of this research has been done in the context of limited edition items, scarce items, or luxury items, but this research combines all of these elements to examine them under the same umbrella, under different scarcity conditions, to determine how consumers perceptions of value are formed under these circumstances.

Research Objective 3 then examines the relationship between consumers perceived value and their willingness to sacrifice. This research examines perceived value, consumer’s desire to acquire, and willingness to sacrifice, and the various relationships these factors have with each

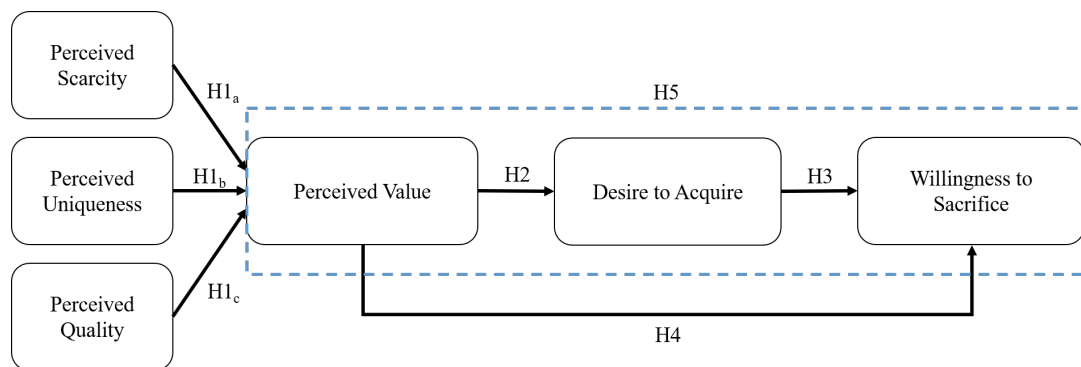
other, and examines them across three studies in a variety of contexts, adding to the understanding of the behavioural responses of consumers resulting from that perception of value.

Underpinning these three research objectives, as well as Research Objective 4, are the two key underpinning theories to the research, the Theory of Psychological Reactance, and the Scarcity Heuristic. The findings from these three studies add further understanding and context to how these theories of consumer behaviour manifest themselves in the various scarcity scenarios that are examined in the research, and adds further understanding to these well-established theories into a new context of Consumers’ Willingness to Sacrifice.

### Methodological Significance

The predominant methodological contribution from this research is the development of a behavioural framework for Consumers Willingness to Sacrifice, as outlined by Research Objective 4. This framework is developed and examined in a range of contexts across the three studies, and is found to be overwhelmingly reliable in its ability to model this behaviour.

This behavioural framework is shown in *Figure 1.7*, below:



**Figure 1.7 – Behavioural Framework for “Willingness to Sacrifice”**

This behavioural framework begins by understanding how consumers develop their perception of value for a limited edition luxury offering, before examining how this perception of value causes them to behave – namely, do they enter an intermediary “desire” state, or do they immediately jump to being “willing to sacrifice” in order to obtain that offering.

To a lesser extent, another contribution this study makes is by the research approach that was used within the studies, specifically in how the stimuli were displayed. The use of a “brochure” method of displaying the stimulus has been used previously (e.g., Lessne and Notarantonio 1988), but adds further validity to this style of approach, especially when it comes to researching luxury brands. Additionally, the decision to exclude a price point in the brochure was informed by the prior research of Lynn (1989), Vigneron and Johnson (2004) and Kapferer and Bastien (2009), and so the findings from these studies adds context to the prior findings of these aforementioned authors.

### Managerial Significance

The findings across the three studies reveal five managerial contributions for consideration.

Firstly, by examining the first portion of the behavioural framework, which looks at how consumers form perceptions of value, suggests the elements which managers need to consider when making a limited edition luxury offering. Perceived Scarcity and Perceived Uniqueness were both consistently predictors of Perceived Value, and whilst Perceived Quality was marginally less consistent, there is also context there for how and when it is a factor in determining Perceived Value. An offering that is perceived to be scarce, unique, and of high quality will lead to consumers having a high perception of value, which in turn will lead to them being willing to sacrifice, and so understanding this will help managers be able to make offerings that consumers will ultimately be willing to sacrifice to obtain.

Secondly, a related finding came from the nature of the product itself. Offerings that were greater brand extensions generally performed better than offerings that were a little closer to what a brand would normally produce. This finding is rather intuitive, but still insightful – products that are further from what a brand would normally make are perceived to be scarcer and more unique, and consumers will need to be assured of its quality.

Thirdly, building from findings suggested by authors Chen, Peng and Hung (2015), this research adds insights into the role of Perceived Food Quality and Perceived Atmosphere Quality as factors that lead to consumers Perception of Value for restaurants. In short –

Perceived Food Quality does impact Perceived Value, whilst Perceived Atmosphere Quality does not. As such – whilst perceived uniqueness does still contribute towards the perception of value for these offerings – it suggests that restaurants need to offer good food over looking appealing, which again, intuitively makes sense.

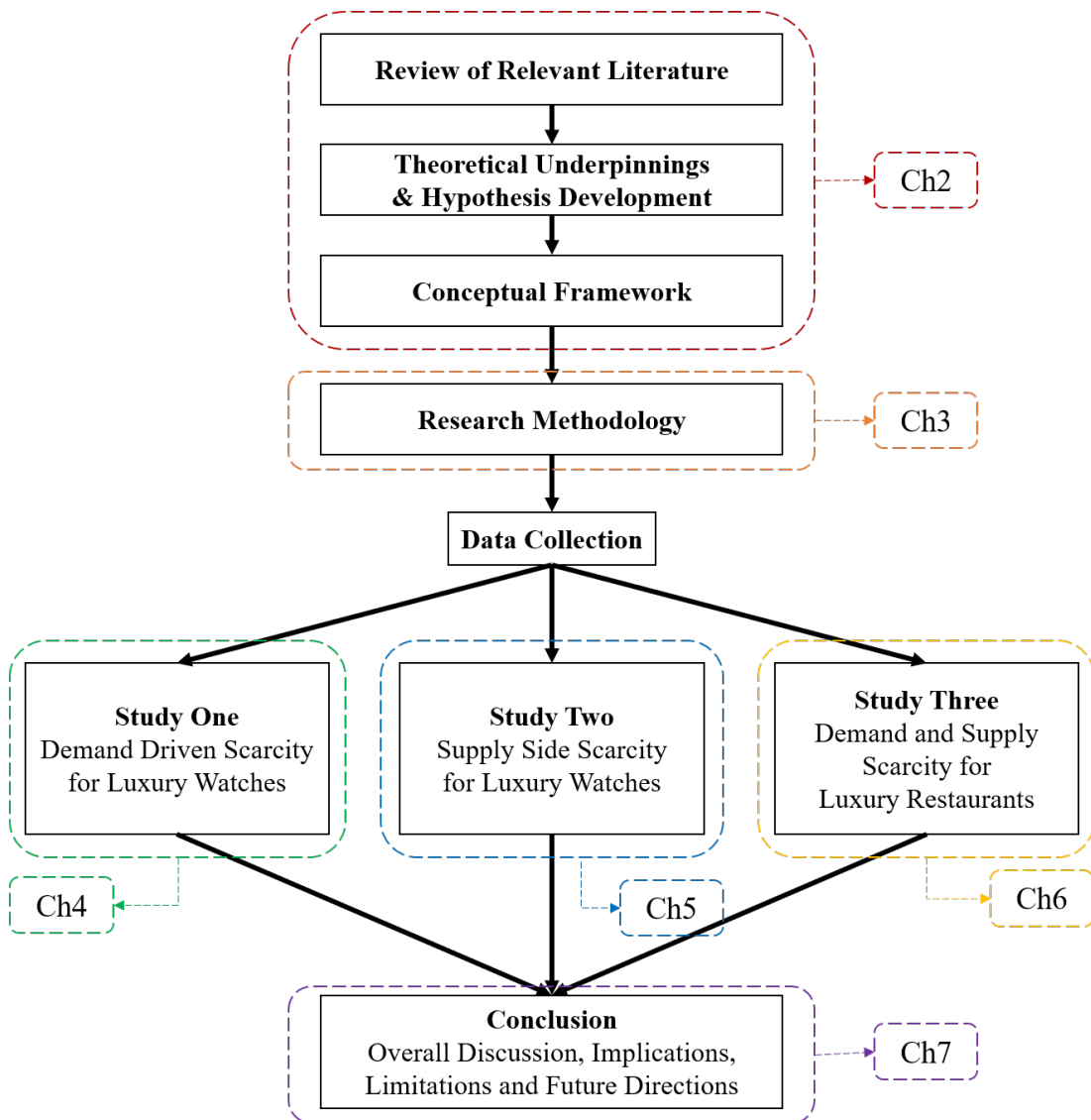
Fourthly, when examining the scarcity conditions around restaurant offerings, it was found that there was no difference between whether a restaurant offered reservations or did not, consumers were still willing to sacrifice in both situations. This then suggests that there is no penalty for restaurants choosing one option over the other, and therefore, they can choose the form of booking management that best fits their branding, or other restaurant requirements.

Finally, the fifth contribution for managers that comes from this study is around embracing consumers' willingness to sacrifice. This behaviour clearly exists, as outlined in the news media earlier in this chapter, and as captured by the research across the three studies, and so, if brands are in a position to elicit this from their consumers – they should also use it as an opportunity. It may enable them to build brand loyalty, by celebrating those consumers who are willing to engage with the brand to such an extreme extent. Or, as highlighted by Ferrier (2018) and Keiles (2018), it is an opportunity for free advertising as it draws attention to the brand, event, or restaurant that is occurring, either at the physical store location, or as documented by consumers on social media. There are a number of ways which brands can be creative in embracing this behaviour, to the benefit of everyone involved.

## Organisation of Research

This thesis is organised into seven chapters. (1) Introduction; (2) Review of Relevant Literature, Theoretical Underpinnings and Hypothesis Development; (3) Methodology; (4) Study One; (5) Study Two; (6) Study Three; (7) Conclusion.

*Figure 1.8* below outlines the structure of the thesis and overall research process:



*Figure 1.8: Overview of Thesis Structure and Research Process*

## Conclusion

This chapter has introduced the concept of “Consumers’ Willingness to Sacrifice”, which is the central focus of this thesis, as well as providing an overview of the research objectives, the structure of the research, and the contributions this research has made.

The following chapter will detail the relevant literature to this research, as well as the underpinning theories which this research is built on. Following this, the research objectives are outlined within this context, and the hypotheses for the research which examined these research objectives are outlined. The chapter also provides a framework for the research, by which the research objectives and hypothesised relationships can be better understood.



# Chapter 2

## Relevant Literature, Theoretical Underpinnings & Hypothesis Development

### Introduction

This chapter begins by going over the relevant literature surrounding this topic, and the various theories and relationships that will be used throughout the research. It begins with a discussion around the nature of luxury and luxury consumption. Following this, the review of relevant literature examines scarcity, uniqueness and quality as the aspects of luxury brands from which consumers derive value. It then ends with a brief overview of Willingness to Sacrifice, to the small extent it has previously been discussed in the literature.

Following from the review of relevant literature, the research objectives that govern the scope of this thesis are outlined, and the two key theories that underpin this research are discussed. These two theories are the “Theory of Psychological Reactance”, and the “Scarcity Heuristic”, which are both behavioural responses that consumers exhibit when encountering various forms of scarcity.

With this having been established, the various hypotheses that have been formulated to examine the research objectives are outlined and discussed. It begins by discussing the antecedent factors that govern a consumers’ perception of value, namely perceived scarcity, perceived uniqueness and perceived quality. The hypothesised behavioural responses that may follow that perception of value when it has been formed are outlined next, namely that consumers may enter an intermediary “desire” state, or may immediately be Willing to Sacrifice in order to obtain the limited edition luxury brand that is on offer.

Lastly, a theoretical framework is crafted to summarise and model the hypothesised relationships. An overall framework is shown, as well as various iterations of that framework which show the relevance of each portion of the model and how the hypotheses examine the various research objectives.

## Background

### Luxury Brands

What makes a brand “luxury”? Many authors, from the early days of Veblen (1899) and Leibenstein (1950), through to more comparatively recent research by Nueno & Quelch (1998), Phau and Prendergast (2000), Vigneron and Johnson (2004), and Kapferer (2012) have attempted to concisely define what constitutes a luxury brand, but a review of the literature shows that there is no universally accepted definition – a problem highlighted by Hudders, Pandelaere & Vynke (2013). Luxury brands are diverse in their nature and kind, and therefore, while there is some consensus among the range of literature as to some of the factors that constitute a luxury brand, there is no one set definition.

Some authors argue that a luxury brand is something greater than a mere “premium-priced” product, having its origins in silver, china, or glass craftsmanship (Nueno & Quelch 1998), or perhaps found stored in tombs and pyramids or gifted to temples and churches (Kapferer 2012).

According to Nueno and Quelch (1998), one luxury company president defined it as being “a work of art designed for an exclusive market”, and as such, a luxury brand is a product created to indulge the senses, regardless of cost. Nueno & Quelch (1998) go on to summarise the characteristics most traditional luxury brands tend to exhibit, such as:

- i. a consistency of quality across all products made, perhaps whilst also giving each individual product its own uniqueness;
- ii. a heritage of craftsmanship, and perhaps even the personality and values of its creator inherent in its nature;
- iii. a clearly recognisable design, such that a connoisseur of that particular brand need not even see the logo to know what “family” it belongs to;
- iv. and finally, scarcity of supply with accompanying global branding and worldwide recognition.

Phau and Prendergast (2000) agree to a certain extent, stating that one of the key factors to luxury branding is the extent to which they are a well-known brand identity. However, they would also argue, with the backing of a wide range of other authors, that luxury brands are defined by a slightly different range of factors, being:

- i. their ability to evoke exclusivity;
- ii. their ability to increase awareness of that brand identity and perception of quality, which in turn, increases consumers preference towards them;
- iii. and their ability to retain a consistent level of sales and consumer loyalty.

Vigneron & Johnson (2004) define luxury products as those purchased to enable the satisfaction of both psychological and functional needs, but highlight that traditionally speaking, these products are purchased to bring esteem to the owner more so than for any functional purpose. Weidman, Hennigs & Siebels (2009) would concur, arguing that due to exclusivity and rarity being key factors in a luxury brands identity, luxury brands will therefore have high prices and high intangible “utility”, even though the functional value may well be quite low.

### Luxury Consumption

Research into luxury consumption predominantly stems from the notion of “Conspicuous Consumption”, which was arguably brought to prominence by Thorstein Veblen in 1899. The theory states that consumers will purchase “conspicuous goods” to flaunt their wealth, and use it to demonstrate to others that they have achieved a certain level of financial and/or social status (Veblen 1899).

Veblen’s writings sparked two further prominent developments in economic and consumption theory. The first is the work of Oskar Morgenstern, who in 1944 along with John von Neumann developed the “Theory of Games”, a field of economic study that models theoretical behavioural actions and responses. Further to this, Morgenstern wrote another paper in 1948: “Demand Theory Reconsidered”, in which he outlined the notion of “non-additive demand curves”. The idea of non-additive demand curves is that, contrary to prior economic thought

that all demand “added up”, there might be some kinds of demand that caused a depreciation in demand from other consumers (Morgenstern 1948).

Morgenstern’s paper in 1948 then inspired the second development in economic and consumption theory, Leibenstein’s “Bandwagon, Snob, and Veblen effects in the theory of Consumers Demand”, which was published in 1950. In his opening comments, Leibenstein notes the observations made by Morgenstern about the nature of consumer demand and conspicuous consumption, but highlights that he doesn’t solve the problem that he raised (Leibenstein 1950, 183). As such, Leibenstein developed the model of “Snob effects”, where consumers purchase to be different from “Bandwagoners”, who purchase out of inspiration to be like the “Snobs”.

Leibenstein continues, but it is worth pausing at this point to make a few observations. It is evident that Luxury Brands are often consumed for two almost seemingly contradictory reasons – individuality and conformity, and this is reflected in more modern research. Consumers may use luxury brands to express their individuality, constructing an external image they hope will cause others to perceive them in a certain way, and yet luxury brands are also used by consumers to signal membership of a certain social group, or social status. Godey, et al (2012), define this as “social salience” and “social identification” respectively, and the most curious element of these two factors is that consumers may consume brands hoping to simultaneously achieve both individuality and social acceptance.

Bagwell and Bernheim (1996) define these two motives as “invidious comparison”, those who consume goods conspicuously to distinguish themselves from lower class society, and “pecuniary emulation”, for those who purchase conspicuous goods to elevate or mask their lower status to be perceived as something more. Other authors (e.g. Corneo & Jeanne 1997a, 1997b; Kastanakis & Balabanis 2012; 2014) stick to the original labels used by Leibenstein, choosing to continue defining this behaviour as “Snob” and “Bandwagon” effects, which outline the market as those who purchase to be different, and those who purchase to conform.

It can therefore be seen that the market for luxury brands is not homogenous, and there will be people purchasing from different motivations, i.e., to conform to those they admire, and those who purchase to become different from the uniformity around them.

However, there is a third category that is highlighted by Leibenstein, the “Veblen Effect”, which is defined by Leibenstein as follows:

*“The essential economic characteristic with which we are concerned is the fact that the utility derived from a unit of a commodity employed for the purposes of conspicuous consumption depends not only on the inherent qualities of that unit, but also on the price paid for it. It may, therefore, be helpful to divide the price of a commodity into two categories; the real price and the conspicuous price. By the real price we refer to the price the consumer paid for the commodity in terms of money. The conspicuous price is the price other people think the consumer paid for the commodity and which therefore determines its conspicuous consumption utility”*  
(Leibenstein 1950, 203).

To summarise, Leibenstein builds on the research of Veblen and Morgenstern to highlight that there are consumers who purchase items a) because they are expensively priced and b) because they wish others to observe this, and it is from this they gain satisfaction. This differentiates them from “Snobs” and “Bandwagoners”, or even “invidious comparison” and “pecuniary emulation”, as these consumers do not care about others purchasing motivations, merely the status that these kinds of purchases will display to others. It is still a form of purchasing based around identity, but one that is independent of others purchasing motivations.

Catry (2003) highlights an intriguing notion that is related to this point. Whilst higher prices means exclusivity, which therefore naturally dissuades some consumers simply because it is outside of their disposable income range, higher prices will almost certainly stimulate new entrants to the market because they wish to purchase products merely because they are

expensive in nature. Putting it another way, the higher priced luxury products open up a whole new market of consumption that is otherwise untapped, because these consumers aren't interested in purchasing products under a certain price threshold.

A slightly different way of viewing luxury consumption was proposed by Han, Nunes and Dreze (2010), who broke the market into four categories of consumer. These categories of consumer are evaluated in two dimensions: Wealth, and Need for Status. Firstly, there are "Proletarians", who do not have wealth, nor a need for status, and therefore do not engage in status-signalling behaviour. This then leaves the three remaining categories who do engage in at least one of these two dimensions. The highest end of both categories are labelled "Parvenus". They have high wealth and a high need for status, and similar to the snob and bandwagon model, Parvenu's actively seek to dissociate themselves from those who do not have wealth. "Patricians" are the third category of consumer, who have wealth, but don't actively desire to signal it. They will purchase luxury products, but only those which are "quiet", effectively signalling to other wealthy consumers who can recognise the brand, but not otherwise drawing attention to themselves. The final category of consumer are the "Poseurs", who are low wealth, but have a high need for status. They are effectively the "bandwagoners" of the previous model, who aspire to be like the Parvenu's, and mimic them. In short, this model proposed by Han, Nunes and Dreze (2010, 17) works in a similar fashion to Leibenstein's original proposal, but adds more nuance to the kinds of wealthy consumers who do not wish to consume as conspicuously as other wealthy consumers.

Whilst it would be nice if the luxury market was that compartmentalised, it has already been highlighted earlier that academics struggle to define what constitutes luxury, and as the market matures, this is only growing more complicated. To this point, Hudders, Pandelaere & Vynke (2013) raise one such complication when it comes to evaluating luxury brands and luxury brand consumption. The authors point out that, in recent years, luxury has become more common-place, and equally, more consumers are being able to afford "luxury" brands. The authors comment the following in the conclusion of their research:

*“The results of this study also provide further evidence for the subjective nature of the luxury concept as not all consumers ascribe the same meaning to luxury brands. Therefore, this paper relies on semiotic theory, which argues that a brand is not inherently luxurious, but receives luxury meaning, indicating that luxury brand meaning is context-dependant. This theory can account for the fact that some brands are perceived as luxury brands by some individuals, but not by others...”* (Hudders, Pandelaere & Vynke 2013, 406).

The findings from Hudders, Pandelaere and Vynke (2013) highlight two things. Firstly, the concept of luxury consumption has shifted vastly from the original academic conception by Veblen in 1899, which focussed almost exclusively on purchasing expensive items to display one’s wealth, to something far more nuanced and segmented. This is a notion highlighted by Aliyev, Urkmez and Wagner (2018), who in their bibliometric study of luxury research from 2000 to 2016 show a distinct decrease in the role of conspicuousness and its significance in luxury consumption.

The other issue that Hudders, Pandelaere and Vynke (2013) highlight is that the notion of luxury has become muddled. One could debate if there was not a unanimous consensus that a brand was luxurious, whether it really is a luxury brand. This then leads to the main challenge faced by managers of brands who wish to consider themselves luxurious: The “Rarity Principle”.

As summarised by Phau and Prendergast (2000), a fundamental challenge that luxury brands face is that they need to sustain high levels of awareness of their brand, whilst also tightly controlling the diffusion of the product being offered, to enhance exclusivity. Brands must walk this tight line of being widely known, but rarely owned, in order to be considered exclusive, and therefore luxurious. This is the essence of the “Rarity Principle” that clearly many higher end products aren’t quite managing. By being too widely available, it decreases

their exclusivity, and therefore casts doubt in the minds of some consumers as to its luxurious nature.

Kapferer and Valette-Florence (2018) recently revisited the theory of the Rarity Principle, and found that it still largely holds to be true. On one hand, market penetration (which they measured through sales of a luxury brand) enhanced perceptions of “brand excellence”, but negatively impacted brand prestige. It was suggested by Kapferer and Valette-Florence (2018) that this implies those who own that luxury brand are reassured by the fact others also chose to purchase it, but that the overall perception of the brand is still harmed by over-diffusion.

One final component of luxury consumption that is worth considering is how luxury consumption has evolved over the years. Seo and Buchanan-Oliver (2015) note how luxury offerings were originally created by small artisan businesses, but through the 1990’s to 2000’s, the marketplace evolved into being dominated by giant multinational conglomerates who could produce these kind of offerings but sell them on a global scale.

A part of this marketplace evolution has been the rise of e-commerce, which has proven to be something of a challenge for luxury brands to adapt to. Okonkwo (2009) noted the slowness with which some luxury brands were adapting to the online space, commenting on the “paradox” of trying to retain exclusivity and avoiding over-exposure, which are counter to the normal principles of e-commerce. Okonkwo (2009) also noted that another challenge that was faced by brands in the online space, were the lack of physical contact with the products and personal relationships with consumers, which had traditionally been critical in the sale of luxury brands previously.

Even as recently as 2018, Yu, Hudders and Cauberghe noted that online luxury retail outlets were still facing hesitancy from consumers given the expense involved, and the lack of tangible evidence of the product prior to purchase. However their research suggested that clearer messaging of quality guarantees was one way in which this hesitancy could be overcome (Yu, Hudders & Cauberghe 2018). Kim (2019) also notes that selling luxury offerings through



authorised websites reduces the perceived risk of shopping online, and that the narrower access of shopping through one of these authorised websites also has a positive influence on consumers willingness to buy.

In summary, luxury brands are generally defined as being those that evoke a sense of exclusivity, have high brand awareness, carry a high perception of quality, and maintain a very highly loyal consumer base (Phau & Prendergast 2000). Consumers are motivated to purchase luxury brands because of their conspicuous nature (Godey, et. al. 2012), and although the motivations to purchase may be different between cultures (Bian & Forsythe 2012), or other segmentation factors (e.g. Han, Nunes and Dreze 2010), the desire to purchase remains a global, unchanging psychological state that can be found in any consumer (Nueno & Quelch 1998; Vigneron & Johnson 2004).

However, luxury brands must be cautious to avoid being too widely owned, as this will negatively impact perceptions of prestige and exclusivity (Phau and Prendergast 2000; Kapferer and Vallete-Florence 2018). Whilst there has been an expansion of the luxury market in recent years, both in terms of brands aiming to be luxurious and those who purchase these brands (Hudders, Pandelaere & Vynke 2013), this has led to a situation where consumers differ in their opinion on what makes a brand “luxurious”, which is arguably a failure of these brands to effectively maintain the balance of the “Rarity Principle”.

## Scarcity

As has been outlined in the previous section, part of the intrinsic nature of a luxury good is that they are scarce. Whether they are deliberately limited – as will be discussed later – or whether they are inherently rare because the materials that go into making that luxury product are themselves rare – the fact that there are few units of a particular luxury product contributes to its uniqueness, quality, and ultimately its perceived value.

Scholarly literature on scarcity is largely founded from the work of Brock's (1968) "commodity theory", where it was hypothesised that "any commodity will be valued to the extent that it is unavailable". Studies following this verified the findings, such as Fromkin, et al (1971) for which a nylon hose was the stimuli, and Worchel, Lee and Adewole (1975), who used cookies. A sidenote from the findings of Worchel, Lee and Adewole (1975) was how cookies that became scarce were perceived as more valuable than those which were always scarce, which is a verification of Brehm's (1966) theory on Psychological Reactance (as noted by Verhallen 1982, 315), which will be discussed later as one of the underpinning theories for this thesis.

Verhallen (1982) and Lynn (1989) both discussed how the impact of scarcity on consumers perceived value goes against traditional economic models which state that as products become more expensive, desire should decrease. Lynn (1989) noted further to this, that the impact of Scarcity on Desirability is heightened further when the actual price is unknown, but the product is assumed to be expensive.

Lynn (1991) conducted a literature review of 41 papers that examined in some way the impact of scarcity on desirability, and showed that the overwhelming weight of evidence indeed verified Brock's Hypothesis on Commodity Theory, that scarcity does in fact enhance perceptions of value within consumers. Further to this, Verhallen and Robben (1995, 372) constructed a comprehensive table outlining the various types of limited availability and the resulting behavioural response. In short, in the circumstances where the behavioural mechanism was reactance or status seeking behaviour, the ultimate consumer response was an

increase in perceived value, and only when the consumer became frustrated, or were being altruistic, was there a decrease in product desirability (Verhallen and Robben 1995, 372), which was consistent with Lynn's (1991) commentary on the outlying results.

More recent studies have shown this behaviour to be enduring. Eisend (2008) showed that scarcity appeals in the advertising of a product lead to enhanced perceptions of value and an intention to purchase. Byun and Sternquist (2012) found empirical support for the retail strategy employed by fast-fashion companies where a sense of scarcity is created through both limited supply and quick renewal cycles. Jung and Kellaris (2004), Suri, Kohli and Monroe (2007), Wu, et al (2012) & Chen and Sun (2014) likewise all found support for scarcity enhancing value perceptions in a variety of forms.

The main way in which scarcity occurs is from the "supply" side, to refer to it in economic terms. One reason for this may be due to limited resources that can be used in making such goods (such as gold or platinum being rare metals). More commonly, scarcity is created from a specific managerial decision to only produce a limited number of units, or only made available for a certain period of time (for example, "available for one week only").

Agarwal, Jun & Hun (2011) also write about this topic in some depth, particularly in the context of how this scarcity is communicated to consumers, and note that whilst both forms of scarcity causes an increase in the desire to purchase that particular offering, the impact of "Limited Quantity Scarcity" is greater than "Limited Time Scarcity". They cite three reasons for why this is the case. Firstly, they note that there is a fundamental difference between the two forms of scarcity. Under time constraints, consumers only need to meet the deadline, whereas under a limited quantity scenario, consumers are competing against one another, and this creates an uncertainty about when this offer may expire (Agarwal, Jun & Hun 2011, 20). The second reason is that consumers may derive more value from a limited quantity scenario, because of this perceived competition of against other consumers, and will perhaps feel a sense of achievement in being one of a limited few who received the offer. This same sense of achievement is far more limited in the cases of limited time scenarios (Agarwal, Jun & Hun

2011, 21). Thirdly, the consumer may infer that a limited quantity offer is more valuable to the company than a limited time one, as they can only afford to give out so many of that item at a reduced cost, whereas in the case of a limited time offer, the inference is perhaps made by consumers that the company are happy to give away however many units of that product consumers are demanding during that time period, and therefore that product is not valued as highly by the company, and therefore, is neither valued as highly by the consumer (Agarwal, Jun and Hun 2011, 21).

However, scarcity could also be created by an excess of demand. One author who hypothesised this form of scarcity is DeGraba (1995). Using Game Theory, the author shows a circumstance where a producer (who is a monopolist) benefits from a situation where the demand is greater than supply. In this situation, which the author calls a “buying frenzy”, it is proposed that the producer benefits by consumers rushing to act because they fear the supply being smaller than the level of demand for the product, and thus purchase the product before they’ve properly assessed how much they actually value it (DeGraba, 1995). In other circumstances, the author argues, the consumer will take time to assess their value before making the purchase, and in such circumstances the producer may not benefit in the same way. As such, the recommendation is that producers try and induce these “buying frenzies” by advertising the demand is greater than the supply, so they can sell the good at a higher overall price (DeGraba 1995).

Such a “perfect” model is only hypothetical, as it relies on a monopolist who has complete control over the market, and perfect control over messaging to the intended target audience. However, a similar kind of behaviour does exist and is being exhibited by consumers, and producers clearly are benefitting from it. One such example can be seen in the luxury sneaker industry, where Adidas x Kanye West style products that are periodically manufactured in an unspecified limited amount, and sold for a high price successfully due to the excess demand that is generated for it. This behaviour clearly needs further research, however its evident there is some form of demand-driven scarcity behaviour being exhibited in the market.

## Limited Editions

A specific form of manipulated scarcity that is seen in the market is the use of “limited edition” products. Gierl and Huettl (2010) discuss how limited editions could be considered the “most prominent example of scarcity”, given that they are restricted from the beginning of the sales period, rather than becoming restricted due to high demand for the offering. In a broader sense, Verhallen and Robben (1995) discuss how goods of restricted availability (where goods are only available to certain individuals), and limited goods (due to market or non-market factors), both increase desirability perceptions of goods due to reactance, status seeking behaviours, and consumer need for uniqueness.

Catry (2003, 10) makes the claim that Luxury Brands “aren’t selling rare or exclusive products”, but “are adept at pretending to do so by offering an illusion of scarcity”. Expanding on this statement, Catry comments that luxury brands “seek to perform an illusion where actual scarcity is replaced by perceived rarity” (2003, 11), and notes how they have attempted to create a sense of this rarity through methods like selective distribution, or artificial shortages through means such as limited edition releases.

In some instances, this limitation may be down to the designer only “signing” a certain number of the good that is made, or by choosing to handmake the range of products being offered and as such, the limitation comes from the ability of the designer to make the product which inevitably will be less efficient – but more varied – than a machine produced good. As such, this then inherently adds a measure of uniqueness to that particular product (Catry 2003, 13). However, generally speaking, limited editions are a managerial decision made to create that sense of scarcity or uniqueness that would otherwise be lacking.

Despite the fact this form of scarcity is artificial or manipulated, it has just the same effect on consumers, and in a variety of differing forms. As noted earlier, Aggarwal, Jun & Hun (2011) found in addition to limited quantity, scarcity created through limited time offers also lead to consumers having increased desire to purchase. Mitomi (2018) discusses the impact of limiting

availability through time periods and found that the extent of the time constraint influenced quality perceptions, demonstrating how shorter time periods lead to higher quality evaluations.

It would appear however that the impact of limited editions only occurs for goods of a conspicuous nature. This is demonstrated by Gierl and Huettl (2010), where they show how the “limited edition” messaging only works for conspicuous goods (in their study, goods such as laptops and watches), and does not have the same effect for lower end, “fast moving consumer goods” (e.g. chocolate or deodorant).

Ultimately, it should be noted that limited editions are all valued based off of the perception of scarcity (as discussed across all of the aforementioned studies), their perception of uniqueness (as discussed by Catry 2003) and their perception of quality (as highlighted by Mitomi 2018). In other words, the combination of the perception of scarcity, perceived uniqueness and perceived quality will determine the consumers perception of value.

With scarcity and its relationship with luxury now having been discussed, the following sections address uniqueness and quality, and their relation to luxury brands.

## Uniqueness

Consumers “Need for Uniqueness” largely stems from the research of Snyder and Fromkin (1977), who theorised that need for uniqueness is “a positive striving for abnormality relative to other people” (Snyder and Fromkin 1977, 518). Lynn and Snyder summarise this notion in Snyder and Lopez’s “Handbook of Positive Psychology” (2002), where they comment that “the perception that the self is either highly similar or highly dissimilar to others arouses negative emotions”, and that “people should be happiest when perceiving that they are moderately different relative to others” (Snyder and Lopez 2002, 396). Snyder and Fromkin’s (1977) “Need for Uniqueness” scale prompted research into this phenomenon of consumers desiring to find their own social niche – one where they’re different enough to feel themselves but not so different that they feel isolated.

Need for Uniqueness research is rooted in “positive psychology” (Snyder & McCullough 2000) rather than marketing theory, but the application to consumer behaviour rapidly became evident. As the theory of “extended self” was developing at this same time (e.g. Belk 1988), it became apparent that one of the ways in which individuals attempted to create and maintain a sense of uniqueness was through the “acquisition of commodities that reflect ones specialness” (Snyder 1992, 15). Building from Brock’s (1968) Commodity Theory, Snyder (1992, 17) comments that “scarce products should be especially desirable to persons who are situationally or disproportionately high in need for uniqueness”.

Lynn and Harris (1997a; 1997b) connect the dots between consumers’ need for uniqueness, and unique products that consumers can purchase to fulfil that need. They argue, quite simply, that need for uniqueness will lead to consumers desiring to obtain goods, services or experiences that few others possess or have experienced (Lynn and Harris 1997a; 1997b). In their research into this phenomenon, Lynn and Harris found that consumers can have a “dispositional tendency to pursue uniqueness through consumption” for goods that are scarce, bespoke, innovative or located in unique locations (1997a, 1875), and also developed a “Consumers Desire for Unique Products” scale (1997b).

It is worth noting at this point that “need for uniqueness” and “unique products” are intrinsically linked, and could be argued to be relatively interchangeable. Consumers will seek unique products that they feel fit with their perception of their extended self; and unique products will be purchased by individuals who feel it satisfies their need for uniqueness. Consumers may be motivated to seek uniqueness for a variety of reasons, and products may be unique for a variety of reasons, and as such, “need for uniqueness” and “unique products” are individual elements of theory in and of themselves – however when practically applied, they lead to the same effective outcome: Unique products will be bought by people seeking uniqueness.

Tian, Bearden and Hunter (2001) highlight a number of ways in which consumers will attempt to resist conformity and seek uniqueness through consumption, such as:

- i. Disposing of goods they own that have become popular, and repeating the process of seeking goods that are scarce, innovative, or in some other way are new or special;
- ii. Seeking out novel, handcrafted, or personalised goods;
- iii. Purchasing vintage or antique goods that are no longer being manufactured;
- iv. Purchasing common objects and altering the object themselves, or adding them to a larger collective that becomes unique;
- v. Gaining in-depth knowledge of more common goods, and finding uniqueness in this depth of understanding; and lastly,
- vi. Selecting a form of uniqueness that others aren't willing to follow.

Tian, Bearden and Hunter (2001, 52) go on to define "Need for Uniqueness" as "the individuals trait of pursuing differences relative to others through the acquisition, utilisation and disposition of consumer goods for the purpose of developing and enhancing one's self image and social image", and summarise this into three types of consumer behaviour: "Creative Choice Counter-Conformity", "Unpopular Choice Counter-Conformity", and "Avoidance of Similarity" (Tian, Bearden and Hunter 2001).

Knight and Kim (2007) showed that Japanese consumers with a high need for uniqueness would perceive American brands poorly if they were too common, if they had a high tendency to avoid similarity or had a tendency to avoid conformity by actively seeking things that weren't popular. While "Unpopular Choice" and "Similarity Avoidance" will lead to consumers rejecting products that are seen as popular, "Creative Choice Counter-Conformity" may see consumers purchasing these products – as was also shown by Knight and Kim (2007). Knight and Kim's definition of "Creative Choice" is particularly illuminating, as they comment that these are consumers "with a high need to express their individuality and also be considered arbiters of good taste..." (Knight and Kim 2007, 277).



This definition is reinforced by Lattar, Phau and Marchegiani (2010), who investigated Need for Uniqueness in the context of luxury brands. They found that “Creative Choice Counter-Conformity” lead to consumers intending to purchase luxury brands, where the other traits did not. This makes sense, as luxury brands would enable these consumers to be individual and be seen to have good taste in products.

With regard to services, Lee and Hwang (2011) found that need for uniqueness actually had a negative impact on consumers perceptions of a luxury restaurant, commenting that perhaps it was due to the restaurant had become too popular. Such a finding would be consistent with consumers with unpopular choice or similarity avoidance traits, but this was not specifically examined within the study. However, Hyun and Park (2016) found innovation had a positive impact on consumers perceptions of uniqueness of that restaurant, which lead to them having high perceived value of that restaurant. They also found that visiting a luxury restaurant with a unique image would satisfy a consumers’ need to pursue uniqueness (Hyun and Park 2016). These findings are consistent with Tian, Bearden and Hunter (2001) who noted that one of the ways consumers would seek uniqueness is through products that are innovative.

In summary, consumers’ “Need for Uniqueness” is “a positive striving for abnormality relative to other people” (Snyder and Fromkin 1977, 518), and therefore “people should be happiest when perceiving that they are moderately different relative to others” (Snyder and Lopez 2002, 396). One of the ways in which individuals attempt to create and maintain a sense of uniqueness is through the “acquisition of commodities that reflect ones specialness” (Snyder 1992, 15). Consumers have a “dispositional tendency to pursue uniqueness through consumption” for goods that are scarce, bespoke, innovative or located in unique locations (Lynn & Harris 1997a, 1875), and as such, “Need for Uniqueness” can also be defined as “the individuals trait of pursuing differences relative to others through the acquisition, utilisation and disposition of consumer goods for the purpose of developing and enhancing one’s self image and social image” (Tian, Bearden and Hunter 2001, 52).

Consumers need for uniqueness manifests itself in three ways: “Creative Choice Counter-Conformity”, “Unpopular Choice Counter-Conformity”, and “Avoidance of Similarity” (Tian, Bearden and Hunter 2001). Each of these ways impacts the way in which consumers behave, as highlighted by Knight and Kim (2007), Latter, Phau and Marchegiani (2010), Lee and Hwang (2011) and Hyun and Park (2016).

## Quality

As highlighted by both Nueno and Quelch (1998) and Phau and Prendergast (2000), one of the core characteristics of a luxury brand is that it is perceived to be high quality. Vigneron and Johnson (2004, 491) argue that “it is expected that luxury brands offer superior product qualities and performance compared with non-luxury brands”. The concept of quality, and consumer perceptions of quality, is one that has been widely examined in literature.

Zeithaml (1988) discusses the differences between objective quality and perceived quality. With regards to perceived quality, Zeithaml notes that it is “(1) different from objective or actual quality, (2) a higher-level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgement usually made within a consumers evoked set” (Zeithaml 1988, 3-4). On “Objective Quality”, Zeithaml defines it as the measurable and verifiable superiority of a product based on some predetermined ideal standard, such as consumer reports, but notes that such methods have been criticised as ultimately also coming down to the judgement of the reviewer (Zeithaml 1988, 4). In fact, it is noted that some researchers claim that all quality evaluations are subjective, and that objective quality does not exist (Zeithaml 1988).

One of the most discussed elements of consumers perceptions of quality is the impact of price. It is one of the most commonly assumed relationships within marketing – possibly due to the aforementioned phenomena of “conspicuous consumption”, where expensive goods are purchased to flaunt wealth. Yet as Zeithaml (1988) notes, that in the 30 years prior to her research at that point in time, there had been close to 90 studies examining the price-quality relationship, and the results had been mixed (Zeithaml 1988, 11). Reviewing the literature to

that point, Zeithaml (1988) summarised that “The use of price as an indicator of quality depends on (a) availability of other cues to quality, (b) price variation within a class of products, (c) product quality variation within a category of products, (d) level of price awareness of consumers, and (e) consumers’ ability to detect quality variation in a group of products” (Zeithaml 1988, 12).

On points (a) and (d) of the aforementioned list, it is interesting to note the findings of Verhallen (1982) and Lynn (1989), who both note that the impact of perceived scarcity on perceived value is actually enhanced when the price is unknown, with Vigneron and Johnson (2004) later noting a similar effect on perceived uniqueness. Wu, et al (2012) also showed recent validation for the findings of Verhallen (1982) and Lynn (1989), showing support for the relationship between “Assumed Expensiveness” and “Perceived Quality”. It is also worth noting the “anchor and adjustment” effect in economics, where the initial price a consumer encounters will often frame consumer perceptions of quality and value (e.g., Kahneman 1992, Kristensen and Garling 1997, Bonini et al 2002).

Dodds, Monroe and Grewal (1991), building on the research by Zeithaml (1988) highlight three factors that play a role in influencing consumers perceptions of quality: Price, the brand name of the product or the name of the store the product is purchased from, and country of origin. The same three factors were later confirmed in a follow up study by Teas and Agarwal (2000).

More recently, Baek, Kim and Yu (2010) investigated the impact of brand credibility and brand prestige on perceived quality. Whilst both had a significant effect, what was interesting to note was the difference in effects based on the type of product. For “high self-expressive” products, brand prestige had a stronger effect, whilst for the “low self-expressive” products, it was brand credibility which had the stronger effect.

In summary, a perception of quality is core characteristic of luxury brands (Nueno & Quelch 1988; Phau & Prendergast 2000). The difference between objective and perceived quality is

debated, given however objective quality is determined ultimately comes down to the perception of the person or group establishing the criteria that the objective quality is judged by (Zeithaml 1988). Other authors ultimately determined that perceived quality is often judged based on price (though this is lessened by the presence of other determinants, and hence, assumed expensiveness is an alternative factor in determining perceived quality); country of origin; and brand (or store) name, credibility and prestige (Zeithaml 1988; Verhallen 1982; Lynn 1988; Dodds, Monroe and Grewal 1991; Teas and Agarwal 2000; Baek, Kim and Yu 2010; Wu, et al 2012).

## Willingness to Sacrifice

As early as 1982, Verhallen comments that little has been devoted to how consumers handle their scarce resources of money, time and effort, and yet despite this, very little research has been done looking at all three together. As recently as 2013, Oritz, Reynolds and Franke highlight what they define as “Passionate Consumer Behaviour”, citing contemporary examples like consumers queuing for Harry Potter book releases or Apple products, but don’t draw any connections to consumer purchasing behaviour in their study, instead focussing their attention on “Consumer Devotion”. In other literature, “Consumer Devotion” is more closely related to fields like “Fandom” (Pimentel & Reynolds 2004), especially in sporting contexts like American football (Drenten, et al 2009), or more recently even online brand communities (Mahmud & Ariño 2016). As such, there is still a gap in the literature relating to how this behaviour drives consumers to be willing to give up their time, money and comfort in order to obtain a limited edition luxury item.

In the context of this thesis, Willingness to Sacrifice is defined as being "(A measure of) the extent to which an individual is willing to give up money, time, and comfort, in order to obtain an offering they perceive to be of greater value than what they gave up to obtain it". As these efforts are have been linked together previously in academic literature (as outlined by Verhallen, 1982, in the evolving definition of “scarcity of means” from an economic perspective), then why has so little attention been given to examining them together?

Each of these areas (monetary, time and comfort sacrifice) have been examined individually or with some combination of two of these factors to varying degrees, but never all three together.

Firstly, monetary sacrifice. Homburg, Koschate and Hoyer (2005) found strong links between Customer Satisfaction and Willingness to Pay, showing across two studies that the relationship between the two follows an “inverse s-curve”, which is to say, the more satisfied the consumer was, the more they were willing to pay.

More recently – and in the context of luxury brands – Li, Robson and Coates (2013) found that the functional, social and symbolic value of a luxury brand (Louis Vuitton, Chanel, etc) lead to Chinese consumers having a willingness to pay more to obtain a luxury brand. In addition to the research from Li, Robson and Coates (2013), Hwang, Ko and Megehee (2013), and Loureiro and Araújo (2014) found some level of empirical support for a willingness to pay more for luxury products by consumers in Korea and Brazil, respectively.

Monetary and time sacrifice were examined together by Bardakci and Whitelock (2003), in the context of “mass customisation”. The authors found that consumers are willing to invest time in specifying preferences for custom made goods, were willing to wait to obtain them, and willing to pay more to obtain them versus a generic version of that particular product. In short, consumers will sacrifice time and money for bespoke goods.

Time and comfort sacrifice have occasionally been examined together too. In fact, the phrase “willingness to sacrifice” was used by Van Lange, et al (1997) in their examination of business relationships. In that context, the authors defined Willingness to Sacrifice as "The propensity to forego immediate self-interest to promote the wellbeing of a partner or relationship". Across 6 studies, the authors discuss the extent to which a person will be willing to discomfort themselves to sustain that relationship. Their conclusions, however, are not relevant to this research per se, though it is interesting to note their definition including time and comfort sacrifice.

More immediately relevant, in the context of this research, is the study conducted by Roux, Goldsmith and Bonezzi (2015), in which the authors focus on scarcity cues and whether they drive consumers to be more competitive (even violent) to obtain their desired product, or whether they will be generous towards other consumers. Authors call for further research into scarcity cues in marketing appeals (limited stock and limited time), and their impact on the resulting consumer behaviour.

Lastly, with regards to just comfort sacrifice, there is an interesting discussion that arises from the field of economics. In “The Joyless Economy, Scitovsky (1992) contemplates various facets of economics and psychology in how they relate to consumer behaviour, at one point commenting the following:

“...it logically follows that pleasure will always accompany the relief of discomfort, and will seem the more intense the greater the discomfort that is being relieved. It also follows that for the level of arousal to move towards its optimum, it must first be at a non-optimal level. In familiar terms, discomfort must first precede pleasure. ...If comfort is the avoidance of discomfort and pleasure is the feeling associated with the relief of discomfort, then anything that ends a situation of discomfort will give both pleasure and leave comfort in its wake.” (Scitovsky 1992, 62).

This idea is arguably a bedrock of psychology, economics, and marketing when it comes to understanding human behaviour. In psychology, it speaks to the physiological state of being, and the need to eat, sleep, and other functional needs. In economics and marketing, it can be used to understand what motivates consumers to behave in the manner they do, to satisfy basic natural needs, as well as the artificially induced needs via advertising and so forth. What is interesting to consider, and which will be later hypothesised, is whether consumers are in fact willingly discomforting themselves further in order to gain a product that they perceive will hold significant value to them.

Ultimately, whilst the aforementioned research from Ortiz, Reynolds and Franke (2013) comes close to highlighting the consumer behaviour that is the subject of this thesis, and while there are a few studies that look at elements of time, monetary or comfort sacrifice together to some extent, it is apparent that there is no research that examines all of these factors collectively, despite Verhallen (1982) highlighting it. To date, there have only been fragmented attempts at examining this kind of behaviour, and there does not appear to be anything that looks at the way in which these consumers arrive at their determination of value, nor is there anything that looks at the resulting purchase behaviour once that determination of value has been formed.

As such, there are clear gaps in the literature that can be investigated to begin examining this type of consumer behaviour, which has not yet been fully captured.

Through the remainder of this chapter, with this context having been established from the aforementioned literature, the research objectives will be outlined, the theoretical underpinnings to this research will be established and discussed, and finally the hypotheses for the research will be formulated.

## Research Objectives

To guide and define the scope of the research, the following research objectives have been composed. The research objectives are comprised of four objectives. Research Objectives 1, 2 and 3 are tested by individual components of the research framework and the corresponding hypotheses, while Research Objective 4 can only effectively be tested over multiple studies by looking at the research framework in its entirety, and comparing the results across each of the studies.

Each of these objectives is outlined as follows:

### Objective 1

**To conceptualise “willingness to sacrifice” in the marketing literature, and create a means of measuring consumer “willingness to sacrifice”.**

The aim of this objective is to investigate the extent to which consumers are willing to:

a) Discomfort themselves in order to obtain an offering that they perceive will give them greater pleasure than the discomfort experienced; b) Give up time to wait for an offering, to ensure that they will acquire the offering; and c) Pay more for an offering, to guarantee that they will obtain that offering on its release.

### Objective 2

**To investigate the antecedent effects of perceived scarcity, perceived uniqueness, and perceived quality on the perceived value of an offering, within the context of luxury brands**

Perceived Scarcity, Perceived Uniqueness and Perceived Quality are all factors that have been highlighted in the literature as elements that in some way have an impact of the perception of quality of both a limited edition item as well as a luxury brand. As such, it makes sense to investigate them as the antecedents to Perceived Value within the context of this study.



### Objective 3

**To investigate the relationship between Perceived Value and Willingness to Sacrifice, within the context of luxury brands.**

More specifically, the purpose of this research will be to investigate the following relationships:

a) Perceived Value and Desire to Acquire; b) Perceived Value and Willingness to Sacrifice; c) Desire to Acquire and Willingness to Sacrifice; and d) Desire to Acquire as a mediator of the relationship between Perceived Value and Willingness to Sacrifice.

### Objective 4

**To investigate the differences in consumers' Willingness to Sacrifice, when purchasing limited offerings with differing forms of scarcity.**

Over the course of the various studies that will comprise this research, the final area that will be investigated is whether there a difference in behavioural responses between: a) The type of product that is scarce, i.e., Goods vs Services; and b) Differing forms of scarcity, i.e., Demand or Supply driven scarcity.

## Theoretical Underpinnings

With the research objectives having now been stated, the following section will now outline the relevant theoretical concepts which underpin this research, as well as the theories, studies, and other research which have been examined to compose relevant hypotheses which can test these research objectives.

There are two specific kinds behavioural responses that arise from scarcity theory and literature that underpin this research and provide a vital foundation to understanding Willingness to Sacrifice. They are the Theory of Psychological Reactance (Brehm 1966), and “The Scarcity Heuristic” (Ditto & Jemmott 1989; Verhallen & Robben 1995). Both of these theories are related to states of heightened motivation that consumers may enter, and the behaviours that may result from entering that motivational state.

### Psychological Reactance (Brehm 1966)

One of the major behavioural responses to scarcity that is fundamental to this research is the “Theory of Psychological Reactance”, authored by Jack W. Brehm in 1966. The theory states that a person will enter a high state of motivation towards one option of a set of possible choices, when the perceived freedom to access that choice becomes threatened. Clee and Wicklund (1980, 390) comment that “the reactance response often entails an overreaction, whereby threatened behaviours or attitudes come to be prized more than before”. The level of reactance is directly proportional to the perception of the level of threat, so that the higher probability of losing out on that desired option will lead to higher reactance (Clee and Wicklund 1980).

Reactance theory research has been present in a wide range of disciplines, but is particularly applicable to consumer purchasing behaviour. Again, to quote Clee and Wicklund (1980, 403):

*“Reactance theory is applicable to any situation in which the following elements are present. First, a consumer must expect a measure of freedom to act in a given situation. Second, some threat must arise that infringes upon that freedom. ...As long as the basic two elements are present –*

*expectation of a freedom and threat (against that) freedom – the stage is set for reactance theory interpretation of resultant behaviour”.*

As such, in the context of marketing research, if a consumer has a good or service they desire, and that particular good or service looks like it may be limited or become unavailable to them, then that consumer will become highly motivated to ensure they do not lose out on that particular good or service. Such a response would be explained, in part, by Psychological Reactance Theory.

Psychological Reactance has been used in a number of contexts as a foundation for marketing research. Firstly, Lessne and Notarantonio (1988) used Reactance Theory to help explain consumer responses to limits in retail advertisements, confirming their hypothesis that communicating purchase limits in retail advertising would increase the attraction for the advertised product.

Secondly, Braun and Wicklund (1989) discuss Reactance Theory – in conjunction with Veblen’s theory of Conspicuous Consumption, and Leibenstein’s theory on the “Snob and Bandwagon” effect, which have been discussed earlier, to explain possible antecedent behaviours to Conspicuous Consumption. The combination of such schools of thought are instrumental in understanding how consumers of conspicuous goods behave and respond to the various circumstances these kinds of goods are presented.

Thirdly, Verhallen and Robben (1995) cite Reactance Theory in their wide-ranging review on the evaluation of products, in part critiquing economic models that rely on unrealistic assumptions and seeking to further academic thought on how to evaluate goods in a more realistic manner. As has been discussed earlier, they provide a comprehensive overview of the various forms of product availability, in which Psychological Reactance is a prevalent theory in explaining consumer behaviour.

As such, The Theory of Psychological Reactance is a logical basis to found this research on, given its relevance to explaining similar kinds of behaviour previously, and its general

applicability to a wide range of behavioural responses in general. Specifically, in this instance, where consumers are arguably “overreacting” to obtain a “prized” good or service, in circumstances where the true availability of the product is unknown and/or highly limited, then Reactance Theory is a fundamental theory in explaining the behaviour being examined within this thesis.

### The “Scarcity Heuristic”

A product can be made to be perceived as more valuable by manipulating its perceived scarcity (Verhallen and Robben, 1994). In this vein of thought, another of the major overarching theories to this research is “The Scarcity Heuristic”. Verhallen and Robben (1995, 376) define this phenomenon as thus:

*“...scarcity does not simply lead to more positive evaluations; **it leads to extreme evaluations...** [the] evaluation will be more positive if the object of evaluation is positive or desirable”.*

Verhallen and Robben (1995) are quoting Ditto and Jemmott (1989) on this subject, and the broader context of the section they quote is quite illuminating:

*“Because prevalence of information is often a reliable indicator of evaluative extremity, **people may come to automatically infer evaluative extremity from perceived prevalence. For example, if all that is known about some object or characteristic is that it is rare, people may rely on a scarcity principle to infer an extreme evaluation.** A rare health disorder may be assumed to be serious, a rare commodity may be assumed to be valuable. This more general **scarcity heuristic** provides a single explanation for the effects of prevalence information on the evaluation of both positively evaluated commodities and negatively evaluated characteristics like health disorders. **It also makes general predictions regarding the effects of prevalence information on evaluations of all***

*kinds of characteristics, objects, and events.*” (Ditto and Jemmott 1989, 17-18).

What is particularly interesting in regard to the “Scarcity Heuristic”, in its original context as discussed by Ditto and Jemmott (1989), is that they mostly are referring to a scarcity of information, that is to say, a lack of knowledge about the actual situation, or a perception of scarcity based on the level of understanding of that person in that moment of time. However, they do also refer to circumstances where this behavioural response is triggered because something is said to be rare or scarce, for example, where commodities are known to be rare, and therefore, are perceived to be valuable. In either circumstance, the “Scarcity Heuristic” refers to the mental shortcut a person will make when they perceive something to be scarce, and as a result, that might lead to an “extreme evaluation” that is greater than the response would be if more information was known about the product.

In short, what these quotations suggest is that scarcity will lead to consumers to making extreme judgement calls in their evaluation of a product, and by extension, their resulting behaviour may well reflect the nature of this judgement call.

It is the idea that scarcity leads to “extreme evaluations” that is particularly relevant to this research, especially considering the behaviours being exhibited by some consumers who appear to be extremely willing to sacrifice time, money and comfort in order to obtain what they perceive to be a luxury item. Such behaviour is consistent with the literature around this “Scarcity Heuristic” and its resulting behavioural outcomes. As such, this behaviour is thought to underpin “Willingness to Sacrifice” behaviour, and the research aims to shed further light on how these extreme behaviours and evaluations come to be, and are manifested in purchasing behaviour.

### Summary on Underpinning Theories

These two theories in conjunction are thought to govern the behaviour being exhibited by consumers. The Scarcity Heuristic explains the antecedent stages of the proposed research model, outlined later in this chapter, as to how consumers come to perceive the value of a product. Scarcity is a critical piece of this puzzle, and this theory about extreme evaluations explains this behaviour.

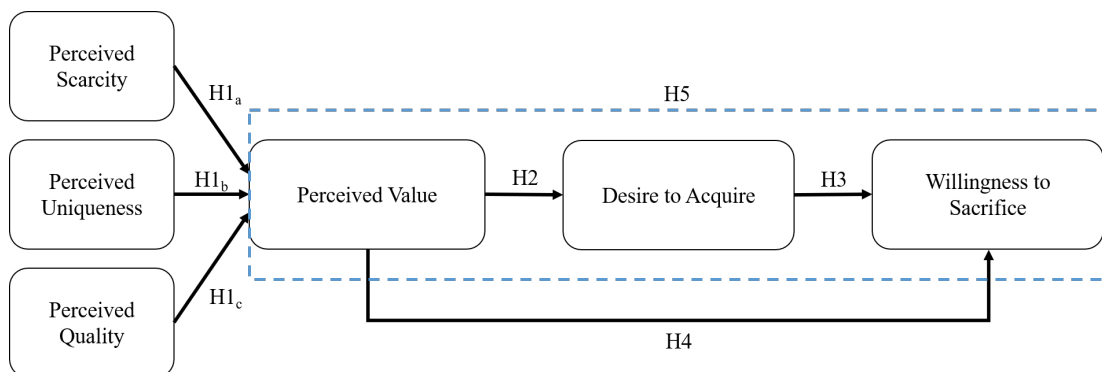
Consequently, Psychological Reactance explains the resulting behaviour. Once realising that a product is rare, and the availability to access this product may be threatened, the consumer will respond in accordance to Reactance Theory, to attempt to ensure they do not miss out on the good or service they value so highly and that they perceive to be threatened. Within the context of this research, Reactance Theory underpins the latter part of the proposed research model, governing the ultimate outcome of “Consumers Willingness to Sacrifice”, and the various pathways the consumers take to arrive at this outcome once they have determined their perception of value.

Psychological Reactance and this Scarcity Heuristic go hand in hand in explaining the overall behaviour being exhibited by consumers, and as such, are critical foundations upon which the following hypotheses and theoretical framework is built.

## Hypothesis Development

Having now outlined the relevant literature for this thesis, established the research objectives that this thesis aims to satisfy, and outlined the two key theories that this thesis rests upon, what now follows is an outlining of the hypotheses that have been constructed to test the research questions and attempt to explain Willingness to Sacrifice behaviour.

Firstly, the antecedent factors that will determine a consumers' perception of value will be outlined. Following this, the resulting behavioural outcomes from this Perception of Value will be discussed, ultimately leading to the outcome variable, Consumers' Willingness to Sacrifice. In Figure 2.1 (below), a conceptual framework is modelled to outline how each of these various relationships are hypothesised to work within the scope of this research. Following the hypothesis development will be a more in-depth discussion of how each hypothesised relationship corresponds to the various research objectives, outlined earlier.



**Figure 2.1: Conceptual Framework**

## Perceptions

The first portion of the model is based on consumers' perceptions. Perceptions can influence consumer purchasing behaviour in a number of different ways. Perceptions of self (Aaker 1999; Kirmani 2009), perceptions of the brand (Kirmani 2009), or aspiration to be part of a community that one perceives is congruous with themselves or brands they enjoy (Muniz & O'Guinn 2001, Kirmani 2009) may each in turn motivate consumer behaviour in certain ways. It's worth noting that this behaviour may not necessarily always be positive – there may be a reduced purchase intention or decreased favourability towards brands that consumers perceive are not representative of who they are and how they want to be perceived. Perhaps in simpler terms, consumer identity creates a filter through which consumers view brands, and hence develop preferences for brands they perceive to match their identity (Kirmani 2009). Consumer purchasing behaviour will therefore be consistent to this perceived self-identity.

## Perceived Value

Perceptions play a critical role in consumers' determination of value, and their resulting behaviour. One definition of Perceived Value is “the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml 1988, 14). Eisend (2008), commenting on Zeithaml's 1988 research and subsequent confirmatory studies, noted that “Perceived Value... is regarded as the primary driver of purchase intentions and behaviour” (Eisend 2008, 33). Additionally, Lynn (1989) comments how value “refers to a commodity's potency for affecting attitudes and behaviour” (Lynn 1989, 258). Therefore, Perceived Value is inherently linked to the resulting purchasing behaviour of consumers.

Defining “Perceived Value” within the context of luxury brands has proved to be difficult. Weidmann, Hennigs and Siebels (2009) discuss how there is little agreement when it comes to the dimensions of “luxury product value” as perceived by consumers. Additionally, there is research to show that perceptions of luxury differ between consumers (Weidmann, Hennigs & Siebels 2009), which adds further complication when trying to arrive at a concise definition.

There are suggestions (e.g., Hennigs et al 2015) that the social value of a luxury good has a far heavier influence on consumer perceptions of value, which is a stark comparison to “Fast



Moving Consumer Goods”, where perceptions of value are heavily based on value for money (Zeithaml 1988). Eisend (2008) showed within the context of a more luxurious brand, that scarcity appeals in advertising lead to a greater perception of value.

There is a vast range of research that shows an apparent number psychological antecedents that will drive a determination of value - and in turn, a motivation for purchasing - that is different from regular purchase behaviour (see Clee & Wicklund 1980; Lynn 1989; Braun & Wicklund 1989; Lynn 1991; Verhallen & Robben 1995; He, et. al 2010; Hung, et al 2011; Wu, et. al. 2012, Hwang, et al 2013 and Loureiro & Araújo 2014).

Looking from a broader perspective, studies by Hwang, et al (2013) and Loureiro & Araújo (2014) have suggested that there are certain psychological factors that can trigger a perception of value, that in turn leads to a consumer being willing to pay more. They are by no means alone in this finding, with a wealth of research over the years suggesting similarly (e.g., Clee & Wicklund 1980; Lynn 1989; Braun & Wicklund 1989; Lynn 1991; Verhallen & Robben 1995; He, et. al 2010; Hung, et al 2011; Wu, et. al. 2012).

## Antecedents to Perceived Value

### Perceived Scarcity

Verhallen (1982) proposed that scarcity increased the attractiveness of an offering if the participants had previously expressed that they were attracted to that offering. Lynn (1989) found that the scarcity effect works in two ways. It can be induced by inviting consumers to consider the expensive price of a scarce commodity, which leads to consumers believing that a product is more expensive when it is scarce (Lynn 1989). Alternately, if a consumer assumes a particular product is scarce, and this is coupled by an induced knowledge that a product is rare, then the scarcity effect will increase desire (Lynn 1989). In 1991, Lynn comprehensively showed across a wide variety of studies, that scarcity clearly enhances the perception of value for commodities. Eisend (2008) also shows that scarcity appeals lead to enhanced value perception, which in turn leads to increased purchase intention.

These ideas are underlined by more recent research which shows that the usage of “limited edition” labels can induce a perception of exclusivity, whether or not it is actually true. He, et. al. (2010) and Hwang, et. al. (2013) hypothesised that consumers with a high chronic desire for rarity show decreased signs of the negative effect of price on purchase intention when faced with a rare offering.

Lynn (1989; 1991), and Stock and Balachander (2005), discuss how assumed scarcity can act as a strong stimulant for value determination. A product can be made to be perceived as more valuable by manipulating its perceived scarcity (Verhallen and Robben, 1994), and further to this, Verhallen and Robben (1995) found that scarcity, through market factors, has a strong impact on the perceived desirability of an offering, building on earlier studies by Verhallen (1982) which also had similar conclusion. All of this is best summarised by the aforementioned “scarcity heuristic”, which leads to “extreme evaluations” of desired offerings (Verhallen & Robben 1995, Ditto & Jemmott 1989). As such, within this study, perceived scarcity is said to be an antecedent to perceived value.

### **H1<sub>a</sub>: Perceived Scarcity positively influences Perceived Value**

#### **Perceived Uniqueness**

Some consumers possess a strong desire to be seen as unique from their peers, and therefore aim to differentiate themselves through material purchases – a phenomena that has been widely detailed within the literature (e.g.: Snyder & Fromkin 1977, Belk 1988, Aaker 1999, Muniz & O’Guinn 2001, Kirmani 2009). It is thought that consumers desire for uniqueness will drive consumers to purchase goods which they perceive to be unique. As Belk (1988) stated, consumers can be defined by the brands they own, and therefore, desiring to create the illusion of uniqueness, the perceived uniqueness of a good will determine its perceived value to the consumer.

In regards to consumer identity, Kirmani (2009) highlights an almost symbiotic relationship between consumers and brands – and this is shown in how the literature identifies both the individual as the hero and the brand as the hero. Highlighting Aaker’s (1999) statement on

self-expression that consumers “use brands because they’re congruent with one’s personality” (Kirmani 2009, 272), the author highlights across a range of literature how identity not only influences consumption, but is influenced by consumption. As such, individuals develop a perception of themselves they would like to display, and then consume brands to create and maintain that identity of themselves.

The perceived uniqueness of an offering is also seen as being an antecedent to perceived value within this study. Consumer uniqueness theory discusses how consumers can sometimes possess a strong desire to differentiate themselves from high levels of similarity around them (Snyder & Fromkin 1977; Kapferer 2012). Consumers have been shown to utilise brand identities to either represent their perceptions of themselves, and/or change how others perceive them (Muniz & O’Guinn 2001; Kirmani 2009). Again, this is a field which has been examined in a number of contexts over a number of years (e.g., Belk 1988; Aaker 1999; Tian, Bearden and Hunter 2001; Bian and Forsythe 2011).

**H1<sub>b</sub>: Perceived Uniqueness positively influences Perceived Value**

### Perceived Quality

Vigneron & Johnson (2004, 488) state that perceived quality forms a natural part of the schema of a luxury brand, and go on to point out that it is “rather difficult to develop a luxury brand image without developing a long term commitment to quality”, and as such, perceptions of high quality become almost inherently synonymous with the concept of a luxury brand (Vigneron and Johnson 2004, 491).

A perception of quality may also come as a construct of brand familiarity, or due to a perception that a particular brand is a market leader (Quintal & Phau 2014). Phau and Prendergast (2000) also argue in their definition of luxury, that a high perception of quality will lead to an increased perception of the value of that luxury brand.

At other times, price may be a signal of quality, however this might come as a result of scarcity perceptions as manipulated by the marketer (Stock & Balachander 2005; Miyazaki, Grewal & Goodstein 2005).

In a broad sense, Perceived Quality has long been shown in academic literature as an antecedent to Perceived Value (e.g. Zeithaml 1988; Lichtenstein, Bloch & Black 1988; Dodds, Monroe & Grewal 1991; Teas and Agarwal 2000). However, its specific role within the context of luxury brands could be further established.

Perceived Quality, alongside perceived uniqueness and assumed conspicuousness are said to be key factors in the identity of a luxury brand, along with the pleasure derived from with the offering and the perception of extended self (Vigneron & Johnson 2004). Quality perceptions may come as a result of perceiving a brand to be a market leader, or in some other way being familiar to the consumer (Quintal & Phau 2014), or as a result of pricing (Stock & Balachander 2005, Miyazaki, Grewal & Goodstein 2005). Baek, Kim and Yu (2010) demonstrated the positive impact of perceived quality on perceived value within the context of “prestige brands”, but further research is needed to establish its empirical connection for genuine luxury products.

This study proposes therefore that perceived quality is an antecedent variable to perceived value, in that, if a consumer perceives an offering to be of high quality, their estimations of the value of the offering will increase.

**H1<sub>c</sub>: Perceived Quality positively influences Perceived Value**

## Desire to Acquire

As cited earlier, perceptions, and specifically, Perceived Value, are often the precedent factor that drives consumer intention and behaviour (Muniz & O'Guinn 2001; Eisend 2008; Kirmani 2009). While the ultimate behavioural outcome being examined within this study is Willingness to Sacrifice, there may be an intermediary stage within consumers behaviour – namely, a “Desire to Acquire” stage. In this stage, consumers who cannot immediately jump to purchasing the product enter this “Desire” stage until they are able to purchase.

Within marketing literature, “desire” has proved a difficult construct to capture. However, there are a handful of authors who have made contributions to this field of understanding.

Perugini and Bagozzi (2004, 34) define desire as “A state of mind whereby an agent has a personal motivation to perform an action or to achieve a goal”. They go on to comment that desire often represents the first step towards a decision to act, followed by the intention to do so, and discuss how research has shown that desires are important components for explaining individuals' decision making (Perugini and Bagozzi, 2004). The authors also point out that desires are, as they put it, “time indefinite”, meaning that they exist until such a point a decision is able to be made and acted on. This is important for how “Desire to Acquire” works within this model, as an intermediary stage some consumers may go through before they're able to engage in the purchasing behaviour.

Huaman-Ramirez and Merunka (2017, 376) frame desire slightly differently, defining desire as “an experience of motivation that includes mental representations of appetitive objects or activities”. This is perhaps summed up in slightly more simple terms by Hunter (2006, 711) who discusses how desire is influenced by “the expected emotions of achieving and not achieving a goal”. This idea of framing it in terms of imagination of a future state of being is intriguing, especially given the context of “Willingness to Sacrifice” and consumers being willing to discomfort themselves for the benefit of some future reward they perceive to be worth it (Scitovsky 1992).

Huaman-Ramirez and Merunka (2017) go on to talk about how one of two ways in which desire is activated is by “the mental construction of rewarding experiences”. In short, the authors summarise a range of psychology literature that demonstrates how people use imagination to create rewarding experiences or feelings of pleasure, and the capturing of these imagined feelings becomes the state of desire they hope to fulfill. The authors go on to show in their research that this feeling is enhanced by time pressure, and that in such circumstances, consumers rely on heuristics to make judgement calls. This behavioural response is similar to the kind discussed earlier in relation to the “scarcity heuristic” which lead to consumers making “extreme evaluations”, which enhanced positive perceptions held by consumers.

This leads to the third major way in which desire is talked about in marketing literature. Both Rucker and Galinski (2008) and Lee, Ryu and Chun (2018) discuss desire in the context of perceived power or control situations. Specifically, the authors discuss situations wherein which the consumer has a low perception of their control in a particular situation. Rucker and Galinski (2008) found that consumers who perceived themselves in low-power situations had increased desire for status goods. Similarly, Lee, Ryu and Chun (2018) found that consumers who perceived they had little personal control over a purchase situation had greater intentions to purchase limited edition products, and to take up offers which were time-limited in some way. These findings are in some ways similar to the Theory of Psychological Reactance, and the context of both studies (conspicuous consumption and limited editions) make them helpful references for this particular research.

Research has shown that there is a difference between consumer desires, and their behavioural intentions (Perguini & Bagozzi 2004; Hunter 2006). Desire is a “time indefinite” state that consumers will exist in until they are able to act on that desire (Perguini & Bagozzi 2004). Desire is aroused by imagination of pleasure that is hoped to be achieved, and is enhanced by time pressure (Huaman-Ramirez & Merunka 2017), and leads to heightened intention to purchase status goods (Rucker & Galinski 2008) or products that are limited editions (Lee, Ryu & Chun 2018).

Within the context of this study, it is proposed that a consumer may arrive at a perception of value, which may lead to a high desire to acquire that offering, but may not immediately be able to purchase that offering. Hence, it is thought that consumers desire to acquire may follow on from a consumers' perception of value, once that perception of value has been determined by the aforementioned antecedent variables. As such, the following is hypothesised:

**Hypothesis 2:** Perceived Value positively influences Desire to Acquire.

Following a period of time in this intermediary "Desire to Acquire" state, consumers will eventually be in a position to act on this desire. As such, the following hypothesis logically follows:

**Hypothesis 3:** Desire to Acquire positively influences Willingness to Sacrifice.

### Willingness to Sacrifice

Consumers' Willingness to Sacrifice is the ultimate focal point of the model, and the research generally. As already shown, consumers are behaving in this extreme, apparently irrational manner in order to obtain a certain good, service, or experience that they perceive to be worth it. The ultimate focal point of this research is to determine why consumers are "Willing to Sacrifice".

Academic literature specifically related to "Willingness to Sacrifice" is very limited. In relation to behaviour, study has been conducted around the context of social or business relationships, referring to the extent to which an individual is willing to be discomforted in order to sustain that relationship (e.g. Van Lange, et al 1997, Mattingly & Clark 2000). However, this line of research does not tell us much about the consumer, and consumer behaviour.

Bardakci and Whitelock (2003, 467) discuss the Customer Sacrifice Gap, which they define as being "the difference between a company's offering and what each customer truly desires". This research is done in the context of product customisation, where the aforementioned theory examines the difference between undesirable offerings and the desires of consumers, which

leads them to be willing to sacrifice time and money to obtain a product more suited to their needs (Bardakei and Whitelock 2003). This does provide insight into consumer behaviour and desire towards products that do not exist, however does not explain the desire shown by consumers in the aforementioned examples.

As outlined in the definition for “Willingness to Sacrifice” earlier in this chapter, this behaviour consists of monetary sacrifice, time sacrifice, and sacrifice of comfort on behalf of each consumer. Examining each of these elements individually, there are further avenues of research that provides potential insight into this phenomenon. However, of the three, only monetary sacrifice has been analysed in any real depth, and is the only one that has any specific relation to the intended focus of the study. Literature on comfort and time are still somewhat limited.

Examining the literature on time, in the context of consumer behaviour, a few avenues have been examined. Some research has been done examining consumer decision making under time pressure (e.g. Suri & Monroe 2003); willingness to sacrifice time (wait longer) between local providers and overseas providers of a good or service (e.g. Forman, Thelen & Shapiro 2015); and finally the extent to which a gift-giver is willing to sacrifice time and effort in the process of giving a gift (Clarke 2006). However, these avenues do not really explain the behavioural phenomenon being investigated. In more recent years, there has been some research that has begun to look into consumers’ willingness to give up time to obtain an offering (Wu, et al 2012). However, there remains a gap in any further understanding when it comes to this behaviour. The proposed research aims to provide further insight into this behaviour.

Consumer comfort has been examined as a motivator for behaviour in relation to services (Spake, et. al 2003). As outlined earlier in this chapter, Scitovsky (1992) in his book “The Joyless Economy” discusses how discomfort comes before pleasure. He states that it “logically follows that pleasure will always accompany the relief of discomfort and will seem the more intense the greater the discomfort that is being relieved” (Scitovsky 1992, 62). This is of course



the very essence of both economics and marketing, where goods or services are purchased to satisfy some perceived need that is held by, or created in, the consumer.

However, could it be said that the reverse is true? Examining the behavioural phenomenon highlighted earlier, it would appear that consumers are willing to actively discomfort themselves to obtain a good or service that they perceive will provide significantly greater pleasure than the circumstances they put themselves through to obtain it. This discomfort could either be psychological, in the sense that consumers were willing to endure negative responses from family or strangers to obtain the offering; or physical discomfort, in that consumers would forego shelter, warmth, and other comforts to ensure they obtain the good. Hence, the proposed study aims to investigate whether consumers are indeed willing to endure discomfort, for an expected greater pleasure derived from the purchase of a limited edition luxury offering.

Lastly, monetary sacrifice. Within the context of this study, monetary sacrifice does not refer simply to the exchange of money or wealth to obtain a good or a service, rather the more extreme cases where in which a consumer is willing to pay more in order to obtain an offering. There is an extensive amount of literature that has been done into this topic over a number of years, that suggests there is a pool of consumers who are willing to pay more for luxury offerings. Particularly in recent years, there have been a number of studies (Li, Li & Kambele 2011; Hwang, et al 2013; Loureiro & Araújo 2014; Ahmetoglu, Furnham & Fagan 2014; Vera 2015) that suggest that luxury brands are something of an anomaly to traditional economic theory – which states that at higher prices demand for goods should fall. The proposed study aims to extend the recent growth of insight into this phenomenon.

The two underpinning theories to this research – Reactance Theory (Brehm 1966; Clee and Wicklund 1980) and “The Scarcity Heuristic” (Verhallen and Robben 1995; Ditto and Jemmott 1989) - both suggest immediate and/or “extreme” responses on behalf of the consumer, when presented with the knowledge that their desired option is threatened, limited, or scarce in some form. Therefore, given that it was established earlier that consumers Perceptions of Value ultimately lead them to their resulting consumption behaviour (Muniz &

O'Guinn 2001; Eisend 2008; Kirmani 2009), its logical to hypothesise consumers may jump straight from their Perception of Value to being Willing to Sacrifice time, money and comfort in order to obtain that particular offering. Therefore, the following is hypothesised:

**Hypothesis 4:** Perceived Value positively influences Willingness to Sacrifice

#### **Mediating Role of Desire to Acquire**

Finally, as there are the two "paths" which consumers may take on their way to the ultimate purchasing behaviour (either jumping immediately to being Willing to Sacrifice, or being in an intermediary Desire state), it therefore means that Desire may play a mediating role in the relationship between Perceived Value and Willingness to Sacrifice. Whilst this exact relationship hasn't been examined before in literature, Desire has been shown to play a mediatory role in other contexts (for example, Hunter 2006).

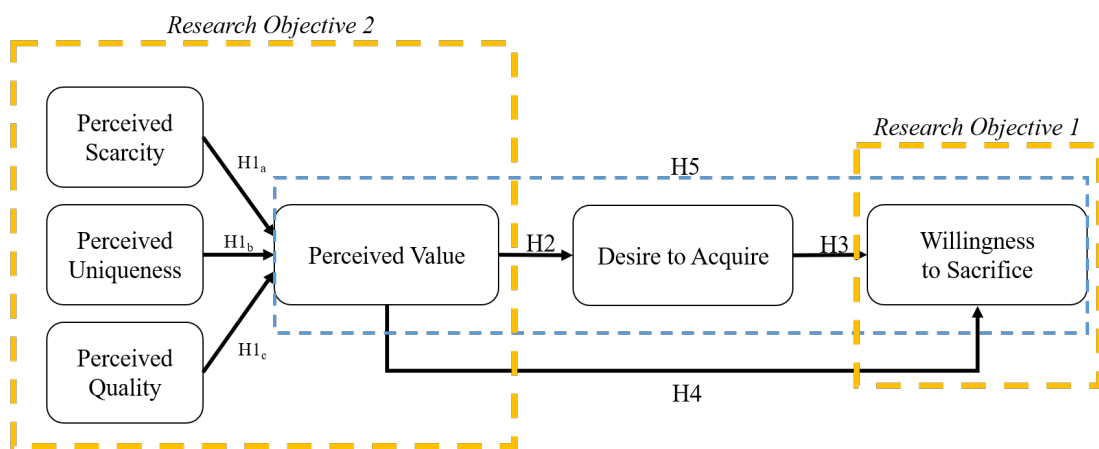
Given these other aforementioned hypothesised relationships within the measurement model, and the role Desire may play as a mediator as a result, the following is hypothesised:

**Hypothesis 5:** Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice

## Conceptual Framework

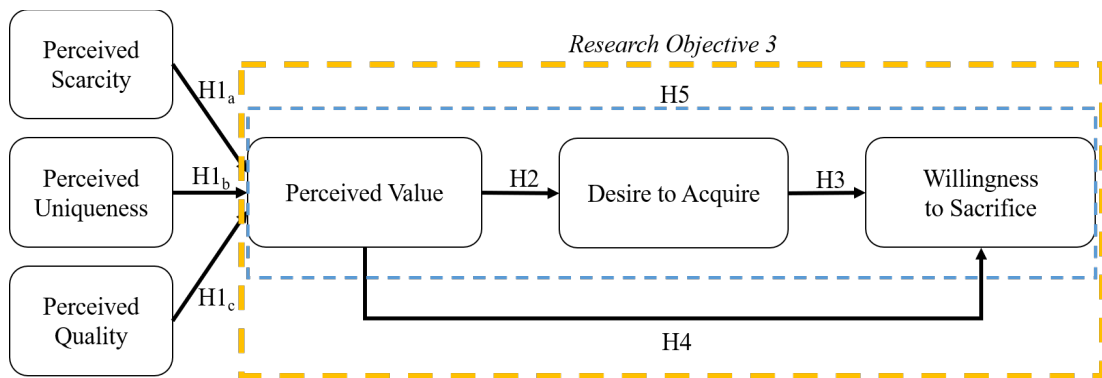
Figure 2.1 (shown earlier) outlined the variables identified from literature and the hypothesised relationships between them. It firstly outlined the process of how consumers determine perceptions of value, and then the following possible pathways of behaviour that consumer may follow having arrived at that perception of value. In this following section, the conceptual framework will be broken down in further detail to outline how each of these hypothesised relationships correlated to the aforementioned research objectives.

Research Objective 1 examines Consumers' Willingness to Sacrifice, and therefore relates to the final outcome variable in the conceptual framework. Research Objective 2 relates to the antecedent variables Perceived Scarcity, Perceived Uniqueness and Perceived Quality, and how they together determine the Consumers Perception of Value. As such, RO2 will be examined by Hypotheses 1a, 1b and 1c. How both of these Research Objectives relate to the conceptual framework is shown in Figure 2.2 below:



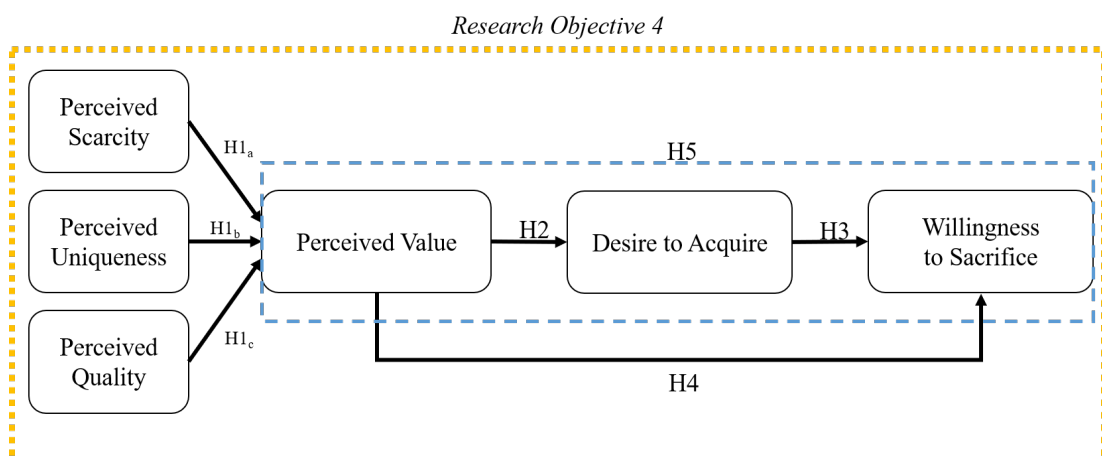
**Figure 2.2: Research Objectives 1 and 2 in relation to the Conceptual Framework**

Research Objective 3 investigates the relationships between Perceived Value and Willingness to Sacrifice, including the hypothesised mediatory role of Desire to Acquire. As such, Research Objective 3 is examined by Hypothesis 2 (Perceived Value to Desire), Hypothesis 3 (Desire to Willingness to Sacrifice), Hypothesis 4 (Perceived Value to Willingness to Sacrifice) and Hypothesis 5 (Desire mediates the relationship between PV and WTS).



**Figure 2.3: Research Objective 3 in relation to the Conceptual Framework**

Lastly, Research Objective 4 investigates the potential for differing responses between consumers, based on the type of scarcity that might be causing the product to be limited. As this relates to the entire conceptual framework, this will be examined through multiple studies, each looking at a differing form of scarcity, and product categories.



**Figure 2.4: Research Objective 4 in relation to the Conceptual Framework**

## Conclusion

This chapter has outlined various portions of the academic literature that are relevant to the scope of this study, and shown that while individual elements have been researched in various ways, there is no one cohesive study that looks at Willingness to Sacrifice from its formation through to its resultant behaviour. There is therefore a need for such a study to pull all these fields together, with the relevance of this behaviour being exhibited by consumers in the market today.

With the relevant literature having been outlined, the various research questions, underpinning theories and hypothesised relationships were then formulated and discussed, and then modelled by the theoretical framework at the end of the chapter. Various models were presented, one overall picture and then various subsets of the model that demonstrated how each of the hypothesised relationships fit together and how they will examine the various research objectives this thesis aims to answer.

The following chapter will outline the Research Methodology that was constructed and followed to test the research objectives and hypotheses that were formulated in this chapter.

# Chapter 3

## Methodology

### Introduction

In this chapter, the overall research methodology that was applied in the three studies will be discussed, with each study being reported in Chapters Four, Five and Six respectively.

This chapter begins by outlining the research philosophy that guided the research. Following this, there is discussion of the overall research design – specifically, how the research would be split into three studies.

The context that would be the backdrop for the research is then outlined, discussing the various brands and reference material that would be used as the stimulus within each of the studies, and how each of these were decided on and tested.

Following this, the data collection process is outlined, including discussion of the survey instrument and the ideal sample size that was sought for in each study. The data analysis methods are also discussed, with the various programs that would be used.

The chapter concludes with an acknowledgement of the ethical guidelines that were followed in both the formation of the research and were applied throughout the data collection process.

## Research Philosophy

The research philosophy employed in this study is a pragmatic approach. Pragmatism, as defined by Saunders, Lewis and Thornhill (2009, 143), is a philosophy that “strives to reconcile both objectivism and subjectivism, facts and values, accurate and rigorous knowledge and different contextualised experiences”.

Given that one of the sources for inspiration for the research comes from recognising a vast discrepancy between economic models of consumer behaviour, and actual consumer behaviour as outlined and influenced by marketing, “pragmatism” is a fitting approach, especially in light of the following statement by Saunders, Lewis and Thornhill:

*“Researcher values drive the reflexive process of inquiry, which is inflated by doubt and a sense that something is wrong or out of place, and which recreates belief when the problem has been resolved”.*

(Saunders, Lewis and Thornhill 2009, 143).

In sum, the following parts of the Pragmatic philosophy guide the research approach:

- Reality is the practical consequence of ideas;
- There is a practical meaning of knowledge in specific contexts;
- A focus on problems, practices and relevance;
- Research is initiated and sustained by the researchers doubts and beliefs;
- Research follows the research questions and objectives;
- Emphasis on practical solutions and outcomes.

(Adapted from Saunders, Lewis and Thornhill 2009, 137)

## Overall Research Design

As per Research Objective 4, one of the main goals of the research is to investigate whether there were any behavioural differences between consumers – particularly when it comes to their Willingness to Sacrifice – when presented with different types of scarcity, and different product categories. This decision is informed by research by authors such as Verhallen (1982) and Lynn (1989), among others, who have highlighted in the literature a variety of causes for scarcity which may result in differing behavioural results.

This therefore means that there are a range of aspects that need to be tested in the scope of this research that cannot feasibly be examined within one study. As such, so that this could be comprehensively tested, the research is made up by three studies, each having its own focus and nuance in regards to the kind of scarcity and the product category being specifically examined.

Study One is the primary examination of the research model within the context of limited edition luxury brands, with the subsequent studies seeking confirm, validate and broaden the findings from Study One. Study One examines the research model within the context of Demand-Driven Scarcity (that is, scarcity caused by high demand from consumers).

Study Two then examines Supply-Side Scarcity (that is, scarcity that is deliberately induced by the supplier), as the point of contrast to Study One. As a point of continuity between these two studies, both studies are conducted within the context of limited edition goods. Limited editions are products that are manipulated to be scarce, and this behaviour has been shown before to increase the perceived value of an offering (Verhallen & Robben 1995; Cartry 2003; Balachander & Stock 2009; Amaldoss & Jain 2010; Gierl and Huettl 2010; He, et. al 2010). Hence, it can be concluded this presents an ideal context for examining Willingness to Sacrifice in the context of Demand and Supply driven scarcity.

Thirdly, to generalise the research even further, Study Three examines Willingness to Sacrifice within the context of the services industry. Specifically, the kind of service used as the stimulus within Study 3 is a restaurant setting, which enables the creation of scenarios to test both



demand and supply side scarcity, which further complements the research findings from Studies One and Two, and provides a robust examination of Research Objective 4.

### Research Context

As has been already well established, the research will be examining products that are considered to be luxurious in some way, as well as within the context of limited edition products. As will be discussed later, the respondents were primed to understand this with both written and visual cues, to ensure they understood the context within which the study was taking place.

For Studies One and Two, it was decided that specific brands would be presented to the respondents to ensure that they would have a benchmark to work from when it comes to considering “luxury”. As such, two brands – Tag Heuer and Louis Vuitton – were chosen for use, for the purpose of helping the respondents to understand the kind of luxury the study was considering. It also serves to give each study a point of comparison to analyse within each respective study, and then later across the two studies.

It was decided for Studies One and Two, which were considering the differences between demand and supply side scarcity, that watches would be a suitable product category for consideration, as watches are relatively synonymous with being a luxury symbol, and have been examined within academic literature as such (e.g. Liu et. al. 2012; Esmailpour & Ali 2016). With this in mind, two brands which have produced limited edition watches previously were needed.

In the broader context of the research, it is important to examine this phenomenon within the context of services as well as goods. Therefore, for Study Three, a service industry needed to be selected, rather than another kind of good. It was decided that a luxury “fine dining” experience would be the most suitable service to examine, with other services such as luxury holidays proving too vague, and a concert or performance of some kind perhaps being too niche. Luxury restaurants will often have a bespoke menu for any given night, perhaps based around a certain theme, or the seasonality the food that is available, and this combined with

the limited number of places available within a restaurant helps to continue the overall research context of examining limited product offerings. A restaurant setting also allows for the ability to create demand side and supply side scarcity scenarios that are being examined within this research. As with watches, luxury restaurants have been examined within academic literature a number of times (e.g. Kapferer 2012; Chen, Peng & Hung 2015; Yang & Mattila 2016), and so it was deemed a suitable example to use as the stimulus.

Table 3.1, below, provides a summary of the research contexts that each individual study would be conducted within:

	<b>Study One</b>	<b>Study Two</b>	<b>Study Three</b>
<b>Type of Scarcity</b>	<i>Demand</i>	<i>Supply</i>	<i>Demand &amp; Supply</i>
<b>Type of Product</b>	<i>Goods</i>	<i>Goods</i>	<i>Services</i>
<b>Table 3.1: Summary of research context in each study</b>			

### Pilot Testing For Brands

When it came to the selection of brands for Studies One and Two, the two luxury brands that were chosen were Tag Heuer, and Louis Vuitton. Tag Heuer is an established watch maker within the luxury market, who produce limited edition watches for various seasonal or cultural events, making them ideal for usage within the study. Louis Vuitton was chosen due to its well-known presence in the luxury market, and as it had been used in other marketing research (e.g., Phau and Prendergast 2000). Louis Vuitton also added the benefit of being better known for making bags, rather than watches, and so this seemed a worthwhile point of difference that would prove interesting to examine within the context of the study.

These two brands – Tag Heuer and Louis Vuitton – had various promotional images selected of watch offerings they had done in the past, which were pilot tested among a group of university research staff. Further pretesting was then conducted through integration into a student exercise. Following feedback from this process, various further revisions were made before the finalised versions were used within the survey.

For Study Three, images of various unique luxurious restaurants were collated and shown to members of the supervisory team. Once a few were selected that seemed to fit a coherent theme of a believable setting, they were put into a similar form of presentation that the watches had been, and then sent to a variety of colleagues and volunteers, who reviewed the material and left constructive comments as to what worked, and what appeared confusing or contradictory. Again, revisions were made based on the feedback, which led to the formation of the final version which appeared in the survey.

### Data Collection Process

For each study, a survey instrument was designed as the means for collecting the relevant data to test each of the hypotheses. The survey instrument has the same overall structure and flow across each of the studies to ensure some measure of consistency between each of the three studies, however, the survey varies for each study to reflect the respective focal point of each one.

Study One and Study Two are nearly identical in terms of the structure and flow of the survey. Each study has two variations of the survey, one with Louis Vuitton as the brand stimulus, the other Tag Heuer. The other point of difference between the studies is the informational text accompanying each brand stimulus, which serves to establish the demand-side or supply-side scarcity scenario that is the focus of Studies One and Two respectively. This enables several layers of comparison. Firstly, within each study, it allows for an examination as to whether differing brands lead to different outcomes. Secondly, it allows for the comparison between each study as to whether the behavioural response as a result of the kind of scarcity is consistent between brands, or whether perhaps this too differs. As such, this allows for a thorough testing of Research Objective 4.

Study Three, maintains the overall structure and flow of Studies One and Two, but has other points of difference. Firstly, this is due to the nature of the product category and associated stimulus. As Study Three tests services – specifically a restaurant setting – a fictitious example was constructed to be the stimulus. This therefore means there was one version of the survey,

rather than two is the case for the previous studies. Secondly, as there is a need to test both demand-side and supply-side scarcity, a side by side comparison between two scenarios was constructed. The first is where the respondent is told that there is no bookings system, and if they want a guaranteed place, they would have to make an effort to be there on the given night they wanted to attend the restaurant, reflecting the demand-driven scarcity scenario where they might miss out if other consumers also were vying for tables. The other scenario is where the restaurant limited the bookings per evening, and as such, there are only a set number of places available at any given night, reflecting the supply-side scarcity scenario. The respondents are asked to give their feelings for each of the scale items for each of these scenarios, side by side, forcing them to consider the variety of situations they might encounter and whether their behaviour would be different in each of those scenarios. As such, both types of scarcity are examined, and can be compared to the previous studies to give an overall picture of the behaviour being investigated.

### Survey Instrument

While each survey and each study had their own emphasis, as outlined above, they all followed the same structure. The structure will be outlined here in brief, but each survey can be found in **Appendices B-F**.

Each survey is accompanied by a cover letter, outlining the purpose of the survey and giving the respondents assurances of their confidentiality, and inviting them to answer openly and honestly for each of the scenarios they were going to be presented with. The survey then opens with a series of basic demographic questions, asking each respondent their gender, age group, relationship status, occupation, education, and income bracket. It is perhaps traditional for demographic information to be collected at the end of the survey, however as it is a hurdle for some respondents to give away this information, by introducing it early in the survey it acts as a filter for those who are going to be committed to giving responses, and those who are not.

Following the demographic section, each respondent is introduced to the product stimulus. The stimulus is presented in the form of a “brochure”, where several images and accompanying

branding material were taken and arranged in this brochure format for the respondent to look over. The wording and presentation followed various examples that have been used in academic literature, one such case being Lessne and Notarantonio (1988). For Studies One and Two, there are two different versions of the survey – containing either a Tag Heuer or Louis Vuitton watch as the stimulus, depending on the version of the survey that the respondent receives. For Study Three, the stimulus is a fictitious restaurant, with images displaying some examples of fancy-looking food and an extravagant setting.

At the end of the brand imagery in Studies One and Two, it is at this point the respondents are also introduced to whether they are considering a demand-side form of scarcity (“It is unknown how many of these limited edition watches there are, but it’s going to be a popular release”), or supply-side form of scarcity (“There are only 2000 of these watches”). This was not done for the restaurant stimulus in Study Three, as the respondents were presented with these scenarios side-by-side in the final portion of the survey.

Once the stimulus has been established, the respondents are asked a range of questions about their perceptions of scarcity, uniqueness, quality and value of the respective product offering. This is related to the antecedent variables to Perceived Value portion of the research model, and serves to examine Research Objective 2 and Hypothesis 1.

Following this, the respondents are asked questions relating to their Desire to Acquire the watch, or to dine at the restaurant. There are two questions asked to measure this, firstly asking the respondent to consider how much they would hypothetically tell a friend they would be willing to pay for this offering, with options ranging from well below the average retailing price, about retailing price, and well above retailing price. Secondly, they are asked to what extent owning the watch or having the restaurant experience would make them happy. Both of these questions combine to act as a proxy to measure their Desire to Acquire the offering. Additionally, it is at this point in the survey for Study Three where the side-by-side comparisons for the demand and supply-side scarcity scenarios are introduced, one where there are no bookings available, the other where there are bookings available. In this study, the

respondents are asked to answer the questions about willingness to pay and anticipated happiness in each scenario side-by-side, and to compare whether their response would be different in each situation.

Finally, the respondents are asked to answer questions relating to their willingness to sacrifice for the watch or restaurant scenarios presented to them. Together with the previous section on desire, this allows the testing of Research Objective 3. The overall flow between consumers Perception of Value, Desire, and Willingness to Sacrifice, is outlined in Hypotheses 2, 3, 4 and 5, and are examined by these questions individually and collectively.

Another important decision that needed to be made when it came to the design of the “brochures” was whether or not to include a price for the watches and restaurant. To some observers, leaving out a price-tag might appear like an oversight. However, including a price point is problematic, not least of all when considering the role of perceptions that is so key to the research, and what the literature has to say about the relationship between pricing and value perception.

For example, Lynn (1989) discussed how perceptions of scarcity lead to an increase in desirability of a product, but only in cases where the respondents did not know the price information of that product. As such, scarcity enhances perceptions of value, when the product is assumed to be expensive, and when an actual price-tag is unknown. This theory is supported by other prior research (e.g. Verhallen 1982). Additionally, with regards to perceived uniqueness, Vigneron and Johnson (2004) state that perceived uniqueness is often dependant on assumptions that a particular product is exclusive or scarce, and that this effect is amplified when price is assumed, rather than being actually known.

Another reason to not include a price-tag comes back to the very nature of luxury itself. To quote Kapferer and Bastien (2009, 314), “Money (high price of products) is not enough to define luxury goods: it only measures the wealth of the buyer”. When luxury is advertised or

displayed in a store, the price-tag is often absent, or so minimal as not to distract from the product itself.

As such, a conscious decision was made to not include a price-tag within the stimulus for the brand. With the restaurant experience survey, pre-testing for this portion of the research instrument proved to be confusing, with a number of the pre-testers commenting along the lines of “I didn’t see a price, so I wasn’t sure how to answer some of the questions”, or alternatively asking whether they had missed where it was we had listed a price. As such, for the restaurant experience survey, an additional section was added, instructing the respondent to think of a price point that to them was luxurious, and answer accordingly.

### Scale Measures

With the exception of “Willingness to Sacrifice”, for which there was no scale, all of the items that are used in the survey instruments have been adapted from other existing scale measures. Every question within the survey was measured on a 7-point Likert Scale.

The scales for Perceived Scarcity, Perceived Uniqueness, Perceived Quality and Perceived Value were all taken from Wu, et al (2012), who had examined a similar subject in relation to purchase intention influenced by scarcity. As such, it seemed fitting to adapt their existing scales into this new context, especially given how well they had worked in a similar topic.

However, for Study Three, their scale for Perceived Quality is unsuitable, as it focussed on the quality attributes associated with goods, that do not translate over to services. As such, a suitable alternative measure needed to be found. Two scales from the research conducted by Chen, Peng and Hung (2015) became the replacement, where their scales for Perceived Food Quality and Perceived Atmosphere Quality were fitting substitutes to capture the nature of this service being used as the stimulus in this third study.

Within the literature, Desire has proven to be difficult for any researcher to effectively capture analytically, and as such, no satisfactory scale exists to be readily utilised within research. However, research from Rucker and Galinsky (2008) which examined the notion of

Anticipated Happiness in conjunction with consumers' Willingness to Pay became a means by which Desire could be captured by proxy.

The scales adapted for research are summarised in Table 3.2 below:

<b>Table 3.2 – Established Scales used within the study</b>			
<b>Reference</b>	<b>Scale</b>	<b>No. of Items</b>	<b><math>\alpha</math></b>
Wu, et al. (2012)	Perceived Scarcity	5	0.884
	Perceived Uniqueness	2	0.878
	Perceived Quality*	5	0.938
	Perceived Value	4	0.933
Chen, Peng & Hung (2015)	Perceived Food Quality**	4	0.85
	Perceived Atmosphere Quality**	3	0.82
Rucker & Galinsky (2008)	Desire: (Willingness to Pay & Anticipated Happiness)	2	(Not Reported)
*Studies One and Two **Study Three Only			

### Willingness to Sacrifice

Lastly, Willingness to Sacrifice is the behavioural outcome being investigated in this research, however, there is no measure yet which exists that can capture this behaviour. As such, this study intends to create and provide a means by which Willingness to Sacrifice can be measured, as outlined in Research Objective 1.

A systematic process was followed to compile the Willingness to Sacrifice measure for use within the study. As recommended by a group of authors (see Li, Edwards and Lee 2002; Wells, Leavitt & McConville 1971, Churchill 1979; Chen & Wells 1991), a process of literature reviews, focus groups, expert review and thesaurus searches for key terms likely to be used within the study all guided the eventual creation of a measure for Willingness to Sacrifice.

Firstly, a variety of authors on similar topics were examined as a point of reference. Specifically, the “Anticipated Sacrifice” and “Purchase Intention” scales by the aforementioned Wu, et al (2012), along with “Willingness to Buy” from Sweeney, Soutar and Johnson (1999), and “Perceptions of Sacrifice” from Suri and Monroe (2003) provided a basis from which scale items were adapted from.



Following this was an examination of a variety of words and other notions related to time, monetary and comfort sacrifice, which resulted in a large list of potential items that might capture the behaviour. This list of potential scale items was circulated to a number of researchers, professors, and industry experts for their consideration and feedback.

Lastly, once the review of literature and review from experts in the field had been conducted, the remaining potential scale items were pre-tested by other volunteers both within and outside of the field to conclude which questions read well, and which items were finally deleted. The remaining items after this refinement process were the ones compiled and utilised within the study.

At the end of the process, there were 20 items in the scale relating to time, monetary, and comfort sacrifice, as well as a few “general” questions that combined elements of all three. These were items borrowed and adapted from the similar scales developed and used by the aforementioned Wu, et al (2012), Sweeney, Soutar and Johnson (1999), and from Suri and Monroe (2003), with other items that weren’t a direct adaptation from these scales being related or synonymous in some way. Whilst this is a large number of items, it was predicted that through the EFA and CFA process, these items would be reduced even further, to truly capture which items were the ones that best encapsulate consumers’ Willingness to Sacrifice.

### Sampling Method and Ideal Sample Size

When it came to the data collection, a goal of 200 usable responses was the minimum sought for. For each study, the survey instrument was compiled and distributed via the online platform Qualtrics, to each of the parties that assisted with the data collection process.

The data for Study One was collected via trained field workers who were instructed to go to public spaces (such as shopping centres, etc), and have a systematic method of selection when it came to asking respondents to fill out the survey (for example, every 5<sup>th</sup> person to enter the store, and if rejected, begin over again). This data was collected over a period of 4 weeks.

Studies Two and Three used panel data for the data collection, collected in collaboration with a data collection company. Again, over 200 responses were collected for each of the surveys,

however a vast number of the data ended up being unusable due to incomplete or incorrectly filled out surveys, which then required further data collection on the part of the researcher. This led to a smaller sample size in comparison to the first study, however as these studies are confirming the results of Study One, the smaller sample size was ultimately not deemed a problem.

## Analysis Methods

Various data analysis programs were used to both clean up and analyse each of the data sets. Firstly, Excel, and then SPSS, were used to look over the data sets to ensure all the responses were complete and that responses that were otherwise unusable had been removed from the dataset. Once that had been done, all three studies began in SPSS for reliability testing and preliminary factor analysis.

For Study One, AMOS 25 was used to conduct the CFA and evaluate overall model fit for Structural Equation Modelling. To test the moderation effect (in relation to Hypothesis 4, if Desire mediates the relationship between Perceived Value and Willingness to Sacrifice), AMOS was also used, following the process for analysing moderation as outlined by Baron and Kenny (1986).

Studies Two and Three utilised WarpPLS for the SEM process, due to its advantage of being able to examine causal relationships within the research framework. PLS-SEM is perhaps unfairly perceived as being less reliable than CB-SEM, which AMOS employs, however PLS-SEM has the advantage of being able to more realistically model the relationships between variables (Kock, 2014) and as such is perhaps actually a better option than AMOS for Studies Two and Three which seek to confirm the findings from Study One. As the PLS-SEM approach is at times seen to be less robust than CB-SEM, it has a larger range of Goodness-of-Fit indices and other reliability measures, which will be outlined in due course in the analysis of Studies Two and Three. Additionally, PLS-SEM has the added advantage of being able to function with smaller samples, where AMOS is unable, and given the smaller samples that had been gathered for Studies 2 and 3, it was ideal for analysing these data sets.

## Ethical Considerations

Prior to any of the research taking place, ethics approval was sought from the HREC to ensure the survey instrument and research process was in accordance with the guidelines set by the university. Approval was granted under the approval number HRE2017-0174, and a copy of the approval letter can be found in **Appendix A**.

Additionally, each survey instrument was accompanied with a cover letter, stating the purpose of the research, what the respondents could expect to answer and that they were at liberty to stop answering at any point without discrimination. All respondents were reassured of their anonymity, and that all of their answers would be treated in strictest confidence. There was also a disclaimer about the use of the branding material being utilised within the research, to make clear the brands were representative and that none of the research was being conducted in association with any of the brands presented within the scope of the survey. Lastly, the contact information of the researcher was presented if they had any questions or concerns.

## Conclusion

This chapter has outlined the context of the research, the various stimuli that will be used in each of the studies, and the formation of the survey instrument that was used to gather the data for the research. The following three chapters will in turn examine the three studies that comprised the entirety of the research, including the data analysis and discussion of results for each of those studies respectively.

# Chapter 4:

## Overview and Analysis of Study One

### Introduction

This chapter discusses the first phase of the research, including the pilot testing that went into preparing this initial study, a quick overview of the survey instrument and stimuli that were used in this stage of the data collection, as well as the analysis of the data collected in “Study One”.

“Study One” is the first of three studies, and as such, the primary goal of this research was to conceptualise the research model focussed on investigating Willingness to Sacrifice. This study would ultimately serve as the foundation point for the following two studies. As such, a lengthier preparation process lead into this study than the second and third studies, as various elements needed to be established that would then be continued into the following studies. For example, the brands that would be used as the stimuli and point of contrast in both Study One and Study Two needed to be decided upon and pre-tested, and the survey instrument likewise needed compiling and pre-testing, as both of these elements would set the structure for the research.

It was decided to begin with that this study would be done within the context of Demand-Side scarcity, examining goods as the product category. Across the three studies, Demand and Supply driven scarcity would be examined, and goods and services would be examined, so that the model was thoroughly tested in a variety of contexts, as outlined in Research Objective 4.

Table 4.1 below provides an overview of how each of the studies will examine each of the various elements of scarcity and product categories:

	<b><u>Study One</u></b>	<b>Study Two</b>	<b>Study Three</b>
<b>Type of Scarcity</b>	<i>Demand</i>	<i>Supply</i>	<i>Demand &amp; Supply</i>
<b>Type of Product</b>	<i>Goods</i>	<i>Goods</i>	<i>Services</i>
<b>Table 4.1: Summary of research context in each study</b>			

Finally, as discussed in more detail in Chapter 3, this study was being examined within the context of limited edition watches, with two luxury brands (Tag Heuer and Louis Vuitton) being used as the stimuli in two differing versions of the research instrument, to provide a point of contrast within each study to examine whether there is any difference between brands. This too would help to provide robustness to the examination of the research model, and an additional point of comparison in Study Two. This would also help in the examination of Research Objectives 2, 3 and 4.

This chapter begins with an overview of the pilot testing process and the preparation of the branding materials used as stimuli within the study, following which there is a discussion of the data analysis for Study One.

## Pilot Testing

Before the study began, the first stage of preparing for the research was to put together a way that would capture the behaviour being researched, specifically the development of a means to measure “Consumers’ Willingness to Sacrifice”. There were a number of processes followed here, namely literature reviews, focus groups with experts in the field, and developing potential scale items through the use of thesaurus entries for the key terms that were likely to be used within the study (Li, Edwards, and Lee 2002, quoting Wells, Leavitt & McConville 1971; Churchill 1979; and Chen & Wells 1999).

There were three seminal papers that guided this process: Wu, et al (2012), Sweeney, Soutar and Johnson (1999), and Suri and Monroe (2003). Both the theoretical literature presented by these authors and the scale items they each respectively used to attempt to measure the element of sacrifice they were examining within their respective studies were used as reference material. With these papers and scales as a basis, 31 questions were created, broken into four categories – “Time Sacrifice”, “Monetary Sacrifice”, “Comfort Sacrifice” and “General Sacrifice”, which encompassed the previous three in the one item. Some of these questions were straight adaptations from the scale items used by the aforementioned authors, others were variations on those based on synonymous terms, and the remainder were re-worded versions of questions based on other relevant theoretical literature around time, money, or comfort sacrifice where a specific question for that form of sacrifice could not be found.

Once those 31 questions were compiled, the next part of the process was to send those questions for review by professors, experts, and other researchers who were experienced in the area of luxury branding, to give their expertise to inform which of the questions were best suited to be utilised moving forward. The various relevant people who were consulted were asked to both rate the questions in terms of how representative each item was for the intended purpose of examining sacrifice, and also to leave feedback about wording, duplications, which questions were unfit and should be discarded, and other relevant feedback they felt was pertinent to improving items overall.

From the resulting feedback, the list of potential items was reduced from 31 down to 20. This draft, along with the broader survey instrument, was then shown to a group of people to pre-test the readability of the instrument overall, before it being put into use.

## Preparation of Brands and Product Categories

To further assist the respondents in their understanding of the luxury stimulus being used within the research, a number of images of the brands were used at a certain point in the survey instrument, in the style of a “brochure”. The various images, along with some text outlining a scenario that was desired for the respondents to consider, were laid out over several pages to prepare the respondents for the questions which would follow.

A few examples of the images and branding material used can be seen below:




*Figure 4.1: Limited edition Tag Heuer example*

Now please pay attention to the following watches. These watches are special limited edition releases for 2017.


Louis Vuitton have not said how many of the watches they have made, and it is going to be a popular release. A lot of people have been talking about these watches, and because a lot of people have said that they do not want to miss out on this watch, it is expected that these watches are going to sell out very quickly.


After looking carefully at the adverts, and with this information in mind, please respond to the questions on the following pages.



*The Tambour watch has unique and recognizable shape that pays tribute to the drum. The rhythm of the drum echoes the rhythm of time. Its brown colouring recalls the Louis Vuitton legacy of Monogram canvas.*

*The Tambour Slim collection features a thin watch signed with the iconic Louis Vuitton Monogram pattern. An elegant and feminine watch, featuring a precious Monogram Star flower set with diamonds - a symbol of good fortune.*





*Figure 4.2: Limited edition LV example, with the limited demand stimulus text*

The images were presented with a few other images of other “normal”, non-limited edition watches, and other branding material such as text from the website or brand ambassadors, to further supplement the respondents understanding of the context for the study.

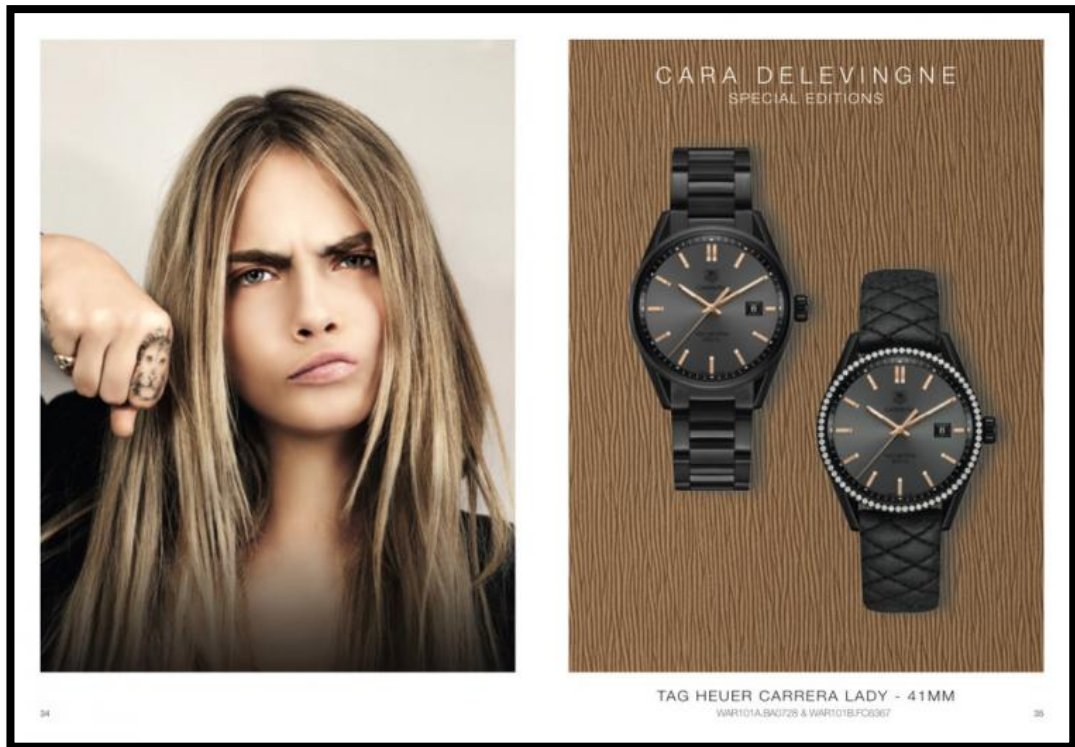


**Louis Vuitton**  
**The hybrid beauty of cases**

*— Almost a cushion, while evoking a subtly rounded square: the case shape of the two latest Louis Vuitton timepieces defies clear-cut categorisation.*

*Figure 4.3: LV Branding material*





*Figure 4.4: Tag Heuer branding material featuring actress Cara Delevingne*

Variations of these images, and other similar, were used in the survey instruments in both Study 1 and the following study, which were done as comparative studies in line with examining Research Objective 4. The examples in each survey were altered for whatever brand was being utilised, and also were altered between Study 1 and 2 to set the context for whether it was limited due to high demand or limited supply.

## Demographic Profile

There were two versions of the survey, the difference between the two being the brand stimulus used within each, either Tag Heuer or Louis Vuitton. Both versions of the survey had over 900 usable responses, with a near 50/50 split between male and female respondents. The largest age bracket was those between 21-34, who made up just under 50% of the sample population in the Tag Heuer data set, and 57% of the Louis Vuitton data set, however all of the age brackets were represented in some way within the sample.

The full demographic profiles for each data set can be seen in Table 4.2 on the following page:

<b>Table 4.2 – Demographic Information</b> <i>(Tag Heuer 999/1447 - 69.04% RR) (Louis Vuitton 931/1504 - 61.94% RR)</i>					
	<b>Demographic</b>	<b>Tag Heuer</b>		<b>Louis Vuitton</b>	
		<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	Male	479	47.9	448	48.1
	Female	520	52.1	483	51.9
	Total	999	100	931	100.0
<b>Age</b>	Under 20	209	20.9	166	17.8
	21-34	498	49.8	537	57.7
	35-44	101	10.1	83	8.9
	45-54	97	9.7	93	10.0
	55-64	64	6.4	39	4.2
	65+	30	3.0	13	1.4
	Total	999	100	931	100.0
<b>Relationship Status</b>	Single	518	51.9	498	53.5
	Relationship	223	22.3	225	24.2
	Married	258	25.8	208	22.3
	Total	999	100	931	100.0
<b>Occupation</b>	Manager	103	10.3	83	8.9
	Professional	127	12.7	99	10.6
	Technician/Trades	31	3.1	20	2.1
	Community/Service Worker	20	2.0	7	.8
	Clerical/Administrative	61	6.1	64	6.9
	Sales	59	5.9	64	6.9
	Machinery Operator/Driver	8	.8	5	.5
	Labourer	4	.4	8	.9
	Student	454	45.4	465	49.9
	Retired	56	5.6	22	2.4
	Other	76	7.6	94	10.1
	Total	999	100.0	931	100.0
<b>Education</b>	Certificate	252	25.2	236	25.3
	Bachelor Degree	383	38.3	364	39.1
	Diploma/Advanced Diploma	113	11.3	116	12.5
	Grad Diploma/Cert	80	8.0	69	7.4
	Postgraduate Degree	106	10.6	82	8.8
	Other	65	6.5	64	6.9
	Total	999	100.0	931	100.0
<b>Income</b>	Under \$19,999	740	74.1	713	76.6
	\$20,000-\$49,999	129	12.9	127	13.6
	\$50,000-\$99,999	90	9.0	56	6.0
	\$100,000-\$149,999	24	2.4	21	2.3
	\$150,000+	16	1.6	14	1.5
	Total	999	100.0	931	100.0

## Statistical Analysis

The analysis of both data sets was conducted using SPSS and AMOS. Over the course of the research period, each of these programs updated versions, however the final versions that were used were SPSS 26 for the EFA (reliability testing and factor analysis), and AMOS 25 for the CFA and Structural Equation Modelling (SEM) analysis.

### Exploratory Factor Analysis (EFA)

Whilst all of the scales used within this study were adapted from already established scales, to ensure the validity of each measure, reliability testing and factor analysis was conducted on each of the scales used within the study using SPSS. Factor analysis was done using Varimax rotation, and all returned one factor.

During the reliability analysis, the first item in the Perceived Scarcity scale was removed due to a low loading. For the remaining scales, none of the items were deemed problematic, and were all retained moving into factor analysis.

During the factor analysis of the Willingness to Sacrifice scale, five items were removed individually following a systematic process until one factor was achieved. During this process, where it initially showed multiple factors, items that loaded relatively evenly for both were removed first, and then secondly items which had a weak loading were removed. This was a lengthy and time-consuming process, as in addition to this, efforts were made to maintain an element of each type of sacrifice. The thinking behind this was that, since a one factor item was desired, and that initial analysis didn't break evenly into multiple factors that made sense, if the end result was one factor, but that only questions that related to monetary sacrifice remained, or where one element of sacrifice was removed entirely, then the scale could not genuinely be said to reflect the elements of sacrifice that had been identified in the preparatory stages of the research and scale compilation. Ultimately, the end result was one that had more than satisfactory statistical validity, and which maintained an overall picture of the behaviour which was being researched.

The results of the EFA for both data sets can be viewed in Table 4.3 over the following pages:

**Table 4.3: EFA**

<b>Constructs &amp; Items</b>	<b>Tag Heuer Factor Loading</b>	<b>Louis Vuitton Factor Loading</b>
<b>Perceived Scarcity</b>		
I think that the current supply of this watch is small	Removed	Removed
I think that this watch is selling out soon	.818	.756
I think many people will buy this watch	.873	.872
I feel that the limited edition of this watch will cause many people to buy	.898	.888
I think the limited supplies caused by the high demand will cause a lot of people to buy	.868	.875
<b>Tag Heuer</b> KMO .810; Bartlett's Test of Sphericity .000; Eigenvalue 2.993; Variance Explained 74.820; Cronbach's Alpha ( $\alpha$ ) .887 <b>Louis Vuitton</b> KMO .792, Bartlett's Test of Sphericity .000 Eigenvalue 2.888; Variance Explained 72.197; Cronbach's Alpha ( $\alpha$ ) .871		
<b>Perceived Uniqueness</b>		
I perceive this watch as highly unique	.925	.931
Possessing this watch makes me feel distinctive	.925	.931
<b>Tag Heuer</b> KMO .500; Bartlett's Test of Sphericity .000; Eigenvalue 1.712; Variance Explained 85.596; Cronbach's Alpha ( $\alpha$ ) .831 <b>Louis Vuitton</b> KMO .500, Bartlett's Test of Sphericity .000 Eigenvalue 1.732; Variance Explained 86.864; Cronbach's Alpha ( $\alpha$ ) .845		
<b>Perceived Quality</b>		
This watch would be reliable	.880	.839
This watch would be of high workmanship	.858	.869
This watch would be of good quality	.872	.865
This watch would be dependable	.894	.862
This watch would be durable	.836	.825
<b>Tag Heuer</b> KMO .880; Bartlett's Test of Sphericity .000; Eigenvalue 3.769; Variance Explained 75.379; Cronbach's Alpha ( $\alpha$ ) .918 <b>Louis Vuitton</b> KMO .871; Bartlett's Test of Sphericity .000; Eigenvalue 3.631; Variance Explained 72.616; Cronbach's Alpha ( $\alpha$ ) .906		
<b>Perceived Value</b>		
This watch is good value for money.	.884	.860
The expected price for this watch is acceptable.	.895	.872
This watch is considered to be a good buy.	.912	.915
This watch appears to be a good bargain.	.866	.893
<b>Tag Heuer</b> KMO: .852; Bartlett's Test of Sphericity .000; Eigenvalue 3.163; Variance Explained 79.077; Cronbach's Alpha ( $\alpha$ ) .912 <b>Louis Vuitton</b> KMO: .846, Bartlett's Test of Sphericity .000 Eigenvalue 3.315; Variance Explained 78.364; Cronbach's Alpha ( $\alpha$ ) .908		

<b>Constructs &amp; Items</b>	<b>Tag Heuer Factor Loading</b>	<b>Louis Vuitton Factor Loading</b>
<b>Willingness to Sacrifice</b>		
The time I would be willing to give up to obtain this watch is (very little – a lot)	Removed	Removed
I am willing to pay whatever it takes to get this watch	Removed	Removed
A high price for this watch is justified	.577	.511
I would pay a premium to guarantee I obtain this watch	.730	.711
Even if this watch was more expensive, it would be worth paying extra for.	Removed	Removed
I would purchase this watch, even if the higher price of this watch means I cannot afford other things	Removed	Removed
I would wait in line ahead of the opening to make sure I could purchase this watch	Removed	Removed
I would queue for this watch rather than doing other desirable activities	.908	.877
I would stay up all night to obtain this watch	.921	.888
Any discomfort I felt obtaining this watch would be worth it	.915	.891
It would be better for me to be uncomfortable, than to miss out on getting this watch.	.911	.885
I would wait for this watch even if the weather was terrible	.933	.898
I would obtain this watch even if it meant giving up sleep to get it	.930	.902
I would obtain this watch even if it meant I was unable to eat before getting it	.933	.891
I would acquire this watch even if it meant I was unable to enjoy my day	.941	.896
I would do anything to make sure I didn't miss out on this watch	.935	.916
I would give up anything to make sure I obtained this watch	.939	.915
In general, I perceive I would give up a lot to get this watch	.916	.879
It is worth giving up more than I would for other watches to get this watch	.883	.842
<p><b>Tag Heuer</b> KMO: .975; Bartlett's Test of Sphericity .000; Eigenvalue 11.072; Variance Explained 79.089; Cronbach's Alpha (<math>\alpha</math>) .982</p> <p><b>Louis Vuitton</b> KMO: .967, Bartlett's Test of Sphericity .000 Eigenvalue 10.274; Variance Explained 73.383; Cronbach's Alpha (<math>\alpha</math>) .975</p>		

## Confirmatory Factor Analysis

Following from the EFA conducted in SPSS, Confirmatory Factor Analysis was conducted on each of the constructs using AMOS, to ensure that each of the factors in the model were valid indicators of each construct. Each factor was analysed except “Perceived Uniqueness”, which was a two-item construct, and “Desire to Acquire”, as it was a composite variable.

For each of the other factors, further refinements were made such as cutting weak factor loadings and correlating terms that were similar, to achieve the acceptable model fit levels that would be eventually applied to the overall measurement model, though not as strictly applied as in the final overall test of model fit. The model fit levels (outlined in Table 4.4 below) are based on the guidelines set out by Hu and Bentler (1999), who set out the guidelines that have been widely adopted by many when it comes to SEM, and Hooper, Coughlan and Mullen (2008) who commented on the guidelines that should be sought for in business and marketing research.

The guidelines that were used for evaluating good model fit are as follows:

<b>Table 4.4: Model Fit Measures</b>	
<b>Fit Measure</b>	<b>Acceptable Level</b>
Normed Chi-square (Chi/DF)	< 3.0
P	< 0.05
RMSEA	< 0.6
CFI	> 0.9
NFI	> 0.9
GFI	> 0.9
TLI	> 0.9
IFI	> 0.9

This therefore being the case, the results of the CFA for both Tag Heuer and Louis Vuitton can be seen over the following pages:

## Perceived Scarcity

### Tag Heuer

<i>I think that this watch is selling out soon</i>	0.675
<i>I think many people will buy this watch</i>	0.772
<i>I feel that the limited edition of this watch will cause many people to buy</i>	0.915
<i>I think the limited supplies caused by the high demand will cause a lot of people to buy</i>	0.843

Chi Square	d.f.	Chi/DF	P	RMSEA	CFI	NFI	GFI	TLI	IFI
1.693	1	1.693	0.193	0.026	1.000	0.999	0.999	0.998	1.000

### Louis Vuitton

<i>I think that this watch is selling out soon</i>	0.579
<i>I think many people will buy this watch</i>	0.765
<i>I feel that the limited edition of this watch will cause many people to buy</i>	0.901
<i>I think the limited supplies caused by the high demand will cause a lot of people to buy</i>	0.867

Chi Square	d.f.	Chi/DF	P	RMSEA	CFI	NFI	GFI	TLI	IFI
0.075	1	0.075	0.785	0.000	1.000	1.000	1.000	1.003	1.000

## Perceived Quality

### Tag Heuer

<b>Table 4.9 – Standardised Regression Weights for Perceived Quality Scale Items</b>	
<i>This watch would be of high workmanship</i>	0.830
<i>This watch would be of good quality</i>	0.817
<i>This watch would be dependable</i>	0.860

<b>Table 4.10 – Perceived Quality Model Fit Statistics</b>									
<b>Chi Square</b>	<b>d.f.</b>	<b>Chi/DF</b>	<b>P</b>	<b>RMSEA</b>	<b>CFI</b>	<b>NFI</b>	<b>GFI</b>	<b>TLI</b>	<b>IFI</b>
2.591	1	2.591	0.107	0.041	0.999	0.998	0.998	0.997	0.999

### Louis Vuitton

<b>Table 4.11 – Standardised Regression Weights for Perceived Quality Scale Items</b>	
<i>This watch would be of high workmanship</i>	0.840
<i>This watch would be of good quality</i>	0.823
<i>This watch would be dependable</i>	0.828

<b>Table 4.12 – Perceived Quality Model Fit Statistics</b>									
<b>Chi Square</b>	<b>d.f.</b>	<b>Chi/DF</b>	<b>P</b>	<b>RMSEA</b>	<b>CFI</b>	<b>NFI</b>	<b>GFI</b>	<b>TLI</b>	<b>IFI</b>
2.591	1	2.591	0.107	0.041	0.999	0.998	0.998	0.997	0.999



## Perceived Value

### Tag Heuer

<b>Table 4.13 – Perceived Quality Model Fit Statistics</b>	
<i>This watch is good value for money.</i>	0.839
<i>The expected price for this watch is acceptable.</i>	0.858
<i>This watch is considered to be a good buy.</i>	0.892
<i>This watch appears to be a good bargain.</i>	0.807

<b>Table 4.14 – Perceived Value Model Fit Statistics</b>									
<b>Chi Square</b>	<b>d.f.</b>	<b>Chi/DF</b>	<b>P</b>	<b>RMSEA</b>	<b>CFI</b>	<b>NFI</b>	<b>GFI</b>	<b>TLI</b>	<b>IFI</b>
2.757	2	1.3785	0.252	0.019	1.000	0.999	0.999	0.999	1.000

### Louis Vuitton

<b>Table 4.15 – Standardised Regression Weights for Perceived Value Scale Items</b>	
<i>This watch is good value for money.</i>	0.795
<i>The expected price for this watch is acceptable.</i>	0.814
<i>This watch is considered to be a good buy.</i>	0.905
<i>This watch appears to be a good bargain.</i>	0.860

<b>Table 4.16 – Perceived Value Model Fit Statistics</b>									
<b>Chi Square</b>	<b>d.f.</b>	<b>Chi/DF</b>	<b>P</b>	<b>RMSEA</b>	<b>CFI</b>	<b>NFI</b>	<b>GFI</b>	<b>TLI</b>	<b>IFI</b>
3.764	2	1.882	0.152	0.031	0.999	0.998	0.998	0.998	0.999

## Willingness to Sacrifice

### Tag Heuer

Item	Weight
<i>I would wait for this watch even if the weather was terrible</i>	0.92
<i>I would obtain this watch even if it meant giving up sleep to get it</i>	0.924
<i>I would obtain this watch even if it meant I was unable to eat before getting it</i>	0.949
<i>I would do anything to make sure I didn't miss out on this watch</i>	0.937
<i>I would give up anything to make sure I obtained this watch</i>	0.939

Chi Square	d.f.	Chi/DF	P	RMSEA	CFI	NFI	GFI	TLI	IFI
4.613	2	2.3065	0.1	0.036	1.000	0.999	0.998	0.998	1.000

### Louis Vuitton

Item	Weight
<i>I would stay up all night to obtain this watch</i>	0.868
<i>Any discomfort I felt obtaining this watch would be worth it</i>	0.864
<i>I would wait for this watch even if the weather was terrible</i>	0.897
<i>I would obtain this watch even if it meant giving up sleep to get it</i>	0.909
<i>I would obtain this watch even if it meant I was unable to eat before getting it</i>	0.900
<i>I would do anything to make sure I didn't miss out on this watch</i>	0.892
<i>I would give up anything to make sure I obtained this watch</i>	0.890

Chi Square	d.f.	Chi/DF	P	RMSEA	CFI	NFI	GFI	TLI	IFI
20.743	9	2.3047	0.014	0.037	0.998	0.997	0.994	0.996	0.998

## Reliability and Validity

Before assessing the full measurement model, each of the items were assessed for their Composite Reliability and Average Variance Extracted. The various tests were done with the outputs from AMOS 25, and are outlined below.

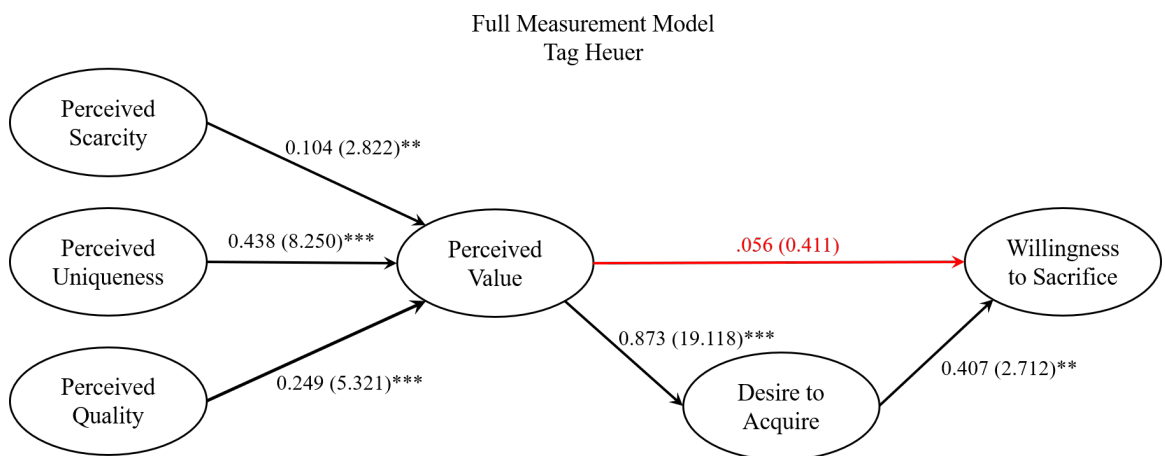
<b>Table 4.21: Composite Reliability, Average Variance Extracted, and Model Fit Statistics for Composite Model</b>				
	<b>Tag Heuer</b>		<b>L. V.</b>	
	<b>C.R.</b>	<b>A.V.E</b>	<b>C.R.</b>	<b>A.V.E</b>
<i>Perceived Scarcity</i>	0.88	0.66	0.87	0.63
<i>Perceived Uniqueness</i>	0.83	0.71	0.85	0.73
<i>Perceived Quality</i>	0.87	0.69	0.87	0.69
<i>Perceived Value</i>	0.91	0.72	0.91	0.71
<i>Desire to Acquire</i>	0.6	0.41	0.6	0.43
<i>Willingness to Sacrifice</i>	0.97	0.87	0.96	0.79
<b>Model Fit Indicators</b>	<b>Tag Heuer</b>		<b>L. V.</b>	
<i>Chi Square</i>	436.425		461.055	
<i>d.f.</i>	152		189	
<i>Chi/DF</i>	2.871217		2.439444	
<i>P</i>	0.00		0.00	
<i>RMSEA</i>	0.043		0.039	
<i>CFI</i>	0.983		0.984	
<i>NFI</i>	0.975		0.973	
<i>GFI</i>	0.958		0.956	
<i>TLI</i>	0.979		0.980	
<i>IFI</i>	0.983		0.984	

For strong measures of reliability and validity, it is generally recommended that Composite Reliability should be  $>0.7$  and Average Variance Extracted  $>0.5$ . Each of the items meet these requirements, except for Desire to Acquire, which falls marginally short. In isolation, it is recommended such items should be removed from the measurement model, however if in a situation where one item falls short of such measures, it may be deemed acceptable to continue if C.R. is greater than .6 and all other constructs are above the recommended thresholds (Fornell & Larcker 1981; Lam 2012). As Desire to Acquire is above 0.6, it is acceptable to continue with it in the measurement model due to the other items all being well above the recommended threshold.

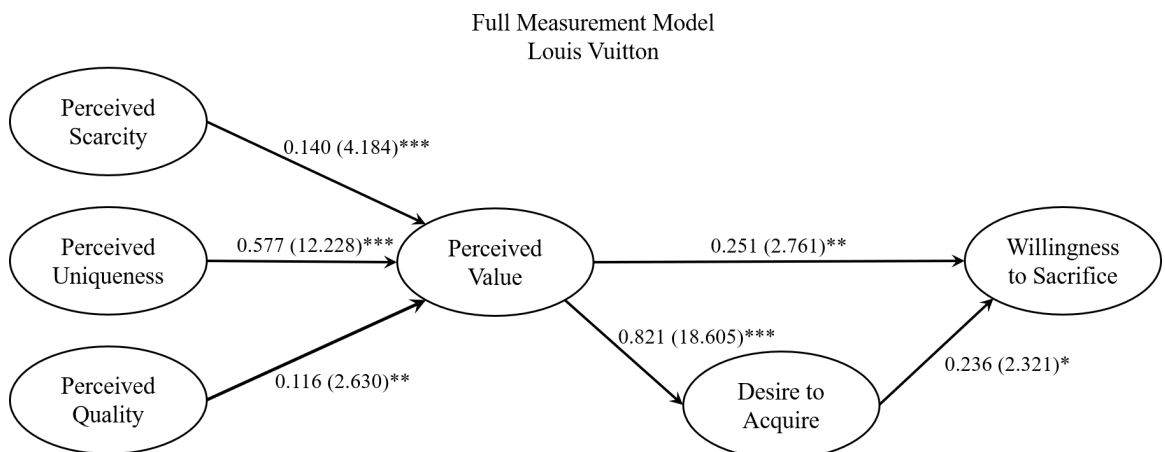
## Full Measurement Model

Finally, being satisfied each of the constructs within the model are satisfactorily reliable and valid, a full measurement model was tested for good model fit to then be used to test and examine each of the hypotheses outlined in the previous chapters.

The full measurement model was tested in AMOS 25, with the results for both outlined in Figures 4.5 and 4.6 below. Both measurement models indicated that they had good model fit, and as such, both were deemed suitable for hypotheses testing.



**Figure 4.5 – Structural Model Results for Tag Heuer (\*<0.05, \*\*<0.01, \*\*\*<0.001)**



**Figure 4.6 – Structural Model Results for Louis Vuitton (\*<0.05, \*\*<0.01, \*\*\*<0.001)**

## Hypothesis Testing

Hypotheses 1 through 5 can be tested by looking at the relationships between variables within the full measurement models, as respectively displayed above. The full results of the hypotheses testing are as follows:

### Hypothesis 1: Antecedent Variables for Perceived Value

Hypothesis 1 sought to examine whether Perceived Scarcity, Perceived Uniqueness, and Perceived Quality positively influence Perceived Value. Examining the full measurement model, it appears that in all three cases across both data sets, that this is the case.

Firstly, examining the Tag Heuer data set. Perceived Scarcity was found to positively influence Perceived Value ( $\beta=0.104$ ;  $p=0.005$ ), supporting H1a. Likewise, Perceived Uniqueness was found to positively influence Perceived Value ( $\beta=0.438$ ;  $p<0.001$ ), supporting H1b, and Perceived Quality was found to positively influence Perceived Value ( $\beta=0.249$ ;  $p<0.001$ ), supporting H1c.

The same is true in the Louis Vuitton data set. Perceived Scarcity positively influenced Perceived Value ( $\beta=0.140$ ;  $p<0.001$ ), supporting H1a. Perceived Uniqueness positively influenced Perceived Value ( $\beta=0.577$ ;  $p<0.001$ ), supporting H1b. Perceived Quality was also found positively influence Perceived Value ( $\beta=0.116$ ;  $p=0.009$ ), supporting H1c.

### Hypothesis 2: Perceived Value to Desire to Acquire

Hypothesis 2 sought to examine whether Perceived Value lead to a consumer Desiring to Acquire an offering. Perceived Value positively influences Desire to Acquire in both the Tag Heuer dataset ( $\beta=0.873$ ;  $p<0.001$ ) and the Louis Vuitton dataset ( $\beta=0.821$ ;  $p<0.001$ ), meaning that Hypothesis 2 is supported in both instances.

### Hypothesis 3: Desire to Acquire to Willingness to Sacrifice

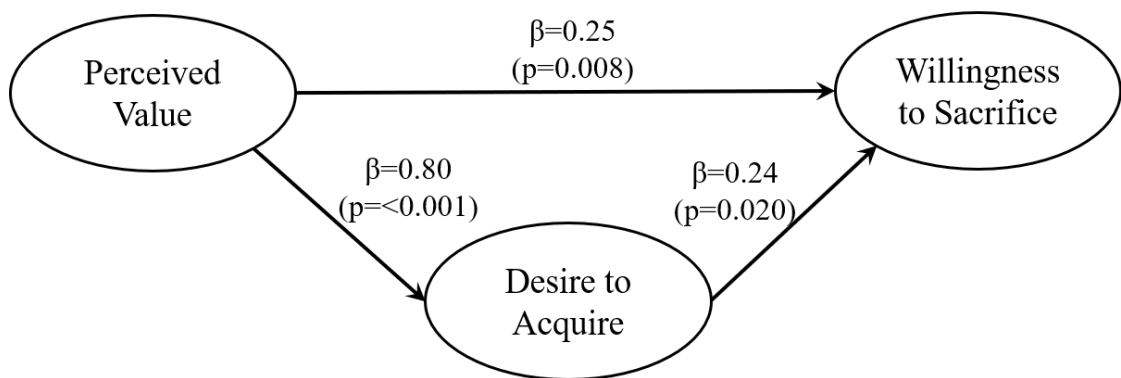
Hypothesis 3 sought to examine whether Desire to Acquire lead to a consumer being Willing to Sacrifice. Desire to Acquire positively influenced Willingness to Sacrifice in both the Tag Heuer dataset ( $\beta=0.407$ ;  $p=0.007$ ) and the Louis Vuitton dataset ( $\beta=0.236$ ;  $p=0.020$ ), meaning that Hypothesis 3 is supported in both instances.

#### Hypothesis 4: Perceived Value to Willingness to Sacrifice

Hypothesis 4 sought to examine whether Perceived Value directly lead to a consumer being Willing to Sacrifice for an offering. There was a difference in results between the two datasets. In the Tag Heuer dataset, the relationship between Perceived Value and Willingness to Sacrifice was not significant ( $p=0.681$ ), and therefore the hypothesis is not supported. However, in the case of the Louis Vuitton dataset, Perceived Value had a positive and significant impact on Willingness to Sacrifice ( $\beta=0.251$ ;  $p=0.006$ ), meaning that the hypothesis is supported.

#### Hypothesis 5: Mediation Testing

One of the pre-requisites for mediation is that there is a significant direct relationship between the independent and dependent variable, which in this study would be between Perceived Value and Willingness to Sacrifice. As shown above in testing Hypothesis 4, there is no significant relationship between Perceived Value and Willingness to Sacrifice in the Tag Heuer data-set, which means that mediation is not possible. However, as the relationship is significant in the Louis Vuitton data set, Hypothesis 5 was able to be tested in that instance. Mediation was conducted using the Baron and Kenny (1986) approach.



**Figure 4.7 – Mediation Analysis for Louis Vuitton**

The relationship between Perceived Value and Willingness to Sacrifice is partially mediated by Desire to Acquire, as there is a reduced, but not entirely removed direct effect when Desire is introduced into the model (outlined in Table 4.22 below). As illustrated in Figure 4.7, the standardised regression coefficient between Perceived Value and Desire to Acquire is statistically significant, and likewise between Desire to Acquire and Willingness to Sacrifice.

The standardised indirect effect is  $(.80)(.24) = 0.192$ . We can therefore say that the Hypothesis is partially supported.

<b>Table 4.22</b>			
<b>Summary of Mediation: Perceived Value -&gt; Desire to Acquire -&gt; Willingness to Sacrifice (H5)</b>			
<b>Tag Heuer</b>			
	Direct Effect W/O Mediation	Direct Effect With Mediation	Indirect Effect
P. Value -> Desire -> WTS	N/A	0.08 (ns)	N/A
<b>Louis Vuitton</b>			
	Direct Effect W/O Mediation	Direct Effect With Mediation	Indirect Effect
P. Value-> Desire -> WTS	0.45 (p=0.001)	0.25 (p=0.002)	$(.80)(.24) = 0.192$

## Theoretical, Methodological and Managerial Contributions

### Theoretical Contributions

In both the Tag Heuer and Louis Vuitton data sets, the antecedent behaviours to Perceived Value were all significant, and therefore supported Hypotheses 1a, 1b and 1c in both cases.

Hypothesis 1a stated there was a positive relationship between Perceived Scarcity and Perceived Value. The supported hypothesis in this study validates the established literature from a range of studies. As highlighted in Chapter 2, initial research done by Verhallen (1982), Lynn (1989; 1991), Verhallen and Robben (1994; 1995) all discuss various ways in which scarcity perceptions can influence consumers perceptions of value. More recent studies such as Eisend (2008), He, et. al (2010), and Hwang, et. al. (2013) also show support for this relationship. This study adds even further weight to this relationship in the literature.

Hypothesis 1b stated that there was a positive relationship between Perceived Uniqueness and Perceived Value. The supported hypothesis in this study validates and builds on the existing literature used to form this hypothesis. As highlighted in Chapter 2, this study validates the findings from Snyder & Fromkin (1977), Belk (1988), Aaker (1999), Muniz & O'Guinn (2001), Tian, Bearden and Hunter (2001), Kirmani (2009), Bian and Forsythe (2011), and Kapferer (2012).

Hypothesis 1c stated that there was a positive relationship between Perceived Quality and Perceived Value. This supported hypothesis validates the call for further research within the context of “prestige brands” by Baek, Kim and Yu (2010), and more broadly builds on the research on this relationship discussed by Phau and Prendergast (2000), Vigneron and Johnson (2004), Stock and Balachander (2005), Miyizaki, Grewal and Goodstein (2005), and Quintal and Phau (2014).

Hypothesis 2 stated that consumers who had a high Perception of Value would possess a high Desire to Acquire an offering, and in turn, Hypothesis 3 stated that consumers with high Desire to Acquire would be Willing to Sacrifice time, money and comfort in order to obtain that offering. In short, the hypotheses revolved around this intermediary “desire” state that consumers may enter between developing a perception of value, and then going on to being able to act on that desire.

The data analysis showed a significant and positive relationship between Perceived Value to Desire to Acquire in both data sets, meaning that Hypothesis 2 is supported. Likewise, it showed a positive relationship between Desire to Acquire and Willingness to Sacrifice in both data sets, meaning Hypothesis 3 is also supported. It could be argued that, given the relationship between Perceived Value and Willingness to Sacrifice is insignificant in the Tag Heuer data set, that these two hypotheses and corresponding relationships carry greater weight in relation to Tag Heuer, than it does to Louis Vuitton, for the reasons already discussed in relation to H4 and H5, but ultimately it is relevant for both brands in terms of how consumers would behave.

As hypothesis Hypotheses 2 and 3 are supported in both datasets, the findings from this study adds weight to the research by Muniz & O’Guinn (2001), Eisend (2008), and Kirmani (2009), who all discussed the role that perceptions and perceived value plays in determining the resulting behaviour within consumers. It also adds validity to the findings of Huaman-Ramirez and Merunka (2017) who discussed the way in which desire is formed by “the mental construction of rewarding experiences”, and builds into this the notion that consumers



perceptions of value capture this part of the imagination to help consumers enter this desire state. It also adds to the work of Perguini and Bagozzi (2004) who discussed the idea that desire is “time indefinite”, a holding state that consumers will remain in until they’re able to act on that desire. These findings also build on the research of Rucker and Galinski (2008) and Lee, Ryu and Chun (2018), who respectively researched desire in the context of conspicuous consumption and limited editions – both which are contexts that this study was conducted in.

As for Hypotheses 4 and 5, as they are only supported in the Louis Vuitton data set, this suggests further research is required before they can offer theoretical support for the prior research they were drawn from. However, the discrepancy between the findings of each model do offer a potential managerial implication, which will be discussed later.

### Methodological Contributions

This study was the primary examination of “Willingness to Sacrifice”. A behavioural framework, which models the formation of consumers perceptions of value through to their resultant willingness to sacrifice was examined twice, and both times achieved good model fit. This is a first promising step in understanding this behaviour, and creating a way to measure this behaviour.

With regards to the survey instrument which was utilised within the study, the results from this research provide validation to the approach, and also to prior research which helped to inform certain decisions which were made to help form the survey instrument.

The scales which were used to measure Perceived Scarcity, Perceived Uniqueness, Perceived Quality and Perceived Value were adapted from Hwang, et. al. (2013), and the scale items for Desire to Acquire were adapted from Rucker and Galinski (2008). This study adds further validity to those scales.

With regards to the “brochure style” approach to displaying the stimulus, this has been used previously in literature (e.g., Lessne and Notarantonio 1988), and adds support for this approach. Another decision that was made was to not include a price for the stimulus, which was informed by the prior research by Lynn (1989), Vigneron and Johnson (2004) and

Kapferer and Bastien (2009), and the findings from this study add further context to these authors respective prior contributions.

### Managerial Contributions

Analysis of the data revealed that there is an insignificant relationship between Perceived Value and Willingness to Sacrifice, in the case of the Tag Heuer data set. This is a direct contrast to the Louis Vuitton Data set, where there was a significant relationship between Perceived Value and Willingness to Sacrifice. The answer as to why this is the case may be found in the nature of the brands themselves, and the impact of Demand-Driven Scarcity.

Tag Heuer's exclusive focus is producing luxury watches, whereas Louis Vuitton, whilst they have ventured into the luxury watch market before, are primarily known for their luxury bags and luggage. In the case of the Tag Heuer data set, there is no support for the hypothesis that consumers will immediately jump to being willing to sacrifice, but will go through a more considered process of desiring the watch before reaching the sacrifice stage. However, the relationship does exist in the Louis Vuitton data set, suggesting there is a more immediate reaction that can take place. In other words – there is a more immediate reaction stimulated by Demand-Driven Scarcity for the Louis Vuitton watch than there is for the Tag Heuer watch. However, while there is more immediate demand for the Louis Vuitton Watch, both models ultimately come to the same conclusion of consumers being willing to sacrifice to obtain the watch.

This suggests, therefore, that there is a stronger reaction for a product offering that is further removed from the normal offering of that brand when demand is likely to exceed supply. Intuitively, this makes sense. A Louis Vuitton Watch will perhaps be inherently more unique than a Tag Heuer one, because of its differentiation from the normal Louis Vuitton product range. Alternatively, a Limited Edition Tag Heuer watch is perhaps perceived as being less valuable than a Limited Edition Watch from a brand that does not normally produce watches, and elicits a more considered response.

## Summary of Hypothesis Testing

<b>Table 4.23</b>		
<b>Study One: Demand-Driven Scarcity</b>		
<b>Hypotheses</b>	<b>Tag Heuer</b>	<b>Louis Vuitton</b>
<b>H1<sub>a</sub>:</b> Perceived Scarcity positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1<sub>b</sub>:</b> Perceived Uniqueness positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1<sub>c</sub>:</b> Perceived Quality positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 2:</b> Perceived Value positively influences Desire to Acquire	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 3:</b> Desire to Acquire positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 4:</b> Perceived Value positively influences Willingness to Sacrifice	<i>Not Supported*</i>	<i>Supported</i>
<b>Hypothesis 5:</b> Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<i>Not Supported*</i>	<i>Partially Supported**</i>
<p><i>Comments:</i></p> <p><i>* Because the relationship between Perceived Value and Willingness To Sacrifice is not significant, H4 cannot be supported, and there can be no mediation of Desire to Acquire between Perceived Value and Willingness to Sacrifice, meaning H5 also cannot be supported.</i></p> <p><i>** The relationship between Perceived Value and Willingness to Sacrifice is Partially Mediated by Desire to Acquire, however there is no full mediation.</i></p>		

## Conclusion

This chapter has reviewed the formation, pre-testing, data collection and data analysis from “Study One”, which investigated “Willingness to Sacrifice” behaviour in the context of goods (limited edition watches) and demand side scarcity. It is the first of three studies investigating Willingness to Sacrifice in a variety of contexts, to build a measurement model to investigate the behaviour as a whole and to find a measure which will capture this ultimate purchasing behaviour that is being exhibited by consumers.

One of the primary aims of Study One was to develop a framework for Willingness to Sacrifice and its antecedent behaviours. For both the Tag Heuer and Louis Vuitton data sets, good model fit was achieved, with all of the indicators falling within the ideal range. Therefore, this study is the first step in a positive direction in understanding the Willingness to Sacrifice behaviour that is being exhibited by consumers. However, this is of course only true within the context of Limited Edition Luxury Watches, where the limited nature of the good has come from high demand. This model therefore needs to be examined further to validate the findings from this study, and help to generalise the model. This is the aim of Studies Two and Three, in the following chapters.

The findings from Study One are a promising initial step in the process of these goals, and have built on and added to a range of literature across a variety of fields of research. These findings are now subject to further comparison from Studies Two and Three, which are the next two chapters respectively, which aim to broaden and confirm the findings from this initial study, and add extra validity to what this study has found.

# Chapter 5:

## Overview and Analysis of Study Two

### Introduction

This chapter discusses the analysis of the data collection from “Study Two”, which focussed on investigating Willingness to Sacrifice within Supply-Side scarcity for Limited Edition watches. This study was conducted in relation to the research objectives and hypotheses outlined in Chapter 2.

With specific reference to Research Objective 4, this study was the counterpart to Study One in looking at goods. In this instance, the study was examining the supply-side scarcity scenario, that is to say, where the manufacturer of the watches set a very specific production limit (“Only 2000 units available”) and was openly broadcast to potential consumers. Further to Study One, the aim of Study Two is to validate the findings from the initial study with the ultimate aim of Study Three to generalise the findings of the first two studies even further.

Table 5.1 below outlines the specific combination of factors being examined in this study, in relation to Research Objective 4, and the specific goals of this study.

	<b>Study One</b>	<b><u>Study Two</u></b>	<b>Study Three</b>
<b>Type of Scarcity</b>	<i>Demand</i>	<i><u>Supply</u></i>	<i>Demand &amp; Supply</i>
<b>Type of Product</b>	<i>Goods</i>	<i><u>Goods</u></i>	<i>Services</i>
<b>Table 5.1: Summary of research context in each study.</b>			

## Preparation of Brands and Product Categories

As was the case with Study 1, in this study, to further assist the respondents in their understanding of the luxury stimulus being used within the research, a number of images of the brands were used at a certain point in the survey instrument, in the style of a “brochure”. The various images, along with some text outlining a scenario that was desired for the respondents to consider, were laid out over several pages to prepare the respondents for the questions which would follow.

A few examples of the images and branding material used can be seen below:




*Figure 5.1: Limited edition Tag Heuer example*

Now please pay attention to the following watches. These watches are special limited edition releases for 2019.


Louis Vuitton have only produced 2000 of these watches. A lot of people have been talking about these watches, and because a lot of people have said that they do not want to miss out on this watch, it is expected that these watches are going to sell out very quickly.


After looking carefully at the adverts, and with this information in mind, please respond to the questions on the following pages.



*The Tambour watch has unique and recognizable shape that pays tribute to the drum. The rhythm of the drum echoes the rhythm of time. Its brown colouring recalls the Louis Vuitton legacy of Monogram canvas.*

*The Tambour Slim collection features a thin watch signed with the iconic Louis Vuitton Monogram pattern. An elegant and feminine watch, featuring a precious Monogram Star flower set with diamonds - a symbol of good fortune.*





**Figure 5.2: Limited Edition LV example, with the limited supply stimulus text.**

The images were presented with a few other images of other “normal”, non-limited edition watches, and other branding material such as text from the website or brand ambassadors, as was the case with Study One. Variations of these images, and other similar, were used in the survey instruments in both the initial study and Study 2, with the text examples in each survey being altered for whatever brand was being utilised, and also being altered between Study 1 and 2 to set the context for whether it was limited due to high demand or limited supply, to examine Research Objective 4.

## Demographic Profile

Study Two was conducted via panel data collected through a data collection company. As with Study One, there were two versions of the survey, one with Tag Heuer as the stimulus and the other with Louis Vuitton as the stimulus. The full demographic details for each data set can be displayed in Table 5.2 on the following page.

<i>Table 5.2 – Demographic Information (Tag Heuer 92/414 – 22.22% RR) (Louis Vuitton 125/328 – 38.1% RR)</i>					
	<i>Demographic</i>	<i>Tag Heuer</i>		<i>Louis Vuitton</i>	
		<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
<b>Gender</b>	Male	38	41.3	49	39.2
	Female	54	58.7	75	60.0
	“Other”	0	0	1	.8
	Total	92	100	125	100.0
<b>Age</b>	Under 20 Years	3	3.3	5	4.0
	21-34	21	22.8	24	19.2
	35-44	11	12.0	15	12.0
	45-54	14	15.2	17	13.6
	55-64	28	30.4	32	25.6
	65+	15	16.3	32	25.6
	Total	92	100.0	125	100.0
<b>Relationship Status</b>	Single	39	42.4	49	39.2
	In a relationship	13	14.1	20	16.0
	Married	40	43.5	56	44.8
	Total	92	100.0	125	100.0
<b>Occupation</b>	Manager	21	22.8	26	20.8
	Technician/Trades Worker	4	4.3	6	4.8
	Community and Personal Services Worker	2	2.2	3	2.4
	Clerical/Administrative Worker	10	10.9	17	13.6
	Sales Worker	5	5.4	3	2.4
	Labourer	6	6.5	1	.8
	Student	6	6.5	4	3.2
	Retired	20	21.7	7	5.6
	Other	18	19.6	36	28.8
	Total	92	100.0	22	17.6
	High School Certificate	38	41.3	46	36.8
<b>Education</b>	Bachelor Degree	16	17.4	32	25.6
	Diploma or Advanced Diploma	10	10.9	19	15.2
	Graduate Diploma/Certificate	10	10.9	15	12.0
	Post Graduate Degree	9	9.8	10	8.0
	Other	9	9.8	3	2.4
	Total	92	100.0	125	100.0
	Under \$19,999	22	23.9	23	18.4
<b>Income</b>	\$20,000-\$49,999	30	32.6	52	41.6
	\$50,000-\$99,999	21	22.8	38	30.4
	\$100,000-\$149,999	12	13.0	6	4.8
	\$150,000 and above	7	7.6	6	4.8
	Total	92	100.0	125	100.0
	Male	999	100.0	931	100.0



## Statistical Analysis

Both data sets were evaluated in SPSS and WarpPLS. The analysis of both data sets began in SPSS 26 for the Exploratory Factor Analysis, and WarpPLS 6.0 for the evaluation of the measurement model.

### Exploratory Factor Analysis (EFA)

Whilst all of the scales used within this study were adapted from already established scales, to ensure the validity of each measure, reliability testing and factor analysis was conducted on each of the scales used within the study using SPSS. Factor analysis was done using Varimax rotation.

During the reliability analysis, the first item in the Perceived Scarcity scale was removed due to a low loading. All the remaining scales retained all of their items, and were one factor.

The results for the EFA for both data sets can be viewed in Table 5.5 over the following pages:

**Table 5.5: EFA**

<b>Constructs &amp; Items</b>	<b>Tag Heuer Factor Loading</b>	<b>Louis Vuitton Factor Loading</b>
<b>Perceived Scarcity</b>		
I think that the current supply of this watch is small	Removed	Removed
I think that this watch is selling out soon	.881	.832
I think many people will buy this watch	.885	.850
I feel that the limited edition of this watch will cause many people to buy	.939	.918
I think the limited supplies caused by the high demand will cause a lot of people to buy	.949	.936
<b>Tag Heuer</b> KMO .765; Bartlett's Test of Sphericity .000; Eigenvalue 3.342; Variance Explained 83.551; Cronbach's Alpha ( $\alpha$ ) .934 <b>Louis Vuitton</b> KMO .787; Bartlett's Test of Sphericity .000 Eigenvalue 3.135; Variance Explained 78.373; Cronbach's Alpha ( $\alpha$ ) .906		
<b>Perceived Uniqueness</b>		
I perceive this watch as highly unique	.889	.867
Possessing this watch makes me feel distinctive	.889	.867
<b>Tag Heuer</b> KMO .500; Bartlett's Test of Sphericity .000; Eigenvalue 1.581; Variance Explained 79.063; Cronbach's Alpha ( $\alpha$ ) .735 <b>Louis Vuitton</b> KMO .500; Bartlett's Test of Sphericity .000 Eigenvalue 1.503; Variance Explained 75.147; Cronbach's Alpha ( $\alpha$ ) .669		
<b>Perceived Quality</b>		
This watch would be reliable	.867	.854
This watch would be of high workmanship	.929	.824
This watch would be of poor quality (R)	.675	.473
This watch would be dependable	.777	.796
This watch would be durable	.789	.774
<b>Tag Heuer</b> KMO .823; Bartlett's Test of Sphericity .000; Eigenvalue 3.297; Variance Explained 65.938; Cronbach's Alpha ( $\alpha$ ) .867 <b>Louis Vuitton</b> KMO .818; Bartlett's Test of Sphericity .000; Eigenvalue 2.864; Variance Explained 57.290; Cronbach's Alpha ( $\alpha$ ) .803		
<b>Perceived Value</b>		
This watch is good value for money.	.936	.912
The expected price for this watch is acceptable.	.958	.887
This watch is considered to be a good buy.	.928	.840
This watch appears to be a good bargain.	.913	.896
<b>Tag Heuer</b> KM: .863; Bartlett's Test of Sphericity .000; Eigenvalue 3.489; Variance Explained 87.237; Cronbach's Alpha ( $\alpha$ ) .951 <b>Louis Vuitton</b> KMO .848; Bartlett's Test of Sphericity .000 Eigenvalue 3.128; Variance Explained 78.205; Cronbach's Alpha ( $\alpha$ ) .907		

<b>Constructs &amp; Items</b>	<b>Tag Heuer Factor Loading</b>	<b>Louis Vuitton Factor Loading</b>
<b>Willingness to Sacrifice</b>		
The time I would be willing to give up to obtain this watch is (very little of my time – a lot of my time)	.806	.830
I am willing to pay whatever it takes to get this watch	.849	.882
A high price for this watch is not justified (R)	.744	.643
I would pay a premium to guarantee I obtain this watch	.873	.899
Even if this watch was more expensive than I expected, it would be worth paying extra for	.864	.880
I would purchase this watch, even if the higher price of this watch means I cannot afford other things	.911	.750
I would wait in line ahead of the opening to make sure I could purchase this watch	.946	.882
I would queue for this watch rather than doing other desirable activities	.934	.928
I would stay up all night to obtain this watch	.943	.904
Any discomfort I felt obtaining this watch would be worth it	.912	.921
It would be better for me to be uncomfortable, than to miss out on getting this watch.	.890	.880
I would wait for this watch even if the weather was terrible	.933	.925
I would obtain this watch even if it meant giving up sleep to get it	.956	.932
I would get this watch even if it meant I was unable to eat before getting it	.951	.905
I would not obtain this watch even if it meant I was unable to enjoy my day (R)	.814	.726
I would do anything to make sure I didn't miss out on this watch	.929	.875
I would give up anything to make sure I obtained this watch	.962	.895
In general, I perceive I would give up a lot to get this watch	.897	.879
It is worth giving up more than I would for other watches to get this watch	.875	.897
This watch is difficult to obtain, but worth giving up a lot to get it	.887	.890
<p style="text-align: center;"><b>Tag Heuer</b>  KMO .956; Bartlett's Test of Sphericity .000;  Eigenvalue 16.038; Variance Explained 80.192; Cronbach's Alpha (<math>\alpha</math>) .987</p> <p style="text-align: center;"><b>Louis Vuitton</b>  KMO .959; Bartlett's Test of Sphericity .000  Eigenvalue 15.107; Variance Explained 75.533; Cronbach's Alpha (<math>\alpha</math>) .982</p>		

### WarpPLS Analysis

As discussed in Chapter 3, WarpPLS was chosen to analyse the measurement model, for two reasons. Firstly, PLS-SEM is known to excel when it comes to measuring and evaluating the strength of causal relationships. As the research model is made up of causal relationships, a PLS-SEM approach was selected over a CB-SEM approach as it would assist with the evaluation of the strength of the full measurement model. Furthermore, as one of the main aims of this study was to confirm the results from the first two studies, PLS-SEM is arguably more appropriate for this than staying with CB-SEM. Secondly, PLS-SEM has an advantage over CB-SEM in its ability to be able to work effectively with data sets that have small sample sizes. As the data collection for this study suffered from a poor response rate, PLS-SEM enabled analysis of the data set in circumstances where CB-SEM programs like AMOS would be unable to function.

PLS-SEM has, at times, been unfavourably viewed by some scholars and reviewers. It is perhaps judged to be less rigorous and therefore less suitable for examining relationships within the measurement model (Hair, Ringle & Sarstedt 2011). However, this view most likely has arisen due to a lack of familiarity with the PLS-SEM approach and background, and when applied properly, PLS-SEM has various benefits over the more traditionally used CB-SEM methods, and in fact, PLS-SEM can provide more robust estimations of the structural model (Hair, Ringle & Sarstedt 2011).

One of the limitations of CB-SEM is that it relies on a very rigid set of requirements that need to be fulfilled for it to work – one of those requirements being a minimum sample size threshold that, if not met, means that analysis cannot be done (Hair, Ringle & Sarstedt 2011). PLS-SEM is not bound by these assumptions, and can therefore be used in circumstances where CB-SEM analysis cannot. This does not necessarily make it inferior or less reliable, merely a tool that can be applied in different circumstances.

With specific reference to small sample sizes, the authors note that PLS-SEM is not a “wildcard for estimating complex models with small sample sizes” (Hair, Sarstedt & Ringle

2019), and should be applied with the same careful discretion as any other analysis method. However, PLS-SEM has shown to be able to provide what other analysis methods cannot when the researcher is limited to a small sample size, and has helped to avoid Type 1 errors in such circumstances (Hair, Sarstedt & Ringle 2019).

Hair, Ringle & Sarstedt (2011, 144) give a few “rules of thumb” when it comes to which SEM method should be used. In cases where the goal is to theory test, then CB-SEM should be used, as was the case in Study 1. Where the research is an extension to the existing structural theory, then PLS-SEM can be used. Also, as mentioned before, PLS-SEM allows for use in circumstances where there is a smaller sample size, as was found to be the case in Studies 2 and 3. In these situations, PLS-SEM does have its own minimum requirements, specifically that the sample size should be equal to or larger than ten times the number of structural paths in the model. As the sample size, whilst small, was still greater than 10x the number of structural paths in the model, it was appropriate to use PLS-SEM to analyse the data set.

There are various resources that were referred to as guides through the PLS-SEM process. Hair, Hult, Ringle and Sarstedt wrote one primer and guide on PLS-SEM, for which the 2<sup>nd</sup> edition (published 2017) was used as a reference for the method of doing PLS-SEM. Additionally, as WarpPLS was the software used for the analysis, the guide for that program, written by Kock (2018) was also followed for the analysis of the data sets in this and the following study.

WarpPLS, and PLS-SEM in general, has different measurement and fit statistics to that of AMOS and similar CB-SEM programs. Those fit measures (as defined by Kock, 2018) are as follows:

1. **Average Path Coefficient (APC), Average R-Squared (ARS) and Average Adjusted R-Squared (AARS):** Each of these should be significant at the 0.05 level.
2. **Average Block VIF (AVIF) and Average Full Collinearity VIF (AFVIF):** These measures in their own respective right measure the level of multicollinearity within the model. Both should be reported, and both should be less than 3.3, but less than 5 is acceptable.
3. **Tenenhaus GoF:** This is a measure of the models explanatory power. A model is said to have small explanatory power if  $\geq 0.1$ , medium if  $\geq 0.25$ , and large if  $\geq 0.36$ .
4. **Simpson's Paradox Ratio (SPR):** This measure examines whether there are any "Simpson's Paradoxes" within the model, or potential causality issues within the model. In essence, this is a test as to whether the hypothesised relationships drawn in the model are either implausible or reversed. The SPR should ideally be equal to 1, indicating no instances of causality issues within the model, but is acceptable if greater than 0.7.
5. **R-Squared Contribution Ratio (RSCR):** This measure examines whether there are any negative R-squared effects within the model. This should ideally be equal to one, but is acceptable if above 0.9.
6. **Statistical Suppression Ratio (SSR):** As with the SPR and RSCR, this is another test of potential causal issues within the model. The acceptable level for this measure is greater than or equal to 0.7, meaning that 70% of the paths in a model are free from statistical suppression.
7. **Nonlinear Bivariate Causality Direction Ratio (NLBCDR):** This test is another measure of the hypothesised directions of causality within the model. The acceptable level for this test is equal to or greater than 0.7.

In addition to these tests for the overall measurement model, WarpPLS also tests for the models Composite Reliability and Average Variance Extracted, among other measures for the latent variables within the model. All of these measures and their relevant acceptable thresholds are outlined in Tables 5.6 below and 5.7 on the following page:

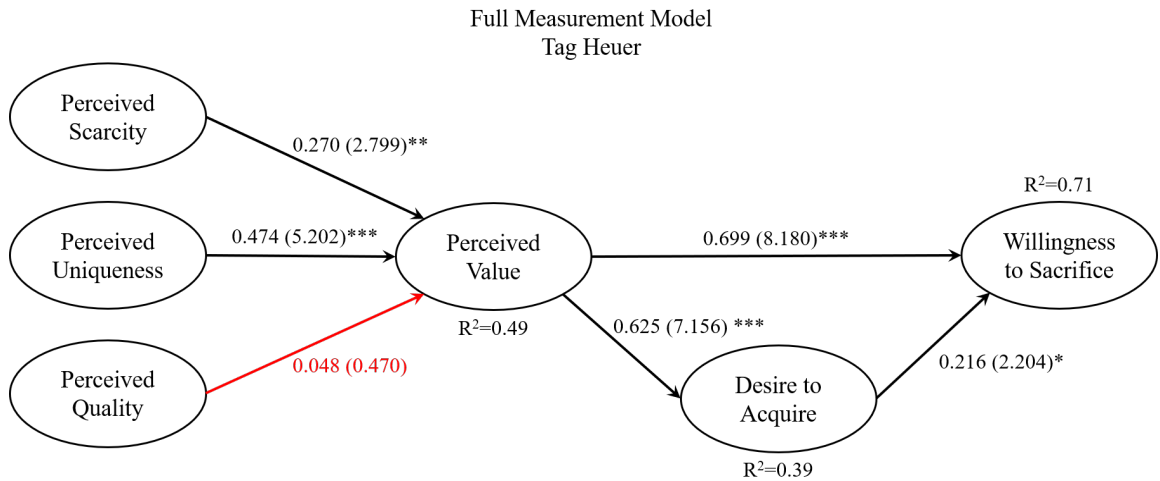
<b>Table 5.6 Model Fit and Quality Indices</b>			
<b>Measure</b>	<b>Description</b>	<b>Tag Heuer (n=92)</b>	<b>Louis Vuitton (n=125)</b>
Average path coefficient (APC)	Should be significant at the 0.05 level	0.389, P<0.001	0.395, P<0.001
Average R-squared (ARS)	Should be significant at the 0.05 level	0.530, P<0.001	0.496, P<0.001
Average adjusted R-squared (AARS)	Should be significant at the 0.05 level	0.519, P<0.001	0.487, P<0.001
Average block VIF (AVIF)	Acceptable if $\leq 5$ , ideally $\leq 3.3$	1.645	1.412
Average full collinearity VIF (AFVIF)	Acceptable if $\leq 5$ , ideally $\leq 3.3$	2.188	1.839
Tenenhaus Goodness-of-Fit (GoF)	Small $\geq 0.1$ , Medium $\geq 0.25$ , Large $\geq 0.36$	0.637	0.602
Sympson's paradox ratio (SPR)	Acceptable if $\geq 0.7$ , ideally = 1	1.000	1.000
R-squared contribution ratio (RSCR)	Acceptable if $\geq 0.9$ , ideally = 1	1.000	1.000
Statistical suppression ratio (SSR)	Acceptable if $\geq 0.7$	1.000	1.000
Nonlinear bivariate causality direction ratio (NLBCDR)	Acceptable if $\geq 0.7$	1.000	1.000

<b>Table 5.7</b>							
<b>Latent Variable Coefficients – Tag Heuer</b>							
<b>Measure</b>	<b>Acceptable Level</b>	<b>P. Scarcity</b>	<b>P. Uniqueness</b>	<b>P. Quality</b>	<b>P. Value</b>	<b>Desire</b>	<b>WTS</b>
<b>R<sup>2</sup></b>	> 0.02				0.488	0.391	0.710
<b>Adjusted R<sup>2</sup></b>	> 0.02				0.471	0.384	0.703
<b>Composite Reliability</b>	>= 0.7	0.953	0.883	0.916	0.965	0.725	0.988
<b>Cronbach's alpha</b>	>= 0.7	0.934	0.735	0.876	0.951	0.243	0.987
<b>AVE</b>	> 0.5	0.836	0.791	0.732	0.872	0.569	0.802
<b>Full Collinearity VIF</b>	< 3.3	1.676	2.754	1.722	2.901	1.984	2.091
<b>Q-Squared</b>	> 0				0.492	0.393	0.693
<b>Latent Variable Coefficients – Louis Vuitton</b>							
<b>Measure</b>	<b>Acceptable Level</b>	<b>P. Scarcity</b>	<b>P. Uniqueness</b>	<b>P. Quality</b>	<b>P. Value</b>	<b>Desire</b>	<b>WTS</b>
<b>R<sup>2</sup></b>	> 0.02				0.389	0.398	0.699
<b>Adjusted R<sup>2</sup></b>	> 0.02				0.374	0.393	0.694
<b>Composite Reliability</b>	>= 0.7	0.935	0.858	0.893	0.935	0.783	0.984
<b>Cronbach's alpha</b>	>= 0.7	0.907	0.669	0.840	0.907	0.447	0.982
<b>AVE</b>	> 0.5	0.784	0.751	0.677	0.782	0.644	0.755
<b>Full Collinearity VIF</b>	< 3.3	1.336	1.605	1.240	2.481	2.060	2.310
<b>Q-Squared</b>	> 0				0.398	0.403	0.687

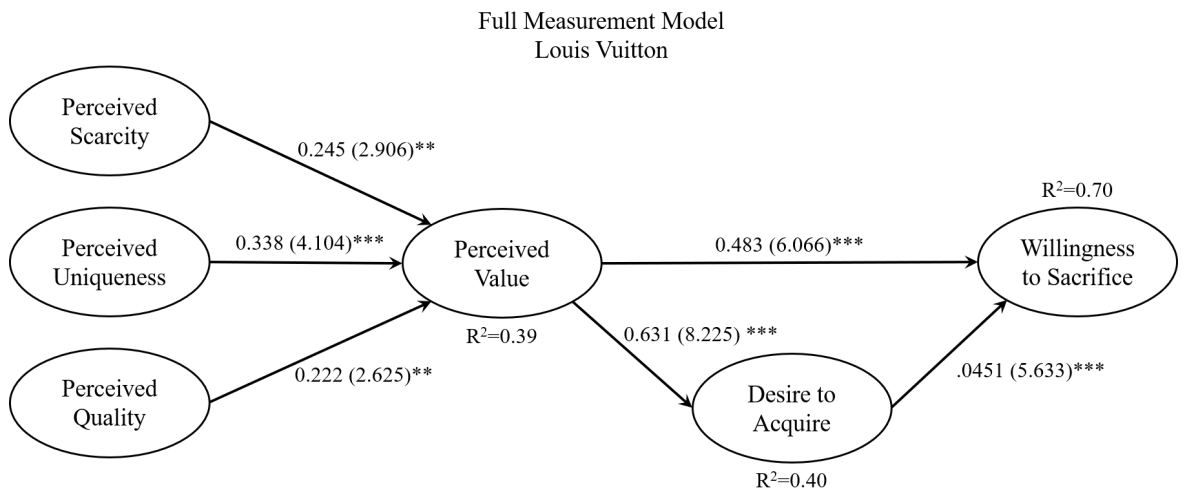


## Full Measurement Model

The full measurement models for both datasets are displayed in Figures 5.3 and 5.4 below, showing the full relationships between each of the variables.



**Figure 5.3 – Structural Model Results for Tag Heuer (\*<0.05, \*\*<0.01, \*\*\*<0.001)**



**Figure 5.4 - Structural Model Results for Louis Vuitton (\*<0.05, \*\*<0.01, \*\*\*<0.001)**

## Hypothesis Testing

### Hypothesis 1: Antecedent Variables for Perceived Value

Hypothesis 1 sought to examine whether Perceived Scarcity, Perceived Uniqueness, and Perceived Quality impacted a consumers Perception of Value. Examining the full measurement model, the relationship between Perceived Quality and Perceived Value was insignificant in the Tag Heuer data set, but was significant in the case of the Louis Vuitton data set. The Perceived Scarcity to Perceived Value and Perceived Uniqueness to Perceived Value was significant across both data sets.

Firstly, examining the Tag Heuer data set. Perceived Scarcity was found to positively and significantly impact on Perceived Value ( $\beta=0.270$ ;  $p=0.003$ ), supporting H1a. Likewise, Perceived Uniqueness was found to positively impact on Perceived Value ( $\beta=0.474$ ;  $p<0.001$ ), supporting H1b. However, Perceived Quality to Perceived Value proved to be insignificant ( $p=0.230$ ), meaning H1c was rejected.

In the case of the Louis Vuitton data set, Perceived Scarcity positively impacted Perceived Value ( $\beta=0.245$ ;  $p=0.002$ ), supporting H1a. Perceived Uniqueness positively impacted Perceived Value ( $\beta=0.338$ ;  $p<0.001$ ), supporting H1b. Perceived Quality was also found to support Perceived Value ( $\beta=0.222$ ;  $p=0.005$ ), supporting H1c.

### Hypothesis 2: Perceived Value to Desire to Acquire

Hypothesis 2 sought to examine whether Perceived Value lead to a consumer Desiring to Acquire an offering. Perceived Value positively and significantly impacted Desire to Acquire in both the Tag Heuer dataset ( $\beta=0.625$ ;  $p<0.001$ ) and the Louis Vuitton dataset ( $\beta=0.631$ ;  $p<0.001$ ), meaning that Hypothesis 2 is supported in both instances.

### Hypothesis 3: Desire to Acquire to Willingness to Sacrifice

Hypothesis 3 sought to examine whether Desire to Acquire lead to a consumer being Willing to Sacrifice for an offering. Desire to Acquire positively and Significantly impacted Willingness to Sacrifice in both the Tag Heuer dataset ( $\beta=0.216$ ;  $p=0.015$ ) and the Louis Vuitton dataset ( $\beta=0.451$ ;  $p<0.001$ ), meaning that Hypothesis 3 is supported in both instances.

#### Hypothesis 4: Perceived Value to Willingness to Sacrifice

Hypothesis 4 sought to examine whether Perceived Value directly lead to a consumer being Willing to Sacrifice for an offering. In the Tag Heuer dataset, the relationship between Perceived Value had a positive and significant impact on Willingness to Sacrifice ( $\beta=0.699$ ;  $p<0.001$ ), supporting the hypothesis. Likewise, in the case of the Louis Vuitton dataset, Perceived Value had a positive and significant impact on Willingness to Sacrifice ( $\beta=0.483$ ;  $p<0.001$ ), meaning that the hypothesis is supported.

#### Hypothesis 5: Mediation Testing

Hypothesis 5 stated that Desire to Acquire acted as a mediator between Perceived Value and Willingness to Sacrifice. As the relationships outlined in Hypotheses 2, 3 and 4 were all positive and significant, Hypothesis 5 could be tested.

To test Hypothesis 5, which sought to examine whether Desire to Acquire played a mediatory role in the relationship between Perceived Value and Willingness to Sacrifice, the 4-step approach proposed by Baron and Kenny (1986) was followed. As the relationships between Perceived Value to Desire to Acquire, Desire to Acquire to Willingness to Sacrifice, and Perceived Value to Willingness to Sacrifice were significant in both data sets, mediation testing could be conducted in both.

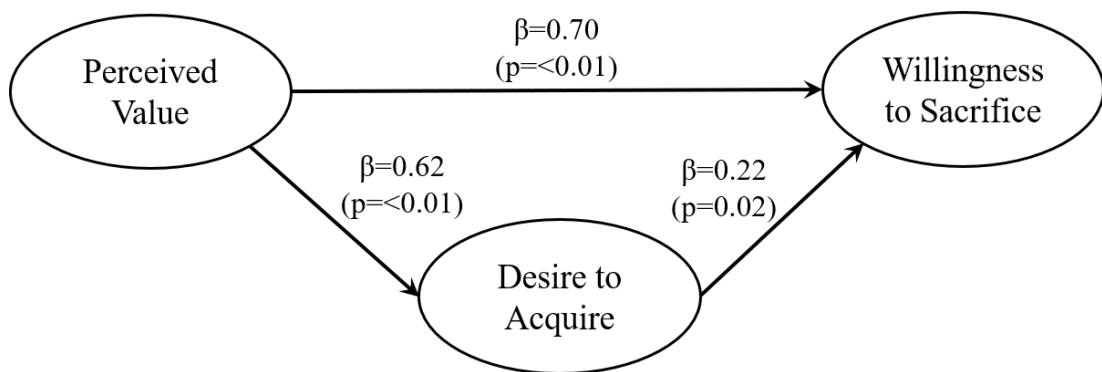
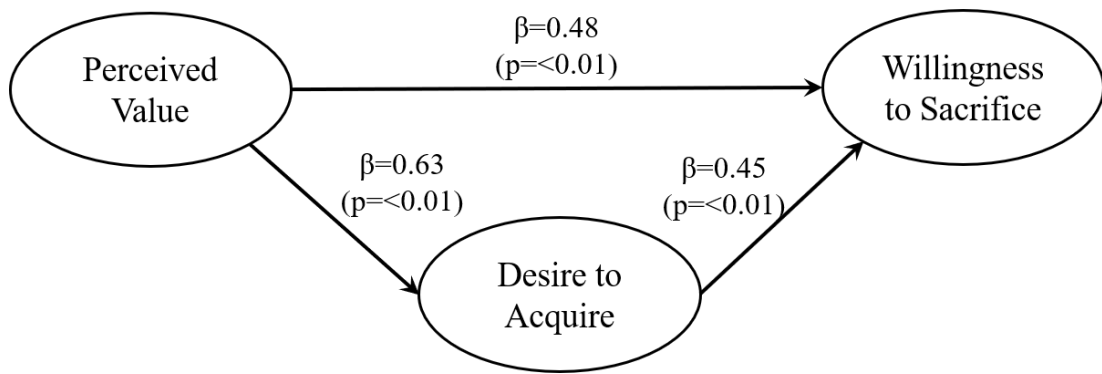


Figure 5.5 – Mediation Analysis for Tag Heuer



**Figure 5.6 – Mediation Analysis for Louis Vuitton**

In both data sets, the relationship between Perceived Value and Willingness to Sacrifice is partially mediated by Desire to Acquire, as there is a reduced, but not entirely removed direct effect when Desire is introduced into the model (shown in Table 5.8 below).

With regard to the Tag Heuer data set, shown in Figure 5.5 above, the standardised regression coefficient between Perceived Value and Desire to Acquire is statistically significant, and likewise between Desire to Acquire and Willingness to Sacrifice. The standardised indirect effect is  $(.62)(.22) = 0.136$ . We can therefore say that the Hypothesis is partially supported for Tag Heuer.

Likewise, for the Louis Vuitton data set, shown in Figure 5.6 above, the standardised regression coefficient between Perceived Value and Desire to Acquire is statistically significant, and likewise between Desire to Acquire and Willingness to Sacrifice. The standardised indirect effect is  $(.63)(.45) = 0.284$ . We can therefore say that the Hypothesis is also partially supported in the case of Louis Vuitton.

The full summary of the mediation testing is shown in Table 5.8:

<b>Table 5.8</b>			
<b>Summary of Mediation: Perceived Value -&gt; Desire to Acquire -&gt; Willingness to Sacrifice (H5)</b>			
<b>Tag Heuer</b>			
	Direct Effect W/O Mediation	Direct Effect With Mediation	Indirect Effect
P. Value -> Desire -> WTS	.082 (p=0.01)	.70 (p=0.01)	(.62)(.22) = 0.136
<b>Louis Vuitton</b>			
	Direct Effect W/O Mediation	Direct Effect With Mediation	Indirect Effect
P. Value-> Desire -> WTS	0.75 (p=0.01)	0.48 (p=0.01)	(.63)(.45) = 0.284

## Summary of Hypothesis Testing

<b>Table 5.9</b>		
<b>Study Two: Supply-Side Scarcity</b>		
	<b>Tag Heuer</b>	<b>Louis Vuitton</b>
<b>H1a:</b> Perceived Scarcity positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1b:</b> Perceived Uniqueness positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1c:</b> Perceived Quality positively influences Perceived Value	<b><i>Not Supported</i></b>	<i>Supported</i>
<b>Hypothesis 2:</b> Perceived Value positively influences Desire to Acquire	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 3:</b> Desire to Acquire positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 4:</b> Perceived Value positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 5:</b> Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<i>Partially Supported*</i>	<i>Partially Supported*</i>
<i>Comments:</i>		
<i>* The relationship between Perceived Value and Willingness to Sacrifice is Partially Mediated by Desire to Acquire, however there is no full mediation.</i>		

## Theoretical, Methodological and Managerial Contributions

### Theoretical Contributions

Hypothesis 1a and 1b are supported in both data sets, as the relationship between Perceived Scarcity and Perceived Value (H1a) and Perceived Uniqueness and Perceived Value (H1b) were both positive and significant. This adds validity to the research conducted by Hwang, et. al. (2013), from which the Perceived Scarcity, Perceived Uniqueness and Perceived Value scales were adapted. For Hypothesis 1a, this adds further validity to the research by Verhallen (1982), Lynn (1989; 1991), Verhallen and Robben (1994; 1995), Eisend (2008), He, et. al (2010), and Hwang, et. al. (2013), which have all established this relationship between Perceived Scarcity and Perceived Value in various contexts previously over a long period of time. For Hypothesis 1b, it builds on the research and discussions from Snyder & Fromkin (1977), Belk (1988), Aaker (1999), Muniz & O'Guinn (2001), Tian, Bearden and Hunter (2001), Kirmani (2009), Bian and Forsythe (2011), and Kapferer (2012), who have all researched Perceived Uniqueness and how it relates to consumer behaviour and perceptions of value.

Hypothesis 1c is not supported in the Tag Heuer data set, but is supported in the Louis Vuitton data set. The explanation as to why this may have occurred, and may initially appear to contradict the wealth of literature that supports the relationship between Perceived Quality and Perceived Value (e.g., Zeithaml 1988; Lichtenstein, Bloch & Black 1988; Dodds, Monroe & Grewal 1991; Teas and Agarwal 2000; Vigneron & Johnson 2004; Stock & Balachander 2005; Miyazaki, Grewal & Goodstein 2005; Baek, Kim and Yu 2010; Quintal & Phau 2014), may well be down to the brand stimuli that were chosen for each, and therefore, raises a discussion that will be looked at in relation to Managerial Implications.

Hypotheses 2, 3 and 5 focus on the intermediary “desire” state that consumers may enter after forming a perception of value, and until they are able to act on this desire. In both the Tag Heuer and the Louis Vuitton data sets, the relationship between Perceived Value and Desire to Acquire are positive and significant, meaning that Hypothesis 2 is supported. Likewise, in

both data sets, the following relationship between Desire to Acquire and Willingness to Sacrifice is positive and significant, meaning Hypothesis 3 is also supported.

Perguini and Bagozzi (2004) are the authors who proposed this “time indefinite” state of desire which consumers can enter and remain in until they are in a position to act on this desire. The findings of this study confirm and build on their initial hypothesis and findings. With regards to how the desire is formed, this study builds on the findings of Huaman-Ramirez and Merunka (2017) who discussed how desires are formed by “the mental construction of rewarding experiences”. In a similar light, it also adds to the findings of Muniz & O’Guinn (2001), Eisend (2008), and Kirmani (2009), who discuss the formation of perceptions and perceived value, and how these perceptions influence the resulting consumer purchasing behaviour.

Additionally, given this study was examining luxury brands and limited editions, the findings of this study build further on the research of Rucker and Galinski (2008) who examined desire in the context of conspicuous consumption, and Lee, Ryu and Chun (2018) who examined desire in the context of limited editions.

Hypothesis 4 was built from the two underpinning theories for the research, the Theory of Psychological Reactance (Brehm 1966; Clee and Wicklund 1980) and the “Scarcity Heuristic” (Verhallen and Robben 1995; Ditto and Jemmott 1989), both of which discuss how consumers will have heightened responses to situations where a perceived freedom is threatened, or “extreme evaluations” of purchase options in situations where scarcity is present. As the hypothesis is supported in this research, the findings of this study build on these key theories of consumer behaviour and extend understanding of how people will react towards limited edition luxury products.

As this is also a scenario where consumers are responding to a perception of value, this supported hypothesis adds further weight to the work of Muniz & O’Guinn (2001), Eisend (2008), and Kirmani (2009), further to the findings from Hypothesis 2 and 3.

### Methodological Contributions

This was the second test examining “Willingness to Sacrifice”, again examining the research framework twice, and both times again proving to be successful. This builds on the findings from Study One, and adds further validation to being able to capture “Willingness to Sacrifice” by using this measure.

With regards to the survey instrument which was utilised within the study, the results from this research once again provide validation to the approach, and also to prior research which helped to inform certain decisions which were made to help form the survey instrument, including further validating the findings from Study One.

The scales which were used to measure Perceived Scarcity, Perceived Uniqueness, Perceived Quality and Perceived Value were adapted from Hwang, et. al. (2013), and the scale items for Desire to Acquire were adapted from Rucker and Galinski (2008). This study adds further validity to those scales.

With regards to the “brochure style” approach to displaying the stimulus, this has been used previously in literature (e.g., Lessne and Notarantonio 1988), and adds support for this approach. Another decision that was made was to not include a price for the stimulus, which was informed by the prior research by Lynn (1989), Vigneron and Johnson (2004) and Kapferer and Bastien (2009), and the findings from this study add further context to these authors respective prior contributions.

### Managerial Contributions

There are two managerial contributions that arise from this study.

Firstly, in relation to the findings from Hypothesis 1c, which stated that there is a positive relationship between Perceived Quality and Perceived Value. This hypothesis is supported in the Louis Vuitton data set, but is unsupported in the Tag Heuer data set as the relationship was insignificant. Not only does this finding potentially contradict a wealth of literature, but also a common conception of the relationship between a products quality and its impact on Perceived Value. However, an explanation presents itself when examining the stimulus for each data set.



As the relationship between Perceived Quality to Perceived Value was significant in the case of the Louis Vuitton data set, but insignificant in the case of Tag Heuer, the emphasis should perhaps be on the significant relationship in the case of Louis Vuitton. Perceived Quality of a limited edition watch in the case of Tag Heuer may be insignificant as a predictor of Perceived Value, as Tag Heuer are watchmakers, and perhaps it is assumed by the respondent it will be of good quality, and therefore does not have a significant bearing on their perception of value. However, for Louis Vuitton, known for making bags and luggage, perception of quality is more important as it is further removed from the usual kinds of products the brand normally produces. In other words, when the product is one that is regularly produced by that brand, quality is not an indicator of perception of value as much as other factors, like its scarcity and its uniqueness, especially when compared to an offering from a brand which does not produce that type of good. This would intuitively make sense, and therefore would not necessarily contradict the wealth of findings in existing marketing literature around this relationship (e.g., Phau and Prendergast 2000), but would add nuance to the way in which the relationship works, within the context of the brand offering the particular good.

Secondly, the mediation testing showed that the introduction of Desire to Acquire reduced, but did not remove, the relationship between Perceived Value and Willingness to sacrifice, meaning that Desire to Acquire acts as a partial mediator of the relationship. This effectively confirms the way in which it was hypothesised consumers would behave – that some would be immediately willing or able to jump directly to purchasing, no matter what the cost, once their perception of value had been established, while others enter an intermediary state until they're able to.

This is a point of difference from Study One, as the hypothesis is (partially) supported in both data sets, compared to only Louis Vuitton from Study One. Given this study is in the context of Limited Supply (as opposed to an overabundance of demand in Study One), what these results suggest is that when the number of units available is known to the consumer, the Reactance effect and/or the impact of the Scarcity Heuristic is stronger. In Study One, where

the scarcity was created by an overabundance of demand, the brand effect appeared to come into greater effect. However, in this study, when it is a defined, limited number of supply, it would appear regardless of the brand, that a portion of consumers will immediately respond to this information. This difference between the two kinds of scarcity of goods could do with further testing, but is an interesting point of comparison between the two to be considered.

## Conclusion

This chapter examined the second of the three studies examining Willingness to Sacrifice behaviour, this time in the context of limited supply for goods. The results of the data analysis show support for the findings from Study One, specifically confirming the overall theoretical framework for how this behaviour is formed and acted on by consumers, and further validating the measure by which Willingness to Sacrifice is being examined.

One of the primary aims of Study Two was to confirm the findings from Study One, specifically that the measurement model and the Willingness to Sacrifice Scale are reliable measures of the phenomena this study is investigating. PLS-SEM excels at testing the power of structural models, and both data sets exceed the ideal measures for reliability and goodness of fit (shown in Tables 5.5 and 5.6 earlier in this chapter), suggesting that the measurement model is a reliable measure, helping to confirm the findings from Study One. This is a substantial result as it adds validity to the findings from Study One, as well as providing a framework from which this behaviour can be examined further.

Chapter Six will examine and discuss the last of the three studies examining this behaviour, extending it further by looking at it within the context of the service industry. The results and findings from Study Three will provide the rounded basis from which this study and Study One can be compared to, and will be the completion of the process by which this Willingness to Sacrifice behaviour is being examined.

# Chapter 6:

## Overview and Analysis of Study Three

### Introduction

This chapter will review the analysis of the “Study Three”, which was the final of the trio of studies designed to comprehensively test the research model, and specifically to test Research Objective 4. The aim of this study was to generalise the findings from Studies One and Two, and focussed on investigating Willingness to Sacrifice within the context of the service industry, looking at Demand and Supply driven scarcity side by side. This study was conducted in relation to the research objectives and hypotheses which were outlined in Chapter 2.

With specific reference to Research Objective 4, this study was to compliment and contrast Studies One and Two, which focussed on goods, by examining Willingness to Sacrifice within the context of services, specifically within the context of a restaurant setting. In the latter part of the survey, two scenarios were posed to the respondent, asking them to consider their behavioural response to when there were reservations available, and when there were no reservations available, and whether they would act in the same way in both cases, or differently.

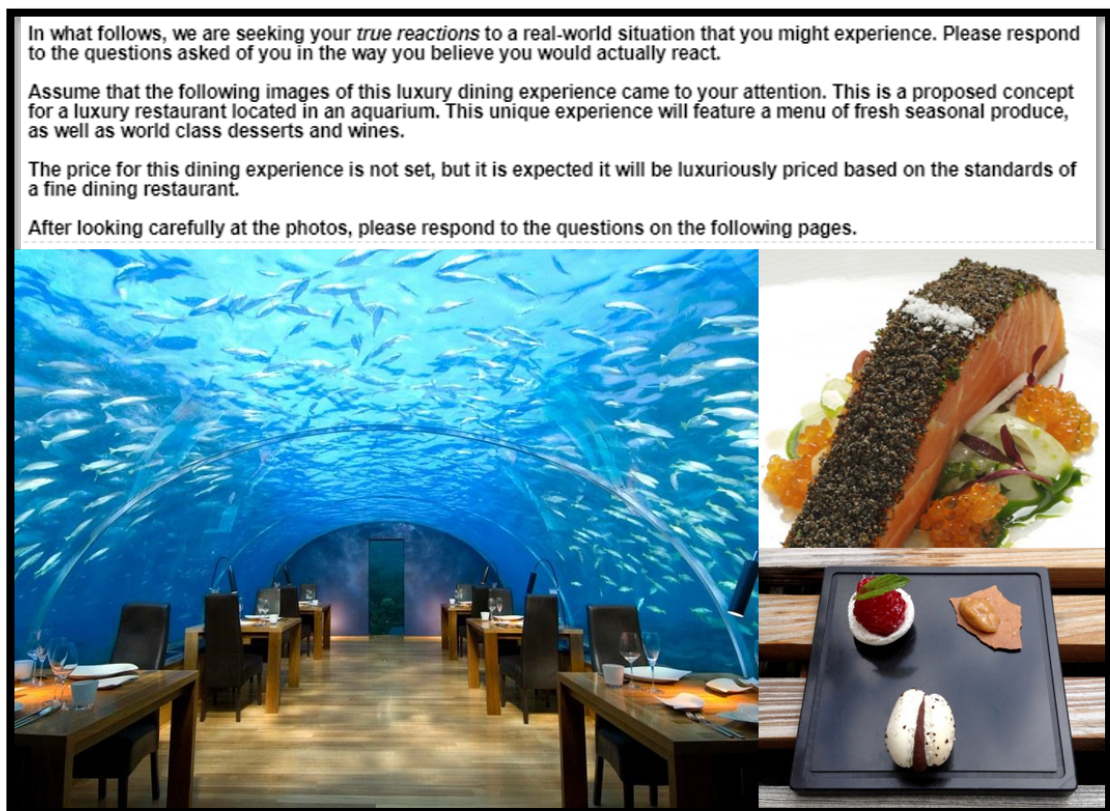
Table 6.1 below outlines the specific combination of factors being examined in this study, in relation to Research Objective 4.

	<b>Study One</b>	<b><u>Study Two</u></b>	<b><u>Study Three</u></b>
<b>Type of Scarcity</b>	<i>Demand</i>	<i><u>Supply</u></i>	<i><u>Demand &amp; Supply</u></i>
<b>Type of Product</b>	<i>Goods</i>	<i><u>Goods</u></i>	<i><u>Services</u></i>
<b>Table 6.1: Summary of research context in each study</b>			

## Preparation of Brands and Product Categories

As with Studies One and Two, a variety of visual stimuli were created to set a basis and context from which the respondents would answer the questions. For Study Three, a slightly different approach needed to be taken than the one that was taken in Studies One and Two. As luxury restaurants are generally “one-off” establishments, it is difficult to select a specific one. As such, a selection of images showing unique décor and a variety of luxury dishes were selected and compiled together to create a fictitious example restaurant that was said to be opening soon in an unspecified location.

The imagery used along with the accompanying explanatory text can be seen below:



*Figure 6.1: Restaurant & Food imagery used in Study Three*

## Demographic Profile

Study Three was conducted via panel data collected through a data collection company. There were 148 usable responses gathered during the data collection process, with a full breakdown of the demographic profile outlined in Table 6.2 on the following page:

<b>Table 6.2</b>			
<b>Luxury Restaurant Experience</b>			
<b>(148/524 - 28.2% RR)</b>			
	<b>Demographic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	Male	63	42.6
	Female	84	56.8
	“Other”	1	.7
	Total	148	100.0
<b>Age</b>	Under 20 Years	12	8.1
	21-34	49	33.1
	35-44	23	15.5
	45-54	23	15.5
	55-64	24	16.2
	65+	17	11.5
	Total	148	100.0
<b>Relationship Status</b>	Single	50	33.8
	In a relationship	25	16.9
	Married	73	49.3
	Total	148	100.0
<b>Occupation</b>	Manager	14	9.5
	Technician/Trades Worker	6	4.1
	Community/Personal Services	1	.7
	Clerical/Administrative	19	12.8
	Sales	4	2.7
	Machinery Operator	1	.7
	Labourer	1	.7
	Student	14	9.5
	Retired	26	17.6
	Other	62	41.9
	Total	148	100.0
<b>Education</b>	High School Certificate	49	33.1
	Bachelor Degree	37	25.0
	Diploma or Advanced Diploma	18	12.2
	Graduate Diploma/Certificate	19	12.8
	Post Graduate Degree	16	10.8
	Other	9	6.1
	Total	148	100.0
<b>Income</b>	Under \$19,999	39	26.4
	\$20,000-\$49,999	44	29.7
	\$50,000-\$99,999	46	31.1
	\$100,000-\$149,999	13	8.8
	\$150,000 and above	6	4.1
	Total	148	100.0

## Statistical Analysis

Both data sets were evaluated in SPSS and WarpPLS. The analysis of both data sets began in SPSS 26 for the Exploratory Factor Analysis, and WarpPLS 6.0 for the evaluation of the measurement model.

### Exploratory Factor Analysis (EFA)

Whilst all of the scales used within this study were adapted from already established scales, to ensure the validity of each measure, reliability testing and factor analysis was conducted on each of the scales used within the study using SPSS. Factor analysis was done using Varimax rotation.

For the last two scales within the data-set (Desire to Acquire and Willingness to Sacrifice), the respondent was asked to answer the questions posed to them twice, considering the question being asked of them in two separate scenarios. The first was under the assumption that reservations were possible, but limited for any given evening. The alternate assumption was that the restaurant did not allow reservations, and that the respondent had to queue to guarantee a place on any given evening. As such, in the tables below, the scales for Desire and WTS are examined under both of those scenarios.

During the reliability analysis, the first item in the Perceived Scarcity scale was removed due to a low loading. All the remaining scales retained all of their items, all were one factor except for Perceived Quality. This scale was a different scale from the one that had been used in the previous two studies, as the previous two focussed on the perceived quality of goods. Within this study, a different scale was adopted from a study that had examined perceived restaurant quality. In that study, there were two factors – Perceived Food Quality and Perceived Atmospheric Quality - and factor analysis in this study showed that they should indeed be split into these two factors in this case as well.

The results for the EFA can be viewed in Tables 6.3-6.5 which are displayed over the following pages:

**Table 6.3 – EFA (Antecedent Variables to Perceived Value)**

<b>Constructs &amp; Items</b>	<b>Factor Loading</b>
<b>Perceived Scarcity</b>	
I think that the availability for this dining experience would be small	Removed
I think that the opportunity to dine at this luxury restaurant would sell out soon	.795
I do not think many people will book this luxury restaurant (R)	.676
I feel that the limited nature of this aquatic dining experience will cause many people to buy	.828
I think the limited supplies caused by the high demand will cause a lot of people to buy	.775
KMO .703; Bartlett's Test of Sphericity .000; Eigenvalue 2.375; Variance Explained 59.386; Cronbach's Alpha ( $\alpha$ ) .770	
<b>Perceived Uniqueness</b>	
I perceive this luxury aquatic dining experience to be highly unique	.848
Experiencing this luxury dining environment would make me feel distinctive	.848
KMO .500; Bartlett's Test of Sphericity .000; Eigenvalue 1.439; Variance Explained 71.933; Cronbach's Alpha ( $\alpha$ ) .610	
<b>Perceived Food Quality</b>	
I perceive this restaurant would serve tasty food	.837
I think this restaurant will offer fresh food	.860
I perceive this restaurant will offer healthy options	.835
The food presentation is visually attractive	.815
KMO .779; Bartlett's Test of Sphericity .000; Eigenvalue 2.800; Variance Explained 70.005; Cronbach's Alpha ( $\alpha$ ) .851	
<b>Perceived Atmosphere Quality</b>	
This restaurant's decoration is impressive	.922
This restaurant's interior design is appealing	.937
This restaurant's atmosphere is luxurious	.898
KMO .743; Bartlett's Test of Sphericity .000; Eigenvalue 2.534; Variance Explained 84.465; Cronbach's Alpha ( $\alpha$ ) .907	
<b>Perceived Value</b>	
This watch is good value for money.	.889
The expected price for this watch is acceptable.	.916
This watch is considered to be a good buy.	.888
This watch appears to be a good bargain.	.826
KMO: .835; Bartlett's Test of Sphericity .000; Eigenvalue 3.100; Variance Explained 77.495; Cronbach's Alpha ( $\alpha$ ) .903	

**Table 6.4 – EFA Willingness to Sacrifice – Reservations**

<b>Constructs &amp; Items</b>	<b>Factor Loading</b>
<b>Willingness to Sacrifice - Reservations</b>	
I am willing to pay whatever it takes to have this luxury dining experience	.644
A high price for this luxury dining experience is not justified	.631
I would pay a premium to guarantee I obtain this luxury dining experience	.679
Even if this luxury dining experience was more expensive than I expected, it would be worth paying extra for	.691
I would purchase this luxury dining experience, even if the higher price of this aquatic restaurant means I cannot afford other things	.782
I would wait in line ahead of the opening to make sure I could purchase this luxury dining experience	.741
I would not queue for this luxury dining experience if it meant missing other desirable activities	.641
I would stay up all night to obtain this luxury dining experience	.712
Any discomfort I felt obtaining this luxury dining experience would be worth it	.791
It would be better for me to be uncomfortable, than to miss out on getting this luxury dining experience.	.789
I would wait outside for this luxury dining experience even if the weather was terrible	.705
I would obtain this luxury dining experience even if it meant giving up sleep to get it	.775
I would not give up my place in a queue for this luxury dining experience even if it meant I was unable to enjoy my day	.643
I would do anything to make sure I didn't miss out on this luxury dining experience	.836
I would give up anything to make sure I obtained this luxury dining experience	.836
In general, I perceive I would give up a lot to get this luxury dining experience	.719
It is worth giving up more than I would for other luxury dining experiences to get this luxury dining experience	.818
This luxury dining experience is difficult to obtain, but worth giving up a lot to have it	.832
KMO .929; Bartlett's Test of Sphericity .000; Eigenvalue 9.865; Variance Explained 54.806; Cronbach's Alpha ( $\alpha$ ) .951	



**Table 6.5 Willingness to Sacrifice – No Reservations**

<b>Constructs &amp; Items</b>	<b>Factor Loading</b>
<b>Willingness to Sacrifice – No Reservations</b>	
I am willing to pay whatever it takes to have this luxury dining experience	.695
A high price for this luxury dining experience is not justified	.552
I would pay a premium to guarantee I obtain this luxury dining experience	.686
Even if this luxury dining experience was more expensive than I expected, it would be worth paying extra for	.722
I would purchase this luxury dining experience, even if the higher price of this aquatic restaurant means I cannot afford other things	.776
I would wait in line ahead of the opening to make sure I could purchase this luxury dining experience	.705
I would not queue for this luxury dining experience if it meant missing other desirable activities	.697
I would stay up all night to obtain this luxury dining experience	.749
Any discomfort I felt obtaining this luxury dining experience would be worth it	.799
It would be better for me to be uncomfortable, than to miss out on getting this luxury dining experience.	.807
I would wait outside for this luxury dining experience even if the weather was terrible	.746
I would obtain this luxury dining experience even if it meant giving up sleep to get it	.823
I would not give up my place in a queue for this luxury dining experience even if it meant I was unable to enjoy my day	.702
I would do anything to make sure I didn't miss out on this luxury dining experience	.830
I would give up anything to make sure I obtained this luxury dining experience	.833
In general, I perceive I would give up a lot to get this luxury dining experience	.748
It is worth giving up more than I would for other luxury dining experiences to get this luxury dining experience	.813
This luxury dining experience is difficult to obtain, but worth giving up a lot to have it	.812
KMO .930; Bartlett's Test of Sphericity .000; Eigenvalue 10.207; Variance Explained 56.704; Cronbach's Alpha ( $\alpha$ ) .954	

### WarpPLS Analysis

As discussed in Chapter 3, WarpPLS was chosen to analyse the measurement model, for two reasons. Firstly, PLS-SEM is known to excel when it comes to measuring and evaluating the strength of causal relationships. As the research model is made up of causal relationships, a PLS-SEM approach was selected over a CB-SEM approach as it would assist with the evaluation of the strength of the full measurement model. Furthermore, as one of the main aims of this study was to confirm the results from the first two studies, PLS-SEM is arguably more appropriate for this than staying with CB-SEM. Secondly, PLS-SEM has an advantage over CB-SEM in its ability to be able to work effectively with data sets that have small sample sizes. As the data collection for this study suffered from a poor response rate, PLS-SEM enabled analysis of the data set in circumstances where CB-SEM programs like AMOS would be unable to function.

PLS-SEM has, at times, been unfavourably viewed by some scholars and reviewers. It is perhaps judged to be less rigorous and therefore less suitable for examining relationships within the measurement model (Hair, Ringle & Sarstedt 2011). However, this view most likely has arisen due to a lack of familiarity with the PLS-SEM approach and background, and when applied properly, PLS-SEM has various benefits over the more traditionally used CB-SEM methods, and in fact, PLS-SEM can provide more robust estimations of the structural model (Hair, Ringle & Sarstedt 2011).

One of the limitations of CB-SEM is that it relies on a very rigid set of requirements that need to be fulfilled for it to work – one of those requirements being a minimum sample size threshold that, if not met, means that analysis cannot be done (Hair, Ringle & Sarstedt 2011). PLS-SEM is not bound by these assumptions, and can therefore be used in circumstances where CB-SEM analysis cannot. This does not necessarily make it inferior or less reliable, merely a tool that can be applied in different circumstances.

With specific reference to small sample sizes, the authors note that PLS-SEM is not a “wildcard for estimating complex models with small sample sizes” (Hair, Sarstedt & Ringle

2019), and should be applied with the same careful discretion as any other analysis method. However, PLS-SEM has shown to be able to provide what other analysis methods cannot when the researcher is limited to a small sample size, and has helped to avoid Type 1 errors in such circumstances (Hair, Sarstedt & Ringle 2019).

Hair, Ringle & Sarstedt (2011, 144) give a few “rules of thumb” when it comes to which SEM method should be used. In cases where the goal is to theory test, then CB-SEM should be used, as was the case in Study 1. Where the research is an extension to the existing structural theory, then PLS-SEM can be used. Also, as mentioned before, PLS-SEM allows for use in circumstances where there is a smaller sample size, as was found to be the case in Studies 2 and 3. In these situations, PLS-SEM does have its own minimum requirements, specifically that the sample size should be equal to or larger than ten times the number of structural paths in the model. As the sample size, whilst small, was still greater than 10x the number of structural paths in the model, it was appropriate to use PLS-SEM to analyse the data set.

There are various resources that were referred to as guides through the PLS-SEM process. Hair, Hult, Ringle and Sarstedt wrote one primer and guide on PLS-SEM, for which the 2<sup>nd</sup> edition (published 2017) was used as a reference for the method of doing PLS-SEM. Additionally, as WarpPLS was the software used for the analysis, the guide for that program, written by Kock (2018) was also followed for the analysis of the data sets in this and the following study.

WarpPLS, and PLS-SEM in general, has different measurement and fit statistics to that of AMOS and similar CB-SEM programs. Those fit measures (as defined by Kock, 2017) are as follows:

1. **Average Path Coefficient (APC), Average R-Squared (ARS) and Average Adjusted R-Squared (AARS):** Each of these should be significant at the 0.05 level.
2. **Average Block VIF (AVIF) and Average Full Collinearity VIF (AFVIF):** These measures in their own respective right measure the level of multicollinearity within the model. Both should be reported, and both should be less than 3.3, but less than 5 is acceptable.
3. **Tenenhaus GoF:** This is a measure of the models explanatory power. A model is said to have small explanatory power if  $\geq 0.1$ , medium if  $\geq 0.25$ , and large if  $\geq 0.36$ .
4. **Simpson's Paradox Ratio (SPR):** This measure examines whether there are any "Simpson's Paradoxes" within the model, or potential causality issues within the model. In essence, this is a test as to whether the hypothesised relationships drawn in the model are either implausible or reversed. The SPR should ideally be equal to 1, indicating no instances of causality issues within the model, but is acceptable if greater than 0.7.
5. **R-Squared Contribution Ratio (RSCR):** This measure examines whether there are any negative R-squared effects within the model. This should ideally be equal to one, but is acceptable if above 0.9.
6. **Statistical Suppression Ratio (SSR):** As with the SPR and RSCR, this is another test of potential causal issues within the model. The acceptable level for this measure is greater than or equal to 0.7, meaning that 70% of the paths in a model are free from statistical suppression.
7. **Nonlinear Bivariate Causality Direction Ratio (NLBCDR):** This test is another measure of the hypothesised directions of causality within the model. The acceptable level for this test is equal to or greater than 0.7.

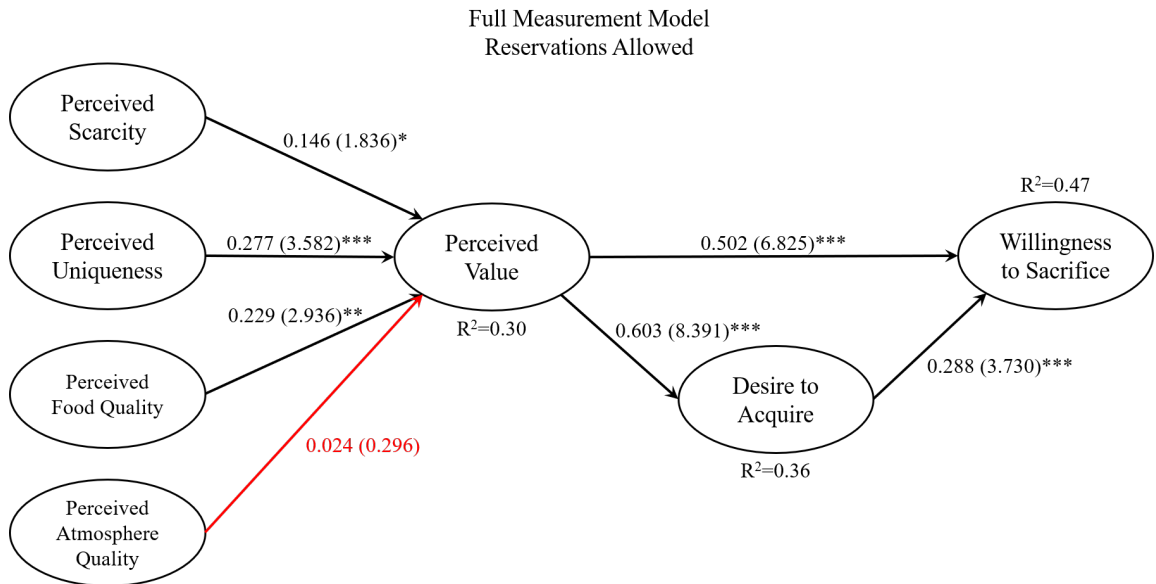
With these fit measures now outlined, Tables 6.6-6.8 show the results of the measurement model analysis:

<b>Table 6.6</b>			
<b>Model Fit and Quality Indices</b>			
<b>Measure</b>	<b>Description</b>	<b>Reservations</b>	<b>No Reservations</b>
Average path coefficient (APC)	Should be significant at the 0.05 level	0.295, P<0.001	0.275, P<0.001
Average R-squared (ARS)	Should be significant at the 0.05 level	0.376, P<0.001	0.318, P<0.001
Average adjusted R-squared (AARS)	Should be significant at the 0.05 level	0.365, P<0.001	0.308, P<0.001
Average block VIF (AVIF)	Acceptable if $\leq 5$ , ideally $\leq 3.3$	1.561	1.531
Average full collinearity VIF (AFVIF)	Acceptable if $\leq 5$ , ideally $\leq 3.3$	1.737	1.639
Tenenhaus Goodness-of-Fit (GoF)	Small $\geq 0.1$ , Medium $\geq 0.25$ , Large $\geq 0.36$	0.512	0.469
Sympson's paradox ratio (SPR)	Acceptable if $\geq 0.7$ , ideally = 1	1.000	1.000
R-squared contribution ratio (RSCR)	Acceptable if $\geq 0.9$ , ideally = 1	1.000	1.000
Statistical suppression ratio (SSR)	Acceptable if $\geq 0.7$	1.000	1.000
Nonlinear bivariate causality direction ratio (NLBCDR)	Acceptable if $\geq 0.7$	1.000	1.000

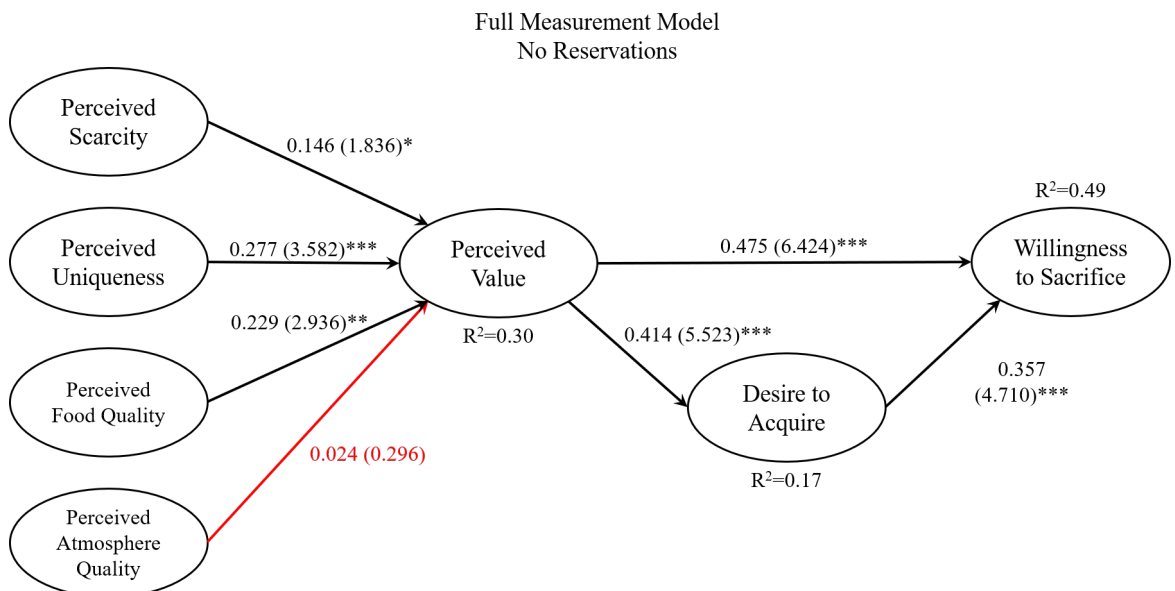
<b>Table 6.7</b>								
<b>Latent Variable Coefficients – Reservations</b>								
	<b>Description</b>	<b>P. Scarcity</b>	<b>P. Uniqueness</b>	<b>P. Food Quality</b>	<b>P. Atmos Quality</b>	<b>P. Value</b>	<b>Desire</b>	<b>WTS</b>
<b>R<sup>2</sup></b>	> 0.02					0.296	0.363	0.468
<b>Adjusted R<sup>2</sup></b>	> 0.02					0.276	0.359	0.461
<b>Composite Reliability</b>	>= 0.7	0.853	0.837	0.903	0.942	0.932	0.819	0.956
<b>Cronbach's alpha</b>	>= 0.7	0.770	0.610	0.857	0.908	0.903	0.558	0.951
<b>AVE</b>	> 0.5	0.594	0.719	0.700	0.845	0.775	0.693	0.548
<b>Full Collinearity VIF</b>	< 3.3	1.391	1.882	1.696	1.893	1.885	1.763	1.646
<b>Q-Squared</b>	> 0					0.299	0.357	0.465
<b>Table 6.8</b>								
<b>Latent Variable Coefficients – No Reservations</b>								
	<b>Description</b>	<b>P. Scarcity</b>	<b>P. Uniqueness</b>	<b>P. Food Quality</b>	<b>P. Atmos Quality</b>	<b>P. Value</b>	<b>Desire</b>	<b>WTS</b>
<b>R<sup>2</sup></b>	> 0.02					0.296	0.171	0.488
<b>Adjusted R<sup>2</sup></b>	> 0.02					0.276	0.166	0.481
<b>Composite Reliability</b>	>= 0.7	0.853	0.837	0.903	0.942	0.932	0.781	0.959
<b>Cronbach's alpha</b>	>= 0.7	0.770	0.610	0.857	0.908	0.903	0.438	0.954
<b>AVE</b>	> 0.5	0.594	0.719	0.700	0.845	0.775	0.640	0.567
<b>Full Collinearity VIF</b>	< 3.3	1.318	1.876	1.671	1.876	1.703	1.362	1.669
<b>Q-Squared</b>	> 0					0.299	0.171	0.483

## Full Measurement Model

The full measurement models for the dataset are displayed in Figures 6.2 and 6.3 below. Note that the first portion of the models will be identical, and the latter half of the model showing the difference between the Reservations and No Reservations scenarios:



**Figure 6.2 – Structural Model Results – Reservations Allowed**  
(\*<0.05, \*\*<0.01, \*\*\*<0.001)



**Figure 6.3 – Structural Model Results – No Reservations**  
(\*<0.05, \*\*<0.01, \*\*\*<0.001)

## Hypothesis Testing

### Hypothesis 1: Antecedent Variables for Perceived Value

Hypothesis 1 sought to examine whether Perceived Scarcity, Perceived Uniqueness, and Perceived Quality impacted a consumers Perception of Value. In contrast to Studies One and Two, Perceived Quality was split into Perceived Food Quality and Perceived Atmosphere Quality, thus adding a “H1d” for this study alone. Additionally, in contrast to Studies One and Two, there was only one version of the survey, and therefore only one set of relationships to model in this instance.

Examining the full measurement model, the relationship between Perceived Atmosphere Quality and Perceived Value was insignificant, but the remaining antecedent variables were all significant.

Perceived Scarcity was found to positively and significantly impact on Perceived Value ( $\beta=0.146$ ;  $p=0.034$ ), supporting H1a. Likewise, Perceived Uniqueness was found to positively impact on Perceived Value ( $\beta=0.227$ ;  $p<0.001$ ), supporting H1b. Furthermore, Perceived Food Quality was found to positively and significantly impact Perceived Value ( $\beta=0.229$ ;  $p=0.002$ ), supporting H1c.

However, as mentioned above, Perceived Atmosphere Quality to Perceived Value proved to be insignificant ( $p=0.384$ ), meaning H1d was rejected.

**(Note:** It is at this point in the study that the side-by-side comparison is introduced).

### Hypothesis 2: Perceived Value to Desire to Acquire

Hypothesis 2 sought to examine whether Perceived Value lead to a consumer Desiring to Acquire an offering.

Perceived Value positively and significantly impacted Desire to Acquire in both the scenarios; for Reservations ( $\beta=0.603$ ;  $p<0.001$ ) and No Reservations ( $\beta=0.434$ ;  $p<0.001$ ). We can therefore conclude that Hypothesis 2 is supported in both instances.



### Hypothesis 3: Desire to Acquire to Willingness to Sacrifice

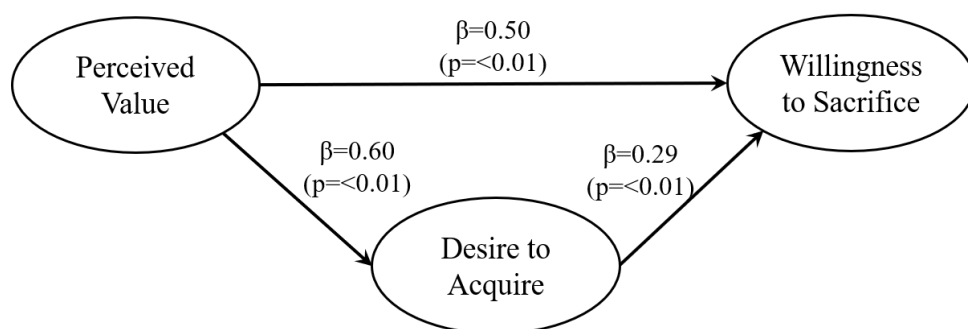
Hypothesis 3 sought to examine whether Desire to Acquire lead to a consumer being Willing to Sacrifice for an offering. Desire to Acquire positively and Significantly impacted Willingness to Sacrifice in both the Reservations scenario ( $\beta=0.502$ ;  $p=0.015$ ) and the Louis Vuitton dataset ( $\beta=0.475$ ;  $p<0.001$ ), meaning that Hypothesis 3 is supported in both instances.

### Hypothesis 4: Perceived Value to Willingness to Sacrifice

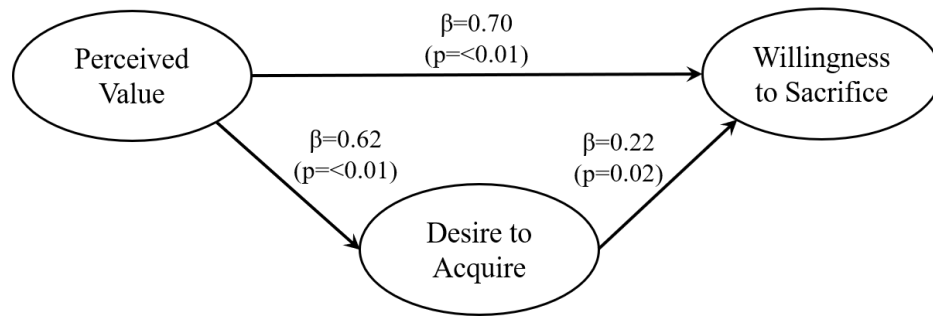
Hypothesis 4 sought to examine whether Perceived Value directly lead to a consumer being Willing to Sacrifice for an offering. In the Reservations scenario, the relationship between Perceived Value had a positive and significant impact on Willingness to Sacrifice ( $\beta=0.228$ ;  $p<0.001$ ), supporting the hypothesis. Likewise, in the case of the Louis Vuitton dataset, Perceived Value had a positive and significant impact on Willingness to Sacrifice ( $\beta=0.357$ ;  $p<0.001$ ), meaning that the hypothesis is supported.

### Hypothesis 5: Mediation Testing

To test Hypothesis 5, which sought to examine whether Desire to Acquire played a mediatory role in the relationship between Perceived Value and Willingness to Sacrifice, the 4-step approach proposed by Baron and Kenny (1986) was followed. As the relationships between Perceived Value to Desire to Acquire, Desire to Acquire to Willingness to Sacrifice, and Perceived Value to Willingness to Sacrifice were significant in both data sets, mediation testing could be conducted in both.



*Figure 6.4 – Mediation Analysis for the Reservations Allowed scenario*



**Figure 6.5 – Mediation Analysis for the No Reservations scenario**

In both data sets, the relationship between Perceived Value and Willingness to Sacrifice is partially mediated by Desire to Acquire, as there is a reduced, but not entirely removed direct effect when Desire is introduced into the model (shown in Table 6.11 below).

With regard to the scenario allowing for Reservations to be made, shown in Figure 6.4 above, the standardised regression coefficient between Perceived Value and Desire to Acquire is statistically significant, and likewise between Desire to Acquire and Willingness to Sacrifice. The standardised indirect effect is  $(.60)(.29) = 0.174$ . We can therefore say that the Hypothesis is partially supported for Reservations.

Likewise, for the No Reservations scenario, shown in Figure 6.5 above, the standardised regression coefficient between Perceived Value and Desire to Acquire is statistically significant, and likewise between Desire to Acquire and Willingness to Sacrifice. The standardised indirect effect is  $(.41)(.36) = 0.148$ . We can therefore say that the Hypothesis is also partially supported in the case of Louis Vuitton.

The full summary of the mediation testing is shown in Table 6.9:

<b>Table 6.9</b>			
<b>Summary of Mediation: Perceived Value -&gt; Desire to Acquire -&gt; Willingness to Sacrifice (H5)</b>			
<b>Tag Heuer</b>			
<i>Reservations Allowed</i>	Direct Effect W/O Mediation	Direct Effect With Mediation	Indirect Effect
P. Value -> Desire -> WTS	0.63 (p=0.01)	0.50(p=0.01)	$(.60)(.29) = 0.174$
<b>Louis Vuitton</b>			
<i>No Reservations</i>	Direct Effect W/O Mediation	Direct Effect With Mediation	Indirect Effect
P. Value -> Desire -> WTS	0.62 (0.01)	0.47 (p=0.01)	$(.41)(.36) = 0.148$

## Summary of Hypothesis Testing

<b>Table 6.10</b>		
<b>Study Three: Services: Demand and Supply Scarcity</b>		
	<b>Reservations</b>	<b>No Reservations</b>
<b>H1<sub>a</sub></b> : Perceived Scarcity positively influences Perceived Value	<i>Supported</i>	
<b>H1<sub>b</sub></b> : Perceived Uniqueness positively influences Perceived Value	<i>Supported</i>	
<b>H1<sub>c</sub></b> : Perceived Food Quality positively influences Perceived Value	<i>Supported</i>	
<b>H1<sub>d</sub></b> : Perceived Atmospheric Quality positively influences Perceived Value	<i>Not Supported</i>	
<b>Hypothesis 2</b> : Perceived Value positively influences Desire to Acquire	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 3</b> : Desire to Acquire positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 4</b> : Perceived Value positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 5</b> : Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<i>Partially Supported*</i>	<i>Partially Supported*</i>
<i>Comments:</i>		
<i>* The relationship between Perceived Value and Willingness to Sacrifice is Partially Mediated by Desire to Acquire, however there is no full mediation.</i>		

## Theoretical, Methodological and Managerial Contributions

### Theoretical Contributions

#### Hypothesis 1

Study Three had an alteration to Hypothesis 1 compared to the first two studies, given the nature of the product category in this case was services, rather than goods. This therefore meant that “H1c” which initially looked at the relationship between Perceived Quality to Perceived Value in the first two studies was split into two further categories, “Perceived Food Quality” and “Perceived Atmospheric Quality”, with each of these factors and their relationship with Perceived Value becoming H1c and H1d, respectively.

With regards to these two new antecedent factors to Perceived Value, one factor was insignificant – Perceived Atmospheric Quality is not a predictor for a consumers Perception of Value, which means that H1d is not supported. Given this finding, and that this comes from a revision to the hypotheses used in the first two studies, it is worthwhile going back to the study that the scale items and hypotheses were adapted from, and the comments that authors Chen, Peng and Hung (2015) make about their initial findings in this respect.

In the original research, Chen, Peng and Hung (2015) had the following to say in their findings relating to this particular construct.

*“Interestingly, the results of this study do not support the contention that inferior atmospherics contribute to diners negative emotions... Therefore it is less likely that atmospherics of a luxury restaurant will be inferior to the point where diners will feel angry and disgusted” (Chen, Peng & Hung 2015, 253).*

They go on to comment:

*“...for diners with high levels of expectation, atmospherics do not affect their positive emotions... this research suggests that this insignificant relationship exists because these diners may have overinflated expectations of a restaurants décor and aesthetics. This finding is further influenced by the common perception that luxury restaurants atmospherics should be superior to other types of restaurants. Based on the above inferences, diners with high levels of expectation may not experience positive emotions because a restaurants atmospherics are good” (Chen, Peng & Hung 2015, 254).*

Whilst this study doesn't have the same focus on positive and negative emotions as the original, it is fair to say, given the shared context of the luxury restaurant setting, and the additional context of this being a limited edition type experience, that the consumers in this study are experiencing what Chen, Peng and Hung would define as “high levels of expectation”. Given their findings that poor atmospherics will not contribute to negative emotions, and that secondly for consumers with high expectation atmospherics do not affect positive emotions, it is easy to conclude why in this study the relationship between Perceived Atmosphere Quality and Perceived Value is insignificant. The circumstances are closely related, and as such, it is unsurprising that the outcome is similar. Indeed, the findings in this study support the findings

of Chen, Peng and Hung (2015), in showing that consumers desiring a limited edition experience do not perceive that atmospherics are important on their perception of value. As such, the findings of this study are consistent with the findings of existing research, and help to answer Chen, Peng & Hung's calls for further research to validate these findings.

As with Perceived Atmospheric Quality, it is important to go back to the original research conducted by Chen, Peng and Hung (2015) from which the Perceived Food Quality scale, and the revised H1c, was adapted. In this research, the findings showed that the relationship between Perceived Food Quality to Perceived Value is positive and significant, which therefore means that in this study, H1c is supported. This result, as with the case for Perceived Atmospheric Quality, should be compared to the original findings.

In the 2015 study, Chen, Peng and Hung commented thus:

*“Second... this study finds that superior food quality does not contribute to diners' positive emotions... However inferior food quality may cause diners to have negative emotions. As documented in previous hospitality management studies, fresh and healthy food is a standard requirement of restaurants... Therefore, diners will not be pleased simply because the food is fresh... Thus it is reasonable for diners to experience negative emotions if the food and beverages are poorly presented”* (Chen, Peng & Hung 2015, 253).

The comment that inferior quality food will have a negative impact is important when it comes to the findings of this study. It was found by the Chen, Peng and Hung (2015) that diners placed importance on a certain minimum standard of quality when dining in an establishment that advertises itself as being better than other food providers. That the food is good shouldn't be something necessarily surprising – that is the expectation – and as such if this expectation isn't met, then the consumer will be unhappy.

The findings from the original study are easily translatable to this study, and consistent with this study's findings. The significant relationship between Perceived Food Quality and Perceived Value shows that potential diners at a luxury restaurant will expect that the food quality is good, and as such, is naturally related to their perception of whether or not they are receiving value in this experience. There is a managerial implication that arises from this, which is discussed later.

With regards to H1a and H1b, they remain unchanged from the first two studies. As mentioned, the relationship between Perceived Uniqueness and Perceived Value was positive and significant, meaning H1b was supported, and likewise Perceived Scarcity to Perceived Value was significant, so H1a is also supported within the data set. As each of these respective variables and relationships proved reliable and significant, these findings build further on the research of Hwang, et. al. (2013), from which the scales used to measure these factors were adapted.

With regards to H1a, the significant result and supported hypothesis builds on the findings of Verhallen (1982), Lynn (1989; 1991), Verhallen and Robben (1994; 1995), Eisend (2008), He, et. al (2010), and Hwang, et. al. (2013), who respectively have each hypothesised and established the relationship between Perceived Scarcity and Perceived Value over a significant period of time.

As for H1b, the significant result and supported hypothesis furthers the research and discussions from Snyder & Fromkin (1977), Belk (1988), Aaker (1999), Muniz & O'Guinn (2001), Tian, Bearden and Hunter (2001), Kirmani (2009), Bian and Forsythe (2011), and Kapferer (2012), who have all researched Perceived Uniqueness in a variety of contexts, and how it relates to consumer behaviour and perceptions of value.

It is also worth noting at this point, that the relationships between Perceived Scarcity and Perceived Value, and Perceived Uniqueness and Perceived Value, have been significant in both data sets for Study One and Two, as well as in the context of services in this Third Study.

This makes it one of the most robust findings and contributions to literature when all three studies are looked at side by side, and thoroughly establishes these relationships within the context of scarce luxury products that has been the backdrop for all three studies. Whilst the relationship between Perceived Quality and Perceived Value has had more mixed findings within each of the three studies, especially as in this study the hypothesis was altered given the nature of the product being examined, the findings overall are valuable and understandable in the respective contexts and do not contradict the existing literature on the subject, thus adding further understanding, insight and nuance to this established field within the literature.

### Hypotheses 2, 3 & 5

Hypotheses 2, 3 and 5 all remained the same as they were in the previous studies. These hypotheses were founded on the idea proposed by Perugini and Bagozzi (2004) that consumers can enter a “time indefinite” state of “desire” which consumers will remain in until they are in such a position to act on this desire.

The findings of this study build on this initial proposal of Perugini and Bagozzi (2004). It also adds further weight to the discussion of Huaman-Ramirez and Merunka (2017), who outlined the way in which desires are formed based on imagining rewarding experiences. Likewise, it also furthers the understanding of the research done by Muniz & O’Guinn (2001), Eisend (2008), and Kirmani (2009), who each discussed the formation of perceptions and perceived value, and how these perceptions go on to influence the resulting consumer purchasing behaviour.

These hypotheses were also formed based on the research of Rucker and Galinski (2008) about desire in relation to conspicuous consumption, and Lee, Ryu and Chun (2018) who examined desire in the context of limited editions. These respective studies were both done mostly in the context of goods, however the findings of this study adds some further context to the behaviour of consumers when it comes to obtaining an experience in the service industry under various limited circumstances, with the stimulus presented being luxurious in nature. As such, it

somewhat provides a point of comparison to these original studies from which further understanding can be gained.

#### Hypothesis 4

Hypothesis 4 was also unchanged from the first two studies. The support for Hypothesis 4 means the findings of this study builds further on the two underpinning theories to the research, adding to the initial findings highlighted by Brehm (1966) and Clee and Wicklund (1988) in relation to Reactance Theory, as well as the findings of Verhallen and Robben (1995) and Ditto and Jemmott (1989) who conceptualised the concept of the “Scarcity Heuristic”.

Like Hypotheses 2 and 3, as this Hypothesis looked at the behavioural response of consumers from their perception of value, this result builds further on the research of Muniz & O’Guinn (2001), Eisend (2008), and Kirmani (2009), who all respectively have examined the role perceptions play in the behavioural response of consumers.

#### Methodological Contributions

This was the third and final study examining “Willingness to Sacrifice”, this time examining it within the context of services. The findings from Study Three validate the research framework in a new product category, extending it into services, and in a different context, looking at restaurants, and looking at demand and supply side scarcity within the same study. The research framework has once again proved to be successful, extending the findings from Studies One and Two which looked at goods, and proving this research framework is robust in a number of different contexts.

The scales which were used to measure Perceived Scarcity, Perceived Uniqueness and Perceived Value were adapted from Hwang, et. al. (2013), the Perceived Food Quality and Perceived Atmosphere scales was adapted from Chen, Peng & Hung (2015) and the scale items for Desire to Acquire were adapted from Rucker and Galinski (2008). This study adds further validity to those scales.

With regards to the “brochure style” approach to displaying the stimulus, this has been used previously in literature (e.g., Lessne and Notarantonio 1988), and adds support for this



approach. Another decision that was made was to not include a price for the stimulus, which was informed by the prior research by Lynn (1989), Vigneron and Johnson (2004) and Kapferer and Bastien (2009), and the findings from this study add further context to these authors respective prior contributions.

### Managerial Contributions

There are two managerial contributions that arise from the findings of this study.

The first comes from the aforementioned discussion around the impact of Perceived Food Quality and Perceived Atmosphere Quality on Perceived Value. Intuitively, the fact that food quality matters, but atmospheric quality does not, makes sense. Whilst we may admire the atmospherics at a luxury restaurant, it is not the main reason one goes to dine there. Additionally, whilst atmospherics may be flashy and eye catching, if the meal we receive in a luxury establishment is sub-par, we will be disappointed with the experience we have. The opposite is true, the concept of a “hidden gem” is that we may initially judge a restaurant poorly on its atmospherics, only to be vastly impressed by the quality of the food offered, and we will leave such an establishment feeling like we have received fantastic value.

It is important to note these findings do not mean that restaurant atmospherics are a total waste of time, and should not be considered. Indeed – the fact that the relationship between Perceived Uniqueness and Perceived Value is significant in this study may show that atmospherics do play some part in attracting the attention of the consumer, and that perhaps unique atmospherics are more important than generic atmospherics. However, what these findings do clearly show, in support of other prior literature, is that consumers perceive that food quality is highly important when it comes to their overall determination of value, and as such, should absolutely be something that is carefully considered when it comes to crafting such offerings to consumers.

The second managerial contribution that can be drawn from the findings of this study relates to the finding that there is no difference in the form of scarcity on the resulting behavioural outcome. In both scenarios, where reservations are allowed for (scarcity is created by the

restaurant), and no reservations (scarcity is created by the level of demand), consumers will still ultimately be Willing to Sacrifice.

As such – it can be concluded that restaurants may choose the scarcity strategy that best fits their overall existing branding. An alternative perspective would be to say that there is no negative impact for choosing one scarcity strategy over the other – both will still be effective.

## Conclusion

This chapter examined the final of the three studies examining Willingness to Sacrifice behaviour, in this case, examining it in the context of services.

The most valuable point of note from this study is that the measurement model once again is proven to be reliable, having good model fit and quality indices (shown in Table 6.7 above). This makes Study Three a successful generalisation of the findings from Studies One and Two, proving that the measurement model for willingness to sacrifice works not only in the context of goods, but also for services. This is a significant finding, having broadened the context within which this model has been tested, and means that this measurement model can be used with confidence when it comes to examining this behaviour in other contexts in future.

With all three studies having now been discussed, the following chapter will examine all of the results as a whole, and discuss the various literary, methodological and managerial contributions and implications that these studies have made.

# Chapter 7

## Conclusion

### Introduction

This chapter will summarise the findings of the three studies that have been conducted to investigate Willingness to Sacrifice. Firstly, the Research Objectives and Hypotheses are reviewed. Secondly, the three studies are reviewed as a collective, and general conclusions are drawn and compared to the research objectives that were set out. Thirdly, the chapter discusses the theoretical, methodological and managerial implications that have emerged from the three studies. Finally, the chapter concludes with a discussion of the limitations of the research, and possible avenues for future research.

## Review of Research Objectives & Hypotheses

As introduced in Chapter Two, the research comprised of four research objectives:

### Objective 1

**To conceptualise “willingness to sacrifice” in the marketing literature, and create a means of measuring consumer “willingness to sacrifice”.**

The aim of this objective is to investigate the extent to which consumers are willing to:

a) Discomfort themselves in order to obtain an offering that they perceive will give them greater pleasure than the discomfort experienced; b) Give up time to wait for an offering, to ensure that they will acquire the offering; and c) Pay more for an offering, to guarantee that they will obtain that offering on its release.

### Objective 2

**To investigate the antecedent effects of perceived scarcity, perceived uniqueness, and perceived quality on the perceived value of an offering, within the context of luxury brands**

Perceived Scarcity, Perceived Uniqueness and Perceived Quality are all factors that have been highlighted in the literature as elements that in some way have an impact of the perception of quality of both a limited edition item as well as a luxury brand. As such, it makes sense to investigate them as the antecedents to Perceived Value within the context of this study.

### Objective 3

**To investigate the relationship between Perceived Value and Willingness to Sacrifice, within the context of luxury brands.**

More specifically, the purpose of this research will be to investigate the following relationships:

a) Perceived Value and Desire to Acquire; b) Perceived Value and Willingness to Sacrifice; c) Desire to Acquire and Willingness to Sacrifice; and d) Desire to Acquire as a mediator of the relationship between Perceived Value and Willingness to Sacrifice.

#### Objective 4

**To investigate the differences in consumers' Willingness to Sacrifice, when purchasing limited offerings with differing forms of scarcity.**

Over the course of the various studies that will comprise this research, the final area that will be investigated is whether there a difference in behavioural responses between: a) The type of product that is scarce, i.e., Goods vs Services; and b) Differing forms of scarcity, i.e., Demand or Supply driven scarcity.

The hypotheses, which were formulated later in Chapter 2, examine each of the Research Objectives as follows:

<b>Table 7.1 – Hypotheses &amp; Research Objectives</b>	
<b><i>Hypothesis</i></b>	<b><i>Research Objective Examined</i></b>
<b>H1<sub>a</sub>:</b> Perceived Scarcity positively influences Perceived Value <b>H1<sub>b</sub>:</b> Perceived Uniqueness positively influences Perceived Value <b>H1<sub>c</sub>:</b> Perceived Quality positively influences Perceived Value	<b><i>Research Objective 2</i></b>
<b>Hypothesis 2:</b> Perceived Value positively influences Desire to Acquire	<b><i>Research Objective 3a</i></b>
<b>Hypothesis 3:</b> Desire to Acquire positively influences Willingness to Sacrifice	<b><i>Research Objectives 1, 3c &amp; 4</i></b>
<b>Hypothesis 4:</b> Perceived Value positively influences Willingness to Sacrifice	<b><i>Research Objectives 1, 3b &amp; 4</i></b>
<b>Hypothesis 5:</b> Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<b><i>Research Objectives 1, 3c &amp; 4</i></b>

## Overall Review of Results

The following section will review the findings of Studies One, Two and Three, in terms of their individual findings, which particularly relate to Research Objectives 1, 2 and 3, and what has been found collectively across the three studies, which Research Objective 4 sought to examine.

### Overview of Study One

Study One was the first of the three studies designed to examine “Willingness to Sacrifice”, and as such, it was the primary examination of the overall research model. Study One examined goods, specifically watches, in the context of demand-driven scarcity, which is to say, that the source of the scarcity came from the level of demand exceeding supply. This was one of the three scenarios specifically designed to help examine Research Objective 4.

The two brands chosen to act as the stimuli in this study were Tag Heuer, a well-known luxury watch making company, and Louis Vuitton, who are a widely known brand in the realm of luxury products. Respondents received a survey instrument featuring one of these two brands, with the stimulus designed to look like a brochure advertising a range of watches, and then ultimately drawing attention to a limited-edition version of that watch. In the case of Study One, the respondent was not told how many units were available, but were primed with the knowledge that demand was very high and the watch was expected to sell out quickly.

With the context of Study One having now been re-established, the results from Study One can be found in Table 7.2 below:

<b>Table 7.2</b>		
<b>Study One: Demand-Driven Scarcity</b>		
<b>Hypotheses</b>	<b>Tag Heuer</b>	<b>Louis Vuitton</b>
<b>H1<sub>a</sub>:</b> Perceived Scarcity positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1<sub>b</sub>:</b> Perceived Uniqueness positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1<sub>c</sub>:</b> Perceived Quality positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 2:</b> Perceived Value positively influences Desire to Acquire	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 3:</b> Desire to Acquire positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 4:</b> Perceived Value positively influences Willingness to Sacrifice	<i>Not Supported*</i>	<i>Supported</i>
<b>Hypothesis 5:</b> Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<i>Not Supported*</i>	<i>Partially Supported**</i>
<p><i>Comments:</i></p> <p><i>* Because the relationship between Perceived Value and Willingness To Sacrifice is not significant, H4 cannot be supported, and there can be no mediation of Desire to Acquire between Perceived Value and Willingness to Sacrifice, meaning H5 also cannot be supported.</i></p> <p><i>** The relationship between Perceived Value and Willingness to Sacrifice is Partially Mediated by Desire to Acquire, however there is no full mediation.</i></p>		

## Overview of Study Two

Study Two sought to re-test the model to confirm and validate the findings from Study One, whilst also seeking to find potential points of difference when the research model was examined in a slightly different context. As was the case with Study One, Study Two also examined the research model within the context of luxury watches, to maintain a point of continuity, but examined the model within the context of Supply-Side Scarcity, that is to say, scarcity that is created from the manufacturers deliberately restricting supply to a set number of units, in this case, 2000 watches.

Once again, there were two versions of the survey, with the stimuli being Tag Heuer and Louis Vuitton respectively. Once again, the stimuli were presented to the respondent in the version of a brochure, featuring the same brand imagery and text from Study One, with the only difference being that the respondents in this study were explicitly told that there were only 2000 units available, to reflect the nature of the supply-side scarcity that was being examined within this study.

With the context of Study Two once again having been presented, the results from Study Two are now shown in Table 7.3 below:

	<b>Tag Heuer</b>	<b>Louis Vuitton</b>
<b>H1a:</b> Perceived Scarcity positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1b:</b> Perceived Uniqueness positively influences Perceived Value	<i>Supported</i>	<i>Supported</i>
<b>H1c:</b> Perceived Quality positively influences Perceived Value	<b><i>Not Supported</i></b>	<i>Supported</i>
<b>Hypothesis 2:</b> Perceived Value positively influences Desire to Acquire	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 3:</b> Desire to Acquire positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 4:</b> Perceived Value positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 5:</b> Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<i>Partially Supported*</i>	<i>Partially Supported*</i>
<i>Comments:</i> <i>* The relationship between Perceived Value and Willingness to Sacrifice is Partially Mediated by Desire to Acquire, however there is no full mediation.</i>		



### Overview of Study Three

Study Three sought once more to examine the research model to further confirm and validate the findings from Studies One and Two, but this time sought to generalise the model into the context of services. This would therefore allow Research Objective 4 to be thoroughly tested in the context of services, with the first two studies having examined the model within the context of goods.

Study Three differed from Studies One and Two in a number of ways. Firstly, as it was examining the model in the context of services, the stimulus for this study was a fictitious restaurant. Images of various luxury dining restaurants were compiled once more into a brochure to be presented to the respondents. Secondly, Hypothesis 1c for Studies One and Two, which examined “Perceived Quality”, had to be slightly modified to fit the context of the service industry, and so was split into two further hypotheses just for this final study, with H1c now examining “Perceived Food Quality” and a newly added H1d examining “Perceived Atmospheric Quality”. Additionally, the scale items examining H1c from Studies 1 and 2 were substituted for ones that again were more suitable for examining this within the context of a luxury restaurant. Lastly, this study only had one version of the survey, with respondents being asked to examine both demand- and supply- side scarcity scenarios side by side. This was achieved by asking respondents to imagine two cases, one where they were able to make a reservation, and another where they would not be able to, and to answer whether their behaviour would be different based on each scenario.

With the context of Study Three now having been re-established, the results from Study Three can be found in Table 7.4, below:

<b>Table 7.4</b>		
<b>Study Three: Services: Demand and Supply Scarcity</b>		
	<b>Reservations</b>	<b>No Reservations</b>
<b>H1<sub>a</sub>:</b> Perceived Scarcity positively influences Perceived Value	<i>Supported</i>	
<b>H1<sub>b</sub>:</b> Perceived Uniqueness positively influences Perceived Value	<i>Supported</i>	
<b>H1<sub>c</sub>:</b> Perceived Food Quality positively influences Perceived Value	<i>Supported</i>	
<b>H1<sub>d</sub>:</b> Perceived Atmospheric Quality positively influences Perceived Value	<i>Not Supported*</i>	
<b>Hypothesis 2:</b> Perceived Value positively influences Desire to Acquire	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 3:</b> Desire to Acquire positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 4:</b> Perceived Value positively influences Willingness to Sacrifice	<i>Supported</i>	<i>Supported</i>
<b>Hypothesis 5:</b> Desire to Acquire mediates the relationship between Perceived Value and Willingness to Sacrifice	<i>Partially Supported**</i>	<i>Partially Supported**</i>
<p><i>Comments:</i></p> <p>* <i>The relationship between</i></p> <p>** <i>The relationship between Perceived Value and Willingness to Sacrifice is Partially Mediated by Desire to Acquire, however there is no full mediation.</i></p>		

## Discussion of Findings

### Examination of Research Objectives

The research set out to establish a means of capturing “Willingness to Sacrifice”, with Research Objective 1 aiming to create a measure which could capture “Willingness to Sacrifice”, and Research Objective 4 seeking to make a behavioural framework that encompassed not only “Willingness to Sacrifice” as the resultant behaviour, but also how this behaviour is formed how that leads to consumers being willing to sacrifice. Both of these objectives have been successfully achieved.

Firstly, with specific reference to Research Objective 1, which sought to create the measure by which “Willingness to Sacrifice” could be captured, and was examined individually within each of the three studies. The “Willingness to Sacrifice” scale measure was shown to be reliable across each of the three studies, and the five data-sets which examined it overall. In every one of these cases, the various relevant statistical tests came back overwhelmingly positive, which is perhaps surprising for an initial examination of this behaviour, but a very welcome one. Therefore, it can be confidently said that Research Objective 1 was comprehensively examined and satisfactorily met, and that there is now a reliable, comprehensive measure to capture “Willingness to Sacrifice”, which can now be extended to further contexts.

Secondly, regarding “Willingness to Sacrifice” as an overall behavioural framework, which was the purpose of Research Objective 4. This could only be examined across the three studies as a collective, and also has comprehensively been shown to successfully work. Each of the five variations of the model achieved good model fit, with a vast majority of the hypothesised relationships within the model proving to be supported. Furthermore, the model has been twice examined and verified using CB-SEM, in the case of Study One, and verified three times further using PLS-SEM, which is arguably an even better evaluator of model fit. Over three studies, 5 variations, 3 differing contexts examining both goods and services, this model has been comprehensively examined and has been shown to be reliable. As such, we can

confidently say that Research Objective 4 has been comprehensively examined and met satisfactorily.

Thirdly, Research Objectives 2 and 3 examined the other hypothesised relationships within the research model, with Research Objective 2 examining the antecedents to Perceived Value, and Research Objective 3 examining the relationships between Perceived Value, Desire to Acquire, and Willingness to Sacrifice. There were some scenarios here where the hypotheses could not be supported, as will be further discussed below, but broadly speaking these moments where the hypotheses were not supported were either still consistent with the broader understanding of other prior established literature, or could also be reasonably explained within the context of the study.

Overall, the vast majority of the hypothesised relationships were supported, which added to the broader weight of existing literature regarding these relationships – as will be covered later on in this chapter. As such, it can be said that Research Objectives 2 and 3 were each comprehensively examined across the three studies, and have been also met satisfactorily, as with Research Objectives 1 and 4.

#### [Antecedents to Perceived Value \(Hypothesis 1\)](#)

The results from Study One supported Hypothesis 1, finding that Perceived Scarcity, Perceived Uniqueness and Perceived Quality all had a positive impact on Perceived Value. As discussed in Chapter 2 and Chapter 4, and will be once more reiterated later in this chapter, these relationships were all very established within the literature, and these findings only reinforce that further.

However, within Study Two, the Tag Heuer data did not support the relationship between Perceived Quality and Perceived Value ( $p=0.23$ ), which is surprising as, of all the hypothesised antecedent relationships, the relationship between PQ and PV arguably one of the best established within the literature. All three antecedent relationships to Perceived Value were supported in the Louis Vuitton data set.

There are two plausible reasons that work together to explain the difference in findings between the Tag Heuer dataset in Study One compared to Study Two, and the differences in findings between the two datasets collected within Study Two. Firstly, Study One examined the research model within the context of demand-driven scarcity, whilst Study Two explored the context of supply side scarcity. As such, it is plausible that consumers may rely more on Perceived Quality as a determinant of their Perceived Value when the number of watches is unknown, and less so when the number of watches is known. Secondly, the nature of each brand stimulus is also a probable influence on the findings here. Tag Heuer is a known watch making brand, and therefore, it is reasonable to assume that the perception of quality is less important compared to how scarce and unique the watch is perceived to be. Equally as much, Louis Vuitton – while a well-known and trusted luxury brand – do not produce watches, and as such, the perception of the quality of such an offering will be more significant as a determinant of perceived value compared to Tag Heuer. In short, the difference in market circumstances, and the known information about each of the brands, is the most likely and reasonable explanation for why it is that Perceived Quality showed insignificant as a predictor of Perceived Value within Study Two's Tag Heuer data set.

Study Three differed from Study One and Two in the antecedents to Perceived Value, due to a service being examined (restaurants), rather than a good (watches). For Study Three, scale items for “Perceived Food Quality” and “Perceived Atmosphere Quality” were borrowed and adapted from the research of Chen, Peng and Hung (2015). In the evaluation of the model, Perceived Scarcity (H1a), Perceived Uniqueness (H1b) and Perceived Food Quality (H1c) were all supported, but Perceived Atmosphere Quality (H1d) was not supported ( $p=0.384$ ).

As was discussed in Chapter 6, going back to the research of Chen, Peng and Hung (2015) provided an explanation for the findings. In short, the context of “high levels of expectation” as were highlighted in the original study, and are translatable to this study in the context of limited spaces available at a luxury restaurant, are comparable in terms of how each of these hypothesised relationships behaved in the respective studies. In the original study, when

consumers were under high levels of expectation, if the atmospherics were perceived to be poor, it wouldn't contribute to negative emotions, however poor food quality would. Within the context of Study Three, this makes sense therefore that food quality is a significant predictor for perceived value, whereas perceived atmospherics are not.

As a final comment on Hypothesis 1 across the three studies, it is interesting to note that across all five data sets and research models, Perceived Scarcity and Perceived Uniqueness to Perceived Value were supported in every case. Such a point of consistency between different contexts of the kind of scarcity and product being evaluated is well worth noting, and highlights a robustness in these factors being a predictor of how consumers determine a perception of value for multiple products within the context of luxury experiences.

#### Perceived Value, Desire to Acquire and Willingness to Sacrifice (H2, H3, H4 and H5)

Between them, Perceived Value, Desire to Acquire and Willingness to Sacrifice make up the remaining hypotheses, in the various ways these variables were hypothesised to relate to each other. These variables and their hypothesised relationships were tested six times across the three studies; twice in Study One (Tag Heuer and Louis Vuitton), twice in Study Two (Tag Heuer and Louis Vuitton), and twice in Study Three (Reservations and No Reservations).

Hypotheses 2 and 3 related to the relationships between Perceived Value and Desire to Acquire, and then Desire to Acquire to Willingness to Sacrifice respectively. In every single way that this behavioural pathway was tested, in the six variations across the three studies, these hypothesised relationships were supported. This makes Hypotheses 2 and 3 the most supported of all the hypotheses, and one of the most robust elements of the research model overall. Whether under demand-driven or supply-side scarcity, or facing goods or services, once certain consumers have developed a perception of value, they will enter an intermediary state of desiring the product before acting on that desire by being willing to sacrifice to obtain that particular offering.

As for Hypothesis 4, which proposed some consumers may skip the intermediary desire state and jump straight to being willing to sacrifice, the hypothesis was successfully supported 5 times, and was unsupported once. The one scenario where Perceived Value did not lead directly to Willingness to Sacrifice was in Study One, in the Tag Heuer data set. In all of the remaining scenarios (Louis Vuitton in Study One, both data sets in Study Two, and under both Reservation and No Reservation scenarios in Study Three), the hypothesised relationship between Perceived Value and Willingness to Sacrifice was supported.

Within the context of Study One, again the nature of the brand stimulus is the most likely explanation for why this hypothesis is not supported, as was the case in Study Two, where the relationship between Perceived Quality and Perceived Value was insignificant, also in the Tag Heuer data set. It is plausible that Tag Heuer, a watch brand, producing a limited edition watch, will not elicit as extreme a behavioural response as Louis Vuitton, a luxury brand not known for producing watches, offering a limited edition watch. As it is a greater brand extension for Louis Vuitton, it makes sense that the relationship between Perceived Value and Willingness to Sacrifice is significant, and for Tag Heuer, the rarity of the product is not so great, and therefore consumers have a less extreme response and the relationship is not significant.

Hypothesis 5 is very closely related to the previous three hypotheses, as it investigated the role of Desire to Acquire as a mediator in the relationship between Perceived Value and Willingness to Sacrifice, and as such, if any of the previous hypotheses had failed, then this relationship, by default, could not be examined. As such, the only case where Hypothesis 5 could not be tested was for the Tag Heuer data set in Study One, as the relationship between Perceived Value and Willingness to Sacrifice was insignificant. However, as every other scenario found the hypothesised relationships to be significant, Hypothesis 5 could be tested for each of them.

What is remarkable is that the results are consistent in the five of the six times this hypothesis was able to be tested across the three studies – in every case, Desire to Acquire was found to be a Partial Mediator. Mediation testing showed that Desire to Acquire reduced the

relationship between Perceived Value and Willingness to Sacrifice, but did not entirely remove it, and thus is only a partial mediator. As a result, the hypothesis is partially supported.

This finding further validates the two previously hypothesised behaviours. Given the introduction of “Desire to Acquire” as a mediator in the relationship between “Perceived Value” and “Willingness To Sacrifice” does not completely remove the alternate behavioural pathway and only serves to partially mediate the relationship, suggests validation for the “extreme responses” exhibited by consumers which the two underpinning theories suggested. While some consumers will be more considered, entering an intermediary “desire” state before going on to being “willing to sacrifice”, there will also be a group of consumers who will behave in a more extreme manner and will immediately act for fear of losing out. If “Desire to Acquire” fully mediated the relationship between “Perceived Value” and “Willingness to Sacrifice”, then this would not be the case.



## Research Contributions

With the results now having been examined and discussed collectively, and the research objectives and hypotheses reviewed in context of the findings from Studies One, Two and Three, the various research contributions will now be discussed. Firstly, the theoretical contributions to the literature will be discussed, followed by the methodological contributions this study has added, and finally the managerial implications will be discussed based on the various findings from this study.

### Theoretical Contributions

This thesis, and the three studies which comprised it, is built on a wealth of prior research in a number of different fields from a plethora of authors over the years, and as such, can add further understanding, weight, and context to the fields of marketing research, economics, and psychology from which the theoretical foundations of this research was formed. The specific areas of theory (namely Reactance Theory and the Scarcity Heuristic), and prior research that this thesis relied on will be highlighted below, however there are a few broader areas in which this research has contributed that are worthwhile pointing out initially.

### Willingness to Sacrifice

Research Objective 1 was to conceptualise “Willingness to Sacrifice” within marketing literature. This research, and the three studies which comprised it, was the first to combine monetary sacrifice, time sacrifice, and comfort sacrifice in the same study. Prior studies in marketing, economics and psychology had looked at monetary sacrifice (e.g. Li, Li & Kambele 2011; Hwang, et al 2013; Loureiro & Araújo 2014; Ahmetoglu, Furnham & Fagan 2014; Vera 2015), time sacrifice (e.g. Suri & Monroe 2003; Clarke 2006; Wu, et al 2012; Forman, Thelen & Shapiro 2015), comfort sacrifice (Scitovsky 1992; Spake, et al 2003) and other forms of sacrifice (e.g. Bardakci and Whitelock 2003), but to date it has never been looked at as a whole, despite consumers exhibiting all of these traits to a certain extent in their behaviour waiting for limited edition luxury products.

This research, in line with Research Objectives 1 and 4, has examined “Willingness to Sacrifice” for both goods and services under demand and supply driven scarcity, and has

emerged with a working measure to capture consumers' monetary, time, and comfort sacrifice, which was not previously established. This research has provided insight into this gap in the literature.

It also has examined, in line with Research Objectives 2 and 3, the antecedent factors that drive consumers to their perception of value and how that then leads to their Willingness to Sacrifice, which, was a subsequent gap in the literature that has now begun to be explored, commencing with this thesis.

### Research Context and Underpinning Theories

This research into Willingness to Sacrifice was conducted within the context of luxury brands, luxury marketing, and consumer behaviour towards such products. In some regards, research into luxury is quite old, being founded in the economic research of authors such as Veblen (1899), Morgenstern (1948) and Leibenstein (1950), but in the context of marketing research and understanding consumer behaviour towards luxury brands, there is still much to be discovered, and this thesis adds understanding to how consumers behave towards certain luxury offerings.

This research was also conducted within the context of goods and services that were limited edition releases. In this regard, this thesis was largely informed by the prior research of authors such as Verhallen and Robben (1995) and Gierl and Huettl (2010) and their research into limited goods and consumer responses to such products. The findings from this thesis can certainly add weight to the initial research from the aforementioned authors, and greater context and understanding to the way consumers behave in relation to limited edition products.

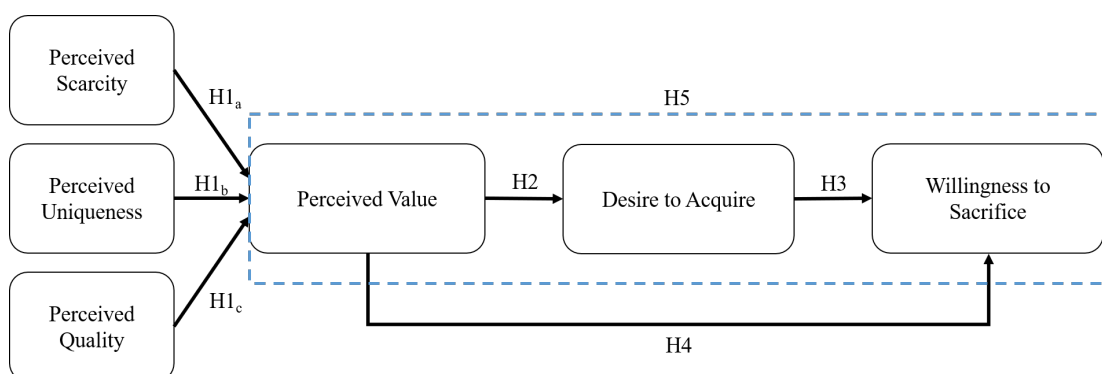
The stimuli that were used within the survey instruments were watches and restaurants. While these product categories were chosen specifically for this study, it was noted in Chapter 3 that watches (see Liu, et al 2012; Esmaeilpour & Ali 2016) and restaurants (see Kapferer 2012; Chen, Peng & Hung 2015; Yang & Mattila 2016) have both been used as stimuli in studies examining the luxury industry, and so, the findings from this thesis are comparable reference points to these aforementioned authors.

There were also two underpinning theories on which this thesis heavily relied, namely “The theory of Psychological Reactance” (Brehm 1966; Clee and Wicklund 1980; Braun and Wicklund 1989), and “The Scarcity Heuristic” (Ditto and Jemmott 1989; Verhallen and Robben 1995). These two theories speak to the “extreme” responses exhibited by consumers when faced by goods which are limited, or which have their availability threatened, which was key to initially understanding the “Willingness to Sacrifice” behaviour which was the focal point of this thesis. As such, the findings of the studies within this thesis contribute and modernise the understanding of these theories, and also contextualise this behaviour within the context of luxury brands, which had only been done to a limited extent previously. Both of these underpinning theories are still very relevant to modern understanding of consumer behaviour, and both of these theories have now been extended to help explain “Willingness to Sacrifice” behaviour in this modern context.

### Methodological Contributions

Further to the theoretical contributions that this study has made, there are a number of methodological contributions that have come from this investigation into Consumers’ Willingness to Sacrifice.

First and foremost is the conceptual framework that has been designed and tested within this thesis. This is the first time where a model has been created that tests how consumers perceptions of value are formed, and the behavioural outcome that it leads to (i.e., Willingness to Sacrifice), as is modelled in Figure 7.1, below:



**Figure 7.1: Conceptual Framework for Consumers’ Willingness to Sacrifice**

The development and successful examination of this conceptual framework is a standout contribution from this research which satisfies the goals set by Research Objectives 1 and 4, and which can be utilised in further research into this phenomenon in other contexts.

The means of examining this conceptual framework over the three studies was via a survey instrument, which was developed using a number of existing scales from prior research, and other techniques and methods also highlighted in previous studies.

There were two specific decisions that were made about the design of the survey instrument which were informed by prior research. Firstly was the way in which the stimulus was presented, which was in the form of a brochure. Various studies have doubtless used this technique, but one which was particularly informative for the design and implementation of the survey instrument in this research was from Lessne and Notarantonio (1988). As such, this study serves as a validation of their study and point of comparison to their methodology, and other studies which have done similar.

The other decision that merits highlighting was the decision to not include a price point within the stimulus text or imagery within the survey instrument. This decision was informed by three pieces of prior research. Firstly, Lynn (1989) noted that perceptions of scarcity lead to the increased desirability of a product only when the price point was not known. Secondly, Vigneron and Johnson (2004) noted that perceived uniqueness was often dependant on assumptions that a product was assumed to be scarce, and that this effect was amplified when the price was unknown. As perceived scarcity and perceived uniqueness were two of the three antecedent factors leading to perceived value, and that each of these would most likely be impacted by having a price present within the stimulus, the decision was consciously made to exclude a price so as to avoid the probability of this having a negative effect on the antecedent portion of the model.

The third study which served as to further underline the decision to not include a price came from Kapferer and Bastien (2009) who commented on the nature of how luxury items are

advertised or displayed in store, noting that the price-tag is often absent and only presented on request. Kapferer and Bastien (2009, 314), comment further that “Money (high price of products) is not enough to define luxury goods: it only measures the wealth of the buyer”.

As such, this study was designed following inspiration from the prior research of Lessne and Notarantonio (1988), and informed by the findings and commentary provided by Lynn (1989), Vigneron and Johnson (2004), and Kapferer and Bastien (2009) to try and ensure that the best possible practices were followed when investigating luxury products, and to control for the various external factors that may negatively impact consumers perceptions of value. Given the research model proved to be successful, then this study can serve as a validation of the techniques and knowledge provided by these aforementioned authors, and should be noted when it comes to further extensions or other research projects investigating Willingness to Sacrifice and its antecedent factors.

#### Scale Items

There were a number of scale items which were borrowed and adapted from previous studies, that this research serves to further validate and add helpful context to.

The first portion of the research model was based on antecedents to Perceived Value, namely Perceived Scarcity, Perceived Uniqueness and Perceived Quality. The scale items for each of these antecedent variables and perceived value itself were all borrowed from Wu, et al (2012). These scale items were all used in each of the three studies, with the only exception being Perceived Quality in Study Three. In this case, scale items from the research by Chen, Peng and Hung (2015) was substituted in, specifically their scales for Perceived Food Quality and Perceived Atmosphere Quality, which were vastly more appropriate in the context of luxury restaurants, than for the Wu, et al (2012) scale for Perceived Quality which had been used for watches in Studies 1 and 2. Overall, these scales proved reliable, which serves to validate the original studies in which they appeared, and also helped the examination of Research Objective 2 and 3.

For Desire to Acquire, as no satisfactory measure was found prior to the research beginning, the scales for “Willingness to Pay” and “Anticipated Happiness” were adapted from the research of Rucker and Galinsky (2008) to measure Desire by proxy. Their successful evaluation within this study somewhat serves to validate the findings of Rucker and Galinsky (2008), although they were not utilised in quite the same way in which the original authors employed them, so it is not an exact like for like comparison.

### Managerial Contributions

With the theoretical and methodological contributions having now been discussed, the managerial applications that come from the findings of this study can now be presented. There are five managerial implications, which are as follows.

#### 1 - Creating Perceived Value

The first implication comes from the antecedent variables which form Consumers’ Perceived Value. The behavioural framework was built to determine how consumers develop a perception of value, and then how that perception would see them behave – i.e., would they be willing to sacrifice in order to obtain the offering they had developed that perceived value of? As such, it is worth noting that in most of the cases bar one, Perceived Scarcity, Perceived Uniqueness and Perceived Quality were all consistent factors in determining consumers perception of value for an offering. As such, this implies that managers of luxury brands can look to capitalise on this by creating limited offerings that are unique to the other offerings that the brand makes, and which emphasises the quality of the craftsmanship.

On this, it is worth noting that the one case where Perceived Quality was insignificant was in Study Two, in the Tag Heuer model. It was commented on in Chapter 5 that it is unsurprising that a watch company making a limited edition watch saw Perceived Quality not important as a determinant of perceived value. Perhaps the context of limited supply is important context to note here, that when consumers know how much of a particular offering is available, that the perception of scarcity and uniqueness will be more important than the perception of quality, particularly if the offering is close to what the company would normally offer.

## 2 – Brand Extensions

Secondly, a related trend that emerged from both Studies One and Two was how the Tag Heuer models were generally weaker than the Louis Vuitton models. In Study One, the relationship between Perceived Value to Willingness to Sacrifice was insignificant, and, as just mentioned, in Study Two Perceived Quality was not positively related to Perceived Value.

What this suggests is that the overall model for Willingness to Sacrifice, in the context of limited edition luxury products, works better when the product is a significantly different offering than what is normally produced by that brand. An alternative way of looking at it is that the model is more successful when the brand extension is greater – Louis Vuitton offering a watch is much rarer than Tag Heuer.

This therefore implies that – although consumers were willing to sacrifice for the Tag Heuer watch - consumers will have a stronger reaction for products that are rarer offerings from the brand. Therefore, when offering a limited edition item, managers may find that the offering proves to be more successful if it is something that is further removed from what is normally offered by the brand.

## 3 – Food Quality vs Atmosphere Quality

Thirdly, in Study Three, which examined restaurants, the antecedent predictors for Perceived Value were altered, substituting in Perceived Food Quality and Perceived Atmosphere Quality. What was interesting to note from this was that Perceived Food Quality was significantly related to Perceived Value, but Perceived Atmosphere Quality was not. The theoretical side of this in relation to the original paper has already been discussed in this chapter, however the managerial implications are also very relevant. Consumers Perceptions of Value are significantly impacted by the quality of food, but not the atmosphere. This makes sense – atmospherics may attract the consumer to the restaurant in the first place, so they shouldn't be completely ignored, but the ultimate reason why consumers go to a restaurant is for the food, not the design.

Hence, for those in the service industry, when constructing a limited and unique experience, the quality of the core offering itself must be high, otherwise it will impact consumers perception of value. A unique restaurant with a wonderful atmosphere, but terrible food will not last, and will not lead to consumers being willing to sacrifice their time, money, and comfort in order to secure a place at the restaurant. However, if the food is good, then consumers will be willing to sacrifice to get into an establishment that is otherwise perceived initially to be unremarkable.

#### 4 – No Difference Between Reservations or No Reservations

Another point of note from Study Three is that the models are the same when it comes to both reservations and no reservations – or in the language of the broader study, whether there is scarcity created from high demand or limited supply. Put another way, there is no significant advantage, or significant detriment, to consumers being willing to sacrifice if the restaurant decides to offer reservations or not.

What this therefore suggests is that the restaurant is free to choose whichever model suits them best based on broader factors, such as their branding, service capacity, staffing, and so on. If it is more convenient to them to offer reservations, then they are free to do so without concern, and if it better fits the branding of the restaurant to force consumers to queue to get a table, then likewise there is no benefit or detriment. If the offering is perceived to be scarce, unique, and offers quality food, then consumers will be willing to sacrifice to obtain that experience in either circumstance.

#### 5 – Embracing Consumers' Willingness to Sacrifice

Finally, it is worth commenting on the nature of the behaviour being exhibited itself. Whilst the news articles which showcase this behaviour highlight that one or two companies are embracing this behaviour, many aren't doing anything at all, and in fact, Apple at one stage was reportedly seeking to discourage it (Gibbs, 2015). There seems to be a real opportunity for brands and companies to plan for this behaviour and make it part of their overall experience – or even for other companies to capitalise on it for their own purposes.



A review of the news media which highlighted this behaviour shows some business are embracing this behaviour, to their benefit. Journalist Morwenna Ferrier (2018) reported on one restaurant that has a no-reservations policy which forces potential customers to queue, however, they served the queuing customers to keep them satisfied whilst they waited. Both Ferrier (2018) and Keiles (2018) also point out the free advertising that comes from consumers queuing for a certain product or event, whether it be drawing the attention of other passer-by shoppers, or the tendency for these consumers to document their entire waiting process on social media, both ultimately draw even more attention to the brand, product or event they are willing to queue for.

If people are going to wait outside for hours for their chance to buy your offering – then there is a massive opportunity to create greater brand loyalty, and strengthen and celebrate the sense of community identity. Whether for the brand themselves, or for some other opportunist, there seems a plethora of options available to feed, shelter, entertain, and celebrate these consumers who are giving up time and comfort and willing to spend money to ensure they get what they came for. It seems like an “open goal” for brand managers to make the most of, and enhance a moment that consumers are already choosing to engage in to build even greater levels of loyalty, positivity and fanaticism towards the brand, and fellow consumers of it.

## Limitations and Future Directions

As mentioned earlier, this is the first research that has examined Willingness to Sacrifice, which particularly examines the concepts of time, monetary and comfort sacrifice under the same umbrella. This was examined in three studies, with 5 stimuli, so this concept was examined as thoroughly as could be expected for a first foray into this area. However, there are limitations that should be applied to this research, and future avenues of research that could be explored to further develop understanding of this behaviour.

Firstly, it is important to note that the research focussed on luxury brands, and therefore, does not predict behaviour for goods and services that are not luxurious. Likewise, a central focus of this research was around limited edition products. Goods and services that aren't subject to scarce conditions will have different behavioural responses, and should be tested before applying this research model to them.

Likewise, there have only been two stimuli tested within this context – luxury watches, and restaurants. Whilst this gives a positive indicator of this behaviour for luxury goods and services, it is only two product categories that have been tested and further product testing would give greater confidence in the validity of the model and predictability of the behaviour being examined.

Testing the research model in other contexts would also help to confirm or qualify the suggestion that the model works better for products that are of a rarer brand extension. While that is a reasonable and logical conclusion from the context and data available from this research, more could be learnt about this initial finding that would give better understanding for the kinds of products that this behaviour works for, and the extent to which it works.

From a theoretical point of view, there is a desperate need for a clear and reliable scale measuring desire. Within this study, this variable was measured via a proxy of using related scales, but the findings of this study, and indeed, the entire academic world, would be enhanced – or challenged – by a measure that better captures this element of consumer behaviour and

emotions. Until such a time, there will be an element of uncertainty around this part of consumers psychology and behaviour.

## Conclusion

In summary, this thesis has attempted to understand why it is that consumers are willing to give up time, money and discomfort themselves in order to obtain a limited edition luxury product, or in short, why consumers are Willing to Sacrifice. It has developed and tested a theoretical model for this behaviour, from the formation of value through to the ultimate behavioural outcome, and has robustly tested it across three studies in a variety of contexts. It is hoped that this thesis will spark further insight, understanding, and research into this phenomenon. Overall, this research is a very encouraging first step into the world of Consumers' Willingness to Sacrifice, and more research is welcomed into understanding this behaviour being exhibited within the marketplace, for the benefit of academics and managers alike.

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Every reasonable effort has been made to acknowledge the owners of copyright material.

I would be pleased to hear from any copyright owner who has been omitted or incorrectly acknowledged.

# Appendices

## Appendix A: Ethics Approval



Office of Research and Development

GPO Box U1987  
Perth Western Australia 6845

Telephone +61 8 9266 7863  
Facsimile +61 8 9266 3793  
Web [research.curtin.edu.au](http://research.curtin.edu.au)

31-Mar-2017

Name: Isaac Cheah  
Department/School: School of Marketing  
Email: [Isaac.Cheah@cbs.curtin.edu.au](mailto:Isaac.Cheah@cbs.curtin.edu.au)

Dear Isaac Cheah

**RE: Ethics approval**

**Approval number: HRE2017-0174**

Thank you for submitting your application to the Human Research Ethics Office for the project **Conceptualising "Consumer Willingness to Sacrifice" for Luxury Brand Acquisition**.

Your application was reviewed through the Curtin University low risk ethics review process.

The review outcome is: **Approved**.

Your proposal meets the requirements described in National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007)*.

Approval is granted for a period of one year from **31-Mar-2017** to **30-Mar-2018**. Continuation of approval will be granted on an annual basis following submission of an annual report.

Personnel authorised to work on this project:

Name	Role
Tucker, Oliver	Student
Cheah, Isaac	CI
Phau, Ian	Supervisor
Teah, Min	Supervisor

### Standard conditions of approval

1. Research must be conducted according to the approved proposal
2. Report in a timely manner anything that might warrant review of ethical approval of the project including:
  - proposed changes to the approved proposal or conduct of the study

- unanticipated problems that might affect continued ethical acceptability of the project
  - major deviations from the approved proposal and/or regulatory guidelines
  - serious adverse events
3. Amendments to the proposal must be approved by the Human Research Ethics Office before they are implemented (except where an amendment is undertaken to eliminate an immediate risk to participants)
  4. An annual progress report must be submitted to the Human Research Ethics Office on or before the anniversary of approval and a completion report submitted on completion of the project
  5. Personnel working on this project must be adequately qualified by education, training and experience for their role, or supervised
  6. Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, that bears on this project
  7. Changes to personnel working on this project must be reported to the Human Research Ethics Office
  8. Data and primary materials must be retained and stored in accordance with the [Western Australian University Sector Disposal Authority \(WAUSDA\)](#) and the [Curtin University Research Data and Primary Materials policy](#)
  9. Where practicable, results of the research should be made available to the research participants in a timely and clear manner
  10. Unless prohibited by contractual obligations, results of the research should be disseminated in a manner that will allow public scrutiny; the Human Research Ethics Office must be informed of any constraints on publication
  11. Ethics approval is dependent upon ongoing compliance of the research with the [Australian Code for the Responsible Conduct of Research](#), the [National Statement on Ethical Conduct in Human Research](#), applicable legal requirements, and with Curtin University policies, procedures and governance requirements
  12. The Human Research Ethics Office may conduct audits on a portion of approved projects.

**Special Conditions of Approval**

None.

**This letter constitutes ethical approval only.** This project may not proceed until you have met all of the Curtin University research governance requirements.

Should you have any queries regarding consideration of your project, please contact the Ethics Support Officer for your faculty or the Ethics Office at [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au) or on 9266 2784.

Yours sincerely



Dr Catherine Gangell  
Manager, Research Integrity

## Appendix B: Study One Survey Instrument – Tag Heuer

### **A STUDY ON CONSUMERS “WILLINGNESS TO SACRIFICE” FOR LUXURY BRANDS**

Dear Respondent,

The purpose of this study is to assess how much consumers are willingness to sacrifice in order to obtain a luxury brand product. The survey exercise is educational and not intended for market research purposes.

The brand(s) and/or product(s) in this survey are representative only, and are selected for the express purpose of this survey. Please answer all the questions in this survey form and give the response which most accurately reflects your views. There is no right or wrong answer. Please note that your answers will be treated with the strictest confidence.

Please note that you have a choice to participate in this survey and that you may end the survey at any time without giving a reason or justification. In this instance, your data will be deleted. Completion of the survey will be taken as evidence of consent to participate in this study.

This project is being conducted by Curtin University as a part of a student project for PhD research. It will take approximately 15 minutes to complete. Please also note that your responses will be kept completely confidential, and there will be no personal information attached to the responses given in this survey. Your responses to this survey will be kept internally as a part of the PhD research.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number HRE2017-2174). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08)9266 7093 or email [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au).

Researcher: Oliver Tucker

Email: [Oliver.H.Tucker@curtin.edu.au](mailto:Oliver.H.Tucker@curtin.edu.au)

Supervisor: Prof. Ian Phau

Email: [Ian.Phau@cbs.curtin.edu.au](mailto:Ian.Phau@cbs.curtin.edu.au)

## SECTION A (Demographics)

The following section contains DEMOGRAPHIC questions that are used to help classify information. Your responses will not be linked to you in any way and will remain confidential. Please answer all questions by circling one number for each question.

<b>1</b>	What is your gender?			
	[1]	Male	[2]	Female

<b>2</b>	What is your age group?					
	[1]	Under 20 years	[2]	21 – 34 years	[3]	35 – 44 years
	[4]	45 – 54 years	[5]	55 – 64 years	[6]	65 years and above

<b>3</b>	What is your current marital status?			
	[1]	Single	[2]	In a relationship
	[3]	Married		

<b>4</b>	What is your field of occupation? (Please choose one only)					
	[1]	Manager	[2]	Professional	[3]	Technician/Trades Worker
	[4]	Community and Personal Service Worker	[5]	Clerical and Administrative Worker	[6]	Sales Worker
	[7]	Machinery Operator/Driver	[8]	Labourer	[9]	Student
	[10]	Retired	[11]	Other (Please Specify) _____		

<b>5</b>	What is the level of your post-secondary school qualifications?					
	[1]	Certificate	[2]	Bachelor Degree	[3]	Advanced Diploma or Diploma
	[4]	Graduate Diploma or Graduate Certificate	[5]	Postgraduate Degree	[6]	Other (Please specify) _____

<b>6</b>	What is your annual income? (Income per annum)					
	[1]	Under \$19,999	[2]	\$20,000 - \$49,999	[3]	\$50,000 - \$99,999
	[4]	\$100,000 - \$149,000	[5]	\$150,000 and above		



**SECTION B (Familiarity)**

The following statements relate to your FAMILIARITY with Tag Heuer. For each of the following statements, please circle the value that most closely represents your views.

Please indicate how familiar you are with Tag Heuer									
		1	2	3	4	5	6	7	
1	Not at all familiar	1	2	3	4	5	6	7	Extremely familiar
2	Definitely do not recognise it	1	2	3	4	5	6	7	Definitely recognise it
3	Definitely have not heard of it before	1	2	3	4	5	6	7	Definitely have heard of it before

In what follows we are seeking your true reactions to a situation that you might actually confront. Please respond to the questions asked of you in the way you believe you would actually react.

Assume that the advertisements on the following page came to your attention. After reading the adverts, please respond to the questions and scales which follow.

### A responsible watchmaker

Trustee of exceptional cultural heritage for more than 150 years, TAG Heuer also plays an essential role in preserving natural heritage thanks to an ethical approach applied to all its timepieces creations'.



CALIBRE 16 AUTOMATIC CHRONOGRAPH - 43MM  
CAY2110.BA0927

74



CALIBRE 16 AUTOMATIC CHRONOGRAPH - 43MM  
CAY2111.BA0927 & CAY2112.BA0927

75





84



AQUARACER 300M

CALIBRE 5 AUTOMATIC - 41MM  
WAY211A.BA0928 & WAY211B.FC6363

85



106



LADIES COLLECTION

AQUARACER LADY - 27MM  
WAY1414.BA0920 & WAY1453.BD0922

107





34



CARA DELEVINGNE  
SPECIAL EDITIONS

TAG HEUER CARRERA LADY - 41MM  
WAR101A.BA0728 & WAR101B.FC6367

35



MONACO

MONACO  
HEUER

CAW211PFC6366

Have a close look at the following watches:



Tag Heuer is releasing a limited edition watch for men (“Monaco”, left) and women (“Cara”, right).

It is not known exactly how many watches there are, but it is going to be a popular release. News outlets, social media, and your friends have been talking about how they think the watch is going to sell out quickly, because a lot of people have said that they do not want to miss out on this watch.

Looking at these watches, and with this piece of information in mind, please answer the following questions on following pages.

## SECTION C (Antecedent Perceptions)

The following statements relate to different attributes of YOUR PERCEPTIONS about the limited edition Tag Heuer watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

### Perceived Scarcity

C1	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I think that the current supply of this watch is small	1	2	3	4	5	6	7
2	I think that this watch is selling out soon	1	2	3	4	5	6	7
3	I think many people will buy this watch	1	2	3	4	5	6	7
4	I feel that the limited edition of this watch will cause many people to buy	1	2	3	4	5	6	7
5	I think the limited supplies caused by the high demand will cause a lot of people to buy	1	2	3	4	5	6	7

### Perceived Uniqueness

C2	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I perceive this watch as highly unique	1	2	3	4	5	6	7
2	Possessing this watch makes me feel distinctive	1	2	3	4	5	6	7

### Perceived Quality

C3	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch would be reliable	1	2	3	4	5	6	7
2	This watch would be of high workmanship	1	2	3	4	5	6	7
3	This watch would be of good quality	1	2	3	4	5	6	7
4	This watch would be dependable	1	2	3	4	5	6	7
5	This watch would be durable	1	2	3	4	5	6	7

**SECTION D (Perceived Value).**

The following statements relate to YOUR PERCEPTION OF VALUE for the limited edition Tag Heuer watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

D	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch is good value for money.	1	2	3	4	5	6	7
2	The expected price for this watch is acceptable.	1	2	3	4	5	6	7
3	This watch is considered to be a good buy.	1	2	3	4	5	6	7
4	This watch appears to be a good bargain.	1	2	3	4	5	6	7

**SECTION E (Desire to Acquire)**

The following statements relate to your DESIRE for the limited edition Tag Heuer watches.

Imagine you are talking to a friend about the limited edition Tag Heuer watches. They ask you how much you would pay for it, given the opportunity. How much do you tell them?

Each of the following numbers represents how much you would hypothetically be willing to pay. In this case, 1 = 10% of the retail price, 2=20% of the retail price... 10 = retail price, 20 = 100% of the retail price (i.e., double the asking price).

<b>E1</b>	Please indicate how much you would be willing to pay: (Please circle one number).																			
Below retail price									Retail Price									Above retail price		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

Your friend asks you how happy you would be if you owned the limited edition Tag Heuer watch. To what extent do you think owning the watch would make you happy?

<b>E2</b>	Please indicate how happy think you would feel, if you owned the limited edition Tag Heuer watch: (Please circle one number).												
Not very happy at all	1	2	3	4	5	6	7	8	9	10	11	12	Extremely happy

**SECTION F (Willingness to Sacrifice).**

The following statements relate to how much you would be WILLING TO SACRIFICE in order to obtain the limited edition Tag Heuer watch.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

F	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I am willing to pay whatever it takes to get this watch	1	2	3	4	5	6	7
2	A high price for this watch is justified	1	2	3	4	5	6	7
3	I would pay a premium to guarantee I obtain this watch	1	2	3	4	5	6	7
4	Even if this watch was more expensive, it would be worth paying extra for.	1	2	3	4	5	6	7
5	I would purchase this watch, even if the higher price of this watch means I cannot afford other things	1	2	3	4	5	6	7
6	The time I would be willing to give up to obtain this watch is (very little – a lot)	1	2	3	4	5	6	7
7	I would wait in line ahead of the opening to make sure I could purchase this watch	1	2	3	4	5	6	7
8	I would queue for this watch rather than doing other desirable activities	1	2	3	4	5	6	7
9	I would stay up all night to obtain this watch	1	2	3	4	5	6	7
10	Any discomfort I felt obtaining this watch would be worth it	1	2	3	4	5	6	7
11	It would be better for me to be uncomfortable, than to miss out on getting this watch.	1	2	3	4	5	6	7
12	I would wait for this watch even if the weather was terrible	1	2	3	4	5	6	7
13	I would obtain this watch even if it meant giving up sleep to get it	1	2	3	4	5	6	7
14	I would obtain this watch even if it meant I was unable to eat before getting it	1	2	3	4	5	6	7
15	I would acquire this watch even if it meant I was unable to enjoy my day	1	2	3	4	5	6	7
16	I would do anything to make sure I didn't miss out on this watch	1	2	3	4	5	6	7
17	I would give up anything to make sure I obtained this watch	1	2	3	4	5	6	7
18	In general, I perceive I would give up a lot to get this watch	1	2	3	4	5	6	7
19	It is worth giving up more than I would for other watches to get this watch	1	2	3	4	5	6	7
20	This watch is difficult to obtain, but worth giving up a lot to obtain it.	1	2	3	4	5	6	7



## Appendix C: Study One Survey Instrument – Louis Vuitton

### **A STUDY ON CONSUMERS “WILLINGNESS TO SACRIFICE” FOR LUXURY BRANDS**

Dear Respondent,

The purpose of this study is to assess how much consumers are willingness to sacrifice in order to obtain a luxury brand product. The survey exercise is educational and not intended for market research purposes.

The brand(s) and/or product(s) in this survey are representative only, and are selected for the express purpose of this survey. Please answer all the questions in this survey form and give the response which most accurately reflects your views. There is no right or wrong answer. Please note that your answers will be treated with the strictest confidence.

Please note that you have a choice to participate in this survey and that you may end the survey at any time without giving a reason or justification. In this instance, your data will be deleted. Completion of the survey will be taken as evidence of consent to participate in this study.

This project is being conducted by Curtin University as a part of a student project for PhD research. It will take approximately 15 minutes to complete. Please also note that your responses will be kept completely confidential, and there will be no personal information attached to the responses given in this survey. Your responses to this survey will be kept internally as a part of the PhD research.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number HRE2017-2174). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08)9266 7093 or email [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au).

Researcher: Oliver Tucker

Email: [Oliver.H.Tucker@curtin.edu.au](mailto:Oliver.H.Tucker@curtin.edu.au)

Supervisor: Prof. Ian Phau

Email: [Ian.Phau@cbs.curtin.edu.au](mailto:Ian.Phau@cbs.curtin.edu.au)



## SECTION A (Demographics)

The following section contains DEMOGRAPHIC questions that are used to help classify information. Your responses will not be linked to you in any way and will remain confidential. Please answer all questions by circling one number for each question.

<b>1</b>	What is your gender?					
	[1]	Male	[2]	Female		

<b>2</b>	What is your age group?					
	[1]	Under 20 years	[2]	21 – 34 years	[3]	35 – 44 years
	[4]	45 – 54 years	[5]	55 – 64 years	[6]	65 years and above

<b>3</b>	What is your current marital status?					
	[1]	Single	[2]	In a relationship		
	[3]	Married				

<b>4</b>	What is your field of occupation? (Please choose one only)					
	[1]	Manager	[2]	Professional	[3]	Technician/Trades Worker
	[4]	Community and Personal Service Worker	[5]	Clerical and Administrative Worker	[6]	Sales Worker
	[7]	Machinery Operator/Driver	[8]	Labourer	[9]	Student
	[10]	Retired	[11]	Other (Please Specify) _____		

<b>5</b>	What is the level of your post-secondary school qualifications?					
	[1]	Certificate	[2]	Bachelor Degree	[3]	Advanced Diploma or Diploma
	[4]	Graduate Diploma or Graduate Certificate	[5]	Postgraduate Degree	[6]	Other (Please specify) _____

<b>6</b>	What is your annual income? (Income per annum)					
	[1]	Under \$19,999	[2]	\$20,000 - \$49,999	[3]	\$50,000 - \$99,999
	[4]	\$100,000 - \$149,000	[5]	\$150,000 and above		



LOUIS VUITTON

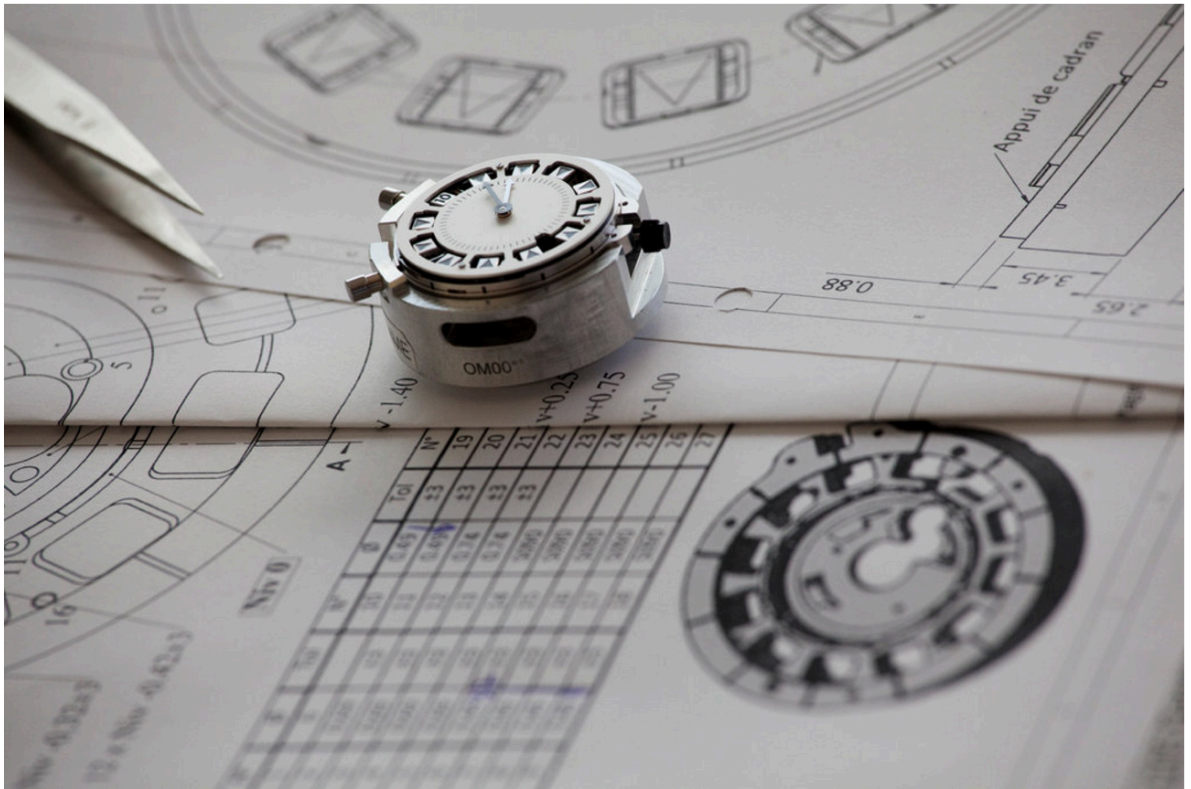
**SECTION B (Familiarity)**

The following statements relate to your FAMILIARITY with Louis Vuitton. For each of the following statements, please circle the value that most closely represents your views.

B		Please indicate how familiar you are with Louis Vuitton							
1	Not at all familiar	1	2	3	4	5	6	7	Extremely familiar
2	Definitely do not recognise it	1	2	3	4	5	6	7	Definitely recognise it
3	Definitely have not heard of it before	1	2	3	4	5	6	7	Definitely have heard of it before

In what follows we are seeking your true reactions to a situation that you might actually confront. Please respond to the questions asked of you in the way you believe you would actually react.

Assume that the advertisements on the following pages came to your attention. After reading the adverts, please respond to the questions and scales which follow.



A creation by La Fabrique du Temps, a designer and builder of high-end movements that was purchased by Louis Vuitton. Louis Vuitton



## Louis Vuitton The hybrid beauty of cases

— Almost a cushion, while evoking a subtly rounded square: the case shape of the two latest Louis Vuitton timepieces defies clear-cut categorisation.



---

## Louis Vuitton GMT

— *La Fabrique du Temps* Louis Vuitton's new GMT watch is indeniably masculine, urban and modern.

Have a close look at the following watches:



*The Tambour watch has unique and recognizable shape that pays tribute to the drum. The rhythm of the drum echoes the rhythm of time. Its brown colouring recalls the Louis Vuitton legacy of Monogram canvas.*

*The Tambour Slim collection features a thin watch signed with the iconic Louis Vuitton Monogram pattern. An elegant and feminine watch, featuring a precious Monogram Star flower set with diamonds - a symbol of good fortune.*



**Louis Vuitton**  
LOUIS VUITTON  
Limited  
Edition

Louis Vuitton is releasing a limited edition watch for men (left) and women (right).

It is not known exactly how many watches there are, but it is going to be a popular release. News outlets, social media, and your friends have been talking about how they think the watch is going to sell out quickly, because a lot of people have said that they do not want to miss out on this watch.

Looking at these watches, and with this piece of information in mind, please answer the following questions on following pages.

### SECTION C (Antecedent Perceptions)

The following statements relate to different attributes of YOUR PERCEPTIONS about the limited edition Louis Vuitton watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

#### Perceived Scarcity

C1	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I think that the current supply of this watch is small	1	2	3	4	5	6	7
2	I think that this watch is selling out soon	1	2	3	4	5	6	7
3	I think many people will buy this watch	1	2	3	4	5	6	7
4	I feel that the limited edition of this watch will cause many people to buy	1	2	3	4	5	6	7
5	I think the limited supplies caused by the high demand will cause a lot of people to buy	1	2	3	4	5	6	7

#### Perceived Uniqueness

C2	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I perceive this watch as highly unique	1	2	3	4	5	6	7
2	Possessing this watch makes me feel distinctive	1	2	3	4	5	6	7

#### Perceived Quality

C3	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch would be reliable	1	2	3	4	5	6	7
2	This watch would be of high workmanship	1	2	3	4	5	6	7
3	This watch would be of good quality	1	2	3	4	5	6	7
4	This watch would be dependable	1	2	3	4	5	6	7
5	This watch would be durable	1	2	3	4	5	6	7

**SECTION D (Perceived Value).**

The following statements relate to YOUR PERCEPTION OF VALUE for the limited edition Louis Vuitton watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

D	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch is good value for money.	1	2	3	4	5	6	7
2	The expected price for this watch is acceptable.	1	2	3	4	5	6	7
3	This watch is considered to be a good buy.	1	2	3	4	5	6	7
4	This watch appears to be a good bargain.	1	2	3	4	5	6	7

**SECTION E (Desire to Acquire)**

The following statements relate to your DESIRE for the limited edition Louis Vuitton watches.

Imagine you are talking to a friend about the limited edition Louis Vuitton watches. They ask you how much you would pay for it, given the opportunity. How much do you tell them?

Each of the following numbers represents how much you would hypothetically be willing to pay. In this case, 1 = 10% of the retail price, 2=20% of the retail price... 10 = retail price, 20 = 100% of the retail price (i.e., double the asking price).

<b>E1</b>	Please indicate how much you would be willing to pay: (Please circle one number).																			
Below retail price										Retail Price										Above retail price
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

Your friend asks you how happy you would be if you owned the limited edition Louis Vuitton watch. To what extent do you think owning the watch would make you happy?

<b>E2</b>	Please indicate how happy think you would feel, if you owned the limited edition Louis Vuitton watch: (Please circle one number).												
Not very happy at all	1	2	3	4	5	6	7	8	9	10	11	12	Extremely happy



**SECTION F (Willingness to Sacrifice).**

The following statements relate to how much you would be WILLING TO SACRIFICE in order to obtain the limited edition Louis Vuitton watch.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

F	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I am willing to pay whatever it takes to get this watch	1	2	3	4	5	6	7
2	A high price for this watch is justified	1	2	3	4	5	6	7
3	I would pay a premium to guarantee I obtain this watch	1	2	3	4	5	6	7
4	Even if this watch was more expensive, it would be worth paying extra for.	1	2	3	4	5	6	7
5	I would purchase this watch, even if the higher price of this watch means I cannot afford other things	1	2	3	4	5	6	7
6	The time I would be willing to give up to obtain this watch is (very little – a lot)	1	2	3	4	5	6	7
7	I would wait in line ahead of the opening to make sure I could purchase this watch	1	2	3	4	5	6	7
8	I would queue for this watch rather than doing other desirable activities	1	2	3	4	5	6	7
9	I would stay up all night to obtain this watch	1	2	3	4	5	6	7
10	Any discomfort I felt obtaining this watch would be worth it	1	2	3	4	5	6	7
11	It would be better for me to be uncomfortable, than to miss out on getting this watch.	1	2	3	4	5	6	7
12	I would wait for this watch even if the weather was terrible	1	2	3	4	5	6	7
13	I would obtain this watch even if it meant giving up sleep to get it	1	2	3	4	5	6	7
14	I would obtain this watch even if it meant I was unable to eat before getting it	1	2	3	4	5	6	7
15	I would acquire this watch even if it meant I was unable to enjoy my day	1	2	3	4	5	6	7
16	I would do anything to make sure I didn't miss out on this watch	1	2	3	4	5	6	7
17	I would give up anything to make sure I obtained this watch	1	2	3	4	5	6	7
18	In general, I perceive I would give up a lot to get this watch	1	2	3	4	5	6	7
19	It is worth giving up more than I would for other watches to get this watch	1	2	3	4	5	6	7
20	This watch is difficult to obtain, but worth giving up a lot to obtain it.	1	2	3	4	5	6	7

## Appendix D: Study Two Survey Instrument – Tag Heuer

### **A STUDY ON CONSUMERS “WILLINGNESS TO SACRIFICE” FOR LUXURY BRANDS**

Dear Respondent,

The purpose of this study is to assess how much consumers are willingness to sacrifice in order to obtain a luxury brand product. The survey exercise is educational and not intended for market research purposes.

The brand(s) and/or product(s) in this survey are representative only, and are selected for the express purpose of this survey. Please answer all the questions in this survey form and give the response which most accurately reflects your views. There is no right or wrong answer. Please note that your answers will be treated with the strictest confidence.

Please note that you have a choice to participate in this survey and that you may end the survey at any time without giving a reason or justification. In this instance, your data will be deleted. Completion of the survey will be taken as evidence of consent to participate in this study.

This project is being conducted by Curtin University as a part of a student project for PhD research. It will take approximately 15 minutes to complete. Please also note that your responses will be kept completely confidential, and there will be no personal information attached to the responses given in this survey. Your responses to this survey will be kept internally as a part of the PhD research.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number HRE2017-2174). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08)9266 7093 or email [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au).

Researcher: Oliver Tucker

Email: [Oliver.H.Tucker@curtin.edu.au](mailto:Oliver.H.Tucker@curtin.edu.au)

Supervisor: Prof. Ian Phau

Email: [Ian.Phau@cbs.curtin.edu.au](mailto:Ian.Phau@cbs.curtin.edu.au)

## SECTION A (Demographics)

The following section contains DEMOGRAPHIC questions that are used to help classify information. Your responses will not be linked to you in any way and will remain confidential. Please answer all questions by circling one number for each question.

<b>1</b>	What is your gender?					
	[1]	Male	[2]	Female		

<b>2</b>	What is your age group?					
	[1]	Under 20 years	[2]	21 – 34 years	[3]	35 – 44 years
	[4]	45 – 54 years	[5]	55 – 64 years	[6]	65 years and above

<b>3</b>	What is your current marital status?					
	[1]	Single	[2]	In a relationship		
	[3]	Married				

<b>4</b>	What is your field of occupation? (Please choose one only)					
	[1]	Manager	[2]	Professional	[3]	Technician/Trades Worker
	[4]	Community and Personal Service Worker	[5]	Clerical and Administrative Worker	[6]	Sales Worker
	[7]	Machinery Operator/Driver	[8]	Labourer	[9]	Student
	[10]	Retired	[11]	Other (Please Specify) _____		

<b>5</b>	What is the level of your post-secondary school qualifications?					
	[1]	Certificate	[2]	Bachelor Degree	[3]	Advanced Diploma or Diploma
	[4]	Graduate Diploma or Graduate Certificate	[5]	Postgraduate Degree	[6]	Other (Please specify) _____

<b>6</b>	What is your annual income? (Income per annum)					
	[1]	Under \$19,999	[2]	\$20,000 - \$49,999	[3]	\$50,000 - \$99,999
	[4]	\$100,000 - \$149,000	[5]	\$150,000 and above		



**SECTION B (Familiarity)**

The following statements relate to your FAMILIARITY with Tag Heuer. For each of the following statements, please circle the value that most closely represents your views.

B Please indicate how familiar you are with Tag Heuer									
1	Not at all familiar	1	2	3	4	5	6	7	Extremely familiar
2	Definitely do not recognise it	1	2	3	4	5	6	7	Definitely recognise it
3	Definitely have not heard of it before	1	2	3	4	5	6	7	Definitely have heard of it before

In what follows we are seeking your true reactions to a situation that you might actually confront. Please respond to the questions asked of you in the way you believe you would actually react.

Assume that the advertisements on the following page came to your attention. After reading the adverts, please respond to the questions and scales which follow.

### A responsible watchmaker

Trustee of exceptional cultural heritage for more than 150 years, TAG Heuer also plays an essential role in preserving natural heritage thanks to an ethical approach applied to all its timepieces creations'.



CALIBRE 16 AUTOMATIC CHRONOGRAPH - 43MM  
CAY2110.BA0927

74



CALIBRE 16 AUTOMATIC CHRONOGRAPH - 43MM  
CAY2111.BA0927 & CAY2112.BA0927

75



84



AQUARACER 300M

CALIBRE 5 AUTOMATIC - 41MM  
WAY211A.BA0928 & WAY211B.FC6363

85



106



LADIES COLLECTION

AQUARACER LADY - 27MM  
WAY1414.BA0920 & WAY1453.BD0922

107





34



CARA DELEVINGNE  
SPECIAL EDITIONS

TAG HEUER CARRERA LADY - 41MM  
WAR101A.BA0728 & WAR101B.FC6367

35



MONACO

MONACO  
HEUER

CAW211PFC6356

Have a close look at the following watches:



Tag Heuer is releasing a limited edition watch for men (“Monaco”, left) and women (“Cara”, right).

These watches are special limited edition releases for 2019.

**Tag Heuer have only produced 2000 of these watches.** A lot of people have been talking about these watches, and because a lot of people have said that they do not want to miss out on this watch, it is expected that these watches are going to sell out very quickly.

After looking carefully at the adverts, and with this information in mind, please respond to the questions on the following pages.



### SECTION C (Antecedent Perceptions)

The following statements relate to different attributes of YOUR PERCEPTIONS about the limited edition Tag Heuer watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

#### Perceived Scarcity

C1	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I think that the current supply of this watch is small	1	2	3	4	5	6	7
2	I think that this watch is selling out soon	1	2	3	4	5	6	7
3	I think many people will buy this watch	1	2	3	4	5	6	7
4	I feel that the limited edition of this watch will cause many people to buy	1	2	3	4	5	6	7
5	I think the limited supplies caused by the high demand will cause a lot of people to buy	1	2	3	4	5	6	7

#### Perceived Uniqueness

C2	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I perceive this watch as highly unique	1	2	3	4	5	6	7
2	Possessing this watch makes me feel distinctive	1	2	3	4	5	6	7

#### Perceived Quality

C3	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch would be reliable	1	2	3	4	5	6	7
2	This watch would be of high workmanship	1	2	3	4	5	6	7
3	This watch would be of good quality	1	2	3	4	5	6	7
4	This watch would be dependable	1	2	3	4	5	6	7
5	This watch would be durable	1	2	3	4	5	6	7

**SECTION D (Perceived Value).**

The following statements relate to YOUR PERCEPTION OF VALUE for the limited edition Tag Heuer watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

D	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch is good value for money.	1	2	3	4	5	6	7
2	The expected price for this watch is acceptable.	1	2	3	4	5	6	7
3	This watch is considered to be a good buy.	1	2	3	4	5	6	7
4	This watch appears to be a good bargain.	1	2	3	4	5	6	7

**SECTION E (Desire to Acquire)**

The following statements relate to your DESIRE for the limited edition Tag Heuer watches.

Imagine you are talking to a friend about the limited edition Tag Heuer watches. They ask you how much you would pay for it, given the opportunity. How much do you tell them?

In this case, "Retail Price" is what you would expect this watch to normally sell for, +100% is double that price and -100% is half that price.

<b>E1</b>	Please indicate how much you would be willing to pay: (Please circle one number).							
Well Below Retail Price	-100%	-50%	-10%	Retail Price	+10%	+50%	+100%	Well Above Retail Price
	1	2	3	4	5	6	7	

Your friend asks you how happy you would be if you owned the limited edition Tag Heuer watch. To what extent do you think owning the watch would make you happy?

<b>E2</b>	Please indicate how happy think you would feel, if you owned the limited edition Tag Heuer watch: (Please circle one number).							
Not very happy at all	1	2	3	4	5	6	7	Extremely happy

**SECTION F (Willingness to Sacrifice).**

The following statements relate to how much you would be WILLING TO SACRIFICE in order to obtain the limited edition Tag Heuer watch.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

F	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I am willing to pay whatever it takes to get this watch	1	2	3	4	5	6	7
2	A high price for this watch is justified	1	2	3	4	5	6	7
3	I would pay a premium to guarantee I obtain this watch	1	2	3	4	5	6	7
4	Even if this watch was more expensive, it would be worth paying extra for.	1	2	3	4	5	6	7
5	I would purchase this watch, even if the higher price of this watch means I cannot afford other things	1	2	3	4	5	6	7
6	The time I would be willing to give up to obtain this watch is (very little – a lot)	1	2	3	4	5	6	7
7	I would wait in line ahead of the opening to make sure I could purchase this watch	1	2	3	4	5	6	7
8	I would queue for this watch rather than doing other desirable activities	1	2	3	4	5	6	7
9	I would stay up all night to obtain this watch	1	2	3	4	5	6	7
10	Any discomfort I felt obtaining this watch would be worth it	1	2	3	4	5	6	7
11	It would be better for me to be uncomfortable, than to miss out on getting this watch.	1	2	3	4	5	6	7
12	I would wait for this watch even if the weather was terrible	1	2	3	4	5	6	7
13	I would obtain this watch even if it meant giving up sleep to get it	1	2	3	4	5	6	7
14	I would obtain this watch even if it meant I was unable to eat before getting it	1	2	3	4	5	6	7
15	I would acquire this watch even if it meant I was unable to enjoy my day	1	2	3	4	5	6	7
16	I would do anything to make sure I didn't miss out on this watch	1	2	3	4	5	6	7
17	I would give up anything to make sure I obtained this watch	1	2	3	4	5	6	7
18	In general, I perceive I would give up a lot to get this watch	1	2	3	4	5	6	7
19	It is worth giving up more than I would for other watches to get this watch	1	2	3	4	5	6	7
20	This watch is difficult to obtain, but worth giving up a lot to obtain it.	1	2	3	4	5	6	7

## Appendix E: Study Two Survey Instrument – Louis Vuitton

### **A STUDY ON CONSUMERS “WILLINGNESS TO SACRIFICE” FOR LUXURY BRANDS**

Dear Respondent,

The purpose of this study is to assess how much consumers are willingness to sacrifice in order to obtain a luxury brand product. The survey exercise is educational and not intended for market research purposes.

The brand(s) and/or product(s) in this survey are representative only, and are selected for the express purpose of this survey. Please answer all the questions in this survey form and give the response which most accurately reflects your views. There is no right or wrong answer. Please note that your answers will be treated with the strictest confidence.

Please note that you have a choice to participate in this survey and that you may end the survey at any time without giving a reason or justification. In this instance, your data will be deleted. Completion of the survey will be taken as evidence of consent to participate in this study.

This project is being conducted by Curtin University as a part of a student project for PhD research. It will take approximately 15 minutes to complete. Please also note that your responses will be kept completely confidential, and there will be no personal information attached to the responses given in this survey. Your responses to this survey will be kept internally as a part of the PhD research.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number HRE2017-2174). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08)9266 7093 or email [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au).

Researcher: Oliver Tucker

Email: [Oliver.H.Tucker@curtin.edu.au](mailto:Oliver.H.Tucker@curtin.edu.au)

Supervisor: Prof. Ian Phau

Email: [Ian.Phau@cbs.curtin.edu.au](mailto:Ian.Phau@cbs.curtin.edu.au)

## SECTION A (Demographics)

The following section contains DEMOGRAPHIC questions that are used to help classify information. Your responses will not be linked to you in any way and will remain confidential. Please answer all questions by circling one number for each question.

<b>1</b>	What is your gender?					
	[1]	Male	[2]	Female		

<b>2</b>	What is your age group?					
	[1]	Under 20 years	[2]	21 – 34 years	[3]	35 – 44 years
	[4]	45 – 54 years	[5]	55 – 64 years	[6]	65 years and above

<b>3</b>	What is your current marital status?					
	[1]	Single	[2]	In a relationship		
	[3]	Married				

<b>4</b>	What is your field of occupation? (Please choose one only)					
	[1]	Manager	[2]	Professional	[3]	Technician/Trades Worker
	[4]	Community and Personal Service Worker	[5]	Clerical and Administrative Worker	[6]	Sales Worker
	[7]	Machinery Operator/Driver	[8]	Labourer	[9]	Student
	[10]	Retired	[11]	Other (Please Specify) _____		

<b>5</b>	What is the level of your post-secondary school qualifications?					
	[1]	Certificate	[2]	Bachelor Degree	[3]	Advanced Diploma or Diploma
	[4]	Graduate Diploma or Graduate Certificate	[5]	Postgraduate Degree	[6]	Other (Please specify) _____

<b>6</b>	What is your annual income? (Income per annum)					
	[1]	Under \$19,999	[2]	\$20,000 - \$49,999	[3]	\$50,000 - \$99,999
	[4]	\$100,000 - \$149,000	[5]	\$150,000 and above		



LOUIS VUITTON

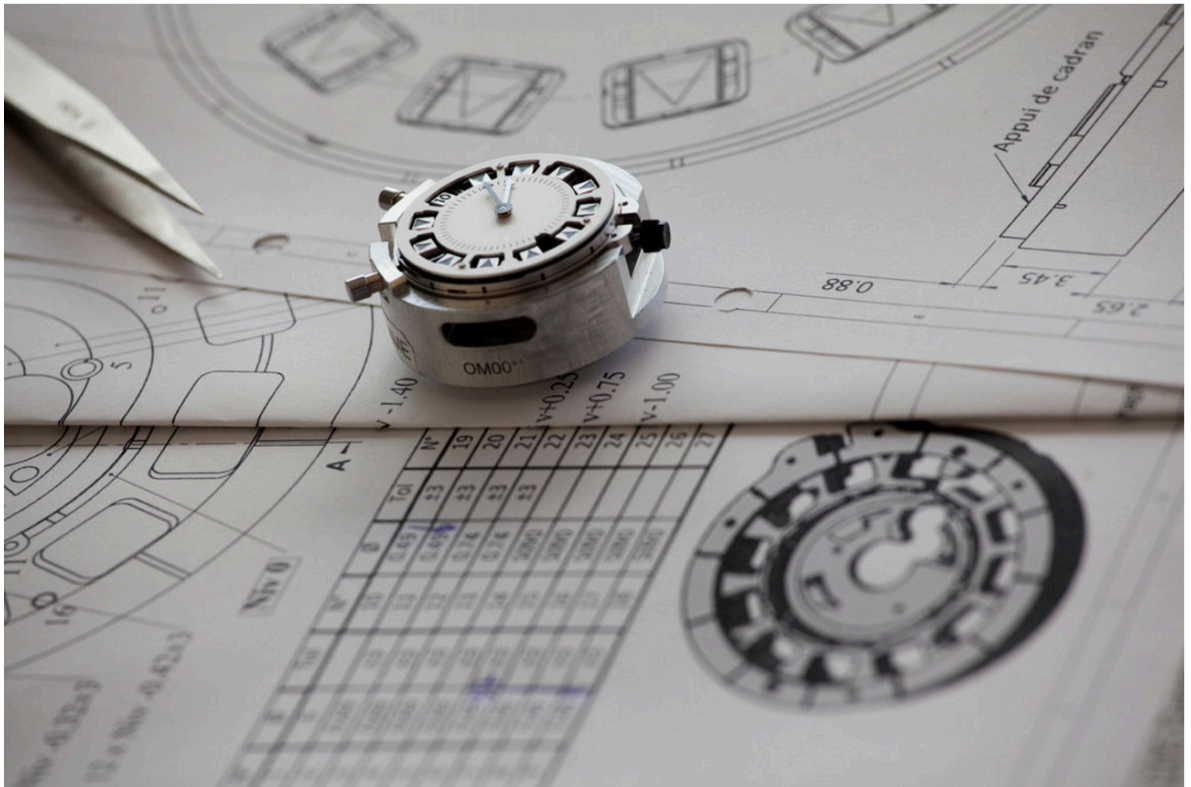
**SECTION B (Familiarity)**

The following statements relate to your FAMILIARITY with Louis Vuitton. For each of the following statements, please circle the value that most closely represents your views.

B		Please indicate how familiar you are with Louis Vuitton							
1	Not at all familiar	1	2	3	4	5	6	7	Extremely familiar
2	Definitely do not recognise it	1	2	3	4	5	6	7	Definitely recognise it
3	Definitely have not heard of it before	1	2	3	4	5	6	7	Definitely have heard of it before

In what follows we are seeking your true reactions to a situation that you might actually confront. Please respond to the questions asked of you in the way you believe you would actually react.

Assume that the advertisements on the following pages came to your attention. After reading the adverts, please respond to the questions and scales which follow.



A creation by La Fabrique du Temps, a designer and builder of high-end movements that was purchased by Louis Vuitton. Louis Vuitton



## Louis Vuitton The hybrid beauty of cases

— Almost a cushion, while evoking a subtly rounded square: the case shape of the two latest Louis Vuitton timepieces defies clear-cut categorisation.





---

## Louis Vuitton GMT

— *La Fabrique du Temps* Louis Vuitton's new GMT watch is indeniably masculine, urban and modern.

Have a close look at the following watches:



*The Tambour watch has unique and recognizable shape that pays tribute to the drum. The rhythm of the drum echoes the rhythm of time. Its brown colouring recalls the Louis Vuitton legacy of Monogram canvas.*

*The Tambour Slim collection features a thin watch signed with the iconic Louis Vuitton Monogram pattern. An elegant and feminine watch, featuring a precious Monogram Star flower set with diamonds - a symbol of good fortune.*



**Louis Vuitton**  
LOUIS VUITTON  
Limited  
Edition

Louis Vuitton is releasing a limited edition watch for men (left) and women (right).

These watches are special limited edition releases for 2019.

**Louis Vuitton have only produced 2000 of these watches.** A lot of people have been talking about these watches, and because a lot of people have said that they do not want to miss out on this watch, it is expected that these watches are going to sell out very quickly.

After looking carefully at the adverts, and with this information in mind, please respond to the questions on the following pages.

### SECTION C (Antecedent Perceptions)

The following statements relate to different attributes of YOUR PERCEPTIONS about the limited edition Louis Vuitton watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

#### Perceived Scarcity

C1	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I think that the current supply of this watch is small	1	2	3	4	5	6	7
2	I think that this watch is selling out soon	1	2	3	4	5	6	7
3	I think many people will buy this watch	1	2	3	4	5	6	7
4	I feel that the limited edition of this watch will cause many people to buy	1	2	3	4	5	6	7
5	I think the limited supplies caused by the high demand will cause a lot of people to buy	1	2	3	4	5	6	7

#### Perceived Uniqueness

C2	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I perceive this watch as highly unique	1	2	3	4	5	6	7
2	Possessing this watch makes me feel distinctive	1	2	3	4	5	6	7

#### Perceived Quality

C3	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch would be reliable	1	2	3	4	5	6	7
2	This watch would be of high workmanship	1	2	3	4	5	6	7
3	This watch would be of good quality	1	2	3	4	5	6	7
4	This watch would be dependable	1	2	3	4	5	6	7
5	This watch would be durable	1	2	3	4	5	6	7

**SECTION D (Perceived Value).**

The following statements relate to YOUR PERCEPTION OF VALUE for the limited edition Louis Vuitton watches.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

D	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	This watch is good value for money.	1	2	3	4	5	6	7
2	The expected price for this watch is acceptable.	1	2	3	4	5	6	7
3	This watch is considered to be a good buy.	1	2	3	4	5	6	7
4	This watch appears to be a good bargain.	1	2	3	4	5	6	7

**SECTION E (Desire to Acquire)**

The following statements relate to your DESIRE for the limited edition Louis Vuitton watches.

Imagine you are talking to a friend about the limited edition Louis Vuitton watches. They ask you how much you would pay for it, given the opportunity. How much do you tell them?

In this case, "Retail Price" is what you would expect this watch to normally sell for, +100% is double that price and -100% is half that price.

<b>E1</b>	Please indicate how much you would be willing to pay: (Please circle one number).							
Well Below Retail Price	-100%	-50%	-10%	Retail Price	+10%	+50%	+100%	Well Above Retail Price
	1	2	3	4	5	6	7	

Your friend asks you how happy you would be if you owned the limited edition Tag Heuer watch. To what extent do you think owning the watch would make you happy?

<b>E2</b>	Please indicate how happy think you would feel, if you owned the limited edition Tag Heuer watch: (Please circle one number).							
Not very happy at all	1	2	3	4	5	6	7	Extremely happy

**SECTION F (Willingness to Sacrifice).**

The following statements relate to how much you would be WILLING TO SACRIFICE in order to obtain the limited edition Louis Vuitton watch.

For each of the following statements, please circle the value that most closely represents your views. 1 = Not At All Important, 2 = Very Unimportant, 3 = Unimportant, 4 = Neutral, 5 = Important, 6 = Very Important, 7 = Extremely Important.

F	Please rate the extent to which you agree or disagree with the following statements. (Please circle one number for each statement).	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1	I am willing to pay whatever it takes to get this watch	1	2	3	4	5	6	7
2	A high price for this watch is justified	1	2	3	4	5	6	7
3	I would pay a premium to guarantee I obtain this watch	1	2	3	4	5	6	7
4	Even if this watch was more expensive, it would be worth paying extra for.	1	2	3	4	5	6	7
5	I would purchase this watch, even if the higher price of this watch means I cannot afford other things	1	2	3	4	5	6	7
6	The time I would be willing to give up to obtain this watch is (very little – a lot)	1	2	3	4	5	6	7
7	I would wait in line ahead of the opening to make sure I could purchase this watch	1	2	3	4	5	6	7
8	I would queue for this watch rather than doing other desirable activities	1	2	3	4	5	6	7
9	I would stay up all night to obtain this watch	1	2	3	4	5	6	7
10	Any discomfort I felt obtaining this watch would be worth it	1	2	3	4	5	6	7
11	It would be better for me to be uncomfortable, than to miss out on getting this watch.	1	2	3	4	5	6	7
12	I would wait for this watch even if the weather was terrible	1	2	3	4	5	6	7
13	I would obtain this watch even if it meant giving up sleep to get it	1	2	3	4	5	6	7
14	I would obtain this watch even if it meant I was unable to eat before getting it	1	2	3	4	5	6	7
15	I would acquire this watch even if it meant I was unable to enjoy my day	1	2	3	4	5	6	7
16	I would do anything to make sure I didn't miss out on this watch	1	2	3	4	5	6	7
17	I would give up anything to make sure I obtained this watch	1	2	3	4	5	6	7
18	In general, I perceive I would give up a lot to get this watch	1	2	3	4	5	6	7
19	It is worth giving up more than I would for other watches to get this watch	1	2	3	4	5	6	7
20	This watch is difficult to obtain, but worth giving up a lot to obtain it.	1	2	3	4	5	6	7

## Appendix F: Study Three – Restaurant Experience

# MASTER TEMPLATE - Restaurant Experience

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### Start of Block: Introduction

Dear Respondent,

Thank you for your participation in this study. The purpose of this study is to assess how much consumers are willing to sacrifice in order to obtain a unique luxury experience.

Please note that you have a choice to participate in this survey and that you may end the survey at any time without giving a reason or justification. In this instance, your data will be deleted. Completion of the survey will be taken as evidence of consent to participate in this study.

Please also note that any imagery, brand(s) and/or product(s) in this survey are representative only, and are selected for the express purpose of this survey.

Please answer all the questions in this survey form and give the responses which most accurately reflect your views. There are no right or wrong answers, and all of your answers will be treated with the strictest confidence.

If you have any questions about this study, please contact [Oliver.H.Tucker@curtin.edu.au](mailto:Oliver.H.Tucker@curtin.edu.au)

### End of Block: Introduction

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### Start of Block: Demographics

The following section contains demographic questions that are used to help classify information. Your responses will not be linked to you in any way and will remain confidential. Please answer all questions.

---

What is your Gender?

- Male
  - Female
  - Other
- 

What is your age group?

- Under 20 years
  - 21 - 34 years
  - 35 - 44 years
  - 45 - 54 years
  - 55 - 64 years
  - 65 years and above
- 

What is your current marital status?

- Single
- In a relationship
- Married



---

What is your occupation?

- Manager
- Technician/Trades worker
- Community and Personal Service Worker
- Clerical and Administrative Worker
- Sales Worker
- Machinery Operator/Driver
- Labourer
- Student
- Retired
- Other (Please specify below)

---

If you answered "Other" above, please specify your field of occupation:

\_\_\_\_\_

—

What is the highest academic qualification you have achieved?

- High School Certificate
- Bachelor Degree
- Advanced Diploma or Diploma
- Graduate Diploma or Graduate Certificate
- Postgraduate Degree
- Other (Please specify below)

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If you answered "Other" above, please specify your level of post-secondary school qualification:

\_\_\_\_\_

—

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What is your annual income? (\$AUD)

- Under \$19,999
- \$20,000 - \$49,000
- \$50,000 - \$99,999
- \$100,000 - \$149,999
- \$150,000 and above

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Page Break

## End of Block: Demographics

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### Start of Block: Restaurant Stimulus

In what follows, we are seeking your **true reactions** to a real-world situation that you might experience. Please respond to the questions asked of you **in the way you believe you would actually react**.

Assume that the following images of this luxury dining experience came to your attention. This is a proposed concept for a luxury restaurant located in an aquarium. This unique experience will feature a menu of fresh seasonal produce, as well as world class desserts and wines.

The price for this dining experience is not set, but it is expected it will be luxuriously priced based on the standards of a fine dining restaurant.

After looking carefully at the photos, please respond to the questions on the following pages.





Page Break

This luxury dining experience is proposed to open soon. Please indicate your interest in this luxury experience by answering the following question:  
(1 = Not Interested At All, 4 = Neutral, 7 = Extremely Interested)

	Not Interested At All	2	3	4	5	6	Extremely Interested
	1						7
I am interested in dining at this restaurant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The following statements relate to different attributes of *your perceptions* about this proposed concept for a luxury dining experience. For each of the following statements, please select the response that most closely represents your views. (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree)

Please rate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	2	3	4	5	6	Strongly Agree
	1						7
I think that the availability for this dining experience would be small	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that the opportunity to dine at this luxury restaurant would sell out soon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think many people will book this luxury restaurant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that the limited nature of this aquatic dining experience will cause many people to buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think the limited supplies caused by the high demand will cause a lot of people to buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	2	3	4	5	6	Strongly Agree
	1						7
I perceive this luxury aquatic dining experience to be highly unique	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experiencing this luxury dining environment would make me feel distinctive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please rate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	2	3	4	5	6	Strongly Agree
	1						7
The food presentation is visually attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I perceive this restaurant would serve tasty food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think this restaurant will offer fresh food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I perceive this restaurant will offer healthy options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This restaurant's decoration is impressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This restaurant's interior design is appealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This restaurant's atmosphere is luxurious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Page Break



End of Block: Antecedent Variables

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Start of Block: Perceived Value

The following statements relate to your perception of value for the luxury dining experience.

For each of the following statements, please select the response that most closely represents your views. (1 = Not At All Important, 4 = Neutral, 7 = Extremely Important)

Please rate the extent to which you agree or disagree with the following statements

	Strongly Disagree	2	3	4	5	6	Strongly Agree
	1						7
This luxury dining experience would be good value for money.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The anticipated price for this luxury dining experience is acceptable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This luxury dining experience would be considered to be a good purchase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This aquatic dining experience appears to be a good bargain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Page Break

End of Block: Perceived Value

Start of Block: Desire

The following statements relate to your desire to have this luxury dining experience. There are two different scenarios; One which allows for reservations, and another where you must queue and you are not guaranteed a spot. In both scenarios, the number of places available for any given evening are limited.

Please consider both scenarios carefully, and answer accordingly if you feel your response would be the same or different in each scenario.

Imagine you are talking to a friend about this luxury dining experience. They ask you how much you would pay for it, given the opportunity.

Each of the following numbers represents how much you would hypothetically be willing to pay. In this case, "Regular Price" is what you would expect this kind of dish to normally sell for, +100% is double that price and -100% is half that price.

Please consider each scenario carefully, and give your answer accordingly

	<b>A limited number of reservations are available:</b> You must call ahead to guarantee your spot for a given night.							<b>No Reservations:</b> You must arrive early and queue for the experience and once sold out, there are no places left for the evening.						
	-100%	-50%	-10%	Regular Price	+10%	+50%	+100%	-100%	-50%	-10%	Regular Price	+10%	+50%	+100%
I tell the m I am willing to pay :	(	(	(	(	(	(	(	(	(	(	(	(	(	(

Your friend asks you how happy you would be if you were able to have this dining experience. To what extent do you think it would make you happy?  
 (1 = Not Happy At All, 4 = Neutral, 7 = Extremely Happy)

	<b>A limited number of reservations are available:</b> You must call ahead to guarantee your spot for a given night.							<b>No Reservations:</b> You must arrive early and queue for the experience and once sold out, there are no places left for the evening.						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
How happy would you be if you managed to have this luxury dining experience?														

End of Block: Desire

Start of Block: Willingness to Sacrifice

The following statements relate to **how much you would be willing to sacrifice** in order to obtain the unique luxury dining experience. Please rate the extent to which you agree or disagree with the following statements, where **1 = Strongly Disagree, 4 = Neutral, and 7 = Strongly Agree**

Please rate the extent to which you agree or disagree with the following statements

	<b>A limited number of reservations are available:</b> You must call ahead to guarantee your spot for a given night.							<b>No Reservations:</b> You must arrive early and queue for the experience and once sold out, there are no places left for the evening.						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7

I am willing to  
pay whatever  
it takes to  
have this  
luxury dining  
experience

A high price  
for this luxury  
dining  
experience is  
justified

I would pay a  
premium to  
guarantee I  
obtain this  
luxury dining  
experience

Even if this  
luxury dining  
experience  
was more  
expensive  
than I  
expected, it  
would be  
worth paying  
extra for

I would  
purchase this  
luxury dining  
experience,  
even if the  
higher price of  
this aquatic  
restaurant  
means I  
cannot afford  
other things

I would wait in  
line ahead of  
the opening to  
make sure I  
could  
purchase this  
luxury dining  
experience

I would queue  
for this luxury  
dining  
experience  
rather than  
doing other  
desirable  
activities

I would stay  
up all night to  
obtain this  
luxury dining  
experience

Any discomfort  
I felt obtaining  
this luxury  
dining  
experience  
would be  
worth it

It would be  
better for me  
to be  
uncomfortable,  
than to miss  
out on getting  
this luxury  
dining  
experience.

I would wait  
outside for this  
luxury dining  
experience  
even if the  
weather was  
terrible

I would obtain  
this luxury  
dining  
experience  
even if it  
meant giving  
up sleep to get  
it

I would not  
give up my  
place in a  
queue for this  
luxury dining  
experience  
even if it  
meant I was  
unable to  
enjoy my day

I would do  
anything to  
make sure I  
didn't miss out  
on this luxury  
dining  
experience

I would give  
up anything to  
make sure I  
obtained this  
luxury dining  
experience

In general, I  
perceive I  
would give up  
a lot to get this  
luxury dining  
experience

It is worth  
giving up more  
than I would  
for other  
luxury dining  
experiences to  
get this luxury  
dining  
experience

This luxury  
dining  
experience is  
difficult to  
obtain, but  
worth giving  
up a lot to  
obtain it

**End of Block: Willingness to Sacrifice**

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