THE EMOTIONAL INFLUENCES ON VENDORS’ RESIDENTIAL PRICE PERCEPTION

(THE PRICE VIRUS)

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I hereby declare that this research thesis referred to as ‘The Emotional Influences on Vendors’ Residential Price Perception (The Price Virus)’, submitted in fulfilment of the requirements for the award of Doctor of Business Administration, is entirely my own original work and that, to my best understanding and knowledge, this thesis does not comprise material previously published; any published materials used are acknowledged.

I certify that the material in this thesis has not been previously presented nor is being currently presented, either in whole or in part, for any other degree at Murdoch University or any other university.

I also certify that any assistance received in articulating this thesis and all sources used have been acknowledged. Murdoch University’s Ethics Committee has granted ethics approval for the collection of data for this research, as explained in this thesis. The approval number is 2014/013.

Signature of Candidate

......................................

Leon Kew Wong
ABSTRACT

The aim of this study is to explore what causes the gap between the asking price and the buying price of houses in Australia. According to 2012 statistics provided by Real Estate Institute of Western Australia, home sales records shows approximately 70 per cent of the homes listed for sale did not achieve their asking price. The research hypothesis adopted in this thesis is that this gap is caused by vendors’ emotional attachment to the home, which in turn influences an unrealistic price. The proposal of this unrealistic price is the focus of the research investigation. The objective is to explore the hypothesis that home vendors are socially and emotionally conditioned to perceive their home to be worth more than its actual market value. The effect of irrational behaviour influenced by vendors’ emotions is deemed to be linked to their unrealistic perception of price.

Home ownership is a key sector of the property industry, now Australia’s biggest industry, larger even than mining. The industry contributed $185.5 billion to the economy, equivalent to 11.5 per cent of GDP in the last financial year. The latest data shows that Australian homes are currently worth $5.0 to $5.5 trillion dollars. Depending on the source, the estimate for number of residential properties sold each year in Australia is between 400,000 and 600,000. If indeed unrealistic price perception is influenced by human emotions in an industry as big as this, then there are cogent reasons for exploring this phenomenon.

This study employed a questionnaire survey relating to the research question. The survey was hosted on Fairfax Media’s websites and received responses from all over Australia as well as 11 other countries. The participants in the survey were mainly homeowners who had sold or had attempted to sell their homes, which enabled this study to explore the emotional behaviour underlying how homeowners arrive at a value for their homes.

Five emotions were assessed as key variables that affect price perception across the emotional stages in decision-making. The results suggest that the strongest factor
influencing unrealistic price perception is greed, followed by vendors’ expectation that buyers will negotiate, a lack of trust in the real estate agent and pride in ownership. The findings reveal that the feeling of uniqueness of the home also influences this unrealistic price perception.

It is hoped that this study will contribute to the real estate industry by providing a better insight into why vendors tend to overprice their homes. The results of this research could therefore provide an improved understanding of home vendors’ behaviour, and offer an important insight into the implications of emotional attachment in relation to decision-making and the perceived value of the home.
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ABBREVIATIONS

AMP                      Appraised Market Price
APM                      Australian Property Monitors
GDP                      Gross Domestic Product
IMF                      International Monetary Fund
REIWA                    Real Estate Institute of Western Australia
SET                      Self-efficacy theory
TPB                      Theory of Planned Behaviour
TRA                      Theory of Reasoned Action

DEFINITIONS

PRICE VIRUS              The unrealistic high selling price
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‘To God be the Glory.’
1.0 The nature, aim and background of the research

The purpose of this study is to evaluate various emotional influences that affect how homeowners determine the selling price of their homes. Based on numerous research studies highlighted in the literature review, it is suggested that people are likely to perceive the value of their homes to be higher than their actual market value. The thesis hypotheses are tested empirically to determine whether or not they are supported by the data collected. This study proposes that vendors’ emotional attachment to their homes is associated with the expectation of achieving a higher selling price for their properties.

Studies have found that materialists tend to value financial success significantly more than other life goals (Kasser & Ryan, 1993; Vansteenkiste, Duriez, Simons, & Soenens, 2006). It has also been argued that there is a strong relationship between materialism and desired incomes (Richins & Rudmin, 1994; Watson, 2003). It may also be assumed that this desire to achieve more is also observable when it comes to selling one’s own property. Financial self-interest is assumed to be a strong motive pushing the vendor to aim for higher prices.

Economists believe that people are fundamentally greedy (Pearce, 1992), and Monteiro, Musten, and Compson (2015) also assume that people are fundamentally inclined to be greedy. Neoclassical and contradictory economists likewise assume that people are naturally greedy, with insatiable consumer appetites (Cohn, 2003). Wachtel (2003) defines greed as the selfish and excessive desire to acquire or possess more than one need. The Free Dictionary (Greed, 2015) defines greed to be an excessive desire to acquire or possess more than what one needs or deserves, especially with respect to material wealth. Similarly, greed can be defined as ‘a primarily materialistic type of desire’ (Balot, 2001, p. 1), and is suggested to be an influencing factor associated with vendors selling their houses. So if the tendency is to be greedy, then it
is only the degree of greed that varies. Some people are supposedly greedier and some less so. Homeowners’ greed may, in fact, be disguised using the following excuse: ‘I am not greedy, but my house is worth more’. This is one of the assumptions in this study—vendors are not receptive to the notion that greed is influencing an unrealistic price, because it does not reflect well on them. Greed is a core construct in the research model.

However, the assumptions of economics make it particularly difficult to distinguish self-interest from greed. Economics has long described people as rational profit-maximisers, and the assumption of self-interest, embodied in the desire to maximize gains and minimize losses, is central to most economic models (Frank, Gilovich & Regan, 1993). It is therefore necessary to evaluate home-owners’ perceptions in order to highlight the complex interrelating social, cultural and emotional factors that positively and negatively influence vendors’ home price expectations. In this analysis, a proper evaluation is essential for understanding the rationale behind why people constantly see their homes as being worth more than their actual market value.

Value creation is widely discussed in academic research literature. ‘Value’ is a core concept in marketing and economics research (Soutar & Sweeney, 2001). Zeithaml (1988, p 14, as cited in Sweeney & Soutar, 2001) has suggested that perceived value can be regarded as a ‘consumer’s overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given’. Additionally, Soutar and Sweeney (2001) found that two components, quality and price, have differential effects on perceived value for money. Hence, for different people, the components of perceived value might vary between individuals. According to Zeithaml (1988), some consumers obtained value from all relevant ‘get’ and ‘give’ components, which is her definition of ‘perceived value’. Researchers such as Schechter (1984) and Bolton and Drew (1991) suggest that understanding value as a trade-off between quality and price only is too simplistic, and has led Soutar and Sweeney (2015) to develop a ‘perceived value scale’ to assess value.

People often dismiss ‘fine-tuned economic models’ on the basis they do not take into account sometimes irrational actions by human actors who do not always act in their
own best interests, or who act in ways which are not justified by numbers, but by emotion (Wharton School, 2009, para. 2). The core proposition arrived at is that emotional factors influence vendors’ unrealistic expectations of higher selling prices for their own homes. This unrealistic price perception is assumed to influence the price gap in the selling of real estate between the prices buyers are willing to pay versus the unrealistically high price vendors are seeking.

In the model proposed in this study, this unrealistically high price is described as *The Price Virus*, and refers to the inflated selling price the home sellers tend to pursue. The word ‘virus’ is used because of its metaphorical associations with bacteria which leads to poor health. In this study, the concept refers to poor or wrong analysis clouded by incorrect interpretations (influenced by emotions) as to the value of the home. Selling a home involves making a business decision, since this is a monetary exercise, and it is therefore important to remain objective, even though home vendors are in danger of deviating from this way of thinking due to their emotional attachment to their home.

What are the emotions that supposedly have such an influence, especially for people who are selling their homes? This research investigates the following factors: pride in ownership, emotions affected by an expectation that buyers will negotiate; lack of trust in real estate agents to act in the vendors’ best interest; feeling of the home’s uniqueness; and finally, the greed motivation. These are the emotional composites that are deemed to produce vendor bias and ultimately lead to the Price Virus.

**1.1 Scope of the thesis**

The experience of owning a home opens the owner up to feeling more emotionally attached to the object and allowing them to enlarge their feeling of possession (Stigler & Becker, 1977), and feeling partial toward the possession. When putting the house on the market, the listed price may be emotionally influenced rather than assessed objectively. This emotional attachment to the home may influence a higher price which is disproportionate to the actual price transacted, and this higher price may originate from a sentimental rather than rational evaluation.
Ariely (2008) simplifies the situation for a non-economist audience by describing an exchange situation where the owner thinks his possession is of a higher value than the buyer is willing to pay. He uses the quotation, ‘one man’s ceiling is another man’s floor’ to describe the ‘endowment effect’. When you own an object, you are at the ceiling and want to sell at a higher price than the desired price of the buyer, who is at the floor. The endowment effect, as Ariely (2008) puts it, is just a difference of perspective.

Contrary to rational economic models, this observed tendency shows that people do not have fixed values for goods, and that the value of a good increases when it becomes part of a person’s endowment. Experimental studies have demonstrated undeniably that randomly-assigned owners of a good demand significantly more money to part with their possession than randomly-assigned buyers are willing to pay to acquire it (Kahneman, Knetsch & Thaler, 1990). The endowment effect theory has been applied in this thesis to investigate the factors influencing the Price Virus.

According to Gountas and Mavondo (2003), predicting consumers’ behaviour is a very important issue for marketing managers in all industries. They suggest that ‘isolated individual psychological constructs such as attitudes, motives, personality traits and learning styles have been used to identify their predictive capacity for actual consumer behaviour with varying degrees of success’ (p. 314). Hence, this research aims to assess feelings and attitudes which may arguably relate to the behaviour of the Price Virus in vendors when selling their homes. The nature of this study is to develop testable hypotheses and a research model about the various emotions that influence and distort the actual market value of home, resulting in the Price Virus.

The study focuses on the price perception of owner occupied houses, not their investment properties. The emotional attachment to investment properties is not emphasised in this investigation but could be elaborated in future studies.
1.2 The basis of the Price Virus

As stated, the vendors’ desire for an unrealistic price produces higher selling prices, which are unrealistic from the buyers’ point of view. In the United States, which has one of the largest property markets in the world, most individuals overestimate the value of their homes significantly (Benítez-Silva, Eren, Heiloand & Jimenez-Martin, 2015). This raises the question of whether home sellers are wrong in their price expectations and if so, why? Perhaps it could be a strategy to raise the price in anticipation that the price will be negotiated. Alternatively, could it be a genuine belief that the home is actually worth more than other people say? Several researchers have suggested that the high price relates to a combination of self-interest, a desire for money, and self-excessiveness due to attachment to the home (Balot 2001; Wachtel, 2003; Childs, 2003; Diamond, 2012).

Belk (1988) demonstrated that the value of possession ownership may be associated with a self-excessive nature, and lead to a perception that the home is worth more than others think. The process of selling the home or transferring the ownership to another person may be associated with a substantial loss of ‘self’. These propositions are advanced by Belk (1998) who reasons that objects and possessions such as homes are considered to be part of one’s self (emotionally speaking). In relating to possessions as a part of one’s ‘extended self’, people feel that their sense of self is intensified by what they have, or reduced by what they have lost (Belk, 1988). To support the theory of possession linking to self, researchers also generally agree that people use attachment to material objects to define and maintain their identities (Ball & Tasaki, 1992; Belk, 1988). Similarly, Goffman (1961) suggests that if possessions are viewed as part of the self, then this could lead to a loss of self if one loses something (in this case, the home), and could even be regarded as a lessening of one’s self. Wallendorf, Belk and Heisley (1988) also agreed that personal items and possessions, such as motor vehicles, collections, and homes have all been found to commonly provide an enlarged sense of self when they were selectively cherished and preserved, but contribute to a diminished sense of self or even grief when they are lost or damaged. Because possessions link to the ‘extended self’ (emotionally), a loss of ownership can effectively lead to a lessening of self. Therefore, when a vendor has to
sell their home, this may be interpreted as a loss of self, because ownership will eventually no longer be attached to the vendor. All these sentiments could lead to asking for remuneration to compensate the loss, ultimately leading to wanting more money, and therefore influencing the Price Virus.

Selling a home involves a large amount of money. The desire for more can never be satisfied, and the effort to find this satisfaction is one guaranteed to fail (Levine, 2013). Emotions can, in fact, lead us away from critical thinking and impartial consideration. Desiring more is deemed to link to the Price Virus and can be described using many different names, including grasping, avarice, covetousness, miserliness, gluttony, lust, overreaching ambition, and desire that spins out of control (Tickle, 2004).

1.3 Research gap in the literature

Why is this research needed? The researcher has worked in private enterprises for 33 years and has over 20 years’ experience in the property and real estate industry. He has observed that vendors consistently ask for an unrealistically high price for their homes, and this phenomenon warrants the current investigation.

Bruine De Bruin, Parker & Fischoff (2007) state that people tend to make decisions that deviate from the norm. For example, Amor and Secket (2002) suggested that people are generally affected by optimistic bias, opinion bias and self-serving bias. Optimistic bias refers to people having a positive perception of things and a tendency to underestimate the possibility that they may experience difficulties. Opinion bias may be interpreted as one’s preconceived idea or perception about something. Self-serving bias is people’s tendency to ascribe positive experiences to their own personal appeal. Self-serving bias can be interpreted as a consequence of both optimistic and opinion biases, which result in overconfidence (Svenson, 1981). One may conclude that these biases may cause vendors to price their homes at an unrealistically high price.

Other studies however, have found that there is a positive correlation between cognitive ability and resistance to decision-making biases (Bruine de Bruin et al., 2007).
Cacioppo and Petty (1998) point out those cognitive approaches produce a tendency towards thinking hard about problems, thus reducing the likelihood of these kinds of errors (Smith & Levin, 1996). According to Peters et al. (2006), recent research has found that people with this kind of higher proficiency has a correlation with resistance to errors caused by irregularity and unreliability. By contrast, the researcher has observed that many individuals, in particularly numerous corporate executives who are involved in making high-level decisions at their workplaces somehow fail to arrive at a realistic selling price for their home. No research has previously examined the price gap caused by emotional influences on the home selling price and, more specifically, whether some specified emotions play a significant role. There is a possibility that business decisions are made with no or little emotion, but that the home is a personal possession of the owner, and that emotional attachment to the home is thus a reality. This study aims to establish that emotional attachment to the home distorts vendors’ cognitive ability to determine a realistic value for the home.

The study is further substantiated by the researcher’s professional real estate experience, as well as informative literature from real estate institutes, both of which highlight emotional factors and other factors which influence an unrealistic price. According to Kasser (2003, p. ix), most people now grow up in ‘winner-take-all economies’, where the main goal of individuals is to get whatever they can for themselves according to their own desires and feelings. Taking into account the researcher’s own professional observations, industry reports and multiple scientific studies and reports, the evidence seems to support the notion that there are specific factors which influence the Price Virus.

Another approach to consider is whether the negative characteristics of real estate agents themselves and the culture of the industry may be a factor in the development of the Price Virus. Agents sometimes tend to ‘feed’ the greed by appraising properties at high prices. Agents have been known to ‘buy listings’ by appealing to an owner’s greed and suggesting that they can obtain an unrealistically high selling price (Pivar & Harlan, 1995, pp. 22). ‘Buying listings’ refers in the real estate industry to the agent fixing a high price in order to win business. A high appraised price is tempting to vendors, and can influence them to give selling authority to the agent who has
provided the highest appraised price. There is a strong possibility that real estate agents may also be another cause of the pricing disparity problem.

These factors offer some basis for the research proposition that home vendors tend to ask for more money for the sale of their homes and have a perception that their homes are worth more than their actual value. However, there are a variety of elements to consider in this investigation besides appraisals from selling agents. Over the years as a professional real estate agent, the researcher has observed that issues such as greed, pride, lack of trust, rarity and expecting buyers to negotiate the price are also important factors. These factors have been observed by the researcher and deemed to be factors which influence vendors to overvalue their homes, thus producing a gap between the asking price of vendors and the buying price of purchasers. These influences are explained in Table 1.1.

It appears that this range of emotional factors contributes to a subjective sense of wellbeing, happiness and comfort, and these concepts appear to complement each other to produce an inward-looking focus on financial self-aggrandisement. To a certain degree, these constructs seems to positively influence vendors to seek higher prices. These variables provide the basis for further study of the unrealistically high prices which are influenced by such variables.
<table>
<thead>
<tr>
<th>Emotional influences</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greed</td>
<td>A selfish and extreme desire for more of something (like money) than is required.</td>
<td>Brasey &amp; Barber, 2009; Diamond, 2002; The Free Dictionary, 2013.</td>
</tr>
<tr>
<td></td>
<td>A concern for one's own advantage and well-being; maximises own gains over their own losses; adopts the position which maximises own benefit and minimises own costs.</td>
<td>Miller, 1994; Lau, Brown &amp; Sears, 1978.</td>
</tr>
<tr>
<td>Pride (in ownership)</td>
<td>A reaction or feeling that demonstrates confidence, deep-rooted self-esteem, and constitutes a feeling of pleasure or satisfaction in one’s actions, qualities and sense of self-respect.</td>
<td>Lea &amp; Webley, 1997; Herrald and Tomaka, 2002; Rangi, 2010.</td>
</tr>
<tr>
<td>Trust (lack of trust in real estate agents)</td>
<td>‘The extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people.’</td>
<td>Cook &amp; Wall, 1980, p. 39.</td>
</tr>
<tr>
<td>Rarity and uniqueness of one’s home</td>
<td>Something which is valuable because there are few of its kind; the quality of being rare. People assign more value to things simply because they own them.</td>
<td>Merriam-Webster Dictionary, n.d.</td>
</tr>
<tr>
<td>Expected negotiation (from buyers)</td>
<td>Desire to maximise one’s own gains where more for one side will necessarily mean less for the other.</td>
<td>Mnookin, 1993.</td>
</tr>
</tbody>
</table>
1.4 Justification for the research

The Australian residential home is categorised as the nation’s greatest asset, as well as perhaps the most important and largest asset of individuals. According to the Australian Bureau of Statistics (2014), more than 60 per cent of all Australians own a home—one of the highest rates of home ownership in the world. The total value of Australian residential properties reached an estimated $4.54 trillion in 2012 (RP Data, 2012a).

A total of $185 billion worth of residential dwellings was transacted during the financial year 2011-2012, embracing a total of 376,331 homes and units which changed hands (RP Data, 2012b). This exchange of 376,331 properties involved a large amount of funds. Based on this data, the total real estate sales of $185 billion in Australia in this period (RP Data, 2012b) would exceed the Gross Domestic Product (GDP) of 133 countries in the world, according to International Monetary Fund statistics (IMF, 2013).

Secondary data from the Real Estate Institute of Western Australia (REIWA) shows that in most cases, the final prices transacted in home sales are lower than the original listing prices. REIWA information indicates that approximately 70 per cent of people selling their homes had to drop their original listing price to secure a sale, and the average discount recorded was 6.45 per cent (REIWA, 2012). Australian Property Monitors (APM) also confirms the average discount to be 6.5 per cent for combined unit and home sales (2012). The gap between the asking price and actual sale price is 6.5 per cent which may not appear to be a large enough figure when we consider the 30 per cent of vendors who achieve their asking price. However, if we solely use the benchmark of the 70 per cent of vendors who do not achieve their asking price, the overall average percentage may be significantly higher than 6.5 per cent.

Using an average discount of 6.5 per cent and applying it nationwide to 376,331 property transactions per year nationally (based on Western Australia’s average sale price of $540,000), the gap between the asking price and selling price comes to
$35,100 per sale. Taking into account 376,331 properties sold, this would amount to a $13.2 billion gap between asking price and selling price (Table 1.2).

**Table 1.2 The price gap**

<table>
<thead>
<tr>
<th>Number of properties sold</th>
<th>Total value (nation-wide)</th>
<th>Average sale price (based on Western Australian data)</th>
<th>Average discount of 6.5%</th>
<th>The price gap (total value of discount based on 376,133 properties sold)</th>
</tr>
</thead>
<tbody>
<tr>
<td>376,331</td>
<td>$185 billion</td>
<td>$540,000</td>
<td>$35,100</td>
<td>$13.2 billion</td>
</tr>
</tbody>
</table>

This figure represents an enormous amount of wealth, and if emotional factors are influencing this huge discrepancy and playing a crucial role in influencing rational analysis of the selling price, then this is a phenomenon worth investigating. These emotional criteria may be playing a significant role in disrupting logical analysis in relation to matters that are closely attached to us, namely, our home and our possessions.

Further findings in this area could also assist the working relationship between vendors and agents. Given that real estate agents’ reputation and credibility ranked third from the bottom behind car salesmen and advertising people on one list (Roy Morgan, 2013), better understanding in this area is certainly essential. This extremely low trust factor is indeed ironic given that vendors are engaging real estate agents to sell their homes, the most valuable asset for the vast majority of people. There is not only a gap in the relationship between vendors and agents but also in the price estimates made by vendors and buyers. This phenomenon is thus a legitimate topic of scientific inquiry which should be investigated thoroughly, to better understand the causes and effects it has on all stakeholders in the real estate industry.
1.5 Contribution to scholarly knowledge for the industry and practitioners

In the real estate industry, the vendor-agent relationship could be more honest and trusting if the gap in this relationship and the emotional factors causing the gap could be explored. If explanations put forward in the proposed model are supported by empirical evidence, there is the possibility of a better working relationship which could lead to more effective business outcomes due to a better understanding of the problem.

If this research supports the notion that there are various factors which contribute to the Price Virus, it could enhance understanding of how and why decisions are affected by the Price Virus. For professionals in the industry, this could also offer a means for learning how to work with their clients better and bridge the gap which creates the low levels of trust revealed in the Roy Morgan survey (2013).

According to Kahneman and Tversky (1984), ‘it is more painful to give up an asset than it is pleasurable to obtain it...That is, the highest price that an individual will pay to acquire an asset will be smaller than the minimal compensation that would induce the same individual to give up that asset, once acquired’ (p. 348). Whether the theory assumed by Kahneman and Tversky is associated with an unrealistically high price, the findings of this study will endeavour to provide further understanding of their view. The study also will determine whether an unrealistically high price is also influenced by other emotional elements that distort decision-making by home vendors.

1.6 The research model – ‘The Price Virus’

The hypothetical ‘Price Virus’ model illustrates five emotions that are displayed in vendors’ behaviour and which ultimately influence an unrealistic price. These emotions relate to greed, pride, expected negotiation, the feeling of rarity associated with the home and the lack of trust in real estate agents. The model tests the hypothesis that vendors’ unrealistic asking prices and the emotions derived from these factors directly...
and/or indirectly produce the unrealistic price, which is the basis for the Price Virus model. This model is presented in Figure 2.15 in Chapter Two.

1.6.1 The research question

This study investigates the significant issue of vendors’ high price perception on the value of their homes. The problem causing this phenomenon to manifest itself is believed to be the emotional influences on vendors’ judgment. The effects of pricing a home higher than its true value may affect the duration of the selling period, typically prolonging the sale. The problem is challenging to solve because while emotions may detect easily, it is difficult to rectify its influence.

The approach to the research will centre on and investigate three key areas:

a) **Motivations and Barriers**: What are the different emotional motivations and barriers that influence the unrealistic price?

b) **Emotions**: What emotional needs are required to be met, or to not be met, for each of the elements that arguably contribute to the proposed Price Virus Model?

c) **Overall Driving Needs**: What are the relationships between the various emotions and the results which can be derived from the investigation?

1.7 Research approach

Deciding on an appropriate research design and data collection methodology is essential for supporting the research process. The data samples must reflect the research question, and the research design chosen is intended to give coherence to the research project. A quantitative research methodology based on positivist assumptions has been selected. The procedure in this case includes collecting and translating data into numerical form so that statistical computations can be carried out and assumptions highlighted. The study contains more than one hypothesis and the research questions proposed include predictions about probable relationships.
between the dependent variables and the independent variables. To discover the answers to these questions, the study uses various carefully designed research tools.

Data was collected according to a stringent process with the support of statistical computer software. The evaluation process has allowed the researcher to establish the degree to which the relationship between two or more constructs interacts.

1.8.1 Methodology

Even though notions of pride, greed, rarity and trust have been widely researched, there are a number of ongoing academic investigations into various facets within each of these factors. The Price Virus model is an original conception, and thus little is known about how much these factors are relevant to home sellers. Data was thus collected from homeowners to ascertain what value it could potentially deliver to the investigation.

In investigating the research problem, the data collected enabled the researcher to assess opinions linked to decision-making characteristics, focussing on the emotions that lead to an unrealistic price being set. In the methodology chapter, an evaluation is carried out by reviewing the various scientific research paradigms. An explanation is also presented as to why empirical research was the most suitable research paradigm to be used in conducting this research.

1.8.2 Research philosophy: qualitative and quantitative

Qualitative, quantitative and mixed methods research approaches were thoroughly assessed and examined, and a justification for the selection of research methodology is outlined below. An exploratory study was carried out to decide on the methodology selection and respondent feedback was also used to formulate the survey questions.
1.8.3 Informal exploratory study—ascertaining feedback to formulate the questionnaire

The exploratory research involved discussions with various individuals including some from the real estate industry. The proposed questions that would frame the pattern and content of the quantitative questionnaire were presented in the discussion. This led on to defining the survey in advance in such a way as to foresee issues and questions that had arisen in the research discussions.

The objective of the exploratory work was to explore and find out the reasons and motivations driving overpricing, and to try to make sense of the phenomenon. The following questions represent the main foundation of the questionnaire:

1. What are the research objectives?
2. What are the predictors of the outcomes?
3. What are the appropriate data collection methods?
4. What are the most appropriate interpretation and synthesis for the research findings?

1.8.4 Quantitative phases—ascertaining reliable statistics

After assessing the information gathered from the exploratory work, quantifiable measures were applied to frame the survey questionnaire. The questions were all multiple-choice.

Phase 1 – Pilot study posting 70 questions (sample size: N=56). The questionnaire was hosted on the Fairfax Media Group’s Sydney Morning Herald website, as well as four other national websites within the Fairfax Media Group. The questionnaire was multiple-choice, and participants were required to choose the most appropriate answers from a multiple-choice list. The questions were structured with great flexibility to allow extended analysis of the results if required. The pilot study examined whether the questionnaire had achieved its proposed findings. Any shortcomings were improved and modified accordingly.
Phase 2 – Final survey posting 40 questions (sample size: N=229). After analysing the pilot study, the final survey was posted again on Fairfax Media websites. To encourage participation, a free online property report was offered to participants as an incentive for completing the questionnaire. Details of sample size and application processes are presented in the findings chapter.

1.9 Outline of chapter structure

1.9.1 Chapter One: Introduction

The objectives of the thesis are explained, along with the reasons for undertaking the research and an account of how the research was carried out. The purpose of Chapter One is to establish the link between emotions and the Price Virus. A summary of the experimental work conducted is also given.

1.9.2 Chapter Two: Literature Review

This chapter assesses information in the literature concerning the various emotions which lead to the Price Virus. This literature review illustrates, condenses and evaluates the hypothesis in the proposed model. The investigation focuses on the Price Virus and what factors contribute to it. In attempting to sustain the hypothesis, the model is illustrated and supported by the research data.

1.9.2.1 Outline of the literature review

Figure 1.1 gives an outline of the literature review summarising evidence relevant to the hypothesis that the Price Virus is motivated by emotional concerns. Initially, as mentioned in previous paragraphs, the investigation’s findings about attitudes and emotions are discussed in relation to various kinds of conclusions. A description of the findings then leads to a discussion about the influence of emotions on cognitive processing.
1.9.3 Chapter Three: Methodology

The methods for obtaining and analysing the results and the interpretation of the results are clarified. It is argued that the methods used to collect the data and the analysis derived from it is reliable. The data generated is shown to be consistent and to conform to acceptable standards for academic research. The significant sample size demonstrates that the sample size is large enough to make findings based on the data.

1.9.4 Chapter Four: Data analysis and discussion

The data acquired from the survey is presented in quantitative numerical form and exploratory evaluations are used to support the formulation of the questionnaire. The objective of this chapter is to provide findings from the data which explain the Price
Virus model. The outcomes derived from data analysis support the model. The information obtained is first arranged into a variety of groups, then descriptive statistics and inferential analyses are used to evaluate the patterns of behaviour in the findings.

1.9.5 Chapter Five: Conclusions, recommendations and limitations

The final evaluation in Chapter Five is essential to understanding the emotions, their influence and the conception of the Price Virus. It is also important to ascertain why people constantly perceive their home to have a higher value than its true market value. The Price Virus model proposes to explain the gap between the asking price of vendors and the buying price of buyers. This chapter also highlights the motives that lead to an artificial and unrealistic perception of value. Incorrect perception and emotional attachment (Belk, 1998) to the home theoretically create an inflated asking price by vendors. In concluding the study, the researcher hopes to highlight the problems of emotional attachment and desirability biases, which ultimately cause the Price Virus. The various findings are discussed and a conclusion presented. Even though there are limitations in the findings, it is argued that the hypothesis is justified by the findings. Future work is also recommended to further investigate this area of study.
CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

Real estate industry data reveals that the majority of sellers are not obtaining the price they originally desired. This observable fact reveals a gap between the sellers’ price and what buyers are willing to pay. The hypothesis of this thesis is that emotional attachment to the home influences vendors to perceive the value of their homes to be more than the actual selling price. This perception leads to a desire for higher financial gains, in the sense that a higher selling price means maximising financial gains.

Emotion is a dominant factor in social interaction. Across many academic disciplines, from history and literature to economics and neuroscience, a convergence of opinion has emerged regarding the importance of understanding emotion (McLemee, 2003). In this chapter, perception of value is reviewed in relation to how emotional responses drive human judgment and cognitive processing. The affect-as-information hypothesis suggests that people assign value to whatever seems to be causing it (Clore, Gasper & Garvin, 2001), relating to biases. For example, ‘people might assign value to objects of judgment or, during cognitive tasks, to one’s own thoughts and inclinations’ (Clore & Huntsinger, 2007, p. 393). Understanding these emotional associations may help to identify the factors that shape vendor behaviour.

It is assumed that vendors’ high price perceptions are driven by sentiments, and that human emotions thus lead to an unrealistic valuation of the home. Several theories are therefore examined to explain the cognitive rationale behind this behaviour.

2.1 Outline of theories used in the research

The appraisal theory (Smith and Lazarus’s cognitive-motivational-emotive system model), the theory of planned behaviour (TPB), the goal framing theory/goal-directed behaviour model, and the endowment effect were useful in developing a cognitive
assessment of this observed behaviour. The fundamentals of these theories identify emotions and motivations as key elements which influence expectations and decisions. Beside emotions, motivations are also distinct factors in this study which are deemed to influence vendors to set an unrealistic price for their homes.

2.1.1 The appraisal theory (Smith and Lazarus’s cognitive-motivational-emotive system model)

Smith and Lazarus’s appraisal theory model was used to explain how emotion might influence a person’s reasoning process and subsequent decisions. The reality of human behaviour in the Smith-Lazarus model lend support to the notion that perceptions emerging from causal analysis, appraisal and emotion, lead to goals, beliefs and intentions: see Figure 2.1. The appraisal theory (Smith & Lazarus, 1990) postulates that emotions are the consequence of a person’s importance analysis of the implications of his or her circumstances, in particular for personal well-being. Individual alterations in emotion come about when individuals appraise similar situations differently (Smith & Kirby, 2009). In this model, there is first a specific appraisal component, followed by assessment of firstly motivational importance, then problem-focussed coping possibilities (Smith & Lazarus, 1990). The objective of this model is to define and examine interactive cognitive patterns, and to suggest that these influence the factors which lead to decision-making.

The Smith and Lazarus cognitive-motivational-emotive system model identifies the connection between emotion and the cognitive processes. The model classifies behaviour by focussing on two essential behavioural elements: appraisal and coping. Appraisal involves a person’s relationship to external events, while coping involves dealing with changes in relationships or the preservation of relationships. Appraisal varies based on how the subject’s attributes are believed to influence their goals. A theory of emotion is a theory of how motivation and cognition construct emotions in relevant adaptive encounters (Lazarus, 1991). The functional relationship between cognition and emotion as defined by Lazarus (1991) is bidirectional. Emotion is the consequence of appraisals of the importance of what will happen in terms of the individual’s welfare, in this case, the vendor’s well-being defined by obtaining the
highest possible home sale price. Appraisal is always a reaction to a cognitive signal, which produces meaning regardless of how this meaning is achieved (Lazarus, 1991). The instant an emotion emerges, it produces a momentum which leads on to the next stage in the appraisal and emotion sequence.

The literature on emotions suggests that emotions influence all types of decisions and cognitive processes. Our communications with one another are a starting point for many of our emotions (Gratch & Marsella, 2004). Emotions arguably provide the means by which we bring together the different mental and physical components required to respond in a logical manner (Cosmides & Tooby, 2000). The model explains appraisal as being an assessment of the importance of information about what is occurring in relation to one’s own personal interests. Emotion is generated simply by establishing that one has something to benefit from or suffer from in relation to something, and that the result of an exchange is applicable to one’s objectives and well-being. Emotion, therefore, influences later decisions.

People also appraise how experiences affect others, and use these appraisals to manage social actions. By assessing the perceived beliefs and biases in assessments by others, and appraising experiences based on such perceptions, this theory argues that such appraisals may influence social undertakings and interpretations. Smith and Lazarus’s cognitive-motivational-emotive system shows the relationship between causal analysis, appraisal and coping, all of which play a part in the ultimate formulation of goals, beliefs, intentions and outcome decisions.

Judgments influenced by emotions may affect a wide range of computational factors that interpret or influence the vendors’ goals, beliefs and intentions leading to perceived desire. This model shows that emotions may affect how an individual copes, leading to different approaches to dealing with an episode or event, and eventually producing goals or beliefs, intentions and values which are directed towards enhancing well-being (Figure 2.1).
Figure 2.1 Smith and Lazarus’ cognitive-motivational-emotive system model

Interest rate, Timing, Number of houses for sale
False-consensus bias perception, Market optimism, Real estate agents
The Price Virus

EXTERNAL EVENTS

CAUSAL ANALYSIS

GOALS / BELIEFS / INTENTIONS / VALUES

Interpret and filter beliefs, material desires, intentions and abilities

Pride, Greed, Lack of trust, Expected negotiation, Rarity, Fear, Excitement, Anger, Worry

APPRAISAL

Emotion

Problem-focussed

1. Taking control
2. Information seeking
3. Evaluating pros and cons

COPING

Emotion-focussed

Trying to reduce negative emotions & living in denial

Evidence suggest that people are motivated to respond to events differently according to how they are appraised (Peacock & Wong 1990)

Source: Adapted from Smith & Lazarus (1990)
In this section, an attempt is made to construct a model of the factors identified in the Smith and Lazarus cognitive-motivational-emotive system. Even though this model may possibly enhance our understanding of vendors’ behaviour, we can also extend it further by expanding the emotion module to include further sub-elements pertaining to pride, expected negotiation, greed, rarity and lack of trust which are applicable to this study.

In this study, the vendor’s goal and desire is to obtain the highest price for the sale of the home, thus producing the Price Virus. This model usefully illustrates vendor behavioural process in relation to the pricing of their home, and further develops the model proposed in this study. The possession (the vendor’s home), perception (how they perceive the value of their home) and emotional attachment (different sentiments leading to behaviour) are reflected in this hypothesis.

2.1.2 The theory of planned behaviour

The theory of planned behaviour (TPB) is useful in analysing how people behave and make decisions. TPB is a theory proposed by Ajzen (1991) that relates beliefs to behaviour, as shown in Figure 2.2. This theory states that attitudes towards behaviour, subjective norms, and perceived behavioural control all influence a person's behavioural intentions and behaviours.

TPB offers an important contribution, in the sense that home sellers can be governed not only by personal attitudes, but also by social pressures and a sense of control. Therefore, TPB, when combined with a few elaborations, can produce some interesting results. In this model, people’s attitudes encompass both cognitive beliefs about the performance, such as whether they believe that their home is worth more, as well as affective evaluations, such as whether they feel that their home is good.
This theory is designed to predict and explain human behaviour in specific contexts (Ajzen, 1991). Ajzen explains that a person has behavioural control, and performance should increase with the feeling of greater behavioural control to the extent that the person is motivated to try. When people put their homes on the market, this generally suggests that they are motivated to sell, for whatever reason. It would be reasonable to assume that all sellers desire to sell at a high price. Bandura, Adams, Hardy and Howells (1980) revealed that people’s behaviour is strongly influenced by their confidence in their ability to perform, that is, by perceived behavioural control and self-efficacy. More recent research has also highlighted this likelihood; Armor and Sackett (2006) establish that people tend to make overconfident predictions about their performance, and that these predictions correlate with their actual performance.

TPB is a theory that links beliefs and behaviour, by positing that vendor attitude leads to behaviour which is based on positive or negative evaluations of self-performance of the particular behaviour, with behaviour being either positively or negatively valued. In
the case of selling one’s house, the vendor’s behaviour may be positively valued, by linking the behaviour to various outcomes and other attributes, such as expecting a high value for the home. According to TPB, behaviour also inclines towards a subjective norm where vendors engaging in a particular behaviour have perceptions which are influenced by the judgment of others, for example by a real estate agent who appraises a relatively high price for their property, and thus has a positive influence on the vendor. Vendors exercise perceived behavioural control in situations where an individual perceives ease or difficulty in obtaining a particular price for the house. Behavioural control is determined by the vendor’s total set of accessible control beliefs, and is ultimately related conceptually to self-efficacy. Owning a home is assumed to lead to self-efficacy, and therefore may influence the vendor to value the home at a higher price. TPB also shows that these factors will influence behavioural intention (where a high price is envisaged) and ultimately, behaviour itself (wanting a high price).

Hence, TPB maintains that attitudes toward behaviour, subjective norms and perceived behavioural control collectively influence an individual's behavioural intentions and behaviours. TPB also predicts deliberate behaviour, in the sense that behaviour may be deliberative and planned. Ajzen also argues that behaviour appears to be not 100 per cent voluntary and under control, behaviour is influenced by attitude, perception and intentions.

2.1.3 Goal framing theory/goal-directed behaviour model

In accordance with goal framing theory, which is linked to TPB, Lindenberg and Steg (2007) state that people are inclined to pursue one of three sets of goals: hedonistic goals, which are intended to enhance immediate pleasure; gain goals, which are intended to accumulate resources; and norms goals, which are designed to reflect the social norms or conventions of the community. Imagine if a vendor is about to put his or her home on the market for sale and a house in the neighbourhood is sold for a certain price. What would the vendor do? Would the selling price of the vendor be the same price as the other house, or would the price be higher? ‘It has long been assumed in psychology and sociology that each person has different ways of looking at
any given situation, and that these ways are important for determining how a person will behave in that situation’ (Lindenberg & Steg, 2007, p. 117). This theory assumes that goals ‘frame’ the way people process information and act upon it, based on hedonistic, gain or norm (social) goals. This study examines how vendors frame their decisions in accordance with how they perceive price, under the influence of the various emotions which they experience.

Similarly, Perugini and Bagozzi’s goal-directed behaviour model (2001) is also an extension of the TPB model, and is briefly used to illustrate the underlying basis for this study, because it is relevant to, and reinforces the Smith/Lazarus model. The Perugini and Bagozzi model is adopted because it enhances and deepens the theory of reasoned action (TRA), which has been the norm in social psychology for many years (Fishbein & Ajzen, 1975). The TRA is a model for the prediction of behavioural intention, attitude and behaviour. The subsequent separation of behavioural intention from behaviour allows for the explanation of limiting factors on attitudinal influence (Ajzen & Fishbein, 1980). TRA holds that behaviour is determined by the intentions of individuals, with vendors’ plans or motivations in this case being to obtain the highest price for the sale of the home.

The goal-directed behaviour model suggests that desires provide the direct motivation for intentions, and transform motivational content into behaviour (Perugini & Bagozzi, 2001). The introduction of anticipated emotions by these researchers widens out the TRA by including new decision-making elements with respect to a person’s goals (in our case, the achievement of a good price for the home). The goal-directed behaviour model adds predictors, which propose that ‘anticipated emotions’ function as an important background to decision-making processes.

TPB links beliefs and behaviours to various emotions that the proposed research model aims to highlight, in order to demonstrate that emotional attachment to the home leads to an unrealistic valuation, and that ultimately, this unrealistic price is generated by these various emotions/predictors, which this study aims to substantiate.
2.1.4 Endowment effect

Endowment effect is a widely accepted theory that people tend to want more money for something they own, and that this higher price expectation is driven by emotional factors. In behavioural economics, endowment effect is also referred to as the ‘reluctance to lose ownership’, or dispossession aversion, leading to the theory that people assign more value to things simply because they own them (Roeckelein, 2006). Home ownership is a substantial asset for almost any person, and the endowment effect is expected to influence the price factor when putting the home on the market. This theory rationalises our unreasonable inclination to overvalue the perceived value of something just because we own it. The notion that people become attached to their possessions, and assign higher values to goods once they own them has been proposed in the literature of developmental psychology, marketing, and decision-making, among others (Kogut & Kogut, 2011). The endowment effect, as discussed by Kahneman et al. (1990; 1991), suggests that sellers exhibit overvaluation prejudice.

The endowment effect is one of the most widely-established irrational human behaviours (Ariely, 2008). Similarly, to Roeckelein (2006), earlier studies have reported that the endowment effect reveals that once people are given something and they consider it their own, they will be reluctant to part with it (Kahneman, Knetsch & Thaler, 1990). The literature suggests that due to subjective perception and choice, people do indeed tend to demand a higher selling price for a commodity they own than they are willing to pay for the same commodity (Kahneman et al., 1990; Knetsch, 1989; Knetsch & Sinden, 1984; Thaler, 1980; Kogut & Kogut, 2011). Likewise, individuals underestimate how much they will become attached to objects once those objects become part of their endowment (Loewenstein & Adler, 1995; van Boven, Dunning & Loewenstein, 2000). To put it simply, the home may, as mentioned earlier, become associated with the owner’s ‘sacred reflection of self’ (Csikszentmihalyi & Halton, 1981).

Kogut and Kogut (2011) have discussed what factors promote the feeling of attachment some people develop for objects in their possession, and how this ‘object attachment’ may affect their subjective evaluation of those possessions (for instance,
the value of their home). Evidence supporting the existence of an endowment effect has also been summarised in valuation studies (Thaler, 1980). If people were aware of the endowment effect, they would understand that they may become attached to objects in their possession, they could at least take these variable preferences into account when making decisions (van Boven, Loewenstein & Dunning, 2003).

The numerous findings cited suggest that home vendors may be influenced by the endowment effect when determining the selling price of the home. Therefore, this expected high value influences their listing price when selling their home. The aim of the study research model is to investigate the reasons for or antecedent influences on the vendor’s expected higher price. More specifically, this thesis investigates the effect on vendor pricing of factors such as a special feeling of home value, and the fundamentals of endowment effect theory have played a key role in shaping this study.

2.1.5 Theories of emotional versus rational influences on decision-making

People are somewhat vulnerable to unusual alternative findings, and are prone to being impressed by such findings, whether their validity is established or not (Tversky & Kahneman, 1973). If house prices are driven in part by irrational expectations and psychological factors, rather than changes in market fundamentals, then housing prices will exceed their intrinsic market values (Clayton, 1998). According to Lerner and Keltner (2000), emotions activate appraisal tendencies, which are relatively automatic processes that guide subsequent perception and judgment. The theories cited above suggest that both rational thinking as well as emotions influence decision-making. These assumptions lead to specific predictions concerning how and when specific emotions may influence judgments (Lerner & Keltner, 2000, p. 489). Our expectation is that the cognitive-motivational-emotive system, TPB, goal-framing theory and endowment effect approaches outlined above may support this study by addressing the systematic influence of specific emotions on judgment and choice, and the social factors that moderate such influences (Lerner & Keltner, 1999).
2.1.6 Research approaches to real estate decision-making process

According to research on rational expectation in the real estate markets by Ott, Riddiough, Yi and Yoshida (2008), real estate markets often behave inconsistently with general analysis and rational expectations hypotheses, and instead conform to the Price Virus hypothesis. From their analysis, it appears that the Price Virus is in fact simply a price maximisation schema which contradicts the logical probability assumption. Their findings align with empirical tests conducted by Clayton (1998), who proposed that a sharp increase in house price is due, in part, to irrational or optimistic expectations. This research study endeavours to show that people who own real estate may make decisions on the price of their homes differently from business decisions they might make in their work place. This is because the home is part of the ‘extended self’ of a person, and emotions of ownership are involved.

2.1.7 Research gaps and new research direction to explore

Brunnermeier and Jonathan (2005) have provided a structural model of subjective beliefs demonstrating how people tend to hold incorrectly optimistic beliefs. They also argue that optimal beliefs differ from objective beliefs in ways that recall many of the claims in the psychology literature about ‘irrational’ behaviour. The second crucial element in Brunnermeier and Jonathan’s model is that this optimism affects decisions and worsens outcomes. Distorted beliefs also distort actions, and these researchers provide the example of a person who is unable to determine the actual value of their property, because they believe optimistically that they will be rich in the future, while at the same time basing their consumption-saving decisions on more rational beliefs about future income (Brunnermeier & Jonathan, 2005).

Psychological theory provides many examples where the human mind is able to maintain beliefs which are inconsistent with the rational processing of objective data. To the extent that people are more likely to remember better outcomes, they may tend to perceive themselves as more likely to be better off in the future, thereby leading to optimistic biases in their beliefs (Brunnermeier & Jonathan, 2005).
The real estate industry investigates sales trends intensively, including data on high and low market prices, number of sales in a particular period, and the number of houses for sale. What the real estate industry does not investigate is the driving force behind the home vendor asking price, which is usually higher than the market price and in most cases does not equate with the actual sale price. The focus of this thesis is the reasons behind this driving force, and sellers’ emotional reasoning as the source of this unrealistic high price. Emotions are complex, since they involve beliefs, motivations, and different types of experiences and personalities. It is therefore fundamental to understand how emotions affect behaviour in the real estate industry, in particular with regard to vendor price expectations.

2.2 Indicators of the Price Virus: higher market prices of the property

The researcher’s thesis is that when vendors put their home on the market, their motivations, goals and intentions are influenced by concepts outlined in the theories of emotion, planned behaviour, goal-framing/goal-directed behaviour models and endowment effect, leading to a desire to obtain the highest price for their home. It is argued that the existence and effect of the Price Virus can be clearly established.

A number of research studies cited in this literature review support the existence of the Price Virus concept, by showing how home owners are inclined have the inclination to overvalue their own houses. Kish and Lansing (1954) reported that home owners overestimated their own houses by 4 per cent compared with appraised values; Robins and West (1977) stated that home owners overvalued their own homes by 5 per cent compared with appraised values and assessed values; while Kiel and Zabel (1999) also reported that sellers overestimate their houses by 5.1 per cent. Two papers by Kain and Quigley (1972) and Kish and Lansing (1954) highlighted similar inaccuracies in the estimation of home values. Ihlanfeldt and Martinez-Vazquez (1986) reported that home sellers overvalued their homes by 16 per cent compared with assessed values, while Goodman and Ittner (1992) reported that the average United States owner overvalued the price of their house price by 10 per cent. Green and Vandell (1994) have also stated that the average listing price is 9 per cent higher than
anticipated offers in the United States, while according to another survey, Scottish homes are selling for 10 per cent less than the asking price (The Telegraph, 2012). Benítez-Silva et al. (2015) draw on more recent data to show that most individuals in the United States overestimate the value of their homes, some by as much as 20 per cent.

Di Pasquale and Somerville (1995) likewise found that seller-reported values are always above transaction prices, while Goodman and Ittner (1992) suggest that there is always an overestimation of capital gains. Their most important conclusion is that the use of owner estimates may cause bias in the estimated coefficients of many independent variables that are not considered.

Tobacman (Wharton School, 2009) discusses a Standard & Poor’s survey (S&P/Case & Shiller, 2003) with reference to perceived value of homes in four major markets: Boston, Milwaukee, Los Angeles and San Francisco. In all four markets, more than 80 per cent of home owners surveyed said they believed home prices would rise over the next few years. When home owners were asked how much they expected the price to change over the next months, mean responses ranged from 7.2 per cent in Boston to 10.5 per cent in Los Angeles (Wharton School, 2009, para. 13).

Tobacman also noted that ‘even more astonishing than these one-year numbers are the numbers for decades’ (Wharton School, 2009, para. 14). When asked the question ‘on average over the next ten years, how much do you expect the value of your property to change each year?’, homeowners in Milwaukee said they expected prices to rise by 11.7 per cent, while homeowners in San Francisco said they expected a 15.7 per cent return (Wharton School, 2009). In Tobacman’s view, people often make poor economic choices because they are overly optimistic about what they will do in the future. In a property bubble, both buyers and lenders are overly optimistic about what the future will bring, while buyers ignore the possibility that they may not be able to maintain their payments because they assume the prices of homes will go up, and they will be able to sell or refinance (Wharton School, 2009).
Robins and West (1977) expressed the view that little is known about the accuracy of owner estimates as a measure of market value, but they suspected that owner estimates contain significant measurement error, since most families do not keep abreast of conditions in real estate markets and are simply ill-informed. The basis for this over-pricing phenomenon has been suggested by Di Pasquale and Somerville (1995) to be associated with maximising hedonic factors. On the other hand, Kaminsky and Reinhart (1999) and Borio and Lowe (2002) state that in an upsurge market, vendors will be confident about setting high prices because the cycle favours sellers.

Research by Free & Cantril (1968) found that in the United States, optimism played a role, with most people surveyed believing that present economic conditions were better than the past, and in terms of the future, the majority were confident that economic conditions could only improve, thus influencing perception of, and desire for a high price. Human behaviour in relation to optimism about the future may be unrealistic, given that the future is often fluid, subjective and unpredictable. Yet expectation in relation to what the future holds is vital for determining vendors’ intended sales price (Harris, 1989).

Horowitz and McConnell (2002) found that sellers weigh up two countervailing forces: the higher the listing price, the higher the upper boundary on bids by buyers, but the lower the probability that a bid will be made on the house. Thus, a higher listing price provides advantages to the vendor. This assumption coincides with views presented in Chapter One of this study.

According to Wong and Hui (2008), the listing or selling price may not reflect the actual sale price. Instead, it is buyer-seller interactions which affect the housing price. What matters in the real estate industry is the ultimate price agreed by the buyer and seller, rather than the listing price. What Wong and Hui observed is that the asking price is insignificant, as it does not represent the final outcome. The real price is the price that concludes the deal and Wong and Hui thus assume that the optimal expected price is not significant in practical terms.
2.2.1 Example of the Price Virus

In their analysis, Wong and Hui (2008) focussed on a property that was on the market for 32 months before finally settling for a sale of 27 per cent below its initial asking price. The price had been revised four times before the property was sold: Table 2.1. The initial asking price and the price the buyer was willing to pay were thus completely disproportionate.

Table 2.1 Data Report (HK$)

<table>
<thead>
<tr>
<th>Listing price revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>07-2003: Listing price $17,680,000, or $10,000 per square foot</td>
</tr>
<tr>
<td>11-2004: Listing price revised to $15,680,000 or $8,869 per square foot</td>
</tr>
<tr>
<td>09-2005: Listing price revised to a range of $14,500,000 to $15,000,000 or 8,201 to 8,484 per square foot</td>
</tr>
<tr>
<td>11-2005: Listing price revised to $14,500,000, or $8,201 per square foot</td>
</tr>
<tr>
<td>12-2005: A potential buyer offered $7,500 per square foot, but offer rejected</td>
</tr>
<tr>
<td>01-2006: Listing price remained at $14,500,000, but with parking space included</td>
</tr>
<tr>
<td>03-2006: Property sold at $12,800,000, or $7,240 per square foot</td>
</tr>
</tbody>
</table>

Source: Property Times (2006, p. 20, as cited in Wong & Hui, 2008)

The decision made by the vendor apparently may not have taken into account market information and with hind-sight, the asking price seems to have been unreasonably high compared to the eventual sale price. This scenario highlights the fact that the decision on the initial price did not reflect the market fundamentals and that the initial price was unrealistically high.

Tversky and Kahneman (1981) have described decision problems where people regularly fail to act consistently or rationally, and trace these failures to psychological factors which govern the perception of decision problems and the evaluation of options. They use the term ‘decision frame’ where the decision-making concept refers to the acts, outcomes and contingencies connected with a particular choice. This choice is controlled by the ‘problem’ (in this case the home needs to be sold), and
partly by the norms, habits and personal characteristics of the decision-maker. It completely assumes that the decision-maker is responding to the question ‘What do I really want?’ and that what the vendor really wants will finally determine rational behaviour which will most likely lead to desiring higher remuneration for the sale of the house.

So vendors may be considered irrational in the sense that their inclinations contradict the price norm. In most instances, a vendor may be considered irrational because their price evaluation conflicts with the expectation of the real estate agent and/or the buyers’ price. But ultimately, the vendor’s reasoned expectation, which may be biased, takes precedence. Or in other words the Price Virus takes precedence.

2.2.2 Concepts of emotion linked to the Price Virus

In the researcher’s observation, the emotions that vendors most frequently exhibit are greed when selling their home, followed by pride in ownership, lack of trust, expecting buyers to negotiate, and a feeling of the rarity of their home. These emotions, it is suggested, influence the determination of the selling price. They are also argued to be linked to the Price Virus, and ultimately, to the fear of losing out.

2.3 Vendor desire to maximise value of house sale—greed

Greed is an emotion that can make us do things we would not normally do. Greed, like lust and gluttony, is customarily considered a sin of excess, and greed tends to be particularly associated with the acquisition of material wealth (Diamond, 2012). To better understand what greed is, and its effects, it is necessary to further investigate this concept (Seuntjens, Zeelenberg, van de Van & Breugelmans, 2015). What causes greed? Greed has been linked to optimistic economic aspirations, such as amassing greater wealth or well-being (Melleuish, 2009). ‘The idea of greed as a driving force is also present in the evolutionary perspective on greed’ (Seuntjens et al., 2015, p. 918).
Greed, in this research thesis, refers to one of the elements that cause the unrealistic high price desired by home sellers. It is presumed at this stage that greed causes a gap between vendor price and buyer price. People are greedy for the plain reason that some are by nature (i.e. personality trait) greedier than others, and because there are no restrictions or guidelines to say that wealth must be distributed equally.

Levine (2013) explains that greed tends to foster activity that imposes losses on others. Nothing exceeds the greed-laden pursuit of wealth in audacity, manipulativeness, and gross insensitivity to the needs and feelings of others (Seltzer, 2012, para. 2). People are inclined to be greedy for a number of reasons when it comes to selling their homes, and one of the most prevalent motivations seems to be desire for more money.

2.3.1 Greed: emotion or cognitive appraisal and goal?

Home owners from time to time set prices that are over-valued and then persist in adhering to these high prices, even though sales evidence shows that the asking price is too high (Dooley, 2006). Neuroeconomic research establishes that financial choices are often assessed in a way in which feelings overrule rational financial analysis, and the determination of price is yet another area where this is the case (Dooley, 2006). So is greed an influencing factor?

Greed is like a gap that never seems to be filled, and some of the richest people in the world still strive to increase their wealth (Dorling & Dorling, 2015). ‘This is because greedy desire can never be satisfied, and the effort to find its satisfaction is one guaranteed to fail’ (Levine, 2013, p. 3). There are sufficiently large numbers of prominent people who believe that it is completely acceptable to be greed. It seems greed will continue to have a significant effect on society. Movies like Wall Street and The Wolf of Wall Street, with real or fictitious characters such as Gordon Gekko and Jordan Belford strongly promote the notion that ‘greed is good’. In a 1986 Commencement address to the UC Berkeley School of Business Administration, Ivan F. Boesky stated that ‘I think greed is healthy. You can be greedy and still feel good about yourself’ (as

Greed is to some extent the primary basis of free enterprise. Adam Smith (1776) assumed in his book *The Wealth of Nations* that the exercise of self-interest, private property and the disconnection of links between self and others generates the attitude that one does not need to create a use right for others.

Deciding to limit the extent of our achievement is an enormously challenging task and for this reason, most sellers will seek the highest possible price for their home. There is an assumption that people who are greedy tend to be rewarded (Winarick, 2010).

Moreover, greed not only affects the rich and affluent, but also ordinary people. According to Robertson, the roots of irrepressible and unbridled greed may rest in the nature of human beings themselves (2001, as cited in Wang & Murnighan, 2011). Greed has been seen as a feature of natural life forms, and the ‘greed strategy’ has thus been argued to be natural (Anderson, Ashlagi, Gamarnik & Kanoria, 2015).

Whether a property is high or low in value, the owner always seems to want more money for the sale.

Winarick (2010) contrasts ‘good’ and ‘bad greed’; an issue which will be further investigated in this research. Greed, in a sense, embraces both ‘good’ and ‘bad’ greed. This study uses the concepts of ‘good’ and ‘bad’ greed to examine the influences of both, especially in decision-making about pricing the home for sale. It is essential to examine whether greed constitutes an emotion, a goal-directed cognitive appraisal or both?

### 2.3.2 ‘Good’ greed: maximisation of monetary outcomes in the home sale

In their experimental design and procedures, Anderson, Ertac, Gneezy and Hoffman (2011) have provided many arguments for the positive characteristics of greed. They successfully establish the principle that the larger the amount of money, the more it will attract people. Many people might be willing to reject an offer of 1 per cent of ten
dollars, but how many people would reject 1 per cent of ten million dollars? Greed is thus viewed as an inducement which boosts incentive, leading to the economic achievements we enjoy today, so, that without greedy people, the wealth-building economy would be stagnant.

Gauthier (1970, p. 170) highlighted that people will always achieve their goals better if they are prudent (egoistic) rather than moral (altruistic). A selfish nature will encourage an individual to act consistently with the achievement of the individual’s goals, thus providing the economic system with a dynamic means for achieving progress. However, greed and the lust for power may also encourage both acquisitiveness and destructive competition, as a means to affirm superiority over one’s enemies (Viroli, 1998), with the buyer in this case being the antagonist. Self-preservation may be another determining factor which leads to greed. Self-preservation may also lead to vendors wanting to preserve their perceived asset value when selling their property. They may wish to regulate the price they wish to achieve, as well as the way the property is marketed, as a way of maintaining their current financial status. A lower price means a lower net worth, and a higher price means a higher net worth. According to Kahneman and Tversky (1984), loss is more painful than an equivalent gain, because losses loom larger than gains. Because the decision-maker will be biased in favour of retaining a possession, so that it is more painful to give up an asset than it is pleasurable to obtain it.

The prevailing conception in economics is that greed is a motivating force for economic growth and development (Greenfeld, 2001), and that society can gain from greedy people. Individuals aspire to maximise outcomes, so that individual greed eventually leads to activities by individuals who benefit society as a whole (Oka & Kuijt, 2014). It has been argued that greed promotes self-preservation, and that people living in environments with a lack of resources have an evolutionary advantage through an inclination to gain and hoard (Cassill & Watkins, 2005).

‘Good’ greed, even though regarded as ‘good’ in ways distinct from ‘bad’ greed, may still influence decision-making that will encourage over-pricing the house when it is put on the market. Various sources discussed in this literature review suggest that ‘good’
greed promotes a healthy economic system, and encourages people to strive for achievement. Through its promotion of achievement, this ‘good’ greed also seems to be linked to seeking a price above the market price.

2.3.3 ‘Bad’ greed

Greed has been associated with:

... a world of ruthless aggression, where the accumulation of wealth and power takes precedence over all other considerations, where people are treated as part objects to be exploited, ripped off, damaged, and controlled, and where even the fleeting recognition of otherness is avoided at all costs, making mature moral responsibility all but impossible (Winarick, 2010, p. 317).

The consequences of ‘bad greed’ are collective hardship that may extend beyond economic destruction to the moral erosion of society. Greed has also been seen as an abandonment of ethical practices. Indeed, neoclassical economic approaches to greed pay little attention to ethical issues or other human motivations (Stigler, 1980; Sen, 1987).

In order to achieve the successful sale of the home, the attributes of ‘bad’ greed may, for example, influence vendors to behave unscrupulously by not revealing major hidden faults in the house. The suppression of such information will allow the vendor to maintain the asking price by arguing there is no justification for compromising on the price.

‘Bad’ greed may lead people to have no sense of guilt, or to feel that it is irrelevant how badly affected the other party is, as long as they get what they want. Winarick (2010) cites Bernard Madoff as an example of ‘bad’ greed and argues that the psychopathic tendencies evident in the fictional character Gordon Gekko, played by Michael Douglas in the 1987 movie Wall Street, are so extreme that they could even serve as a useful clinical example. Winarick further states that although ‘bad’ greed is
highly damaging, it is still a reality of human behaviour, and has to be taken into account in evaluating decision-making. ‘Bad’ greed will lead to a desire for wanting more.

2.3.4 ‘Good’ greed versus ‘bad’ greed

Greed takes different forms and may be directed towards different goals. It is assumed that greed influences the decision-making of home sellers when they put their properties on the market. ‘Good’ greed and ‘bad’ greed may converge or have similar attributes in terms of aiming for the best price. It is clear that greed has been understood as both good and bad, as a virtue or a vice (Seuntjens et al., 2015; Sutherland, 2014).

The notion of ‘good’ greed and ‘bad’ greed is examined with regard to the craving for more money when selling the home. Levine (2013, p. 63) suggests that perceptions of self-worth are not intrinsic, but may reflect the perceived worth of objects which are associated with the self. Greed’s objects are all those things by which we imagine we will improve our situation: ‘any and every imaginable kind of good: material possessions, bodily or mental gifts, advantages and privileges’ (Riviere, 1964, p. 27).

It is anticipated that greed will influence the vendor to push for higher prices, even when prices are down in a weak market. Vendors may also try to exploit buyers if they are in the position to do so, and will focus on their own self-interest at the expense of being truthful. Greed may likewise influence vendors’ reluctance to sell at a lower price. Greed is also likely to influence vendors’ willingness to accommodate buyers’ requests for improvements, typically only if they are willing to pay a higher price. It is anticipated that getting more money will enhance vendors’ self-satisfaction. These factors, it is suggested, are linked to greed. Winarick describes the features of both ‘good’ greed and ‘bad’ greed, as illustrated in Figure 2.3. From the findings reviewed, both types of greed seem ultimately to lead to a desire for more money. Even though the characteristics of ‘good’ and ‘bad’ greed are different, they are both associated with self-indulgence. Figure 2.4 conceptualises these two aspects of greed as they relate to price determination within vendor behaviour.
Figure 2.3 Conceptualisation of two aspects of greed (adapted from Winarick, 2010)

**GOOD GREED**
- Striving for success/realistic goals
- Healthy self-assertion/self-preservation
- Seek optimal experiences
- Power & control within moral constraints
- Likely Decision
- Desire for more

**BAD GREED**
- Ruthless aggression
- Destructive fantasies
- Give rise to envy
- People as objects to be exploited
- Likely Decision
- Definite desire for more
Figure 2.4 Conceptualisation of two facets of greed in relation to price determination by vendors (adapted from Winarick, 2010)
2.3.5 Similar outcome

‘Bad’ greed it is argued to be the driving force in pursuing an unreasonably high price when it comes to selling. It is also argued that ‘good’ greed follows the same trajectory as ‘bad’ greed. A microanalysis of both ‘good’ greed and ‘bad’ greed attributes suggests that they both have the same effect of influencing the vendor to seek a higher price. According to Seuntjens et al. (2015), greed is associated with self-interest and resulting in people wanting more for themselves, a predictor of similar tendencies found in ‘good’ greed and ‘bad’ greed.

Hobbes (1651 [1968]) suggested that self-interest is a primary human motivator and that it manifests in two forms: a desire for economic gain and personal glory. Both forms have self-interest as the major component, and hence, will both produce the similar outcome of demanding more for money. People who are egoistically preoccupied with the self also tend to identify with material entities (Knights, 2008).

Seuntjens et al. (2015) also argue that greed tends to produce a disengagement from the welfare of others, because greedy people only focus on their own need to acquire more. Hardin (1968) found that both greed and self-interest predict behaviour independently, but that they both lead to similar decision-making. In Table 2.2 the characteristics of ‘good greed’ and ‘bad greed’ adapted from the findings of Winarick (2010) are explained and correlated to the possible behaviours of home sellers which lead to a higher asking price. According to Wang and Murnighan (2011), greed tends to extend without bounds, embodying a relentless, unstoppable craving for more.
### Table 2.2 Characteristics of ‘good greed’ and ‘bad greed’ considered adapted from Winarick (2010)

<table>
<thead>
<tr>
<th>‘GOOD’ GREED</th>
<th>‘BAD’ GREED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Striving for success but must achieve realistic price</strong></td>
<td><strong>Must get price wanted</strong></td>
</tr>
<tr>
<td>• Vendor is ambitious, desires to have a successful sale, aim to get the highest possible price in the transaction.</td>
<td>• Vendor is adamant about not settling for a lower price.</td>
</tr>
<tr>
<td>• Vendor is also fairly objective about the fact that should the price not be achieved; some form of reconciliation may apply for a price adjustment</td>
<td>• The original asking price is deemed accurate.</td>
</tr>
<tr>
<td></td>
<td>Mind is fixed on asking price and will not budge.</td>
</tr>
<tr>
<td><strong>Agent must push the price as hard as possible</strong></td>
<td><strong>Agent must not submit a lower price</strong></td>
</tr>
<tr>
<td>• Agent must genuinely do their best to achieve asking price.</td>
<td>• Buyer must pay the asking price.</td>
</tr>
<tr>
<td>• All efforts must be made to find the right buyer.</td>
<td>• Lower price seen as a giveaway.</td>
</tr>
<tr>
<td></td>
<td>• No excuse for not achieving asking price.</td>
</tr>
<tr>
<td><strong>Must be satisfied with the price achieved</strong></td>
<td><strong>Price must not be lower than our neighbour’s price</strong></td>
</tr>
<tr>
<td>• Price must be convincing; best price agent can achieve.</td>
<td>• Lower offer price compared to comparable houses sold in the area considered a failure, result of poor marketing efforts.</td>
</tr>
<tr>
<td>• Price must also not be too much lower than asking price.</td>
<td>• Agent must not even attempt to submit a lower price.</td>
</tr>
<tr>
<td>• Price must also be in price range of similar properties sold in the area.</td>
<td>• Lower price does not reflect the real value of vendor’s house.</td>
</tr>
<tr>
<td><strong>Seller is in control of the ultimate decision to sell and will behave ethically</strong></td>
<td><strong>Agent must exploit the buyer to get the price wanted</strong></td>
</tr>
<tr>
<td>• Decision to sell rests in the hands of the vendor.</td>
<td>• Vendor demands that agent does everything, even the impossible, to obtain asking price.</td>
</tr>
<tr>
<td>• Vendor decides whether to accept price or not.</td>
<td>• Agent must say whatever is necessary to convince the buyer to pay asking price.</td>
</tr>
<tr>
<td><strong>Vendor has sense of control; decision to accept or reject the offer gives sense of authority</strong></td>
<td>• No justification for buyer paying lower than asking price.</td>
</tr>
<tr>
<td><strong>Outcome: seeks higher price</strong></td>
<td><strong>Outcome: seeks higher price</strong></td>
</tr>
<tr>
<td>Vendors still want higher price. However, vendors’ behaviour is more tolerant of price not being achieved. Has option of accepting or rejecting the offer. Vendor assessment of the agent is mostly thorough but fair.</td>
<td>Vendors are blatantly unreasonable, wanting higher price irrespective of circumstances, but may ultimately be forced to accept lower offer if they must sell. Relationships may be hostile throughout the whole process.</td>
</tr>
</tbody>
</table>
2.3.6 Greed relationship to high price

Various accounts (Newhauser, 2000; Robertson, 2001; Schwartz, Ward, Monterosso, Lyubomirsky, White & Lehman, 2002) associate greed with unrealistic high price (Figure 2.5): greed is an emotion that creates the desire for more, as well as the fear of getting less:

‘Greed and loss are tied together both because loss fuels greed, and because greed fosters activity intended to create loss. Greed is a response to loss not only because deprivation fuels and intensifies desire, but more importantly, because of the impact deprivation has on the shape of desire’ (Levine, 2013, p. 4).

Figure 2.5 Relationship of greed to Price Virus

Brasey and Barber (2009) argue that those who are motivated to achieve are most likely to be those who feel no satisfaction at lower levels of performance. In self-seeking terms, it would seem that the highest achievers are those who may also be described as the greediest. Greed, it would appear in this analysis, is really a manifestation of dissatisfaction (Brasey & Barber, 2009). Here, sellers’ dissatisfaction is motivated by a fear that they may not achieve a high price for the sale.

To summarise, greed has been a fundamental concept in traditional philosophy, religious thinking, and economic theorising (Seuntjens et al., 2015). Greed can be good (constructive) and bad (destructive), as highlighted by discussions about the industrious element associated with greed, but also has a potential to damage interpersonal relations (Seuntjens et al., 2015, p. 918). Despite the significance of
greed, it is surprising that psychologists pay little attention to this emotion (Seuntjens et al., 2015, p. 918). One explanation for the lack of empirical research on greed is the difficulty people have in defining it (Wang & Murnighan, 2011). This study endeavours to test how greed positively influences the Price Virus.

2.4 Overview of pride and influence on vendor’s decision-making

Pride is a ‘self-conscious’ emotion, meaning that it is based on an evaluation of self in relation to specific events (Lewis, 2008). Psychologists have linked pride with both positive social behaviours, for instance volunteering and altruism (Michie, 2009), and with harmful behaviours such as narcissistic aggression and the manipulation of others (Tracy, Cheng, Robins & Trzesniewski, 2009).

A recurring observation is that pride has a dual nature (Lewis, 2008). In effect, the word ‘pride’ has two separate aspects: one associated with descriptors such as ‘confident’ and ‘positive’; the other with ‘proud’ and ‘egotistic’. Two main types of pride adopted from Tracy and Robins (2004a), ‘authentic’ pride and ‘hubristic’ pride, are identified in this study, and their relationship to the Price Virus is examined to show that pride is likely to influence home owners to make economically incorrect choices when selling their home. Pride is an element of interest in this study due to its link to human perception and decision-making. Whether pride influences home owners to value their homes at a higher price or not, the hypothesis associating pride with unrealistic high price is assumed to be correct.

Self-liking is a self-assertive passion, which encourages people to make themselves happy and to overvalue their relative worth (Mandeville, 1971 [1732]; as cited in Verburg, 2015, p. 674). According to Verburg (2015), the passion of pride causes self-liking, and self-liking encourages overvaluing of self-worth. He also argues that in commercial societies, admiration and distinction are cultivated through the pursuit of riches, motivated by pride and vanity in the accumulation of material possessions. This study attempts to explore pride and its effect on decision-making and vendor motives. Whether pride leads to overvaluation of the property, and therefore fails to produce a
realistic selling price which will attract buyers is a question that remains to be answered, while pride is also associated with a number of negative social outcomes (McGregor, Nail, Marigold & Kang, 2005), which may also affect the objectivity of vendors.

Pride has also been linked to a variety of positive social results (Leary 2007; Leary, Tambor, Terdal & Downs, 1995; Williams & De Steno, 2008), so that it is appropriate to distinguish between achievement-oriented pride and improper pride in this research. To assist in understanding these apparently contradictory effects of pride, several researchers (Ekman, 2003; Lewis, 2008; Tangney, Wagner & Gramzow 1989; Tracy & Robins, 2004a) have suggested distinguishing between ‘hubristic’ and ‘authentic’ pride (Carver, Sinclair & Johnson, 2010). The purpose is to distinguish the positive side of pride, or ‘authentic’ pride, from pride that is negative and ‘hubristic’, and to examine how these two contrasting forms of pride are anticipated to influence decision-making in relation to perceived value, eventually leading to the Price Virus.

2.4.1 The pride construct

What is ‘pride’ precisely? What influence does it have on behaviour, and how can we describe its emotional configuration? How does it manifest in behaviour leading to the Price Virus and distort decision-making? Lea and Webley (1997) argue that pride is normally a reaction or feeling, also described as an outlook, and can be seen as a demonstration of confidence. Pride can also be divided into sub-categories. Pride in one’s successes may promote positive behaviours in the achievement domain (Herrald & Tomaka, 2002) and lead to the development of an honest and deep-rooted sense of self-esteem, but ‘hubristic’ pride has been theoretically associated with narcissism (Lewis, 2008). How can the same emotion serve such varied and in many ways, antagonistic roles? First of all, one needs to identify the attributes of pride, and determine how it can be categorized.

As discussed by Lea and Webley (1997), pride is not only an emotion, but also an attitude, and is associated with self-esteem. Pride has been defined as a feeling of pleasure or satisfaction in one’s actions, qualities and self-respect (Rangi, 2010).
Secondly, how does pride relate to other behavioral patterns? Lea and Webley (1997) endorse the notion that pride is certainly a passion, but examine further the nature of this emotion. Pride is seen as an achievement-related affect, while according to Harter (1985, p. 16), ‘pride is an emotional response to an evaluation of one’s competence’. Considering this approach, it is understandable that pride has been described as self-rewarding and the internal counterpart of praise by external agents (Batson, Dyek, Bateson, Powell, McMaster & Griffitt, 1988). Hence, pride originates in achievements and success.

2.4.2 ‘Authentic’ (positive) pride

Pride tends to inspire people to work harder to attain success (Aicinena, 2011), and is considered a positive emotion present in all human beings. It is enhanced by positive endorsement from others, and is allied with achievement and satisfaction. Feelings of pride serve to increase an individual's concept of self (Aicinena, 2011).

Several researchers have described pride as a positive emotion which can produce positive effect (Gruber & Johnson, 2009) through enhanced self-esteem after some achievement is accomplished (Takahashi, Matsuura, Koeda, Yahata, Suhara, Kato & Okubo, 2008). Joshua Sparrow (2005) argues that self-esteem, besides enhancing pride in the self, may also assist in maintaining and regaining a positive view of one’s self no matter what the circumstance. A healthy self-esteem leads people to keep trying to push forward, even when they have failed, to take on new challenges, and to strive when they have not reached their full potential. It is likely that home owner psychology is associated with ‘positive’ pride, for instance, pride in simply owning a home, a significant achievement given the large financial commitment involved in acquiring a property, or a feeling that they have reached their full potential by obtaining the highest possible re-sale price.

2.4.2.1 Characteristics of ‘authentic’ pride

Carver et al. (2010) distinguish two forms of pride, and relate ‘authentic’ pride to adaptive achievement and goal engagement. Their empirical results link ‘authentic’
pride to *tangible achievements*, and they argue that reward responsiveness reflects positive responses to goal attainment. For example: ‘when I get something I want, I feel excited and energised’. Achieving optimum sale price is assumed to constitute a ‘tangible achievement’, which, it is argued, is encourage by pride.

*Self-esteem* reflects self-perceived social acceptance (Leary et al., 1995). People within a social cluster seek out and accept individuals because they possess the relevant skills or knowledge. Self-esteem is derived not from self-indulgence about how great we are, but from recognition by others that we have contributory abilities that can play an effective role in a general sense. Feelings of ownership are said to be pleasure-building (Beggan, 1992; Furby, 1978; Nuttin, 1987; Porteous, 1976), and are complemented by a sense of efficacy and competence (White, 1959).

Even though there are some challenges surrounding the exact appraisal and experiential characteristics of pride, most psychologists agree that pride is a positive, self-conscious emotion arising from achievements that can be attributed to one’s own abilities or efforts (Lewis, 1997; Tangney, 1999; Tracy & Robins, 2004a; 2004b). Where a person’s *competence* is concern, in situations when accomplishment is publicly praised, competence is strongly associated with pride (Webster, Duvall, Gaines & Smith, 2003). A feeling of competence therefore encourages a person to experience ‘authentic’ pride. If an individual has been recognised to be an authority in a particular field, this will give him or her self-assurance to act with confidence, while ‘pride in doing a good job’ is often seen as desirable and positive.

Williams and De Steno (2008) believe that pride plays a crucial role in providing incentives for pursuing success, a view known as the pride motivational hypothesis. In other words, an individual may feel motivated to extend themselves within their particular domain when feeling proud about a recognised achievement. It is anticipated that homeowners will be *motivated* to pursue success when selling by achieving the highest possible negotiated sale price.

Pride may be viewed in some sense as a positive thing, may encourage a feeling of being unique and distinctive, and can be associated with accomplishments and a sense
of satisfaction in one's actions. For this reason, pride is frequently experienced when receiving the social approval and admiration of others (Skårderud, 2007).

Factors such as tangible achievements, self-esteem, competence and motivation to succeed appear to drive vendors to desire higher prices and to over-price their property. Obtaining a higher than market price may be associated in the vendor’s mind with notions of achievement or success. The hypothesis argued is that the effects of pride are associated with the pursuit of higher goals. For the characteristics of ‘authentic’ pride, see Figure 2.6.
Figure 2.6 Elements of Authentic Pride

‘AUTHENTIC’
PRIDE

HOME OWNERSHIP

Tangible achievements
(Carver, et al., 2010)

Self-esteem /Self-worth
(Leary, Tambor, Terdal, & Downs 1995).

Competence /ability
(Webster, Duvall, Gaines & Smith, 2003)

Motivated to pursue success
(Carver, Sinclair & Johnson, 2010)

DECISION BASED ON

ADAPTIVE
ACHIEVEMENT &
GOAL ENGAGEMENT
(Williams & DeSteno, 2008)

NEW GOALS/OVER-
PRICING THE
PROPERTY
2.4.3 Negative (‘hubristic’) Pride

By contrast, pride may also be offensive, negative or even harmful when it takes the ‘hubristic’ form (Aicinena, 2011). Pride that leads to destructive behaviour is considered to be ‘hubristic’: ‘hubristic pride is pride that has gone wrong’ (Aicinena, 2011). This is pride that has crossed the ethical boundary, for example in the sporting industry, when participants are prepared to do anything to achieve success, including cheating, causing harm to other competitors, engaging in substance abuse or activities that disadvantage others. It permits individual sportsmen and women to engage in destructive actions without feeling remorse. This dysfunctional behaviour (caused by ‘hubristic’ pride) causes harm to others besides players, including coaches, athletes and parents (Aicinena, 2011). In sport, trying to win at any cost at the expense of behaving fairly and ethically may be categorised as ‘hubristic’ pride.

Apart from the sporting arena, ‘hubristic’ pride may also affect home owner behaviour. The need to succeed that derives from high self-worth contingencies (Mageau, Carpentier & Valler, 2011) leads individuals to egotistically emphasise goal-seeking at the expense of others involved in the activity, manifesting in arrogance and ‘hubristic’ pride.

‘Hubristic’ pride can lead to maladaptive behaviour such as aggression and anti-social behaviour (cf. Tracy, Cheng, Robins & Trzesniewski, 2009). ‘Hubristic’ pride can contribute to personal feelings of self-importance and arrogance, and lead to inappropriate actions by encouraging behaviours such as unfriendliness, enmity, and manipulation. This attitude may influence and affect decision-making negatively in the process of selling the home, for instance through greed. Originally, ‘hubris’ was associated with those who believed themselves to be superior to the gods, and involved the moral failing of not recognising one’s place within a hierarchical scheme and vaingloriously insisting on being right (McNamee, 2002). Hubris is a false pride (Cichy, 1972) which is sometimes associated with social impostors who over-value themselves to compensate for a lack of success within their own domain. This negative orientation is typical of those who are unable to achieve respect in the normal way, and instead try to present themselves as more accomplished than they really are, in
order to gain the respect desired. Hubristic attitudes often influence individuals to perceive themselves as being immune to failure, and to focus on ‘the self’ as perfect in any circumstance. Such individuals are therefore likely to adopt self-protective attitudes and to rationalise their inability to succeed in term of external causes beyond their control (Campbell, Foster & Brunell, 2004).

2.4.3.1 Characteristics of ‘hubristic’ pride

A number of researchers (Bodolica & Spraggon, 2011; Carver et al., 2010; Miller, 1975) have associated ‘hubristic’ pride with vanity/conceit, self-righteousness, narcissism, over-confidence and arrogance. Their decision-making processes are directed towards extrinsic objectives such as public recognition and social dominance (Carver et al., 2010). In decision-making, hubristic pride may be associated with a tendency to set unrealistic ambitions, as well as extrinsically-motivated goals (Carver et al., 2010).

The hubristic person has an excess of pride, exaggerates their importance, acts recklessly in pursuit of glory, and may believe they are infallible (Marquand, 2007). False pride may be associated with vanity or conceit (Lea & Webley, 1997), which lead to an unrealistic indulgence and elevation of the self. It represents a failure of self-knowledge, in the sense that it is based on the notion of an enduring, substantial self. Self-importance then, like other forms of conceit, entails a cognitive error (Heim, 2009).

Szabados & Soifer (2004) describe self-righteousness as associated with hypocrisy, and state that these two characteristics sometimes co-exist. Self-righteousness may foster a belief that one’s house is perfect. One noticeable feature of self-righteousness is its prevalence across all economic classes (Bicknell, 2010). Self-righteousness is assumed to influence home sellers to believe their home to be worth more in economic terms.

Wallace, Ready and Weitenhagen (2009) have also proposed that narcissism is another variable which can be predicted. Narcissism is evident in people who exhibit an inflated sense of self-importance and exclusivity, an irrational sense of entitlement, arrogance, exploitative tendencies, empathy deficits, and an excessive need for
admiration (Wallace et al., 2009) and can lead to unrealistic ambitions and a relentless quest for self-enhancement. According to John & Robins (1994), most people view themselves as better than average and have inflated opinions about themselves, and this is itself a form of narcissism.

Anderson (1999) has argued that some common decision-making mistakes are due to seeking out information that which supports our existing beliefs, while avoiding contradictory information. Rabin and Schrag (1999) have argued that confirmatory biases lead to over-confidence, in the sense that people tend to believe more strongly in their favoured hypotheses than they should. According to Kahneman and Tversky (1982), ‘confidence is the subjective probability or degree of belief associated with what we “think” will happen’ (p. 515). Over-confidence is widely considered a flawed behaviour that runs the risk of misinterpreting the significant unreliability of one’s own perception. The overconfidence impact has been described as occurring ‘when the confidence judgments are larger than the relative frequencies of the correct answers’ (Gigerenzer, Hoffrage & Kleinbölting, 1991, p. 506). When individuals are overconfident, they believe that they are more perceptive than they really are, or imagine their powers of prediction to be more acute than they actually are. Over-confidence has been defined as a ‘cognitive conceit’ by Block and Harper (1991). According to Rabin and Schrag (1999), over-confidence is also influenced by confirmatory biases, which are assumed to affect decision-making when determining the selling price of the house.

Even though these characteristics differ from ‘authentic’ pride, the outcomes from ‘hubristic’ pride are suggested to be similar to those of ‘authentic’ pride. In Figure 2.7, ‘hubristic’ pride relates to measures of impulsivity and aggression (Carver et al., 2010) and a likely decision to over-price the property.
Figure 2.7 Characteristics of ‘hubristic’ pride

- Vanity/conceit (Lea & Webley, 1997)
- Self-righteousness (Bicknell, 2010)
- Narcissism (unrealistic ambition) (Wallace, Ready & Weitenhagen, 2009)
- Over-confidence (Rabin and Schrag, 1999)

Home Ownership

Decision Based On

Extrinsic Values of Public Recognition & Social Dominance (Carver, et al.,)

Towards

Overpricing of Property
2.4.4 Two aspects of pride (Tracy & Robins, 2007)

The two distinct types of pride (‘authentic’ and ‘hubristic’) described above are associated with different cognitive characteristics. ‘Authentic’ pride is generally associated with the ‘I won because I practiced’ attitude. By contrast, ‘hubristic pride, is associated with the ‘I won because I am great’ attitude (Tracy & Robins, 2007). Feeling ‘I am great’ is a self-perception which may or may not have any actual basis, whereas, ‘I won because I practiced’ is a ‘real’ achievement that has credibility. This analysis suggests that ‘authentic’ pride may correlate with high self-esteem and adjustable personality attributes such as extroversion, agreeableness, conscientiousness, and emotional stability, whilst ‘hubristic’ pride may correlate with narcissism, low or highly fluctuating self-esteem, anger and resentment (Tangney, 1999). It will be argued that these two dimensions of pride are associated with distinctive cognitive styles in relation to distinctive kinds of events.

Does pride as a whole lead to an unrealistic price for the home? Various findings point to the conclusion that home sellers, whether motivated by ‘authentic’ or ‘hubristic’ pride, will show a similar tendency to over-price their property when selling. According to numerous sources in this literature review, the desire to have more or achieve more seems to correlate with both ‘authentic’ and ‘hubristic’ pride, but according to different processes: see Figure 2.8, where the influence of pride on the over-pricing of properties is suggested to correlate positively with the Price Virus.
Figure 2.8 Both ‘authentic’ and ‘hubristic’ pride correlate with over-pricing of the property.
2.4.5 Pride associations with the Price Virus

Are vendors unrealistic in their price because of pride? To summarise, it is argued that people will be motivated by ‘authentic’ or ‘hubristic’ pride, to want more money for their homes, and will therefore tend to overvalue their homes when it comes to selling. Despite the fact that both of these schemas will produce the same outcome, ‘hubristic’ pride may tend to influence the overvaluation of the home on a larger scale than ‘authentic’ pride, due to its hubristic nature. Nevertheless, the likely inclination towards a higher price is the same for both ‘authentic’ and ‘hubristic’ forms of pride.

Based on the literature analysed in this review, and a comprehensive analysis of both ‘authentic’ and ‘hubristic’ pride, it is argued that the hypothesis that pride does eventually influence the Price Virus can be demonstrated (Figure 2.9).

**Figure 2.9 Pride associations with the Price Virus**

Later in this thesis, an empirical study will be presented to establish the relationship between pride and the Price Virus. It is critical to link these two elements in order to identify the causal factors that contribute to home owner pride, which leads to the unrealistic high selling price.

2.5 Lack of trust in real estate agents

A lack of trust in real estate agents is another factor which may influence the asking price by the vendor. A fundamental fact about real estate agents is that they only receive financial reward when a sale is successful, so that once the property is listed,
the agent will be compelled to sell the house as soon as possible, and the pressure to sell may influence the agent into pushing through a sale even when the price may not favour the vendor.

According to a recent Roy Morgan survey (2013), real estate agents are ranked third from the bottom as the least trusted profession behind car salesmen and advertising people. So lack of trust in real estate agents is examined in this study as a possible determinant which may motivate the vendor to inflate the selling price, in order to compensate for a perception that the agent may not be working in their best interests. Real estate agents deal with selling people’s houses, which are high value assets in terms of monetary worth. As observed by the researcher, people watch agents carefully to see if they do or say something to achieve a sale which is not necessarily favourable to the vendor, whose interests may suffer as a result. In some cases, the agent may not be totally honest with the vendor. Once vendors sign the selling contract with the agent, they realise how influential the agents can be. Agents are privy to information that is not available to the vendor and buyer, and are in a position to manipulate the situation. Agents are able to regulate the dynamics by finding a middle ground between both parties, because they exchange information directly with both the vendor and buyer. Ultimately, it is the agents who will close the deal for both the parties, and they may have great influence over the vendors and buyers in relation to price, depending on what information is disclosed.

Vendors may therefore feel it is necessary to watch out for their own interests, and this may lead to resisting a price offer, even though it is attractive, for fear that the price may not be optimal, and that the agent may not be pushing hard enough for fear that the buyer may walk away from the sale. As a result, the element of trust comes into play when engaging an agent to sell one’s house. Trust is an important factor, since it enables cooperative behaviour (Gambetta, 1988), yet the Roy Morgan survey cited above ranked real estate agents poorly in terms of trust, suggesting there may be an untrusting relationship between vendors and agents. This study attempts to demonstrate that lack of trust plays a critical part in producing vendors’ inflated listing prices.
Trust is a psychological state that allows consumers to risk personal vulnerability by fostering positive expectations about the intentions of others (Rousseau, Sitkin, Burt & Camerer, 1998). So do vendors risk their own personal vulnerability by expecting that agents will act in their best interests? Consumer trust is widely held to be an important area of study, in part because of the key role it plays in a number of desirable marketing outcomes, including effective branding (Keller & Lehman, 2006), securing greater cooperation and agreement (Schurr & Ozanne, 1985), and improving relationship strength (Aaker, Fournier & Brasel, 2004) and commitment (Morgan & Hunt 1994, as cited in Wilson & Darke, 2012). More broadly, trust is recognised as vital to the efficient operation of modern, global economies (Fukuyama, 1995). However, a number of different forms of threat are known to undermine consumer trust in marketing agents. For instance, distrust is a common reaction to threats like increased uncertainty (Flynn, Slovic & Kunreuther, 2001), as well as persuasion threats in the form of deceptive advertising (Darke & Ritchie, 2007) and manipulative sales tactics (Brown & Krishna, 2004; Campbell & Kirmani, 2000, as cited in Wilson & Darke, 2012). The complexity of the vendor/agent relationship in relation to trust may affect the ultimate listing price configuration determined by the vendor.

2.5.1 Lack of trust in agent leads to the Price Virus

The researcher has observed that real estate agents are perceived by vendors to be only looking after their own interest and their commission. With this perceived opinion about agents, vendors may try to protect themselves by setting a higher price, in case the agent undersells their property for the sake of securing their commission. This tendency towards self-protection by setting a higher price may eventually lead to the Price Virus (Figure 2.10).

Figure 2.10 Lack of trust association with greed

![Lack of Trust](image1) → ![Price Virus](image2)
Real estate data (REIWA, 2012) reveals that 70 per cent of home sellers fail to achieve their asking price. Could this be the result of a lack of trust in the real estate agent that causes vendors to raise the selling price? The hypothesis that lack of trust in agents may lead to higher prices has not yet been investigated, and so this hypothesis will be examined using the following propositions:

- Real estate agents primarily care about getting their commission, not about the home owner’s interests, so agents cannot be entirely trusted.
- Home sellers do not trust agents, but will tolerate them as long as they can get the highest price possible for the house.

These are two possible explanations for why vendors are more determined to list at a higher price, in a belief that the agent will fail to achieve the goal set by the vendor. To summarise, lack of trust may bring about self-protective behaviour and eventually lead to a higher price.

2.6 Expecting price negotiation between buyers and vendors

In any transaction, all parties are expected to negotiate. Most negotiators enter negotiations expecting the other party’s interests will be completely opposed to their own (Thompson & Hastie, 1990). According to De Paulo, Lanier, and Davis (1983), buyers will tend to make opening offers at lower negotiation levels, rather than proposing a more realistic value for the goods. Thus, sellers may post higher offering prices with a view to later offering price concessions which will help to close the sale. Since there is an expectation that negotiation will take place, does this drive the vendor to ask for prices higher than realistic values? Unsuccessful negotiation may produce failed results, for example, when negotiators fail to reach a mutually acceptable agreement, even when both parties would benefit from a joint agreement no one profits (Thompson & Hastie, 1990).

When engaged in negotiation for the sale of the house, the vendor will have mainly economic motivations. But there may be other motivating factors too, including
feelings about self, the negotiation process and the negotiating relationship (Curhan, Elfenbein & Xu, 2006). In other words, ‘subjective value’ accrues from these components of the negotiation (Curhan, Neale, Ross & Rosencranz-Engelmann, 2008), so that these subjective values may affect the perceived value and the asking price in the negotiation process.

Why do negotiators frequently fail to reach collaborative agreements? There are several theoretical perspectives mentioned by Pruitt and Rubin (1986), as well as Bazerman and Carroll (1987). The present approach focuses on negotiators’ perceptions, and specifically, the accuracy of negotiators’ perceptions of the other party’s interests, as a determinant of negotiation behaviour and performance. Views are normally influenced by the growing body of research that examines negotiation behaviour from the perspective of behavioural decision theory (Bazerman & Carroll, 1987; cf. Bazerman & Neale, 1983; Neale, 1984; Neale & Bazerman, 1985; Thompson & Hastie, 1990).

If the two parties have different evaluations of the relative importance of the negotiation issues, then an integrative solution may be possible because negotiators have something to offer that is relatively less valuable to them than to those with whom they are bargaining (Raiffa, 1982; Lax & Sebenius, 1986). The process of negotiation involves proposing offers, making counter-offers, and trying to persuade the other party to concede (Cross, 1977). Although many negotiation situations involve opportunities for mutual gain, most negotiators do not reach optimal agreements, as observed in the real estate industry. ‘The way negotiators actually behave usually departs significantly from normative economic models’ (Thompson, Wang & Gunia, 2010, p. 492). The two primary tasks a negotiator faces are to create value, and to claim value (Lax & Sebenius, 1986); to set a higher selling price and achieve it.

Wilhelmsson (2008) has used survey information to conclude that first time buyers do not experience weaker bargaining power, as measured by the discount from the listing price. So, relative negotiation power does not disadvantage first time buyers. Van Boven et al. (2000) uses the illustration of a prospective home buyer who wants to buy at the lowest price and must estimate accurately the home owner’s lowest price. This
is the starting point for negotiation. The home vendor, on the other hand, has an equivalent interest in estimating their maximum purchase price. If both parties’ estimates are prejudiced, or more precisely, if the buyer underestimates the owner’s lowest price and the owner overestimates the buyer’s highest price, negotiations may be more time-consuming, and may result in an impasse, leading to a failure to finalise a potentially profitable transaction. If vendors anticipate at some point in the negotiations, one party is likely to cross the line from amiable bargaining into stingy, irrational or unfair behaviour, changing the situation from friendly to the confrontational (Herrmann, 2003), vendors may formulate a higher price right from the beginning.

2.6.1 Negotiation grounded in social perception

According to Thompson and Hastie (1990), social and psychological judgments made in relation to negotiations are grounded in social perceptions, and consist of three important elements: a person’s perceptions of the bargaining situation, their perceptions of the other party, and perceptions of themselves. Thompson’s first category relates to perceptions of the bargaining situation, and comprises judgments and feelings about the negotiation process and its outcome. ‘Perception of processes’ includes whether or not reasonable-mindedness and fairness is present.

Thompson and Hastie’s (1990) second category relates to perceptions regarding the other party, and impression configurations applied to one’s negotiating counterpart. This category includes the attributes that negotiators notice about counterparts, based on their behavior, including their ethics, tactics applied, and strategies (Curhan et al., 2006).

Thompson’s third category relates to perceptions of self, and involves turning the perception process inwards. Negotiators judge their own characters, performance, and worth using both their internal awareness of their motivations and values, as well as their observations of their own behaviour as if from the outside (Ross, 1977). Perceptions of self are associated with self-efficacy, self-enhancement and positive
illusions, self-esteem and ‘maintaining face’ (cf. Bandura, 1977; Brown, 1986; Pyszczynski, Greenberg, Solomon, Arndt & Schimel, 2004; Stajkovic & Luthans, 1998; Taylor & Brown, 1994; White, Tyanan, Galinsky & Thompson, 2004). White et al. (2004) have argued that negotiation can be a particularly threatening experience, because it frequently implies confrontation and assigning public tangible worth to objects and effects which are of personal value.

The findings of Kramer, Newton and Pommerenke (1993) help to explain why negotiators are often reluctant to concede or reach agreement, even when agreement appears to be in their best interest (Keenan & Wilson, 1990; Pruitt & Lewis, 1975). If negotiators hold unrealistically optimistic beliefs about their abilities and objectives, they may avoid accepting agreements that they perceive as falling short of their desires (Kramer et al., 1993). Indeed, individuals have been found to overestimate their control over events (Crocker, 1982; Langer, 1975). These patterns demonstrate a pervasive tendency for individuals’ judgment to be self-enhancing across a wide variety of social contexts (Brown, 1986). These results explain why negotiators tend to be overconfident and unrealistically optimistic, a tendency observed among both laboratory (Neale & Bazerman, 1991) as well as real-world negotiators (Bach, 1985).

2.6.2 Expected negotiation and the Price Virus

Vendors know that in the process of selling, the price will be negotiated, and this may lead to them over-pricing the property. The objective is to obtain more money, since it is expected that buyers will negotiate, and this expectation may drive up the price. The question here is whether vendors increase the price because they believe that buyers will negotiate over the asking price, and that by increasing their asking price they will forestall the possibility of getting a lower price. In this scenario, the vendor may not really believe the asking price is realistic, but raises the asking price to forestall a subsequent lower price. In price negotiation, it is natural to have commercial conflict, because there is competition by both parties to achieve the best financial results (buyers versus sellers). Conflict arises because each negotiator has differing objectives,
with the buyers typically wanting low prices and sellers wanting high prices (Neslin & Greenhalgh, 1983).

Many negotiations provide opportunities for integrative agreements in which individuals can maximise joint advantages without contending for resources in a direct win/lose fashion (Thompson & Hastie, 2004). However, negotiators often settle for sub-optimal compromise agreements rather than search for mutually beneficial, or integrative, agreements. Thompson & Hastie (1990) stated that we hypothesized that misperceptions of the other party's interests are a primary cause of sub-optimal outcomes. In any case, vendors strive to sell at a higher value out of self-interest.

In the Western world, people believe that the price and quality of goods are directly related, so that vendors may feel insulted if buyers bargain for their homes, because they see this as literally devaluing their possessions (Herrmann, 2003). Due to an expectation of negotiation and bargaining by buyers, sellers put up the price (De Paulo et al., 1983). This study, therefore, tests the hypothesis of the relevance of expected negotiations leading to the Price Virus (Figure 2.11).

**Figure 2.11 Expected negotiation associations to the Price Virus**

Researchers have distinguished negotiation elements, types of negotiation and negotiation consequences. Haynes, Campbell and Hitt (2014) suggest that the desire for more begins with a desire, but may be followed by a disposition to act on that desire (Smith, 1987; 1994) by pursuing excessive wealth. Hence, wanting more begins with a feeling. From this perspective, the Price Virus may originate in vendors’ expectation that buyers will negotiate over the price, with vendors being likely to put up prices because of this expectation.
2.7 Rarity and uniqueness attributes in pricing decisions (uniqueness of home)

‘Rarity’ may be defined as the extreme abundance value with changing limits applied to the extremities of perception that defines rarity (Gaston, 1994; Grime 1998; Murray et al., 2000). Rarity, or scarcity, is an essential concept in economics. The theory of supply and demand describes how the rarity of a particular product may determine a higher price; scarce resources lead to rarity, lack of diversity, lack of economies of scale and therefore reduce competition (Chatziefstathiou, Spilanis & Vayanni, 2015).

What is investigated in this section is the home sellers’ perception that their homes are something uncommon, which therefore have a rarity value which leads to a belief that the home should command a higher than normal price when it is listed on the market. However, it is also possible that some people may not see their home as having rarity value at all, but rather being just another property similar to others. It is critical to explore whether this feeling of rarity is present in vendors, and if so, whether it influences pricing behaviour. According to Atsmon and Dixit (2009), people are willing to pay a premium for rarity, while Cialdini (2008) also explains that people may favour scarce products over comparable ones which are readily available.

Social philosophers and social scientists have highlighted for some time the constant tension in social life between the desire to be similar to other people and the desire to be different or unique (Suls & Wan, 1987). Suls and Wan cite Festinger’s (1954) theory of social comparison, which highlights the need to be similar to others in order to make stable and accurate self-evaluations. Similarity, or the standard code, refers to the means by which people can benchmark themselves against others. Having a particular social identity means seeing things from the group’s perspective (Stets & Burke, 2000). This enables one to measure the ‘self’ in accordance with the social criteria that are deemed acceptable within a specific community.

By contrast, Snyder and Fromkin (2012), Fromkin and Snyder (1980) and Tesser (1980) have argued that situational and personal factors may motivate people to feel and act in idiosyncratic ways. Does a perception of the rarity or typicality of the sale item influence home vendors when making a decision to determine a selling price?
Marshall et al. (1920) maintained that a passion for social distinction is an important and universal human motivation, which manifests in a desire to be unique or what others are not able to be. Often, the private properties of some rich people are valuable not because of their beauty, but simply because of their rarity (Kitching, 2015, p. 118). If this conclusion is correct, then home vendors will have a desire to be distinctive and view their houses as unique, and this will certainly be an element which must be considered in relation to the pricing mechanism. If the home is viewed as non-ordinary, then there will be a tendency to see the property as having higher value.

How people perceive the value of their homes depends on whether they consider the home to be a rare commodity or just an ordinary possession. The relative perception of rarity and emotional attachment to the home will have a determining effect on how vendors value their home, so that it is imperative to determine whether people see their home as unusual or run of the mill.

2.7.1 The rarity factor

When we want to sell something, or when we want to secure a contract, we may promote the notion that we ourselves are unique have a rare product or can provide a rare and exceptional service. We may try to persuade the prospective buyer or client that there is a point of distinction or rarity about us, our commodity or service. In the field of marketing, it is assumed that the perception of scarcity increases the perception of value (Cialdini, 1984; King, Hicks & Abdelkhalik, 2009).

The same logic applies to home owners who feel that their home and its differentiation from other homes is unique (Liu & Zhang, 2013). Even though there may be two similar homes with similar designs, or even built by the same builder, we will never find the same content in the interior of the home. This is because each home owner has their own individual preferences regarding the colour of the walls, doors, carpets and floor tiles. Besides this, different furniture may be placed at different places within the home. This is why similar homes in the same area are sold at different prices, and is based on unique defining features, such as the street location,
the direction the property faces and its presentation. These unique differences may become factors that enable a vendor to command a higher price.

The findings of Koford and Tschoegl (1998) show that people place importance on rarity for its own sake, and support theories of consumer behaviour based on a demand for exclusivity. They have highlighted theories of positional goods (branded goods and how they are positioned in the market) and a need for exclusivity (social elite effects) which provide a natural explanation for the demand for rarity. Some people may also value rarity highly because they believe that other people value rarity too.

Rarity is commonly used as a device for seeking a higher price in sale negotiation. Lynn (1989) has presented experimental evidence showing that scarcity affects the desirability of objects through the association of scarcity with expensiveness. The experimental subjects found scarce objects more attractive when the experimenter prompted them with the idea that scarce objects were often costly. According to Koch and Benlian (2015), a sense of scarcity promotes consumers’ purchase motivation. Likewise, in effecting the sale of a home, some of the critical methods used are emphasising why the home is worth the buyer’s consideration, and why it should trump other houses on the market. The rarity component is presented in this study as a mechanism which may take the vendor along this path. Asking for more money reflects the natural human desire to want more, and the perception of rarity gives justification for that demand.

Similarly, Brock (1968) has suggested that people may favour scarce commodities over comparable available commodities. According to King et al. (2009), the scarcity of objects enhances their value, and is a widely recognised principle in the behavioural sciences. This is because ownership of scarce commodities increases the owner’s feeling of personal uniqueness, which is seen as an inevitable motivating aspect of human behaviour (Belk, 1988). The perception of the rarity of one’s possession may also be used to distinguish aspects of the self. This study attempts to show how the perception of the rarity factor of people’s possessions causes them to value them more highly.
Why and how do home owners see their homes as being unique? It is assumed most people do, and to this end, many owners improve and embellish their homes (if they can afford to). Even those who cannot afford to do so try to re-model their homes along similar lines. Ultimately, when the time comes to dispose of the house, whether this perception of rarity manifests itself in the Price Virus can be observed through empirical tests.

Several researchers, such as Mead (1934), Porteous (1976), Abelson and Prentice (1989) and Dittmar (1992), have argued that possessions also serve as symbolic manifestations of the self, and that there is a close connection between possessions, self-identity, and individuality. In most societies, individuality and related concepts like rarity are associated with prescribed and identifiable positions within the social order (Burridge, 2015, p. 115). These scholars suggest that possessions and ownership may be used to express individuality or self-identity in relation to others. The desire for a premium price is strongly associated with these kinds of perceptions.

2.7.2 The typicality factor

When a vendor feels that their home is not unique, but rather an ordinary home, then the ‘product’ is not differentiated, but is instead seen as mass-produced, and will be perceived to have a low price (Cornell, 2006). In numerous communal societies, harmony with other members of the society is seen as the dominant social value. Triandis (1990) has observed that because group harmony is so highly respected, agreement and compliance with in-group pressures is considered the norm, and people believe the same rules should apply to everyone (Nisbett, 2003, p. 48). Conduct which is inconsistent with this dominant social value is discouraged or even sanctioned; anyone who deviates from this social norm is held to disturb social harmony, and may be penalised. Thus, the vendor may feel that he or she will be subjected to ridicule should they ask for a price which is too far outside the range of normal asking prices. Consequently, their behaviour will be highly normative, in order to be sure they have acted in a way considered socially appropriate (Ross, Greene & House, 1977).
Do home owners follow the price trend set by other home sellers who are in the same position of trying to sell their properties? Marks, Miller and Maruyama (1981) have suggested that people may not necessarily be influenced by others who possess traits that are viewed favourably. This leads us to another factor for consideration, which is whether home sellers view other vendors as being similar to themselves, and view them favourably as people who have the same intentions as themselves, or whether they view them as hostile competitors trying to achieve the highest price in the market.

Jones and Thibaut (1958, p. 161) highlighted concerns about establishing and maintaining a social reality in which one seeks specific social interactions, with the aim of eliciting social support for one’s views. It is argued that close perceived similarity between oneself and others will increase one’s perception that there is social support for one’s position, thus reinforcing one’s certainty about the correctness of one’s position (Miller & Marks, 1982). Chan, Berger, and van Boven (2012) have argued that people also tend to behave similarly to comparable aspirational groups (Englis & Solomon, 1995), and make choices that are consistent with positive reference groups, by constructing or expressing desired identities (Berger & Heath, 2007; 2008; Escalas & Bettman, 2003; 2005). The typicality factor may provide a safer approach by allowing one to remain within the normative social framework.

The natural instinct for vendors is to want to feel they are correct in their decision-making. Wanting to be correct may push them to appeal to a consensus price based on common norms set by other vendors. Objectively, a wrong price will be an obstacle to achieving a sale. Having unbiased perceptions combined with a safe decision-making approach may produce a tendency towards this more collectivist approach. If vendors tend to follow this collectivist schema, then it is likely they will not go down the Price Virus pathway.

2.7.3 Rarity versus typicality

The analysis of rarity in contrast to typicality has conventionally been approached from two very different perspectives. Intentions and motives are the main forces whether
people view something as rare or common. Rare situations mean they are less common in the wider population, and rarity is always distinguished as being significant. There is here a tension between people having a collective identity, but at the same time wanting to be distinct. Johnson, Kenneth and Magnani (1994) have revealed that a relatively larger proportion of people have a disposition towards rarity in comparison with a relatively smaller proportion of people who have a disposition towards being unexceptional. According to Sakamoto and Nakajima (2015), rarity is a key factor in enhancing one’s sense of ownership. Hence, one would presume that a disposition towards rarity is more regularly observed as being a significant driving force in behaviour. However, typicality requires less of an effort to explain contrasting behaviours against the customary environment of others.

Although consumers may desire rarity, by definition it cannot be independent of quantity. Brands such as Rolls Royce, Paris fashions and even Wharton School of Business graduates take the apparent rarity of their products into account in their price and output decisions and producers must also take quantity into account (Koford & Tschoegl, 1988). Less output increases rarity, but how does this relate to the thousands of homes on the market? There is actually no correlation, because perception of rarity relates to the way homes are individualised by their owners. Whether the home is considered to be rare or typical depends on how intentions or motivations are constructed. The intention of selling and a strong motivation to get as much from the sale as possible may be associated with an increased perception of its rarity, and a desire to achieve more value from the sale.

According to Stoller (1984) and Barker and Peacock (2015), to command a rarity premium, a good must not be freely available at a marginal cost. As for the assumption of rarity, the vendor must first believe that his or her home is indeed special, and of a ‘rare nature’. For example, to satisfy that the criterion that a home is of a rare nature, the vendor may mentally highlight certain features of the home, for instance, that it faces north which is ideal for sun light during the winter months; that it is located on a quiet street; that it faces the park; that it is near the ocean. These features may seem unexceptional to home buyers, but vendors may see these features as being unique.
This is how the perception of rarity arises; what may be rare to the vendor may seem typical to the buyer.

Ultimately, how the vendor assesses rarity or typicality again depends on the nature and intention of the sale: see Figure 2.12. How one subjectively perceives the sale experience may encourage a belief that the property is worth more than its market value. By contrast, demanding too much money may hinder the sale, and this may affect decision-making. There may therefore be a struggle to reconcile perceived rarity with typicality in determining a price structure.

2.7.4 Distinguishing identity from similarity

Each home has its own ‘identity distinguishing identity from similarity’ which the owner has created according to their own taste, to highlight the home’s personal and individual qualities. For example, a vendor may buy a painting or exclusive furniture to set their homes apart from others. This is the main reason why builders display their exhibition homes with beautiful furniture, in order to create the best atmosphere for prospective buyers to feel a sense of identification with a picturesque home.

According to Chan et al. (2012), people may assimilate with or differentiate themselves from others, focusing on either the group or individual level, but not both. These two dynamics are not only different, but are in fact in opposition. Therefore, vendors either conform to what the market perceives the price to be, or they derive their own individualistic price based on their feeling of the home’s rarity value.
Figure 2.12 Rarity versus typicality

Situational and personal factors motivate people to feel and act uniquely

Need to be similar to others in order to make stable and accurate self-evaluations
Festinger, 1954, Chan et al., 2012.

PERCEPTION OF HOME

RARITY

NEED TO DISTINGUISH IDENTITY
(Bearden & Hunter, 2001)

PERCEPTION OF UNAVAILABLE TO OTHERS
(Barker & Peacock, 2015)

NONDISTINCTIVE EXPERIENCES
(Lui & Zhang, 2013)

PRICE CAN BE MANIPULATED
(King et al., 2009)

HIGH PRICE
(Courchamp et al., 2006)

Typicality

SIMILARITY
(Nisbett, 2003)

NOT UNIQUE
(Triandis, 1990)

EXPERIENCES ARE FAMILIAR
(Marks et al., 1981)

MANIPULATION LIMITED
(Cornell, 2006)

LOW PRICE
(Cornell, 2006)

UNIQUENESS

EXPERIENCES ARE UNAVAILABLE TO OTHERS
(Barker & Peacock, 2015)

UNIQUE

PERCEPTION OF UNAVAILABLE TO OTHERS
(Barker & Peacock, 2015)

EXPERIENCES ARE FAMILIAR
(Marks et al., 1981)

MANIPULATION LIMITED
(Cornell, 2006)

LOW PRICE
(Cornell, 2006)
2.7.5 Perception of uniqueness or non-uniqueness

People may also engage in ‘possession rituals’ which enhance psychological notions of possession (Pierce, Kostova & Dirks, 2003). According to McCracken (1986), rituals such as displaying, showing off, using, and personalising possessions assist in associating the culturally-prescribed meanings of objects with the individual's self-identity. Therefore, irrationally devoted to the object is both an ‘assertion of territoriality through ownership’ and an ‘attempt to draw from the object the qualities that have been given to it’ by society and associating them with one's own self-identity (McCracken, 1986, p. 79). In such rituals, ownership is as unique as it is possible to be.

As mentioned, there are thousands of homes on the market for sale at any one time, so it would be unrealistic for the vendors to believe that their home is unique. However, vendors may still highlight individual home characteristics as evidence for the uniqueness of their homes. Greater awareness that there are many similar houses on the market may reduce this perception, but vendors may still believe, nevertheless, that their home is somewhat unique.

Pierce et al. (2003) describe self-concept in the context of individuals who strive to increase feelings of self-worth by attempting to legally or psychologically possess items which are of great importance to them. They conclude that ownership can be a means to boost self-evaluations and self-esteem, so that individuals are likely to feel that ownership of such objects is important in terms of their personal values, thus creating a uniqueness perception.

Berger and Heath (2007) cite previous research establishing that consumers are driven by a desire to differentiate themselves from others (Ariely & Levav, 2000; Snyder & Fromkin, 2012), and highlight the fact that these individual-drive mechanisms often focus on the need for uniqueness (Lynn & Harris, 1997; Snyder & Fromkin, 1977; Tian, Bearden & Hunter, 2001), or are the result of provisional situations that lead individuals to feel undifferentiated (Byrne & Griffith, 1969). They view the desire to be unique as an instinctive human behaviour. Home sellers too, may seek to highlight the distinctiveness of their homes, and thus enhance the rarity effect. Fromkin and Snyder
(2012) also argue that people tend to seek ways of achieving a sense of difference, and the present study argues that vendors do indeed have a tendency to perceive their home as unique.

2.7.6 Distinctive versus non-distinctive home characteristics

Home sellers may also believe that their homes may have distinctive characteristics compared to others (Lui & Zhang, 2013). Their home may appear to be a warm and safe environment that enhances the comfort of the home, and such perceptions may arise from the fact that the location is quiet, has no history of crime, the outdoor area is along the sea breeze path, and so on. These perceived intangible values provide a sense of distinctive characteristics which will be experienced when living in the house, whereas other similar houses in the area may lack such distinctive characteristics (Marks et al., 1981).

2.7.7 Possibility of price manipulation versus limited possibility of price manipulation

Vendors’ belief that there is scope for manipulation of price is strongest when the perception of rarity exists (Courchamp et al., 2006). When the vendor has a feeling that the house is unique, there is a greater likelihood they will believe that the price can be manipulated to achieve optimum financial outcome. Scarcity is a frequently used concept in the economic literature, in particular in the discussion of value and price theory (Montesano, 1995).

When the vendor has a perception that the house has some unique qualities, the vendor may believe there is more scope for demanding a higher value relative to market price perception by others. If the product is scarce, there are fewer limits on the degree to which the product price may be manipulated, but if the house is perceived to be standard and non-unique, then price manipulation tends to be limited. Latest sale prices of one bedroom apartments within the 5 kilometres radius of Perth
City are selling at similar price, features of one bedroom apartments are deemed to be similar in terms of size, internal fittings and amenities (Table 2.3).

<table>
<thead>
<tr>
<th>Address</th>
<th>Selling Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Hawthorne Place, Burswood</td>
<td>380,000.00</td>
</tr>
<tr>
<td>108 Sterling Street, Perth</td>
<td>364,000.00</td>
</tr>
<tr>
<td>659 Murray Street, West Perth</td>
<td>375,000.00</td>
</tr>
<tr>
<td>269 Vincent Street, Leederville</td>
<td>375,000</td>
</tr>
</tbody>
</table>


### 2.7.8 Associations of rarity with the Price Virus

According to Levy (1959), when people acquire things, they have a tendency to show them off, and turn them into symbols which express personal values, qualities, attitudes, education, social affiliations and accomplishments. As stated by Bronner (2015), Americans makes clear distinction when making divisions among people. Owning rare goods may increase a consumer’s social status, and their acquisitions may be ascribed perceived attributes such as the wealth of the owner (Hall, Milner-Gulland & Courchamp, 2008, p. 75). According to Courchamp et al. (2006), the human tendency to ascribe exaggerated value to rarity fuels the disproportionate exploitation of things that are rare (or in this case are perceived to be rare), rendering them even rarer and thus more desirable. Following Hall et al. (2008) and Courchamp et al. (2006), the hypothesis in this study is that vendors may perceive their home to be individualised, special and rare, and this feeling of rarity influences them to believe that their home is worth more than its actual market value.

Based on the findings cited in this section, there is a strong tendency for people to see their possessions as being unique. Therefore, the hypothesis of this study is that vendors are influenced by the feeling of rarity of their home, which subsequently produces influenced the Price Virus. According to Atsmon and Dixit (2009), rarity is strongly associated with quality, and Klein and Leffler (1981) also argue that people
use price as an indicator of quality. Research findings cited in this section suggest that the scarcity of a product tends to yield a financial premium by increasing price (King et al., 2013). Other researchers also seem to support this hypothesis of the rarity effect, and its positive and significant relationship to the Price Virus.

**Figure 2.13 Rarity associations to the Price Virus**

Due to the perception of rarity, a sense of loss is felt when selling the home, and this will in turn influence a higher price and lead to the Price Virus: Figure 2.13. Should rarity be established to be a factor in home ownership perceptions, then rarity is an element to be considered in vendors’ behavior which will influence the Price Virus.

**2.8 Framework development: overall process and decision-making in the real estate industry**

The specifics of this study require a purpose-built model to illustrate the theoretical framework which has led to the hypothesis: Figure 2.14. Even though the elaboration of this model is not far-reaching or extensive, it is sufficient to reflect the process by which this objective has been reached. Although a more detailed approach could have been developed, this might have become overly complex and led to other problems. By contrast, the following framework is orderly and uncluttered, and shows clearly the process which has led to the research model. By a simple process of reasoning, the model reveals the factors that lead towards unrealistic high price or the Price Virus. Figure 2.14 illustrates key factors on each side, and how they are reflected as important observational criteria within the study, as well as explaining how the process is conceptualized, and the stages which lead to the testing of the model itself.
As mentioned in Chapter One, the Price Virus hypothetical research model begins with the following emotional elements: pride, expected negotiation, greed, lack of trust, and rarity. The proposed model and the representations of these associated constructs are independent variables which link them to the Price Virus. The model itself is developed from discussions in the literature review, and the framework processes are divided into two segments: on the left hand side, factors to be evaluated before making a decision; and on the right hand side, factors influencing the ultimate outcome.

Figure 2.14 Hypothetical framework process
2.8.1 Decision-making process

Owning a home may activate emotional feelings associated with possession. Emotional factors such as suitability to buyer preference or need will have influenced the original housing purchase. Subsequently, when the time comes to sell, the decision-maker engages in processes of goal striving, or in other words, focussed pursuit of the chosen goal and the process for attaining that goal (Bagozzi & Dholakia, 1999; Gollwitzer & Bayer, 1999). The goal identified in this case is the achievement of optimum price from the sale, and this is the core issue this study seeks to investigate, as a way of understanding its effects on the ultimate asking price.

The actual decision on a house sale is preceded by a decision-making process which is independent of the stimuli and outcomes of the decision (Harte, Westenberg & Someren, 1994). This decision-making process leads to the final decision about whether to sell or not. When the decision is made to sell, the pricing factor is influenced by other factors. Information gathered during the decision-making process influences the thought process leading to a final decision (Svenson, 1979).

This process-tracing schema is based on process models which are commonly applied in resolving problems or defining a hypothesis based on the analysis of cognitive processes (Anderson, 1989; Vanlehn, 1989; Newell & Simon, 1972). ‘A process model describes how the process goes from an initial state of knowledge through a sequence of states of knowledge to a particular goal state’ (Harte et al., 1994, p. 96).

In the decision-making process, when there is an intention to sell, home vendors start to evaluate information about external factors which assist in assessing their situation. In the initial stages, the vendor embarks on an assessment of the regulatory bodies that make decisions affecting market conditions, as well as the number of people selling and buying homes.

According to the availability heuristic, people are inclined to make decisions based on the information which is most readily available (Redelmeier, 2005). This heuristic is one of the most important bases for many of our judgments and decisions (McKelvie,
2000; Redelmeier, 2005). Anchoring and empirical adjustments represent the key foundation decision-making heuristic for situations where some estimate of value is required (Epley & Gilovich, 2006). In this particular situation, the home vendor anchors themselves to some fairly accurate estimates at the early stage, and subsequently adjusts their estimates until an acceptable effect is attained at the goal state when the decision to sell is made: Figure 2.14.

2.8.2 Decision outcomes

This section considers several factors influencing decision-making in relation to selling price. These relate to emotional factors which affect the decision, and include elements such as past experience (Juliusson, Karlsson & Garling, 2005), cognitive biases (Stanovich & West, 2008), belief in personal relevance (Acevedo & Krueger, 2004), and escalation of commitment, all of which influence what choices people make (as cited in Dietrich, 2010). Understanding the factors that influence the decision-making process is important for understanding what decisions are made, as they may affect outcomes.

Understanding the process by which individuals makes decisions is imperative for understanding the decisions they make, or the outcome of such decisions (Dietrich, 2010). Botti and Lyenger (2004) argue that individuals tend to favour their own decisions and believe they will be more content with their own choices.

In decision-making outcomes, cognitive preconceptions influence people to rely excessively on expected observations and previous experiences, and to dismiss information and evaluations perceived as negative. Various factors such as greed, pride, lack of trust, expected negotiation, and rarity play a role in influencing the decision-maker to fix an unrealistic price, and are tested in this study and also reflected in the hypothetical framework process.
2.8.2.1 Proposed Price Virus model

An early study of anticipated emotions was conducted by Parker, Manstead and Stradling (1995), who found that anticipated emotions tempered behavioural expectations. The effect of anticipated emotions is that an implied comparison is made between one’s goal as a standard or reference value, and achieving or failing to achieve that goal, where anticipated emotions result (Perugini & Bagozzi 2001). Based on TPB (the goal-directed behaviour model), emotional factors are a pervasive influence on human decisions and beliefs.

The low perceived credibility of real estate agents is assumed to be a reason why vendors will inflate the listing price, because they do not trust that the agent is honest enough to get them the best price. Lack of trust in real estate agents plays a significant part in leading to this situation. Apprehension that the agent will not work in their best interests causes sellers to inflate the price, in order to offset the price gap should the buyer put forward a lower offer through the agent, who may be less than enthusiastic in pushing for a higher price in case the deal collapses.

Haurin (1988) has argued that when a seller has a perception that their home is a rare commodity (feeling of rarity of the possession), the greater the tendency of the seller to set a higher reserve price. The element of rarity in the mindset of sellers causes them to perceive that their home is a rare commodity and therefore they are influenced to believe their home is worth more. This perception is a result of their own personal and emotional input, which creates the notion of a highly distinctive possession.

Relevant literature on emotions largely tends to highlight pride, expected negotiation, greed, lack of trust and rarity, which tend to encourage the objective of achieving a higher sale price, no matter what justification is used (emotional loss, greed or the endowment effect). It has been argued that money is a possible common measure which can be used to compare appetitive and aversive affective learning (Delgado, Labouliere & Phelps, 2006). When vendors put their homes on the market, apart from other reasons for selling, the main objective is to maximise financial gain. The fear of
not being compensated adequately is connected to specific emotions identified in the Price Virus model when the home is placed on the market.

The Price Virus is proposed in this study as the principal reason for the unrealistic high price determined by vendors. This study attempts to present empirical data to show that most home owners who are selling their properties do not set a realistic value, but instead tend to pursue a price beyond the saleable market value assessed. Several approaches will be analysed to support the Price Virus model. According to Epstein (1994), we rely on affect and emotion to provide a quicker, easier, and more efficient way to navigate a complex and uncertain world. In short, we decide, then we rationalise (Cheng & Monroe, 2012). The proposed model as a whole and it supporting components will contribute to establishing this hypothesis.

To further explore the rationale for sellers’ behaviour, the proposed Price Virus Model shown in Figure 2.15 will also be supported by various theories discussed above which relate to the following variables: rarity, pride, expected negotiation, lack of trust in real estate agents and greed.
2.9 Developing the hypothesis

The following are the five hypotheses tested based on the literature review. The final model will be presented after the findings.

**Hypothesis 1**

**H1: There is a positive and significant relationship between greed and the Price Virus**

Greed has been described as an extreme desire to obtain more, especially material possessions (Balot, 2001). Similarly, Diamond (2012) associates greed with the excessive acquisition of material wealth, and defined it as an extreme craving to acquire or possess more than one needs or deserves, especially with respect to material wealth. According to Levine (2000), greed is associated with pursuit of wealth for its own sake. Greed in this study is considered to be an emotion which leads home
sellers to set an unrealistic price. The greed/Price Virus relationship was analysed to confirm that it does produce a gap between the accepted market value and the over-priced value.

**Hypothesis 2**

**H2: There is a positive and significant relationship between pride and the Price Virus**

Rangi (2010) defined pride as a feeling of pleasure or satisfaction in one’s actions, qualities or self-respect. To summarise, pride is associated with attitudes and self-esteem and pride is an achievement-related affect. According to Harter (1985), ‘pride is an emotional response to an evaluation of one’s competence’. Hence, it is understandable that pride has been described as self-rewarding and the internal counterpart of praise (Batson et al., 1988). Pride is also associated with a range of negative social outcomes (McGregor, Nail, Marigold & Kang, 2005). Leahy (1992) finds a connection between narcissism and pride, while Lewis (2008) also argues that ‘hubristic’ pride can be theoretically associated with narcissism. According to Hypothesis 2, pride has a relationship with the Price Virus.

**Hypothesis 3**

**H2: There is a positive and significant relationship between lack of trust and the Price Virus**

Some real estate agents have been known to ‘buy listings’ by appealing to an owner’s greed and advising them that they can obtain an unrealistically high selling price (Pivar & Harlan, 1995). According to Roy Morgan survey findings, real estate agents were ranked third from the bottom in terms of professional trust, lower than car salesmen and advertising sales representatives (Roy Morgan, 2013). Lack of trust was observed to determine whether the home seller inflates the selling price to counter the perception that agents are not working in their best interests. Hence, lack of trust influences vendors to increase the selling price, which causes the Price Virus.
Hypothesis 4

H4: There is a positive and significant relationship between expected negotiation and the Price Virus

Most negotiators enter negotiations expecting the other party’s interests will be completely opposed to their own (Thompson & Hastie, 1990). The two primary tasks a negotiator faces are to create value and to claim value (Lax & Sebenius 1986). Every negotiation involves a tension between maximising one’s own gains, where more for one party will necessarily mean less for the other (Mnookin, 1993). Negotiation also involves issues relating to the distribution of benefits, and the fact that both parties cannot both achieve favourable outcomes at the same time. Assuming a pie of fixed size, a larger slice for one party will mean a smaller one for the other party (Mnookin, 1993). In negotiations, both parties want a larger slice of the pie, suggesting that unrealistic price becomes a reality even before negotiation begins.

Hypothesis 5

H5: There is a positive and significant relationship between rarity and the Price Virus

In the field of marketing, it is assumed that the perception of scarcity increases perceptions of value (Cialdini, 1984). Lynn (1989) has presented experimental evidence that scarcity affects the desirability of objects through the association of scarcity with expensiveness. Frank et al. (1993) showed that people are willing to pay a premium (or accept a lesser wage) for high-status (rare) positions. Rarity is therefore prized and can be a very powerful influence on people. The feeling of rarity, therefore, relates to the Price Virus.

2.10 Statement of research hypothesis

Studies cited above provide useful evidence regarding emotions, behaviours and motivations. In this study, the researcher has integrated analysis of both structural and social-psychological factors into the research design in order to answer questions expounded previously which are objectively significant.
The research question has been developed by integrating hypotheses with empirical testing along scientific principles; by clearly formulating and explaining the precise research question, the researcher has been able to make informed decisions about study design, data selection and analysis.

Table 2.4 outlines the specific emotions investigated and tested to obtain results which support the research question of whether emotional attachments to the home cause vendors to determine an unrealistic selling price.

Table 2.4 Testing of hypotheses

<table>
<thead>
<tr>
<th></th>
<th>Associated with</th>
<th>Price Virus / unrealistic price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greed</td>
<td></td>
<td>Price Virus / unrealistic price</td>
</tr>
<tr>
<td>Pride</td>
<td></td>
<td>Price Virus / unrealistic price</td>
</tr>
<tr>
<td>Lack of Trust</td>
<td></td>
<td>Price Virus / unrealistic price</td>
</tr>
<tr>
<td>Expected Negotiation</td>
<td></td>
<td>Price Virus / unrealistic price</td>
</tr>
<tr>
<td>Rarity</td>
<td></td>
<td>Price Virus / unrealistic price</td>
</tr>
</tbody>
</table>

In this study, the key factors in the development of the research question, the hypotheses and the research objectives are outlined in the hope of demonstrating the effectiveness of the research model in investigating these elements in the study.

2.11 Summary of the literature review

This chapter assesses significant theories in the scholarly literature which support the notion that that personality and emotions do in fact contribute to price discrepancy. Examining vendors’ behaviour in relation to high price perception, without taking into account the emotions highlighted will not provide an understanding of the decisions made, and the influences which affect perceived value. This investigation therefore goes beyond information currently available to provide a broader understanding of high price outcomes and the variables which produce them.
The focus of this research is emotions relating to greed, pride, lack of trust in real
estate agents, vendor expectation that buyers will negotiate and vendor perception of
the rarity of their home. These factors have been reviewed in relation to unrealistic
high price, which is caused by a desire to achieve optimal home sale price. A review of
how these emotions influence the Price Virus or high price syndrome has been
presented. Different opinions have been considered in relation to each of these
factors, based on findings summarised in the literature review, as a way of supporting
data interpretation to determine whether any of these variables are significant in
influencing vendors to make poor pricing decisions when selling. The various
hypotheses advanced will be tested in the findings chapter to determine their validity.
CHAPTER 3
METHODOLOGY

3.0 Introduction

In Chapter One of this study, a summary was presented on home vendor perceptions in terms of price determination when selling their home. The results and statistical outcome provide by REIWA confirm the gap between the price set by vendors and the price buyers are prepared to pay for the property. This gap has also been highlighted in the preceding literature and theoretical framework outlined in Chapter Two, which provides a detailed analysis of each key component which influences the price disparity between vendors and buyers.

Chapter Three describes the research design and methodology selected for this research to analyse the influences on price perception by home owners when they sell their properties. The central aim of this research is to trace the influence of emotional elements connected to the Price Virus, which influences decision-making to arrive at an unrealistic high price. This study aims to arrive at new findings which have been explored in previous research by explore the complex relationship between emotions which produce the Price Virus.

This chapter focuses on the following issues: (1) explanation of research approaches and research paradigms; (2) description of stages in the research process, the methods used in designing the research instrument and data collection; (3) explanation of the sampling approaches; (4) description of statistical measures used to analyse the data. The research participant sample is also described, along with relevant measurable factors, data collection processes and research consistencies. This methodology chapter then offers a methodological justification and assessment of the usefulness of the method applied. The research model is used to summarise, group and incorporate respondents’ emotional connections to the Price Virus by examining the scores from the survey. This chapter outlines the overall philosophical basis for the research process and data collection, explains and evaluates the merits of qualitative and
quantitative research methodologies and the data analysis plan for hypothesis testing; as well as summarising how the research was carried out.

3.1 The objective of this chapter

The objective of Chapter Three is to evaluate the appropriateness of different research methods and then justify the selection of the particular method used in this thesis (the methodology). The research methodology influences the data collection techniques, data types and analysis. The data evaluation also provides a greater understanding of the research approach by explaining the research methodology used in this study. The criteria used ensure the research is reliable, valid, and makes an innovative contribution. This chapter will explore the merits of all major research methods and identify the specific research process, which needs to be adopted in the data collection and analysis. The point is to demonstrate the reliability of the sample selection, show the method used in constructing the format of data collection and to provide an account of the processes applied to data analysis.

Our ability to collect and assess data in an organised and impartial manner may be limited by a number of issues, including small sample size. Myers & Hansen (2002, p. 4) stated that ‘the conclusions we draw from [the sample] are subject to a number of inherent tendencies, or biases, that limit their accuracy and usefulness’. To avoid such problems, this research uses Yin’s (2003) blueprint for research, which deals with four issues:

1. What questions should be studied, using what research methodology and philosophical basis?
2. What data are relevant to collect?
3. What data collection techniques and processes should be selected?
4. How should the results be analysed and how should the hypothesis be tested?

The aims of this research are summarised in the problem definition, the research design, the sample collection and the methodological discussion. The sample
configuration was dependent on the wording of the questionnaire, in the sense that the study selected respondents who were home owners, and the language and phrasing of the questionnaire related to the real estate market.

### 3.2 Research approaches

This section presents the rationale for selecting the research approaches used and describes the specific features of these approaches to obtaining data in order to analyse the hypothesis presented in the previous literature review. The relations between quantitative and qualitative research methods in this study are also explored by assessing four major research paradigms: empirical/positivist/post-positivist, interpretivist/hermeneutic, critical research, and constructivist. The researcher evaluated critically the merits of each of these four paradigms in order to decide which was the most appropriate and effective approach for addressing the research questions.

Two major research approaches, namely, quantitative and qualitative, cut across all four of these major research paradigms. Quantitative research is an empirical research method which investigates observable phenomena and where the fundamental unit of analysis is data in the form of statistical information which is amenable to mathematical or computational analysis and testing (Given, 2008). The purpose of quantitative research is to explain and use mathematical models and theories in relation to statistical phenomena. Measurement procedures are essential to the quantitative method, because it is based on an intrinsic association between the empirical research and statistical representations of quantitative relationships.

In the study of management and organisation, the quantitative approach is deemed to be unbiased in regards to observable facts or conditions, autonomous of individual reflection, and obvious to all participants and observers, as well as being highly reliable (Lee, 1992). This approach relies heavily on statistics and figures.
The information collected has been processed to exclude evidence extraneous to the research objectives. Usually in descriptive research, data collection is subjected to quantitative methods and numerical analysis. This type of investigation typically answers ‘why?’ and ‘what?’ questions (Ruane, 2006), following the same reasoning outlined in Yin’s research construct. The ‘why?’ and ‘what?’ questions in this study relate to exploring trends and patterns in vendor behaviour and decisions in relation to the value of their properties.

By contrast, the qualitative method is potentially more subjective and serves to communicate issues of knowledge and understanding, experience, personal conditioning and culture. Qualitative research is used as a method of analysis in many different academic disciplines, but conventionally in the social sciences, but also in the disciplines of marketing and applied market research by businesses and others (Denzin & Lincoln, 2005). In the qualitative approach, the aim is to produce a holistic representation of the key constructs and relationships between social and business phenomena (Ospina, 2004). It is a subjective method of collecting data and ascertaining tentative hypotheses, which can then be tested by empirical (quantitative) methods.

The qualitative approach is commonly used to represent a targeted group’s behaviour and the perceptions that guide it through a thorough investigation of a group of people who share certain common characteristics, as a way of supporting a hypothesis or hypotheses. It directly defines the rationale for the qualitative study, the function of the researcher or the investigator, the phases of study, and the approach to data analysis. Table 3.1 highlights contrasts between qualitative and quantitative research. By exploring the nature of both these methods, the researcher was able to select the most appropriate technique for this study.
Table 3.1 Qualitative versus quantitative research methodologies

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on phenomenology and understanding</td>
<td>Focus on probabilistic induction based on principals of logical positivism</td>
</tr>
<tr>
<td>Focus on understanding human behaviour from the informant’s perspective.</td>
<td>Focus on discovering facts based on observable evidence. Data obtained by</td>
</tr>
<tr>
<td>Data obtained from participant interviews and observation</td>
<td>measuring things</td>
</tr>
<tr>
<td>Reality is socially structured and subjective</td>
<td>Reality is objective</td>
</tr>
<tr>
<td>Emphasis on philosophical perspective</td>
<td>Emphasis on theoretical model</td>
</tr>
<tr>
<td>Exploratory, inductive and descriptive</td>
<td>Confirmatory, inferential, deductive</td>
</tr>
<tr>
<td>Process-oriented</td>
<td>Results-oriented</td>
</tr>
<tr>
<td>Used to develop theory</td>
<td>Used to test theory</td>
</tr>
<tr>
<td>Holistic</td>
<td>Particularistic</td>
</tr>
<tr>
<td>Dynamic reality</td>
<td>Static reality</td>
</tr>
<tr>
<td>Informative, small sample.</td>
<td>Representative, large sample</td>
</tr>
<tr>
<td>Results presented using words &amp; narrative</td>
<td>Results presented using numbers &amp; statistics</td>
</tr>
</tbody>
</table>

Source: adapted from González & Ruiz Hernández, 2011.

3.3 Rationale for use of empirical methods.

Empirical research is a method of obtaining knowledge through direct or indirect observation or experience (Hancock & Algozzine, 2006), while Gaskell (2001) defines empirical study as a method of obtaining information by applying observation and experience to a research question.

The empirical method can be very useful in expanding the parameters and distributions of mathematical and simulation modelling studies. It is also very important for theory building and verification (Flynn, Sakakibara, Schroeder, Bates & Flynn, 1990). With empirical data, predictions can then be investigated using an appropriate test. The results of analysis can confirm or undermine the theory on which the hypotheses and predictions were based (Goodwin, 2005).
Data from empirical observations and experience can be explored using the quantitative method (numerical data in the form of numbers), which is examined using a statistical approach, or the qualitative method (data represented in narrative form) using interviews, observations and qualitative evaluation methods. The qualitative method seems to be inclined to be more applicable to the initial stages of research (exploratory research) and in theory building. The quantitative method on the other hand seems to be more suitable when the theory has been established, for analysing and improving the theory (Echambadi, Campbell & Agarwal, 2006).

Some researchers prefer the quantitative method because they feel it achieves reliable and accurate measurements using scientific methods. However, it is important to be aware that empirical results based on statistical hypothesis testing are never completely reliable: they may endorse or undermine a hypothesis. It should be emphasised that such methods only generate probabilities. In most practical investigative studies, no research method is completely qualitative or quantitative (Yin, 2003). Empirical research can be explained as a research study centred on evidence, investigation and observation, and the basis of this type of research is to analyse a hypothesis.

3.3.1 The advantages of empirical methods.

One of the benefits of empirical methods is that they can develop the data needed to test a hypothesis about how things might work under different conditions (Sullivan, 1987). By rationalising the evidence collected in the research and interpreting it, the researcher can formulate empirical questions and obtain answers from the data collected. Many methods can be included in the empirical method using quantitative, qualitative and mixed methods. This can provide a more flexible response to the dynamics of the various circumstances in the research study.

All research studies are complicated, and there is no one method that fits all models. Research objectivity relates to an assessment of possible oversights of interpretation based on limited research methods used (Dekker, 2003). In empirical research,
selecting the appropriate theoretical framework or model is important for ensuring that particular research study design produces valid interpretive results. The theoretical framework must reflect relevant elements which the research project must reflect.

In selecting either quantitative and/or qualitative methods, some important consideration in the research design are the topic of study and the principles for research generally and those which are specific to the topic. These principles relate to the logic of research and determine the formulation of the study questionnaires methodology. In selecting quantitative and/or qualitative approaches, the researcher must evaluate relevant behaviours and the meanings associated with those behaviours (Maylor, Blackmon & Blackmon, 2005).

To summarise, empirical methods direct necessitate answering specific research questions and examining the meaning of the phenomena, and behaviour within the sample population. It also describes the approach used for the research to examine the selected measures and the testing methods, for example, the survey method.

3.4 The four dominant philosophical paradigms in research methodology

Research paradigms determine the criteria used in research (Dash, 2005) and the following four dominant paradigms are outlined in Figure 3.1:

- Empirical/positivist/post-positivist;
- interpretivist/hermeneutic;
- critical research; and
- constructivist

This is not, however, to imply that these are the only of research methods. There are many varieties of research methodology and researchers sometimes use more than one as their point of reference. How such methods are applied depends on the nature of the hypothesis being examined by the researcher.
There is a common understanding that scientific research is a methodical and disciplined process of data analysis and testing of findings to find out if the hypothesis is supported or not (Sekaran, 1992). Research cannot be accomplished without the researcher being aware of the fundamental theoretical paradigm. The research paradigm perspective must inform the researcher’s methodology, guide the research process and influence the formulation of the research questions and assumptions (Broido & Manning, 2002).

3.5 Positivist and post-positivist paradigm (quantitative research)

Positivism favours the use of empirical data and scientific methods. This paradigm proposes that there are uniformities and consistencies among people which are measurable, so that the researcher can gain knowledge about certain occurrences through observation using scientific methods. The research aim is basically to provide
an explanation for the phenomena that have occurred, with knowledge based on observation of what can be detected and evaluated.

Post-positivist methodologies aim to revise and improve on positivist methodologies. Positivism assumes that the researcher and the observed person are independent of each other, whereas post-positivism differs from positivism by recognising that the researcher may in fact influence what is observed. Positivism assumes that the objective of science is to determine the truth, whereas, post-positivism considers that the goal of science is to arrive at a better knowledge of the truth, while assuming that this goal can never accomplished (Creswell, 2013).

Like positivists, post-positivists believe that an actual reality exists, though this can only be known imperfectly and probabilistically (Robson, 2002). By contrast, interpretivism, hermeneutics and social constructivism adopt divergent views on objectives and procedure in achieving knowledge of human action, and also have different ethical commitments and views on methodology and epistemology, and issues of representation, validity and objectivity (Schwandt, 2003).

Sociologists have recently tended to avoid these distinctions by adopting a ‘realist’ position based on a pragmatic approach to these questions (Maton, 2013). Kuhn (1970) argued that scientific techniques are not reliable or fully proven, and may not be useful for investigating individual psychology. For this reason, realists maintain that sociologists could rationally apply qualitative methods focussing on psychological factors according to whichever method is most appropriate to a specific circumstance (Kuhn, 1970). However, social reality is complex and problematic, and some researchers have combined interpretivist and positivist approaches (Broido & Manning, 2002). According to Philips and Burbules (2000), the post-positivist methodology is more scientific in the sense that it is committed to scientific methodology, which may use some forms of measurement, but also controls for data deviation.
The empirical cycle model (de Groot, 1969) is useful in this study because of its association with the behavioural sciences and because it integrates scientific method with added functional guidelines for investigative work (Figure 3.2).

**Figure 3.2 Groot Empirical Cycle**

1. **Observation**: the gathering and arrangement of empirical facts to form the hypothesis;
2. **Induction**: the process of formulating the hypothesis;
3. **Deduction**: deducing the effects of the hypothesis as testable appraisals using new empirical data;
4. **Testing**: testing the hypothesis using new observed information (empirical data);
5. **Evaluation**: evaluating the results of analysis.

*Source: de Groot Empirical Cycle (1969)*
The fundamental basis for this research model is that it should be extensive enough to allow one to understand comprehensively what is predicted in the project, including expected problems and expected answers. A connected issue is whether the quantitative approach is essentially positivist, because this depends greatly on the definitions used to define quantitative method and positivism. Studies that apply numerical data may not always be assumed to be positivist, because at times, they simply use statistical data which has already been published. Such approaches have frequently been acknowledged to have some positivist features.

The two main investigation strategies used in quantitative research are experiments and surveys (Creswell, 2013). A hypothesis is clearly a proposal which is designed to be tested in a research study. To be properly evaluated, all inconsistencies in the hypothesis must be known and amendable to for empirical testing.

According to Teorell and Svensson (2007), quantitative methods may be used in traditional experimental research to measure variations in order to explain, predict, and control for a phenomenon or situation. The quantitative method involves collecting solid data, analysing it and then deriving scientific data representing facts, outcomes or principles. Creswell states that quantitative research is often referred to as, ‘... the traditional, the positivist, the experimental, or the empiricist paradigm’ and that ‘the quantitative researcher views reality as “objective”, “out there” and independent of the researcher’ (Creswell, 1994, p. 4).

3.6 Hermeneutic (Qualitative)

Hermeneutics has been described as ‘the art of interpretation as transformation’ contrasted with a view of theory as ‘contemplation of eternal unchangeable by their observer’ (Ferraris, 1996, p. 1). Hermeneutics has much to offer those interested in qualitative inquiry and as Schwandt (2001) points out, serves as a major source of ideas for qualitative inquiry (as cited in Kinsella, 2006, para. 1). Hermeneutics is a significant research tool and method of analysis method very much associated with
philosophical concepts in social science research. The hermeneutic framework outlines the circumstances that are essential for a convincing interpretation.

Hermeneutics concerns how we make choices based on information formulated using preceding experiences, thus allowing researchers to elicit information that is latent, but not manifest in people’s behaviour. Murray (1998, para. 2) provides the following typical everyday illustration of hermeneutics at work: ‘until someone pointed it out to me, I admit I hadn’t really thought about how I thought. But when I did, I realized that the idea made perfect sense.’ Researchers, therefore recognise that the normal pattern of thought includes an interpretive element and that when conducting research, it is prudent to consider hermeneutics because of the attributes demonstrated in the awareness of human ability and creativity.

In the methodological debate, interpretivists dispute the notion that we cannot comprehend the reasons for people’s behaviour. In addition, interpretivists function in distinctive fashions, without understanding how those behaviors involved are interpreted and what seems to be right in their environment. Because of this, it seems interpretivism fails to understand the distinctive character of peoples’ experiences, values, and convictions. Interpretivists, therefore, embrace the qualitative approach, which uses methods such as systematic, unstructured and open questioning. Interpretivists approaches may also involve scholarly critique and/or historical analysis.

The hermeneutic qualitative approach to research entails a complex compilation of data to support the hypothesis and also involves data interpretation. The researcher must analyse and categorise patterns of behaviour using investigative means. Van Maanen (1983) points out that the hermeneutic qualitative approach strives to lessen the distance between context and action through a ‘trade in linguistic symbols’ (p. 9) and involves investigating perception in order to expand knowledge of social and human activities. The qualitative method directs the way discussions are conducted in order to promote critical thinking (Arend, 2009). Integrating rational analysis, problem-solving and critical thinking produces a better understanding of cognitive principles. Critical thinking goes beyond mere knowledge achievement or the activation of a
range of processing skills by expanding and continuously applying analytical skills (Scriven & Paul, 2005).

Representing data in the form of visuals, video recordings, audios and manuscripts, involves judgments which are assisted by a hypothesis and theoretical models. This is because qualitative approaches do not use statistical analysis as much as the quantitative approaches, with the result that dispute the validity of qualitative findings and can only endorse them with reservations (Punch, 2013). The hermeneutic qualitative approach uses design formulations, methodologies and systems to obtain meaning from the data collected and translate it a way which increases knowledge of unfamiliar activities. The methodology may be unstructured when working on very fluid behavioural studies, to increase adaptability. This flexibility allows new knowledge or answers to be obtained (Solomon, 2012), which if examined more systematically might not allow more creative ways of obtaining information. Such knowledge is often not manifested in the early stages of research until further innovative probing takes place (Chung, 2012).

The hermeneutic approach gives researchers tools to distinguish and comprehend intentions and motives, as long as the research is conducted in an unbiased manner. By deriving conclusions from their data, scientists may find ways to approach a specific situation and influence their future expectations. Hermeneutic qualitative data can be used as primary support or to argue results, and to explain relationships. Research facilitators play a vital role in the development of critical thinking by persuading and encouraging participants, and in the difficult task of stimulating the right atmosphere for discussion.

For discussion effective discussion, it is not sufficient for facilitators to respond frequently or positively; they must also explicitly share their own reflections on the subject matter under discussion. A facilitator who does not persistently stimulate further discussion may accidentally shutdown the thinking process (Arend, 2009).

Hermeneutic qualitative methodologies, if not prepared meticulously, may lead to biases and prejudices which result in erroneous research outcomes. For this reason, it
is important to integrate assessment activities, rather than just pursuing a particular conclusion. A review of the unspoken and unstated beliefs of ordinary people is normally conducted in the qualitative approach. Qualitative methods are not custom-made, but instead use imaginative solutions to achieve results. According to MacCoun (1998), because a social scientist is 'biased', it is rarely a neutral observation. The difficulty is that people must agree about what constitutes evidence, and they use socially-constructed instruments to obtain such evidence (Ratner, 2002). Some other disadvantages in using an unstructured research approach are that not all participants involved may have the same characteristics, and this approach is more time-consuming because of the unfocussed nature of the data (Whitehead, 2004). Whereas postmodernists are fascinated by the fact that their data reflects their theories and methods, realists emphasise that their theories, methods, and data reflect things which are actually real (Ratner, 2002, para. 16). The critical issue is that researcher bias is real, and may influence the person being observed person, who may also exhibit bias in their own responses.

The characteristic elements in qualitative reports are descriptive statements, investigations, and analysis of the data, with the results providing insights for further study. Even though researchers hope for a conclusive result, qualitative methods do not necessarily provide all the answers. Critics of the qualitative approach see it as being open to bias due to the influence of the researcher’s psychological characteristics in favour of the research motive (Mehra, 2002). At the closing stages of the investigation, this method may reveal inadequacies in the research and point to of further investigations which may be required in the future.

3.7 Critical Research (Qualitative research methodology)

Critical social research endeavours to highlight unspoken assumptions and how specific forms of knowledge may replicate underlying relationships of disparity, oppression and inequality. It critiques the social structure in which people are conditioned by social processes and specific individuals. Critical research is dedicated to looking beyond outer appearances to expose unjust and prejudiced social practises
and arrangements, and suggest ways in which the oppression can be challenged through praxis (Harvey, 1990). It seeks to increase awareness of the contradictory conditions which cause human behaviour, and which are distorted by or hidden to everyday understanding (Comstock, 1982).

Critical research can be used as a tool to expanding the discussion in order to explore topics outside the boundary. It purportedly ‘dares to explore' new areas and transcends boundaries which might otherwise hinders efforts to obtain desired findings. The facilitator again plays a critical role in influencing the discussion environment by making it easier to exchange knowledge or experience, so that participants do not view important issues as unsafe. Critical research takes into account the possibility that apparently common sense opinions may be based on socially-constructed beliefs and delusions which mask up inequality and its sources.

Critical research is hypothetically and methodologically distinctive and its implications are perhaps summarised through the specific subjects with which it engages. Hammersley (1995) criticised it as an ‘empty rhetorical shell’, yet critical research theory reminds us that research should not remain detached from its social context, but should take instead a balanced position in its critique. According to Asghar (2013), critical research, regardless of its great potential for challenging and improving research assumptions, has generally been ignored by researchers. However, its highly adaptable and independent approach to researching reality can challenge researchers to observe, perceive, analyse and interpret data with extra vigilance.

Critical researches social science as occupying a crucial role in challenging commonsense political assumptions by taking into account social forces. It aims to expose power relations which maintain or reinforce imbalances of power (Davey & Liefgooghe, 2004). Kinchelo and McLaren (2002) described critical research as being concerned with context and ideology, language and power. This suggests an important first step towards a critical methodology in this research. By highlighting the need for a far-reaching evaluation of the selected constructs and their relationship with the Price Virus, the intention is to establish an association between the dependent and independent variables. The legitimacy of the research results must be measured by
whether they can be incorporated into an emerging framework of this kind, although of course this research study relates to the analysis of emotions, rather than ideology, language and power.

Critical research can also be seen as a precise technique and a theoretical, empirical, reflexive and engaged process informed by various ‘standpoint’ commitments to social justice and human rights (Hudson, 2000). According to Brooke (2002), there are weaknesses in the methodology of critical research. Two of its most commonly cited flaws are its lack of grounding in social theory and its inadequate conceptualisation of power. Brooke has also suggested that in critical theory, there is no guaranteed that research outcomes will be free of social or legal restraints, so that the focus is on the process rather than outcomes. It may be difficult for the researcher to apply a critical research scheme due to its method and approach.

3.8 Constructivism (Qualitative)

Constructivism is the philosophical principle which holds that thinking constructs its own perception of reality, while accepting realism as a paradigm of the human mind, so that reality is perceived to be inherently subjective (Andrew, Pedersen & McEvoy, 2011).

‘Constructivism gives importance to the socio-cultural viewpoints of observation, perception and acquired knowledge in the sense that the meanings given to circumstances are influenced by communal cultures. Although used in business studies as well, constructivism is mainly a teaching philosophy that is based on the idea that student understanding is formed via reflection on their personal experiences and relating new knowledge to the knowledge that they already possessed’ (Andrew et al., 2011, para. 5).

Constructivist methodologies prompt people to ask and formulate their own enquiries and therefore, rather than carrying out evaluation through testing or other external measures which might lead the majority of the group to influence test results.
This constructivist viewpoint is also closely identified with realism and pragmatism (Maxwell & Mittapalli, 2010). Realism deals with aspect of life that corresponds to a realistic manner which reflects life as it is, rather than comparing to natural instincts. It is concerned with the straightforward, actual and real, distinguished from abstract or speculative interpretations. Realism is a social science theory identified with positivism (Cruickshank, 2011), the principle that there is a reality, both natural and social, which is independent of human knowledge (Maton & Moore, 2009).

Pragmatism, on the other hand, ‘is a reasonable and logical way of doing things or of thinking about problems that is based on dealing with specific situations instead of on ideas and theories’ (Pragmatism, 2015). Pragmatism entails making decisions based on facts, not on ideals. Pragmatism, avoids the controversial issues of truth and reality, accepts philosophically that there are singular and multiple realities that are open to empirical inquiry and orients itself toward solving practical problems in the ‘real world’ (Creswell & Plano Clark, 2007, p. 20-28). Pragmatists may change their interpretations as they gather insights or knowledge on a particular topic, whereas the idealist will remain true to their fundamental convictions.

Kirchner, Sweller and Clark (2006) agree that the key principle of constructivism that individuals construct knowledge, but are apprehensive about the research design implications of this theoretical framework. ‘The constructivist description of learning is accurate, but the instructional consequences suggested by constructivists do not necessarily follow.’ (Kirschner et al., 2006, p. 78). They emphasise that instructors often design unguided instruction that relies on the learner to ‘discover or construct essential information for themselves’, which may be subjective (Kirchner et al., 2006, p 75).

Constructivism suggest that individuals have a role in determining not only what experience they have, but how that experience will be interpreted (Hevern, 2003). This framework challenges the natural science paradigm where researchers tend to avoid including variables relating to behavioural or personality factors. Gergen and Gergen (1991) foresee the possible problem that when people are observed, they may not be in their more natural state, so that the research subjects may not be objective.
Because the subject may change or adapt to the observational setting, it may be difficult to eradicate these kinds of bias.

The researcher has decided not to pursue a constructivist approach, on the grounds that it might be too unstructured and because the research emphasis is on broad concepts rather than specific facts (Brooks & Brooks, 1999). According to Brooks and Brooks (1999), some researchers are concerned that constructivist strategies lack consistency, and may be affected by personal interest or relevance. Therefore, the reality is, it is relative and open to a variety of interpretations (Le Cornu & Peters, 2009). However, some forms of realist and pragmatist approaches were considered useful for this research.

3.9 Critical evaluation and discussion of all the different paradigms

Selecting the most appropriate research method to achieve effective research outcomes is not a simple task. Academic investigators may be distracted by various paradigms and end up using inappropriate research methodologies, which could produce unsound results. Determining a robust framework is vital, because no matter how much researchers may perceive themselves to be unbiased, they are still likely to be affected by preconceived ideas. It is thus important for the researcher to choose an appropriate research paradigm by which to pursue the research, while at the same time keeping an open mind to allow consideration of other concepts and ideas that may lead to new findings, and avoid biases.

The analysis in this section concerns the evaluation of research paradigms in the selection of research tools and a consideration of methodology as it relates to research paradigms. The quantitative, qualitative and mixed methods analysed in the previous sections are now considered in relation to the decision made by the researcher on the approach to be adopted.

The choice of paradigm is important, as it determines the intent, motivation and expectations for the research, and without nominating a paradigm, there is no basis
for subsequent choices regarding methodology, methods, literature or research design (Mackenzie & Knipe, 2006). Table 3.2 summarise the main features and differences between the various methodologies, highlighting the distinctive characteristics of the quantitative, qualitative and mixed method approaches. The related research techniques are clearly diverse but depending on how the methods are used, they serve as an effect guide for researchers.
Table 3.2 Quantitative, qualitative and mixed methods approaches

<table>
<thead>
<tr>
<th></th>
<th>Quantitative: empirical, positivist, post-empirical, realist and pragmatic</th>
<th>Qualitative: hermeneutic, critical and postmodernist, constructivist.</th>
<th>Mixed Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Philosophical assumptions</strong></td>
<td>Post-positivist knowledge claims</td>
<td>Constructivist/ advocacy/participatory knowledge claims</td>
<td>Pragmatic knowledge claims</td>
</tr>
<tr>
<td><strong>Strategies for inquiry</strong></td>
<td>Surveys and experiments</td>
<td>Phenomenology, grounded theory, case study, and narrative, in depth interviews, thematic appreciation and focus groups</td>
<td>Sequential, concurrent, transformative, illustrative and evocative, providing ‘close-up’ view. Social processes included in quantitative material, making the research part of a bigger set of observations.</td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td>Closed questions with a range of options and freedom of responses, predetermined approaches, numeric data</td>
<td>Open-ended questions with a range of options and freedom of responses</td>
<td>Both open-ended and closed questions; both emergent and predetermined approaches; quantitative and qualitative data and analysis.</td>
</tr>
<tr>
<td><strong>Researcher practices</strong></td>
<td>Testing or verification of theories or explanations; Identification of variables to study</td>
<td>Researcher position themselves; collection of participant meanings</td>
<td>Collection of both quantitative and qualitative data</td>
</tr>
<tr>
<td></td>
<td>Relating variables in questions or hypotheses</td>
<td>Focus on a single concept or phenomenon; values brought into study</td>
<td>Development of rationale for mixed approaches, integrating data at different stages of inquiry</td>
</tr>
<tr>
<td></td>
<td>Use of standards of validity and reliability</td>
<td>Study of context/ setting of participant; sample generally smaller and whether it represents the wider society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observation and measurement of information numerically</td>
<td>Validation of accuracy of findings</td>
<td>Presentation of visual pictures of the procedures in the study</td>
</tr>
<tr>
<td></td>
<td>Use of unbiased approaches</td>
<td>Interpretation of data; creating of agenda for change or reform; collaboration with participants</td>
<td>Use of both qualitative and quantitative research practices</td>
</tr>
<tr>
<td></td>
<td>Use of statistical procedures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the quantitative method, data is often used to support or refute the hypothesis, based on the outcomes from the data collected in relation to various variables. There is still however a possibility that the statistical data collected may not necessarily provide a definitive idea of human behaviour. Quantitative data corresponds to specific research approaches and research questions. The most important component in the quantitative method is that it allows the researcher to identify the causes behind research observations. Experiments in this study were conducted in an effort to answer such specific research questions and the results were controlled to remove the influence of extraneous variables and isolate the cause of specific effects. The quantitative method is precise and the measurements are reliable, but due to the complexity of human behaviour, it is difficult to control for all variables, since individuals do not all respond in the same manner. Quantitative methods fail to consider the fact that individuals construe their own experiences, and determine and act upon their own values. Table 3.3 highlights the strengths and weaknesses of this approach.

Table 3.3 Strengths and weakness of the quantitative method

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Statistical control for selection bias</td>
<td>• Surveys cannot capture some complex categories of information, because human experience is complex and difficult to control for all variables</td>
</tr>
<tr>
<td>through sampling and design</td>
<td>• Survey methods often make it difficult to reach certain groups</td>
</tr>
<tr>
<td>• Ability to generalise from the sample to</td>
<td>• No analysis of context in which the survey takes place</td>
</tr>
<tr>
<td>the total population with a known level of</td>
<td>• Survey approach may alienate respondents</td>
</tr>
<tr>
<td>statistical confidence; precision through</td>
<td>• False assumption that facts are true for all people</td>
</tr>
<tr>
<td>reliable measurement</td>
<td>• Delay in obtaining results</td>
</tr>
<tr>
<td>• Magnitude and distribution of outcomes and</td>
<td>• Information lost through data reduction; possibility of richer responses often reduced by use of</td>
</tr>
<tr>
<td>impacts can be quantified</td>
<td>‘Yes/No’ or multiple-choice responses; freedom of choice in responses limited</td>
</tr>
<tr>
<td>• Potential to replicate data collection and</td>
<td>• Difficult to study programme implementation process</td>
</tr>
<tr>
<td>analysis methods</td>
<td></td>
</tr>
<tr>
<td>• Standardised methods for sample selection,</td>
<td></td>
</tr>
<tr>
<td>data collection and analysis statistical</td>
<td></td>
</tr>
<tr>
<td>techniques allow for sophisticated analyses</td>
<td></td>
</tr>
<tr>
<td>• Increased credibility of findings for many</td>
<td></td>
</tr>
<tr>
<td>(but not all) stakeholders</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from Bamberger, 2000
In some instances, the questions may be subjective, although this is less so than in qualitative research interviews. The qualitative method endeavours to understand meanings, to observe behaviour, explain and comprehend experiences, beliefs, opinions, values and other intangible factors. In this method, researchers consider the setting and have an adequate understanding of the topic. The process is interactive, with the researcher engaging with the individual in an effort to understand their behaviour in a systematic manner. By using the qualitative approach, it may be possible to obtain more in-depth information on behavioural meanings, convictions, and practices. However, the qualitative method is subjective in nature, in contrast to unlike in the quantitative method, so that it is difficult to use established standards of reliability and validity. Another major weakness is that the researcher’s presence may have a profound influence on the person being interviewed. Researcher prejudice and preference could thus lead to biases. Table 3.4 illustrate the strengths and weaknesses of the qualitative approach.

Table 3.4 Strengths and weakness of the qualitative method

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Flexibility; uses more descriptive, narrative style; considers data that otherwise might not be available</td>
<td>• Lack of clear design may frustrate readers; subjective nature of qualitative data and its origin in single contexts</td>
</tr>
<tr>
<td>• Sampling focuses on ‘high value’ subjects</td>
<td>• Lack of generalisability; cannot be replicated</td>
</tr>
<tr>
<td>• Holistic focus (‘the big picture’)</td>
<td>• Multiple perspectives make it hard to reach consensus; difficult to apply conventional standards of reliability and validity</td>
</tr>
<tr>
<td>• Examines broader context within which the programme operates; researcher gains insider’s view of the field</td>
<td>• Individual characteristics are not isolated</td>
</tr>
<tr>
<td>• Multiple sources provide complex understandings, suggest possible relationships, causes, effects and dynamic processes</td>
<td>• Interpretivist methods appear too subjective, because of the bias issue</td>
</tr>
<tr>
<td>• Narrative reports more accessible to non-specialists</td>
<td>• Researcher may influence study participants</td>
</tr>
<tr>
<td>• Participatory approaches make it more likely that vulnerable voices and voices groups can be heard</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from Bamberger, 2000

The mixed methodology combines quantitative and qualitative methods, and enables researchers to use words and narrative to explicate statistical data. This method thus allows responses across a wider and more comprehensive range of research questions,
because researchers are not restricted to one method or approach. A researcher may also use the strengths of the quantitative method to compensate for weaknesses in the qualitative method or vice versa.

Bryman (2006) has suggested however, that mixed method researchers do not always collate their findings, and that the quantitative and qualitative components are treated as separate areas. There are various reasons for this tendency, one of which suggested by Bryman, is that the integration of quantitative and qualitative findings may not always be desired.

When using mixed methods, the researcher develops a research strategy combining quantitative and qualitative elements, each of which is intended to define the research questions. Integration of the different methods may not be paramount in the researcher’s thinking, so that there may be little integration (Bryman, 2006). Even though integration of mixed methods findings may not always be intended, this is not to imply that there may not be some value in exploring associations between the quantitative and the qualitative findings (Bryman, 2006; Hammond, 2005). However, it may be difficult for a researcher to conduct both quantitative and qualitative research in unison, as this may be time consuming, and present challenges in integrating the data successfully.

3.10 The chosen research approach: positivist/post-positivist: quantitative method

After in-depth examination of these research approaches, the positivist/post-positivist approach was selected using the quantitative method. Both the strengths and weaknesses of this approach have been explored through a discussion of the usefulness of quantitative as opposed to qualitative methods with reference to their fundamental paradigms. The choice of an appropriate research method is vital to the realisation of any research project, and is determined by the research question and the researcher’s understanding of the topic to be researched. It is thus essential that specific research methodologies are informed by an appropriate research paradigm. In research work, interrelated hypotheses are constructed to form a theoretical
framework, which then informs the study, by establishing which phenomena are to be evaluated using which statistics, and how the statistical data will be related to the observed phenomena.

Post-positivist research principles emphasise meaning and the creation of new knowledge (Ryan, 2006), and are thus appropriate to this study, whose objective is to establish the factors which influence unrealistic price as perceived by home vendors. Positivism is also strongly associated with epistemology, the study of knowledge and how people can know or fail to know something (Truncellito, 2007). This is relevant to the question of how much the researcher knows or is able to know about how home vendors perceive the value of their property. Motives, perceptions, evidence, and other resources are essential for the production of knowledge about the phenomena which lead to the Price Virus.

A combination of research methods may be most effective in achieving a particular research objective (Moody, 2002). On the other hand, a mixed methodology may produce discrepancies between the two methods if divergent philosophical and technical issues are integrated simultaneously (Bryman, 1984; Hall, 2008). Using positivist/post-positivist scientific methods to investigate and write about people’s experience can assist in keeping the research free from the values, passions, and viewpoints of the researcher. The interviewing method may still be applicable, but because emotions are a complex and difficult topic for research, a positivist/post-positivist method was deemed most appropriate. Questions about whether vendors are greedy or not were considered too direct and provocative to ask face-to-face. There were also other concerns about qualitative methods in this study. The exploratory research exercise also revealed to the researcher that he tended to guide interviewees in their answers to certain questions which had not been anticipated (no official interviews were conducted, only exploratory work).

Despite the challenges presented in expressing, attitudes, perceptions and the nature of truth, the researcher found he was still able to adjust the research methodology from its conception right through to the closing stages of the research. It is vital to bear these factors in mind, to ensure that the research approaches used are in
harmony with the nature and intentions of the specific investigation. A survey methodology was adopted because it was considered a more reliable method for obtaining unbiased findings and ensuring that the researcher’s biases were captured and not ignored or minimised. Data integration was carefully structured to ensure robust results from the quantitative methods used.

The researcher also felt that a nationwide sample would provide the most credible data and research outcomes. There was a possibility that home vendors in different cities or rural areas might vary in their responses. The interviewing method would not be feasible in these cases, as it would only apply to participants in the local area. Interviewing participants on a nationwide basis would have been impractical and would also have been too time-consuming.

The quantitative approach was therefore selected for this study instead of the mixed method, on grounds of practicality. However, this research could also be extended in the future to include qualitative collected from interviews. This could contribute further insights which might improve question results in a way which cannot be achieved in laboratory conditions associated with the social and behavioural sciences. Despite this, it is argued that the data collected from the survey does indeed support the research conclusions outlined.

3.10.1 Quantitative method

The quantitative method selected produces firm and unbiased statistical data, in the sense that it is not influenced by face-to-face interactions. The sample size for this analysis was computed by statistical measures to establish what sample size would be needed for a given population to achieve reliable findings. In line with standard research protocols, the researcher selected sample sizes which generated findings with a minimum confidence interval of 95 per cent.

Research questions appropriate to home owners and home vendors were devised. A variety of research probes was considered along with the data and items of analysis. The quantitative approach enables a model to be tested (Creswell, 2012), and in this
case, the model was composed of variables which were measured numerically and analysed using statistical procedures, in order to establish whether the predictive overviews for the model would hold true.

A large-scale statistical survey method was adopted (Hittleman & Simon, 1997). This method of research can reach many more participants in a faster time than by conducting interviews. Quantitative research options in this research were on-screened and a large number of respondents participated. These, measurements were found to be impartial, quantifiable and statistically valid, as well as providing an important tool for assessing independent opinions and trends (Leedy & Ormrod, 2005).

3.11 Research methodology: stages in the research process

A description of the facts, data collection processes, and investigation methods and their consistency are presented, along with descriptions of the external online questionnaire structure, data collection and analysis methods. This provides a justification for the development and usefulness of the hypothetical model for classifying (profiling and understanding) vendors’ responses in relation to emotional factors, which are measured by statistical scores.

Every effort has been made to ensure the research methods are appropriate to compensate for the study’s limitations, and ethical concerns were also taken into consideration. The research approach was designed to gather information and apply methodologies as effectively as possible, despite some limitations associated with this study.

The research process involves a gradual step-by-step formulation of an appropriate research procedure, which contributes to recognising, establishing, determining, analysing, developing and representing the data. Zikmund et al. (2011) state that marketing research often conforms to the following general pattern:

1. Defining a research problem
2. Planning a research design
3. Planning a sample
4. Collecting the data
5. Analysing the data
6. Formulating the conclusions and preparing the report

Figure 3.3 represents these six stages as recurring, cyclical and circular-flow processes. As stated by Zikmund et al. (2011, p. 16) ‘the circular-flow concept is used because the conclusions from research studies usually generate new ideas and problems that need to be investigated’.

**Figure 3.3 Stages in the research process**

Analysis involves interpreting and understanding the data that have been collected and identifying influential uniform patterns, which highlight the main elements in the findings. Appropriate data analysis techniques were determined based on information
constraints, the descriptions of the research design and the make-up of the data assembled.

The last stage in the research process (the formulation of conclusions and writing of the final report) involve ascribing meaning to the information and arriving at conclusions. The final report must clearly convey the findings, and the summary of findings is ultimately only as good as its applications.

3.12 Primary survey data collection: questionnaire design/item development, response method and sampling

The three main questioning options for data capture shown in Figure 3.4 include personal, telephone and self-completion options (Bradley, 2010). These differing approaches to data collection have different effects on market research studies.

Figure 3.4 The three main questioning options for data capture

Source: Bradley, 2010, p. 117
3.12.1 Self-completion method (Questionnaire)

The self-completion option is when respondents provide answers to the questions and is appropriate when respondents are interested in responding to answers, or who need no support in providing answers. This approach targets respondents who have an interest in the topic; in this case, home owners and home sellers.

The benefit of the self-completion method is that respondent spends their own time answering the questions, and there is no need for an interviewer to expend time and money on the activity (Bradley, 2010).

3.12.2 Questionnaire design/item development

The research questionnaire was constructed on the basis of an extensive literature review and the researcher’s extensive industry experience over 33 years. The design of the questions was developed using some ethnographic perspectives. The questionnaires were primarily created using the researcher’s actual experience in the industry and the literature review, focussing on the concepts of greed, pride, lack of trust, expected negotiation and rarity, in line with the survey objectives. This phase involved deciding on suitable measurement scales, question articulation and subject matter, reply format and the final structure of the questionnaire. The exploratory work also helped to develop a well-defined outline of the themes to be included in the questionnaire.

According to Yin (2003), the research strategy applied depends upon the type of research question, the extent of control over behavioural factors and the general nature of the phenomena to be studied. The questionnaires were designed to meet the research objectives and to minimise the problem of questions not being answered. The questions were designed to make it easy for the respondents to provide the essential answers, so that reliable analysis and explanation were possible.
With these objectives in mind, a number of distinct questions and concerns emerged which were further addressed as the research design was developed. The key outlined below were reviewed and summarised with reference to the various research themes:

- Do home sellers tend to choose a real estate agent who nominates a higher value than the expected selling price (the Price Virus-dependent variable, addressed in four of the questions)?
- Do home sellers tend not to accept a lower price appraisal by an agent, even though it may be a more realistic price (greed-independent variable, addressed in five of the questions)?
- Does pride in home ownership tend to influence home sellers to believe that their home is worth more than its market value (pride-independent variable, addressed in four of the questions)?
- Is it true that although real estate agents cannot be trusted, home sellers will tolerate them if they can obtain higher prices (lack of trust-independent variable, addressed in two of the questions)?
- Do home sellers over-price their homes because they expect buyers to negotiate for a lower price (expected negotiation -independent variable, addressed in three of the questions)?
- Most home owners think their homes have unique characteristics, and therefore believe they are worth more money (rarity-independent variable addressed in five of the questions)?

These questions highlight the important issue of whether we can objectively assess vendor behaviour by linking the various emotions to the Price Virus. They relate to factors which are individualised, social, and practical, and to circumstances deemed to be significant for the research question, and are concerned with feelings, preferences, assessments, and thought evaluations.

Questions relating to each construct were designed to suit the home seller perspective and confusing terms were eliminated. For example, the term ‘Price Virus’ was replaced with ‘high price’. The responses were measured on a six-point Likert-type scale that ranging from ‘strongly disagree’ to ‘strongly agree’ (see Appendix B for the final survey
questionnaire). The survey comprised seven categories, with data outlined in segments A and B:

1. Segment A: comprises the anchor question focussing on the reality of the Price Virus factor: the dependent variable.

2. Segment B: comprises a summary of responses relating to the emotions connected to the Price Virus; the five sections consist of data relating to greed, pride, lack of trust in real estate agents, buyer expectation of negotiation, and rarity: the independent variables.

3.12.3 Methods for capturing data: the survey

Surveys are a common in research design. The survey method was selected because it allows a structured approach, which can represent a wide-ranging of responses for the research. This study proposed an empirical framework for examining the theoretical interactive trail described in the literature review and analysed in the hypotheses. The conceptual framework aims to quantify data (Malhotra, 2002) in order to identify causal relationships.

A further reason for selecting the survey method was support from the Fairfax Media Group, which offered to host the questionnaire on five popular national websites. These websites assisted in collecting the statistics required for the analysis. This data collection process was deemed to be reliable, given that the researcher exercised no influence over the respondents, who were all anonymous.

3.12.4 Sampling approaches and processes

The study’s sampling approach and process focussed on sample structure to ensure an appropriate selection and variety of samples, which was critical for research reliability. Guidelines used in the sampling approach and process are illustrated in Table 3.5.
### Table 3.5 Sample guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Definition of population</td>
<td>Population defined in terms of elements, units, extent and time</td>
</tr>
<tr>
<td>2. Specification of sample frame</td>
<td>Identification of means for defining population elements, e.g. telephone book, map or city directory</td>
</tr>
<tr>
<td>3. Specification of sample unit</td>
<td>Selection of sampling unit (sampling unit may contain one or several population elements)</td>
</tr>
<tr>
<td>4. Specification of sampling method</td>
<td>Description of selection method for sampling units</td>
</tr>
<tr>
<td>5. Specification of sampling size</td>
<td>Determination of number of population elements to be sampled</td>
</tr>
<tr>
<td>6. Specification of sampling plan</td>
<td>Specification of operational procedures for selection of sampling units</td>
</tr>
</tbody>
</table>

Source: Shajahan, 2004

### 3.12.5 Sampling methodology

It is not possible in practice to examine every individual in a target population, so the researcher selected a sample of the population that was expected to be representative of the target population of interest (McLeod, 2014). In this particular study, it was not appropriate to use random sampling, as this might not adequately represent the actual ('real world') context (Eisenhardt, 1989; Tellis, 1997). Eisenhardt (1989) and Patton (1990) suggest that random sampling may also lead to data skewed towards a particular subgroup, thus producing sampling error. The random selection method was therefore rejected. The population of interest for this study was specifically home owners.

In selecting home owners as the target population represented in the sample, the researcher also needed to ensure that individuals in the group were comparable to other individuals in the selected sample. This was essential because the more representative the sample, the more confident the researcher can be that the results
can be generalised to the target population (McLeod, 2014). Different sampling methods were investigated prior to selecting the most appropriate sampling method, as illustrated in Table 3.6.

Table 3.6 Different sampling methods

<table>
<thead>
<tr>
<th>Types of sampling</th>
<th>Selection strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random</td>
<td>Select from a full list of the population (sampling frame); a random number table can be used</td>
</tr>
<tr>
<td>Systematic</td>
<td>Start at a random point on the sampling frame choosing every tenth (or some other frequency) depending on sampling frame size</td>
</tr>
<tr>
<td>Stratified</td>
<td>Sampling frame stratified, for example by class, race, sex) then random sampling</td>
</tr>
<tr>
<td>Cluster</td>
<td>Population divided into units or clusters, each containing individuals in a range of circumstances; for example, different types of young offender institution could be sampled</td>
</tr>
<tr>
<td>Multi-stage</td>
<td>Extension of the cluster sample, in which samples are drawn from within clusters; for example, sampling by age, sex and ethnicity from within young offender institutions identified through cluster sampling</td>
</tr>
</tbody>
</table>

Source: adapted from University of Portsmouth, 2012

The participants selected in this study were a result of cluster sampling technique, a method where clusters of participants representing the overall population are classified and included in the sample (Jackson, 2015). Clusters are groups of respondents from the overall population which are classified and included in the sample. Cluster sampling is a quick and straightforward methodology, rather than sampling the entire population, as in simple random sampling, the researcher works with a few randomly selected clusters using cluster sampling.

First, the determining criteria were determined by the researcher on the basis of number of properties owned, gender, age, income, country, employment, education and properties sold. It was also critical to separate the population into home owner and non-home owner categories, and people who have sold homes and those who have not. From each group, the researcher then selected individual subjects by simple
random technique. In this particular method, the sampling techniques carried out using a large-scale survey hosted on a public domain website. This strategy lessened the cost of collecting data from a larger population and allowed a sufficient sample size to ensure efficiency, representativeness, reliability and flexibility (Ghauri, Gronhaug & Kristianslund, 1995; Leedy & Ormrod, 2005; Shajahan, 2004). A larger sample size in most cases will improve the quality of the statistical results (Ghauri et al., 1995).

3.12.6 Sampling frame

The sample selected in this study was drawn from the target population of home owners. Because it is impossible for a researcher to contact an entire market research population, the study sample was selected to represent as closely as possible all of the elements in the relevant population and to best fulfil the research objectives (Bradley, 2010). According to RP Data (2012), there were approximately 380,000 properties sold at the start of this research and therefore a good sampling frame will assist in predicting how the rest of the population may react to the inference. The profile of the subjects had to be appropriate to the research topic, and this was reflected in the selection of home owners or home sellers in the sample.

3.12.7 Sampling bias, common method bias and sample size limitation

One problem in selecting a sample from a target population is sampling bias, which refers to circumstances where the sample does not properly represent the attributes of the target population. Even when a sample group is selected from a population but has a biased belief, this does not entail that the entire population shares the same view.

This study contained respondents who were systematically different from the population. For example, 3.18 per cent of respondents did not own properties, and therefore did not meet the sample criteria, despite the fact that one prerequisite for participating in the survey was stipulated to be that participants must own a property. There was a high probability that participants who did not own a property would not experience emotions that could contribute to the Price Virus. In another example, 25
per cent of respondents had not sold a property, so that they might not have had any experience of the selling process and the emotions involved in that process. Hence, their responses might reflect decision-making which was different from those who had previously sold.

The assumption is that responses can be strongly influenced by method bias when respondents cannot provide accurate responses and/or when they are unwilling to try to provide accurate responses (Mackenzie & Podsakoff, 2012, p. 544). Therefore, their responses will be more prone to method bias. In order to provide an effective question, the complexity of the objective must not go beyond the means of the respondent. The factors that limit a respondent’s capabilities and/or make the task of answering accurately more difficult are potential sources of method bias (Mackenzie & Podsakoff, 2012, p. 544). Common method bias may arise from the use of a common rater (source), measurement context or the characteristics of the items (Chung et al., 2012, p. 51).

This study adopted several procedures to avoid the common method bias that could be linked with a survey study where the dependent and the independent measures have the same source (Podsakoff et al, 2003). As suggested by Podsakoff et al. (2003), proximal separation was used to reduce common method bias by placing the questions related to the predictor and criterion variables in different parts of the survey instrument. The survey questions are also simple, specific and concise (Tourangeau et al., 2000). To reduce the potential of common method bias, participant anonymity was assured, which also reduced evaluation apprehension (Podsakoff et al., 2003). This was implemented through the informational letter to participants stating that this study had been approved by the ethics committee of the university and that no participant’s identity will be revealed in the results of the research. Participants were encouraged to answer the questions justly and without obligation to answer all the questions. This approach endeavoured to ensure that common method bias was not present.

It would have been desirable to have a larger sample than the study’s 229 respondents, but this limitation was unavoidable, due to the fact the survey
questionnaire was placed on the various Fairfax Media websites for only one week at no cost to the researcher. Even though several thousand people clicked on the website link, only a few hundred actually participated, and only 229 responses were usable.

### 3.13 Exploratory research

Exploratory research was also conducted to improve the data collection methodology and topic selection prior to conducting the survey. The objective was to obtain credible conclusions, and address concerns about researcher bias. This exploratory work was conducted in face-to-face discussions to obtain information useful for formulating the survey questions. Given there were two parties involved in the discussion, it was crucial to observe any hesitations in responding to certain questions, as a way of determining whether respondents would be truthful in providing their answers. The objective was to minimise biases and inaccuracies.

After conducting the exploratory research, qualitative methodologies were explored but not implemented in the study. The researcher identified a key problem in such methodologies as being their subjective nature, which made it difficult to apply conventional standards of reliability and validity (Hughes, 2012). As highlighted above, the researcher found that his presence had an overwhelming influence on some individuals in situations where the researcher suggested some words that led to biased responses. The issue of identity concealment can also present problems when selecting findings (Hughes, 2012). Because human emotions can be extremely unpredictable, the researcher adopted a quantitative approach.

#### 3.13.1 Informal discussion and professional observations

In order to enhance the data collection process, the researcher sought the views of other professionals in the real estate industry in the exploratory work, to assist in formulating effective and appropriate survey questions. Seven individuals agreed to assist in unofficial discussions on the questions posted for the survey, and were asked how they thought participants would answer the questions and how long the
questionnaire would take to complete. Feedbacks on suggested amendments to the questions were provided, and discussions were conducted to ascertain the validity of the answers.

All participants from the exploratory research were aware that they were only assisting the study, and were not actual respondents in the final survey, but were recruited due to their knowledge and expertise within the industry. Although their responses were not used for analysis, the researcher values their input, which has contributed positively to developing the survey method.

3.14 Pilot study (quantitative research to refine survey design)

The pilot questionnaire was designed so that the questions would confirm the hypothesis positively or negatively, and provide a means for amending structural aspects of the study if necessary. The objective was to identify relevant ways to measure the variables considered in the study.

Prior to actual data collection, the pilot survey with the test sample was hosted by Fairfax Media’s five major websites for a week. A total of 70 questions were included in the questionnaire to test its validity. 2,951 people clicked on the web link, 143 responded and 56 completed the questionnaire. Although the reasons for reluctance to participate are not known, the low response rate may be partially due to the large number of questions.

The pilot study in this case was used as a ‘small scale version or trial in preparation for a major study’ (Polit, Beck & Hungler, 2001, p. 467). For a pilot study to be effective, Baker (1994) established that a sample size of 10 to 20 per cent of the sample size of the final survey is a realistic number of respondents. The pilot study’s sample size thus exceeded the benchmark of 20 per cent of the final survey (sample size of 229 was obtained from the final survey).
The pilot study addressed a number of strategic issues and led to the following factors being identified and addressed in the final study:

a) Evaluation and enhancement of the topics to make them more comprehensible;
b) Assessment of lab technicians administering the Scored Surveys software, to ensure they were competent in the procedures;
c) Evaluation and enhancement of the phrasing and language of the questionnaire;
d) Confirmation of the dependability and validity of the outcomes;
e) Substantiation of numerical and diagnostic occurrences, to establish their usefulness.

3.15 Data analysis

The analysis of data in this study entailed making a summary of the accumulated data collected and presenting the evidential outcomes in a way that highlighted the most significant attributes, so that the accumulated results could lead to possible major findings.

The aim of this research was to establish the causal relationships between the five designated emotions (greed, pride, lack of trust, expected negotiation and rarity) which were perceived to be contributing factors to the Price Virus. The research design provided an opportunity to seek more in-depth knowledge about the variables, and the justifications concerning the occurrence of observable facts. The analysis was related to the conceptual model representing all the theoretical constructs, and used the PLS-based software WarpPLS 5.0.

3.15.1 Measures

This study applied the following validated measures to study the proposed Price Virus model. The questionnaire was developed to address the influence on the Price Virus of
the emotional factors proposed to be relevant to the study. The questions were created and developed using references from the literature which focus on each of these individual factors. The measurements and their sources are listed in Table 3.7.

Table 3.7 Measurements and their sources

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items and sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of Greed</td>
<td>• Greed tends to be particularly associated with the acquisition of wealth (Diamond, 2012)</td>
</tr>
<tr>
<td></td>
<td>• Greed has been linked to optimistic economic aspirations, such as amassing greater wealth (Melleuis, 2009)</td>
</tr>
<tr>
<td></td>
<td>• Greed tends to foster activity that imposes losses on others (Levine, 2013)</td>
</tr>
<tr>
<td>Feeling of Pride</td>
<td>• The passion of pride causes self-liking and self-liking encourages overvaluing of self-worth (Verburg, 2015)</td>
</tr>
<tr>
<td></td>
<td>• Pride plays a role in providing incentive to pursue success (Williams &amp; DeSteno, 2008)</td>
</tr>
<tr>
<td>Feeling of lack of trust</td>
<td>• Lack of trust is a common reaction to threats (Flynn, Slovic &amp; Kunreuther, 2001)</td>
</tr>
<tr>
<td></td>
<td>• Common reaction to persuasion threats in form of deception (Darke &amp; Ritchie, 2007)</td>
</tr>
<tr>
<td></td>
<td>• Manipulated sales tactics (Brown &amp; Krisha, 2004; Campbell &amp; Kirmani, 2000)</td>
</tr>
<tr>
<td>Feeling of expected negotiation</td>
<td>• Most negotiators expecting the other party’s interests will be completely opposed to their own (Thompson &amp; Hastie, 1990)</td>
</tr>
<tr>
<td></td>
<td>• Negotiation involves proposing offers, making counter-offers, and trying to persuade the other party to concede (Cross, 1977)</td>
</tr>
<tr>
<td>Feeling of rarity</td>
<td>• People are willing to pay a premium for rarity (Atsm &amp; Dixit, 2009)</td>
</tr>
<tr>
<td></td>
<td>• People may favour scarce products over comparable ones which are readily available (Cialdini, 2008).</td>
</tr>
</tbody>
</table>

It was essential to focus on the research topic of emotional factors which influence home vendors. Researching a broad topic like emotions is difficult, since there is a great deal of information available on all aspects of the emotions. The researcher listed all the questions which he wished to answer, then chose those questions which were considered neither too general nor too narrow. The same method was used in developing questions for each construct tested. The pilot study was crucial in discovering whether the questions were too general, too restrictive, or appropriate.
The questions pertaining to each construct to be tested were placed in their own section, and then broken down into components or smaller sub-questions. For example, pride was broken down into issues such as self-esteem, motivation to succeed and over-confidence. In the final survey, some questions were also amalgamated into sections comprising other constructs, to explore how participants responded if their answers were out of logical sequence. The researcher was also mindful of the importance of maintaining topic coherence, so that respondents could answer questions in a coherent manner.

Since the researcher knew the topic well, the questionnaire was developed using his own knowledge, but integrating academic references to ensure that the questions were effective in providing valid results.

### 3.15.2 Analysis of aggregated results

The final survey comprised forty questions, with respondents providing answers on a 1-6 Likert type scale (see Tables 4.4 to 4.8, Chapter 4). Responses were given within a ‘strongly disagree’ to ‘strongly agree’ range using questions linked to the hypotheses and indicating a positive or negative feeling towards emotions associated with the Price Virus.

### 3.16 Statistical method: Structural equation modelling (SEM)

Structural equation modelling (SEM) is a statistical method for analysing and estimating causal relationships based on statistical data and qualitative causal expectations. SEM can be applied to ascertain whether the proposed model for the research is usable for data analysis, and comprises a grouping of factor analyses and multiple regressions. The established variables as indicators and factors are the latent variables. In SEM, the measurement model is the segment that associates measured variables to latent variables. The structural model is the segment that associates latent variables to one another. This study expected the hypothesised model to be analysed
for the best fit of the data (Henseler, Ringle & Sinkovics, 2009). SEM appeared to be the appropriate analysis approach as it provides the best overall assessment of data fit.

### 3.16.1 Component-based SEM

Component-based SEM, or partial least squares (PLS) applies a different process for analysing data, and considers measurement models, structural models, and the overall model. It is in computation and can be applied to small samples. In addition, it allows for single-item constructs within the model. Since the introduction of PLS, its usage has increased significantly (Wong, 2013), while numerous subsequent software applications have been created to run PLS-SEM, including PLS Graph, WarpPLS, Smart PLS and so forth.

In this study, PLS and path analysis were used to predict variables, observable variables and their correlations. PLS is particularly useful in examining (1) the relationship between the explanatory/control factors and the potential role that individual emotive variables play pertaining to the dependant variable; and (2) the cross-relationships of different variables (Tung & Chung, 2010, p. 380).

PLS was deemed appropriate because it does not require any prior distributional assumptions, and a relatively small sample size is acceptable (Chin, Marcolin & Newsted, 2003). PLS was deemed to be most appropriate for analysing the data at hand (Chin, 2001; as cited in Tung & Chung 2010). The multivariate analysis approach is particularly effective, because it separates out evaluations of the relationships between the multiple variables and also directs the effects of independent variables.

WarpPLS is an effective PLS-based structural equation modelling (SEM) software which has advantages that make it appropriate for the testing process, because it:

- Realises classic (composite-based) and factor-based PLS algorithms;
- Detects non-linear relationships, and estimates corresponding path coefficients;
- Configures linear relationships using classic and factor-based PLS algorithms;
• Has mediating as well as moderating effects;
• Computes P-values, model fit and quality indicators and coefficients;
• Computes indirect effects for paths using various measures as well as total effects.

By using WarpPLS 5.0 in several tests, the relationship between the independent variables and the dependent variable was tested in order to derive the beta coefficient and P-value results to describe influence and significance. In a model, causal relationships between variables may depict direct effects, moderating effects and mediating effects on the reciprocal effects (Kim, Kaye & Wright, 2001). Direct effects between independent and dependent variables frequently do not present statistical and interpretative problems (Kim et al., 2001). Therefore, in this analysis the partial least squares (PLS) regression procedure using the WarpPLS 5.0 software programme (Kock, 2010; 2012) was used to evaluate the model.

3.16.2 Moderating effects

The moderator variable stipulates when or under which conditions a predictor variable influences a dependent variable (Baron & Kenny, 1986; Holmbeck, 1997). The moderator variable may also decrease or enhance the direction of the relationship between a predictor variable and a dependent variable, or it may even change the direction of the relationship between the two variables from positive to negative or vice versa (Lindley & Walker, 1993). A moderator variable may be considered when the relationship between a predictor variable and a dependent variable is strong, but most often it is considered when there is an unpredictably weak or unreliable relationship between a predictor and a dependent variable (Baron & Kenny, 1986; Holmbeck, 1997; Lindley & Walker, 1993). The moderating effect is normally expressed as an interaction between predictor and moderator variables (Aldwin, 2007; Baron & Kenny, 1986; Holmbeck, 1997). When the independent variable has either a weak or no direct relationship with the dependent variable, the moderating effect is functional for establishing indirect relationships.
In this research model, greed is shown to have moderating effects on the relationships between several predictor variables and the dependent variable. The moderating effect of greed in this case decreases the relationship between predictor variables and dependent variable. Incorporating the moderating effect into the model actually improved the R-squared value considerably.

3.16.3 Mediating effect

The mediating effect is also a useful tool for explaining the model in its totality. A mediator variable signifies an intervening variable or, stated differently, a device by which an independent variable is able to influence a dependent variable (Baron & Kenny, 1986; Peyrot, 1996). A mediator clarifies how or why a relationship occurs between the predictor and dependent variable, and a mediator is often an attribute or an intrinsic characteristic of people (Holmbeck, 1997; Lindley & Walker, 1993; Peyrot, 1996). In contrast to moderating effects which are most normally present when there is an unexpected weak relationship between predictor and the dependent variable, there must be a significant relationship between the predictor and the dependent variable before testing for a mediating effect (Baron & Kenny, 1986).

In this study, the independent variable rarity had no direct relationship with the dependent variable in the final analysis. However, some other independent variables act as the mediator between rarity and the dependent variable, providing an explanation of rarity in the final model.

3.17 Error bias

One objective of the researcher is to eliminate bias from the empirical data obtained in the course of observation. For example, in the question ‘are home vendors greedy?’ survey respondents who are home vendors themselves might respond in a way which would create methodological error and as a result, bias. This is because vendors might answer the question misleadingly by selecting ‘no’ even if they are in fact greedy, thus distorting the answer and producing a biased conclusion. The importance of any
methodical research varies depending on the extent to which empirical data can be
gathered and examined in an unbiased and well-structured manner. However, all
statistical methods contain some form of error. To take another example from the
study, the data showed that 3 per cent of respondents were unemployed. Although
the survey was anonymous, it is possible that the rate of unemployment was
understated if some respondents were not truthful in answering this question. So
selection bias may occur when the participants surveyed are not typical of the target
population on which the conclusions are based.

Survey participants were given a free property report upon completion. The ultimate
basis for bias remains lack of objectivity, and it may be that some participants were not
interested in answering truthfully, but instead participated due to the incentive of the
free property report which was offered. Biases may still exist even when much effort
has been expended in avoiding them, and in fact biases are almost inevitable in
research studies conducted on people.

3.18 Conclusion

The purpose of this chapter is to explain the research methodology of the study, clarify
the sample selection, define the procedure used in planning the instrument and data
collection, and offer a justification for the statistical procedures used to analyse the
data. The research paradigm is positivist/post-positivist in nature.

The researcher’s principal focus was on deriving an appropriate theoretical framework
to demonstrate whether the topic or subject matter can be substantiated. This
prompted the researcher to make necessary adjustments and concentrate on what
was feasible and comprehensible. Money and time are often important factors in
determining research design, and a research paradigm must rely on principles which
are generally deemed to provide reliable and consistent results.

Thomas Kuhn (1970, 2012) has argued that scientists may be prejudiced by prior
beliefs and experiences because they are human and therefore prone to error.
Empirical data is often gathered by multiple researchers who carry out tests independently and create further error biases. The researcher was aware of some error bias, and so a test of fitness was conducted to ensure that the data collection would be reliable and suitable for testing.

Inferential analysis was applied to confirm whether each of the constructs had a correlation or no correlation to the dependent construct. The relationships between the five constructs and the Price Virus were determined using standard statistical measures. The Pearson Correlation method was utilised to validate whether a relationship existed between these factors and the Price Virus. The measure for determining the null hypothesis was a criterion of statistical significance at the p<0.01 and p<0.05 level of probability.

The objective of the study was to develop a comprehensive interpretation of the complex phenomena associated with the various emotions that manipulate and influence the Price Virus. The data collected and analysed provides evidence for the conclusions reported in Chapter Five. In the following chapter, the findings are presented and discussed in detail in relation to the data collection segments, the pilot study, and the survey.
CHAPTER 4
RESULTS AND DATA ANALYSIS

4.0 Introduction

Previous research suggests that feelings of ownership are a common feature of human emotions. They have positive and negative aspects, involve self-awareness and existing knowledge, may be directed toward a variety of objects, and have important consequences for the individual (Pierce et al., 2003). These factors were examined to show how emotional attachment to home ownership creates inflated valuations of the home, which prior to research testing and according to the hypothesis proposed in this study, were presumed to correlate with the Price Virus.

In reviewing the multiple determining factors deemed to have a positive effect on the Price Virus, the goal has been to develop evidence to support this hypothesis. Chapter Four outline the data analysis by applying the research methodology presented in the previous chapter in the form of statistics.

This chapter investigates the relationships between the independent variables and dependent variable based on research data collected during the empirical study. The data was gathered and then analysed in accordance with the research question presented in Chapter One of this study.

Data was analysed to classify, explain and test the hypothesised relationships between the stipulated emotions that influence the Price Virus, in order to determine whether, and/or how, they contribute to the unrealistic value. Analysis of the research findings confirms that home sellers do indeed propose prices that are not based on the market appraised price (MAP), but rather on their own personal perception of price, which in most cases is higher than the MAP.

Although a quantitative approach is used, an exploratory approach was also made to analyse responses, and thus strengthen the questionnaire survey. A total of seven real
estate industry professionals took part in a one-on-one interview with the researcher to ensure the face validity of the survey questions. Besides improving the questions, the information collected from several of these informal discussions may also be useful for further research in this area in the future.

The objective of this data analysis is to examine the relationship and correlations between the various factors and the Price Virus, as illustrated in Figure 4.1 and Table 4.1. The independent variables are greed, pride, lack of trust, expected negotiation, and rarity, while the dependant variable is the Price Virus, with question marks signifying testing of each construct and its relationship with the dependent variable.

Figure 4.1 Model testing framework

This model highlights the fundamental practical similarities between the independent variables for prediction and causal explanation in relation to the dependent variable, the Price Virus, in an attempt to establish the predictive power of greed, pride, lack of
trust, expected negotiation and rarity in relation to the Price Virus. There is currently a lack of sufficient predictive modelling of emotions and their influences on vendors. The data has been analysed to create information showing the scope of interaction between the independent variables and the Price Virus. The research tool used to process the data is the statistical model, which explains at an academic level the hypotheses about the relationship, influence, and interactive connections.

Table 4.1 Predictions for the five hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: There is a positive and significant relationship between greed and the Price Virus</td>
<td>Increased intensity of greed correlates positively with the Price Virus</td>
</tr>
<tr>
<td>H2: There is a positive and significant relationship between pride and the Price Virus</td>
<td>Increased intensity of pride correlates positively with the Price Virus</td>
</tr>
<tr>
<td>H3: There is a positive and significant relationship between lack of trust and the Price Virus</td>
<td>Increased intensity of lack of trust correlates positively with the Price Virus</td>
</tr>
<tr>
<td>H4: There is a positive and significant relationship between expected negotiation and the Price Virus</td>
<td>Increased intensity of expected negotiation correlates positively with the Price Virus</td>
</tr>
<tr>
<td>H5: There is a positive and significant relationship between rarity and the Price Virus</td>
<td>Increased intensity of rarity correlates positively with the Price Virus</td>
</tr>
</tbody>
</table>

4.1 Pilot study

The pilot study provided useful details on the range of emotions that relate to the Price Virus, and also assisted the researcher in formulating similar questions for the main survey. However, the outcome of the pilot revealed some flaws which made analysis challenging. The researcher initially assumed that the questions selected would make it easier to discover the relevant relationships. But in fact, it revealed irregularities in the formulation of the questions. The initial pilot responses from 56 participants shown in Table 4.2 were not used in the main analysis.
The pilot results revealed that some of the questions were not appropriate, and so were removed from the final questionnaire. The intention in including a large number of questions initially was to attempt to identify additional behaviours external to the hypotheses that might also influence the Price Virus, in order to add further information to the research. However, after reviewing the pilot results, it was clear that this was not practical, because the scope of study would have been too broad and too difficult to complete. The total number of questions was reduced from 70 to 40, to make the questionnaire more precise and less demanding for participants.

Table 4.2 Pilot study response condition

<table>
<thead>
<tr>
<th>Pilot study response condition</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clicked on questionnaire web link</td>
<td>2,951</td>
</tr>
<tr>
<td>Total responses</td>
<td>143</td>
</tr>
<tr>
<td>Invalid</td>
<td>87</td>
</tr>
<tr>
<td>Valid</td>
<td>56</td>
</tr>
<tr>
<td>Percentage of valid questionnaires</td>
<td>1.90%</td>
</tr>
</tbody>
</table>

4.2 Final survey

The final survey consisted of questions that had been re-organised after reviewing the pilot study, and comprised 40 questions. The questionnaire was hosted by the Fairfax Media Group for a week on the same websites used for the pilot study:

A total of 3,664 individuals opened the link, 314 responded and 85 responses were excluded from the analysis because of incomplete answers, leaving usable data from 229 responses: see Table 4.3. The questionnaire took approximately 10 to 15 minutes to complete, and participation was voluntary and anonymous.

Table 4.3 Research response condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clicked on questionnaire web link</td>
<td>3,664</td>
</tr>
<tr>
<td>Total responses</td>
<td>314</td>
</tr>
<tr>
<td>Invalid</td>
<td>85</td>
</tr>
<tr>
<td>Valid</td>
<td>229</td>
</tr>
<tr>
<td>Percentage of valid questionnaires</td>
<td>6.25%</td>
</tr>
</tbody>
</table>

4.3 Research instrument reliability

A test of reliability was conducted based on scales applied in the questionnaire, as well as assigning of numbers to observations in order to quantify the phenomena. The outcomes for each of the coefficient alphas showed the reliability to be satisfactory. According to the De Vellis Reliability Guidelines (1991), a Cronbach alpha coefficient value of over 0.7 is adequate for this reliability test.

4.3.1 Correlations and Cronbach’s alpha

Table 4.4 shows the analysis of data by describing, demonstrating and summarising the data in a meaningful manner. The patterns apparent in the data show that the mean for all participants’ answers falls within the category ranging from ‘slightly agree’ to ‘agree’. To identify the unique qualities of each variable, the mean score for each of the seven variables was considered in relation to the characteristics of each significant variable. These items included the Price Virus as the dependent variable; and greed, pride, lack of trust, expected negotiation and rarity as the independent variables. These acceptable measures allow us to make conclusions both with regard to any of the hypotheses, and beyond the data analysed.
Table 4.4 Mean and standard deviation, Cronbach’s alpha and correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>CA</th>
<th>Expect N</th>
<th>Price Virus</th>
<th>Trust</th>
<th>Greed</th>
<th>Rarity</th>
<th>Pride</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect N</td>
<td>4.696</td>
<td>0.746</td>
<td>0.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Virus</td>
<td>4.848</td>
<td>0.725</td>
<td>0.727</td>
<td>0.536**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>4.106</td>
<td>1.120</td>
<td>0.794</td>
<td>0.486**</td>
<td>0.503**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greed</td>
<td>4.577</td>
<td>0.770</td>
<td>0.777</td>
<td>0.579**</td>
<td>0.529**</td>
<td>0.543**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarity</td>
<td>4.091</td>
<td>0.931</td>
<td>0.882</td>
<td>0.331**</td>
<td>0.270**</td>
<td>0.461**</td>
<td>0.300**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pride</td>
<td>4.060</td>
<td>0.959</td>
<td>0.779</td>
<td>0.291**</td>
<td>0.260**</td>
<td>0.466**</td>
<td>0.235**</td>
<td>0.497**</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)

For Cronbach’s alpha, the normally accepted measure for scale reliability is 0.7 as a cut-off value (Nunally, 1994). However, Moss et al. (1998) express the view that a Cronbach alpha value above 0.6 is generally acceptable. Hair (2006) also maintains that in a study where small sample sizes are used, lower Cronbach alpha scores such as 0.6 may be adopted as acceptable. Nagpal et al. (2010) have suggested that for subscale measures, a cut-off value of 0.6 is adequate. In this study, the Cronbach alpha coefficients for expected negotiation, Price Virus, lack of trust, greed, rarity and pride were all above 0.7, with expected negotiation being an exception with a value of 0.62: see Table 4.4. The Cronbach alpha coefficients for the five scales were thus deemed to be good indicators of their reliability, except for one, which was acceptable.

4.4 Exploratory factor analysis

The factor analysis as shown in the outcomes appears to be significant and easy to interpret. The researcher was investigating concepts which cannot be clearly measured by collapsing a considerable number of variables into a few interpretable factors.

In view of the results for the reliability tests from the earlier stage, exploratory factor analysis (EFA) applying fundamental components extraction was conducted on the data, in order to adequately ensure that the items loaded significantly onto the essential constructs. Twenty-three variables were included in this analysis: five for rarity (R_1, R_2, R_3, R_4 and R_5), five for greed (G_1, G_2, G_3, G_4 and G_5), four for Price Virus (PV_1, PV_2, PV_3 and PV_4), three for pride (PD_1, PD_2 and PD_3),
three for expected negotiation (EXN_1, EXN_2 and EXN_3), and two for lack of trust (T_1 and T_2).

Table 4.5 illustrates the outcomes for exploratory factor analysis item loadings. All items loaded were significant, as their factor loadings achieved scores higher than 0.50. MacCallum et al. (1999; 2001) have suggested that all items in a factor model should have commonalities of over 0.60, or an average commonality of 0.7 to substantiate the validity of factor analysis in small sample sizes. However, Hair et al. (1998) have suggested that for a sample size of approximately two hundred, a factor loading of 0.40 is justified.

The factor analysis was used as a method of data reduction and accomplished this objective by searching underlying unobservable variables indicated within the observed variables. This enabled the variables to be grouped into homogeneous sets, depending on the result of their factor scores.
### Table 4.5 Exploratory factor analysis outcomes

Pattern Matrix a.

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_1</td>
<td>.952</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R_2</td>
<td>.863</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R_3</td>
<td>.846</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R_4</td>
<td>.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R_5</td>
<td>.739</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_1</td>
<td></td>
<td>.807</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_2</td>
<td></td>
<td>.688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_3</td>
<td></td>
<td>.664</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_4</td>
<td></td>
<td>.630</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G_5</td>
<td></td>
<td>.614</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV_1</td>
<td></td>
<td></td>
<td>.842</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV_2</td>
<td></td>
<td></td>
<td>.693</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV_3</td>
<td></td>
<td></td>
<td>.617</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV_4</td>
<td></td>
<td></td>
<td>.609</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD_1</td>
<td></td>
<td></td>
<td></td>
<td>.831</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD_2</td>
<td></td>
<td></td>
<td></td>
<td>.817</td>
<td></td>
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</tr>
<tr>
<td>PD_3</td>
<td></td>
<td></td>
<td></td>
<td>.716</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD_4</td>
<td></td>
<td></td>
<td></td>
<td>.632</td>
<td></td>
<td></td>
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<tr>
<td>EXN_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.786</td>
<td></td>
</tr>
<tr>
<td>EXN_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.684</td>
<td></td>
</tr>
<tr>
<td>EXN_3</td>
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<td></td>
<td></td>
<td>.535</td>
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<td>T_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.914</td>
</tr>
<tr>
<td>T_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.785</td>
</tr>
</tbody>
</table>

Extraction method: principal component analysis
Rotation method: promax with Kaiser normalisation.
a. Rotation converged in six iterations

### 4.5 Sample appropriateness

The SPSS software used in this investigation comprised Bartlett’s test of sphericity (Bartlett, 1950) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974). These methods enable researchers to measure the appropriateness of their correlation matrices for factor analysis. Table 4.6 below shows results for KMO and Bartlett’s test, and indicates the measures for the research.
Table 4.6 KMO and Bartlett’s test

| Kaiser-Meyer-Olkin measure of sampling adequacy. | 0.875 |
| Bartlett’s test of sphericity | Approx. Chi-square | 2473.761 |
| df | 300 |
| Sig. | 0.000 |

The KMO measure varies between 0 and 1. Kaiser (1974) recommended a bare minimum of more than 0.5, while values below 0.50 were considered unacceptable, and would necessitate either collecting more data or reconsidering which variables to include. Values between 0.5 and 0.7 were mediocre, values between 0.7 and 0.8 were good, values between 0.8 and 0.9 were excellent, and values above 0.9 were superb (Hutcheson & Sofroniou, 1999). For the study data, the value was 0.875, which falls within the excellent range, confirming that the sample size was adequate for factor analysis. Bartlett’s measure tests the null hypothesis that the original correlation matrix is an identity matrix (Field, 2005, p. 6). A significant test would confirm that the $R$-matrix is not an identical matrix, and as a result, there are some relationships between the variables which one would expect to include in the analysis. Bartlett’s test is highly significant ($p < .001$), and hence, the factor analysis is appropriate.

4.6 Descriptive statistics

The questionnaire was hosted and conducted on the various websites mentioned and the identity of any of the respondents could not be detected. Table 4.7 illustrates the configuration of the respondents in terms of gender, age, education level and gross annual household income. Almost exactly three quarters of the respondents identified were male (66.7%) whereas 33.3 per cent identified were female. In the age category, only 0.5 per cent of the respondents were in the age group between 18 to 24, while the majority of participants fell within the age group ranging from 35 to 64 (75.6%). Most of the participants were university graduates, with 39% having a bachelor’s degree as their highest educational attainment, and 31.2% having a postgraduate degree as their highest educational attainment. Those with only a secondary school
certificate made up 13.8 per cent. The gross annual income of 15 participants was less than $40,000 (7.2%), while more than 61 per cent earned more than $80,000 annually, and those earning more than $120,000 made up 41.8 per cent of the total participants. Income level affects household well-being and people’s capacity to purchase properties, which justifies the research focus on this topic.

Table 4.7 Demographic data of respondents

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>FREQUENCY (N=229)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>144</td>
<td>66.7</td>
</tr>
<tr>
<td>Female</td>
<td>72</td>
<td>33.3</td>
</tr>
<tr>
<td>Age*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 24 years</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>25 to 34 years</td>
<td>32</td>
<td>14.4</td>
</tr>
<tr>
<td>35 to 44 years</td>
<td>52</td>
<td>23.4</td>
</tr>
<tr>
<td>45 to 54 years</td>
<td>60</td>
<td>27</td>
</tr>
<tr>
<td>55 to 64 years</td>
<td>56</td>
<td>25.2</td>
</tr>
<tr>
<td>65 years and above</td>
<td>21</td>
<td>9.5</td>
</tr>
<tr>
<td>Highest education level attained*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary school</td>
<td>12</td>
<td>5.5</td>
</tr>
<tr>
<td>Certificate</td>
<td>18</td>
<td>8.3</td>
</tr>
<tr>
<td>Diploma</td>
<td>35</td>
<td>16.1</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>85</td>
<td>39</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>68</td>
<td>31.2</td>
</tr>
<tr>
<td>Gross annual household income*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $40,000</td>
<td>15</td>
<td>7.2</td>
</tr>
<tr>
<td>$40,000 to $79,000</td>
<td>35</td>
<td>16.8</td>
</tr>
<tr>
<td>$80,000 to $119,000</td>
<td>41</td>
<td>19.7</td>
</tr>
<tr>
<td>$120,000 to $159,000</td>
<td>48</td>
<td>23.1</td>
</tr>
<tr>
<td>$160,000 to $199,000</td>
<td>24</td>
<td>11.5</td>
</tr>
<tr>
<td>$200,000 to $239,000</td>
<td>15</td>
<td>7.2</td>
</tr>
<tr>
<td>$240,000 or more</td>
<td>30</td>
<td>14.4</td>
</tr>
</tbody>
</table>

* Data contains missing values

One major use for employment statistics is to provide an indicator of the number of respondents who are likely to have the financial means to be able to buy, sell or own properties. The results in Figure 4.2 show that the majority of the respondents were
employed full time (59.8%), while 16.4 per cent of the respondents were self-employed. The third largest group was the retired category, found to be 12.8 per cent. Those who were unemployed made up 2.74 per cent of the respondents.

It can be argued that the employment statistics, as compiled, may misrepresent respondents’ actual work situation, and that the unemployed category may be misleading. People may be unemployed and yet still be wealthy, while with an online survey, there is no way of checking questionnaire responses to verify the identity, location or demographic background of respondents. In relation to this concern, the unemployed category is significantly small at 2.74 per cent, and therefore would not significantly influence the results.

The pie chart in Figure 4.3 shows that only seven of the participants did not own a property (3.18%), so that more than 96 per cent of the participants were property owners. Half of the respondents owned more than two properties, representing 49.1 per cent. Although the information letter stipulated that participants must own at least
one property to participate in the survey, a small number (3.18 \%) still participated in the survey without owning a property. Even though just over 3 per cent of the respondents were not home owners, there is a possibility that they could still be people of interest to the real estate industry. The survey was placed in the real estate section of the respective websites and thus may have attracted individuals who might be home buyers, or individuals who are interested in real estate.

**Figure 4.3 Number of properties owned**

This statistic is critical, as the fundamentals of this research require participants who own properties, and the experience of ownership is essential for an accurate assessment of the research questions. With more than 96 per cent being property owners, this provided a good and reliable data set.

Figure 4.4 shows that the majority of participants were from Australia, making up 78.95 per cent of the total respondents. The international participants made up 21.05 per cent, and were from the United Emirates, the United Kingdom, the United States, Canada, China, England, Germany, Malaysia, Singapore, Hong Kong and South Africa.
Where participants come from is crucial to their human experiences. Exactly how and why people behave in a specific culture and in a particular location may depend on different environments and settings. Even though the researcher did not intend to gather data from the international respondents, the data collected indicated that answers from international respondents were fairly consistent with those from Australia. Section 4.9 shows that the frequency tables highlight consistency of answers across the various segments of the questionnaire, whether participants were from Australia or from overseas. The participants were all from developed nations, which may suggest that the consistency of the responses can be explained by comparable environments.

Figure 4.5 reveals that 74.09 per cent of the participants have either sold or attempted to sell, making up the majority of the respondents. The reliability of this research depends on selecting respondents who have either sold or have attempted to sell their property at one time or another, because experience in selling or buying a house is essential for contributing effectively and significantly to this study.
More than three quarters of the participants had experienced selling their house, which provided a reasonable sample for adequate testing. As mentioned earlier, close to 97 per cent of the participants were home owners, so that even those who had never sold their homes had home ownership experience relevant to this study.

4.7 Overall fit measurement

The structural equation model (SEM) using WarpPLS 5.0 software was used to examine the data analysis and justify the results of this research. The model measurement analysis resulted in a statistically acceptable goodness-of-fit between the data and the proposed measurement model: see Table 4.8. The results show that the model provided a good fit with the data, in accordance with Kock’s (2012) interpretation.
Table 4.8 Model evaluation overall fit measurement

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average path coefficient (APC)</td>
<td>0.228</td>
<td>P&lt; 0.01</td>
</tr>
<tr>
<td>Average R-squared (ARS)</td>
<td>0.370</td>
<td>P&lt; 0.01</td>
</tr>
<tr>
<td>Average adjusted R-squared (AARS)</td>
<td>0.362</td>
<td>P&lt; 0.01</td>
</tr>
<tr>
<td>Average block VIF (AVIF)</td>
<td>1.442</td>
<td>Acceptable if &lt;=5, ideally &lt;=3.3</td>
</tr>
<tr>
<td>Average full collinearity VIF (AFVIF)</td>
<td>1.628</td>
<td>Acceptable if &lt;=5, ideally &lt;=0.36</td>
</tr>
<tr>
<td>Tenenhaus GoF (GoF)</td>
<td>0.450</td>
<td>Small &gt;=0.1, medium &gt;=0.25, large &gt;=0.36</td>
</tr>
<tr>
<td>Simpson's paradox ratio (SPR)</td>
<td>1.00</td>
<td>Acceptable if &gt;=0.7, ideally =1</td>
</tr>
<tr>
<td>R-squared contribution ratio (RSCR)</td>
<td>1.00</td>
<td>Acceptable if &gt;=0.9, ideally =1</td>
</tr>
<tr>
<td>Statistical suppression ratio (SSR)</td>
<td>1.00</td>
<td>Acceptable if &gt;=0.7</td>
</tr>
<tr>
<td>Nonlinear bivariate causality direction ratio (NLBCDR)</td>
<td>0.867</td>
<td>Acceptable if &gt;=0.7</td>
</tr>
</tbody>
</table>

Ten global model fit and quality indices are illustrated: average path coefficient (APC), average R-squared (ARS), average adjusted R-squared (AARS), average block variance inflation factor (AVIF), average full collinearity VIF (AFVIF), Tenenhaus GoF (GoF), Simpson's paradox ratio (SPR), R-squared contribution ratio (RSCR), statistical suppression ratio (SSR), and nonlinear bivariate causality direction ratio (NLBCDR). P values are provided for the APC, ARS, and AARS. These P values are calculated through a process that involves re-sampling estimations, coupled with corrections to counter the standard error compression effect associated with adding random variables, analogous to Bonferroni corrections (Rosenthal & Rosnow, 1991; as cited in Kock, 2012). This is essential, because the model fit and quality indices are calculated as averages of other parameters (Kock, 2012). It is recommended that the P values for the APC, ARS and AARS should all be equal to or lower than 0.05, that is, significant at the 0.05 level (Kock, 2012).

It is preferable that both AVIF and AFVIF be equivalent to or lower than 3.3, especially in models where most of the variables are measured using two or more indicators.
Wetzels, Odekerken-Schroder & van Oppen (2009) also proposed the following thresholds for the GoF: small if equal to or greater than 0.1, medium if equal to or greater than 0.25, and large if equal to or greater than 0.36 (as cited in Kock, 2012).

Ideally, the SPR should equal 1, which this model fits precisely. As for the RSCR, it should also ideally equal 1, so that there are no negative R-squared contributions in a model. Acceptable values for RSCR are equal to or greater than 0.9, so that the sum of positive R-squared contributions in a model makes up at least 90 per cent of the total sum of the absolute R-squared contributions in the model. The SSR index is a measure of the extent to which a model is free from statistical suppression instances (MacKinnon et al., 2000, as cited in Kock 2012).

WarpPLS 5.0 User Manual 53 coefficients of association substantiate the hypothesised directions of the causal links in the model. The acceptable values for NLBCDR are equal to or greater than 0.7, signifying that in at least 70 per cent of path-related instances in the model, the support for the reversed hypothesised direction of causality is weak or less. Hence, the hypothesised direction of causality is supported.

4.7.1 Analysis of aggregate results.

All possible responses were displayed on a 1 to 6 Likert-type scale. The responses show that the majority of the answers fell within the ‘slightly agree’ to ‘strongly agree’ category, in line with the questions linked to the propositions (see Appendix C). This indicates a very strong inclination towards a positive response for emotions associated with the various factors linked to Price Virus.

4.8 Dependent variable: Price Virus

Based on the frequencies indicated in Appendix C, the majority of responses were in the ‘agree’ categories. For ease of interpretation, the responses for ‘slightly agree’ to ‘strongly agree’ were combined, and indicate that 79.9 per cent to 84.7 per cent of the answers were in the ‘agree’ category. The Price Virus segment was measured using
four questions asking about attributes relating to this factor. Levine (2013) argues that human processes are based on faith rather than fact, and that most people believe that the future is hopeful, and is confident that things will only improve (Free & Cantril, 1968). This notion was considered and used to formulate research questions including: ‘sellers over-price their home because their instinct (gut feeling) tells them they may be able to get a higher price’ and ‘sellers tend to appoint real estate agents who give a value higher than the expected selling price’.

Price Virus value was measured using two questions about attributes associated with this factor. Examples from the literature were used to prepare these questions, including situations where home owners tend to over-estimate the value of their home (Melser, 2013) or only consider information which supports their existing beliefs (Anderson & Kellma, 1992).

Questions pertaining to establishing the existence of the Price Virus included: ‘sellers often ask for higher prices because market trends show that property prices always appreciate in value’, and ‘sellers tend to believe that their home is always worth more than the estimated value, no matter what others say’.

4.9 Independent variables

This segment analyses the independent variables of greed, pride, lack of trust, expected negotiation and rarity. An analysis of the relationship between these variables and the Price Virus was conducted to provide confirmation of the hypothesis.

4.10 Hypothesis analysis

WarpPLS 5.0 software is a prevailing statistical tool because it includes seven new model fit and quality fit indices compared to the other versions of WarpPLS, such as version 3.0. As indicated earlier in Section 4.7, the reliability and validity of the measurement instrument were calculated using WarpPLS 5.0. The critical statistical
issues were examined by assessing the convergent validity and reliability of each measure, followed by the discriminant validity.

4.10.1 Hypothesis 1

**H1: There is a positive and significant relationship between greed and the Price Virus**

The relationship between greed and the Price Virus was the first to be analysed. Hypothesis H1 suggests that the vendor’s greed influences a higher price; the Price Virus. Greed appears to be a significant motivator for the Price Virus. The variables seem to be strongly related ($\beta-0.60$, $\rho<0.01$) and variable greed explains 36 per cent of the variability in the dependent variable, the Price Virus (Figure 4.6), and 64 per cent of the variability is explained by other factors which are not included in this model. The model fit indices are ARS=0.357, $\rho<0.001$; APC=0.598, $\rho<0.001$; AFVIF=1.561.

**Figure 4.6 PLS regression for greed/Price Virus.**

$\beta=0.60^{**}$

$R^2=0.36$

Significant at **$p<0.01$

Greed was measured using five questions asking about attributes associated with greed. People who are greedy tend to be rewarded (Winarick, 2010), and greed tends to foster greed that imposes loss on others (Levine, 2013). Questions included ‘sellers would exploit the buyer for a higher price if they were in a position to do so’, and ‘sellers primarily consider their own financial benefits to be more important than being truthful with buyers’. Appendix C summarises the frequency response for the greed factor. Data was incorporated using scales from questions. These items were built into the questionnaire not only to establish the respondents’ views, but also to establish why they felt a certain way in relation to home seller behaviour and attitudes to greed.
From the five questions pertaining to greed, respondents within the ‘slightly agree’ to ‘strongly agree’ categories for each individual question ranged from 79.5 per cent to 88.2 per cent (refer to Appendix C). Hence, the majority fell within the ‘agree’ categories. More than 98 per cent of the total 229 respondents answered all five of these questions. This outcome shows a positive correlation relating to greed and home sellers. Therefore, hypothesis 1 is not rejected.

4.10.2 Hypothesis 2

H2: There is a positive and significant relationship between pride and the Price Virus

Pride has a direct positive and significant relationship to the Price Virus. The variables seem to be related (β=0.33, p<0.01) and the total variance explained by the model is 0.11 (Figure 4.7). The model fit indices are ARS=0.109, p=0.023; APC=0.330, p<0.001; AFVIF=1.561. Pride influences 11 per cent of the variability in the dependent variable, the Price Virus, and 89 per cent of variability is explained by other factors not included in the model.

Figure 4.7 PLS regression: pride/Price Virus.

![Diagram of PLS regression with Pride influencing Price Virus with β=0.33** and R²=0.11.]

Significant at **p<0.01

The questionnaire aimed to establish whether pride played a role in leading to the Price Virus. Frequency analysis was conducted to determine whether home sellers were responsive or unresponsive to pride, and to determine the reasons for their responsiveness or unresponsiveness. A methodical assessment of the results from answers to these items was conducted.
Pride was measured using four questions asking about attributes associated with pride, bearing in mind that self-contempt entails a cognitive error (Heim, 2009), and that pride is normally a reaction associated with confidence in the self (Lea & Webley, 1997). Questions included: ‘sellers tend to believe that they will get a high price for their home even though they know it is over-priced’, and ‘sellers tend to over-price their home because they are confident it will sell at that price’.

The four questions that correlate with pride are listed in Appendix C. Responses in the ‘slightly agree’ to ‘strongly agree’ category range from 66.8 per cent to 77.3 per cent, with all questions answered by nearly 82 per cent of the total respondents: see Appendix C. Therefore, hypothesis 2 is not rejected.

4.10.2.1 Greed moderates pride/Price Virus relationship

Greed has a moderating effect on pride and the Price Virus and reduces the influence and magnitude of the relationship between pride and the Price Virus. Greed actually decreases the effect of pride on the unrealistic price outcome. The measure of -0.15 in Figure 4.8 suggests that when vendors’ greed is high, pride is less of an influence because greed is a stronger factor than the feeling of pride.

The beta value shows a negative value, and hence, should greed is low, the relationship between pride and the Price Virus is stronger. By contrast, pride’s influence on the Price Virus will be enhanced if the vendor is less greedy.
4.10.3 Hypothesis 3

H3: There is a positive and significant relationship between lack of trust and the Price Virus

The third factor tested was lack of trust, which seems to have a positive and significant relationship with the Price Virus ($\beta=0.44$, $p<0.001$). The model fit indices are $ARS=0.195$, $p<0.001$; $APC=0.441$, $p<0.001$; $AFVIF=1.561$. Lack of trust explains 19 per cent in the variance of the Price Virus (Figure 4.9).
Questions were prepared based on the notions that real estate agents are primarily concerned with their own commission and therefore cannot be trusted entirely; and that home sellers do not trust agents, but will tolerate them if they can achieve the highest possible price for the house. Based on the respondents’ answers, the assumption of lack of trust for real estate agents compares accurately with the survey results obtained by Roy Morgan (2013). Real estate agents do indeed seem to fail the trust test with the majority of people. According to the Roy Morgan survey, real estate agents are consistently placed third from bottom in terms of lack of trust of professionals.

Appendix C shows two questions that were used to correspond to lack of trust in the agent. Responses in the categories of ‘slightly agree’ to ‘strongly agree’ show a total of 65.5 per cent of the respondents answered positively to the question ‘agents only care about their commission’, while 74.3 per cent answered positively to the question ‘agents are not trusted’: see Appendix C. All questions answered by all respondents came to a total of approximately 98.2 per cent. The hypothesis 3 is not rejected.

4.10.3.1 Greed moderates lack of trust/Price Virus relationship

Greed has a moderating effect (-0.13) on lack of trust and the Price Virus and reduces the effect of lack of trust on the Price Virus. Vendors’ lack of trust appears to reduce its influence on the Price Virus when greed is high. Similarly, to pride, when vendors’ greed is high, it moderates the influence of lack of trust on the Price Virus. In a case where greed is high, lack of trust does not have such a detrimental effect on the vendor, and thus has a lesser effect on the Price Virus. The question posted in the survey, ‘home sellers do not trust agents, but will put up with them if they can get the highest price for the house’, resulted in 71.1 per cent of the respondents answering in the ‘agree’ categories. Greed, compared to the other factors, achieved the highest beta score of 0.33 in terms of its association with the Price Virus.

However, as witnessed by the value of -0.13 (Figure 4.10), by contrast, when greed is low, lack of trust will increase its influence on the outcome of the Price Virus. Lack of
trust will have a stronger effect by making vendors vigilant when dealing with agents, who will thus be influenced to set a higher price.

**Figure 4.10 Greed moderating effect: lack of trust and the Price Virus**

To summarise, when greed is low, lack of trust in the agent becomes an important factor in vendors seeking to protect themselves, out of fear that the agent may try to sell at a low price for a quick sale, thus leading to the Price Virus. By contrast, when greed is high, lack of trust influences the Price Virus in a negative manner.

**4.10.3.2 Expected negotiation mediates lack of trust/Price Virus**

In Figure 4.11, expected negotiation is shown as a mediator between lack of trust and the Price Virus. Lack of trust has a positive and significant relationship with expected negotiation ($\beta=0.35$, $p<0.01$), and also a significant relationship with the Price Virus ($\beta=0.29$, $p\leq0.01$). The direct correlation between lack of trust and the Price Virus is weaker, reduced from 0.44 to 0.29 due to the mediating effect of expected negotiation. However, the model has stronger variance of 0.40 (Figure 4.11) as compared to 0.19 (Figure 4.9).
Lack of trust thus has a direct effect on the Price Virus and also an indirect influence on the Price Virus through expected negotiation ($\beta=0.47$, $p<0.01$). The model fit indices are $ARS=0.261$, $P<0.001$; $APC=0.372$, $P<0.001$; $AFVIF=1.561$, showing that the model is much stronger when lack of trust is mediated by expected negotiation.

4.10.4 Hypothesis 4

H4: There is a positive and significant relationship between expected negotiation and the Price Virus

In Figure 4.12, expected negotiation is shown to have a strong positive and significant relationship with the Price Virus ($\beta=0.57$, $p<0.001$). Expected negotiation accounts for 32 per cent of the variation in the Price Virus. Some of the model quality indices are $ARS=0.320$, $p<0.001$; $APC=0.566$, $p<0.001$; $AFVIF=1.561$. 

Figure 4.11 PLS regression lack of trust/expect negotiation/Price Virus

![Diagram showing the relationships between Lack of Trust, Expected Negotiation, and Price Virus. The beta coefficients ($\beta$) and $R^2$ values are indicated for each relationship. Significant relationships are marked with ** and $p<0.01$.](diagram.png)
Expected negotiation was measured using three questions that highlight the fact that negotiation involves tension between one person wanting more, which means less for the other (Mnookin, 1993), and that negotiation may lead to bad conduct and greed (Fassin, 2005). Questions included in the survey were: ‘sellers strive to sell their home at a higher value because they consider their own self-interest’, and ‘sellers over-price the home because buyers negotiate lower prices’. The frequency table shows that the majority of respondents chose ‘agree’, indicating that home sellers expect buyers to negotiate.

As shown in Appendix C, the responses to the four questions relating to pride shows that between 87.8 and 92.5 per cent of participants’ answers fell within categories ranging from ‘slightly agree’ to ‘strongly agree’. Expected negotiation had the highest score among the other independent variables in terms of the number of participants answering ‘agree’ to the three questions. The total responses to these questions were approximately 99 per cent. From the data, it can be seen that the vast majority of respondents answered question 19 ‘sellers over-price home as buyers will negotiate for a lower price’, in the affirmative, producing the highest score of 92.5 per cent. Hypothesis H4 postulating that expected negotiation leads to the Price Virus is supported by this data analysis, therefore hypothesis 4 is not rejected.
4.10.4.1 Greed moderates expected negotiation/Price Virus relationship

Greed moderates the relationship between expected negotiation and the Price Virus negatively (Figure 4.13). The results revealed that when the greed construct is high, expected negotiation and the Price Virus are also affected negatively. This explains the finding that when vendors’ greed is extreme, the relationship between expected negotiation and the price virus is not strong. Balot (2001) described greed as an extreme desire to obtain more. The Price Virus is negatively affected by expected negotiation, by contrast when greed is high, the relationship between expected negotiation and the Price Virus will be stronger. Greed is a dominate factor, whether buyers negotiate or not, the focus will be on the desire for a higher price.

Figure 4.13 Greed moderating effect on expected negotiation/Price Virus

![Diagram showing the moderating effect of greed on expected negotiation and Price Virus]

(significant at **p<0.01)

Direct relationship
Moderating effects

It seems that greedy vendors are not concerned about whether buyers will negotiate, and this reduces the degree of correlation between expected negotiation and the Price Virus. When greed is high, the vendors’ attitude is that buyers should not be negotiating, or that it does not matter whether they negotiate or not, and so excessive greed disrupts the positive correlation between expected negotiation and the Price Virus. Buyers’ negotiation will not deter vendors’ insistence on a higher price, and expected negotiation will not intimidate vendors for whom greed is a strong factor.
4.10.4.2 Greed and pride as mediators for expected negotiation/Price Virus

Expected negotiation is fully mediated by the two factors (greed and pride) in relation to the Price Virus. The expected negotiation factor explains 29 per cent of the variability for greed. Expected negotiation also explains 34 per cent of the variability for pride. Expected negotiation has a direct influence ($\beta=0.30$, $\rho<0.01$) as well as an indirect influence on the Price Virus through greed ($\beta=0.39$, $\rho<0.01$). Similarly, expected negotiation also has a direct ($\beta=0.30$, $\rho<0.01$) and an indirect influence on the Price Virus through pride ($\beta=0.14$, $\rho<0.05$).

Expected negotiation is fully mediated by the two factors (greed and pride) to the Price Virus. The expected negotiation factor explains 29 per cent of the variability in Greed. Expected negotiation also explains 12 per cent of the variability in Pride. Expected negotiation has a direct influence ($\beta=0.30$, $\rho<0.01$) as well as an indirect influence on the Price Virus through Greed ($\beta=0.39$, $\rho<0.01$). Similarly, expected negotiation also has a direct ($\beta=0.30$, $\rho<0.01$) and an indirect influence on the Price Virus through Pride ($\beta=0.14$, $\rho<0.05$).
Significant at *p<0.05, **p<0.01

- - - - - Significant relationship
  - - - - Non-significant relationship - deleted relationship

The model fit indices are ARS= 0.261, P<0.001; APC= 0.372, P<0.001; AFVIF=1.561. Due to the mediating effects, the direct effect for expected negotiation was reduced from 0.57 (Figure 4.12) to 0.30 (Figure 4.14). Nevertheless, the total variance explained by the model is stronger, at 0.45.

4.10.5 Hypothesis 5

H5: There is a positive and significant relationship between rarity and the Price Virus

The fifth factor tested was rarity, which seems to have a positive and significant relationship with the Price Virus (β=0.30, p<0.001). The model fit indices are ARS=0.088, p=0.045; APC=0.296, p<0.001; AFVIF=1.561. Rarity explains 9 per cent of the variability in the Price Virus (Figure 4.15) and rarity has a positive and significant influence on the Price Virus. However, as indicated, the influence is very low, as
witnessed by the $R^2$ value of 0.09 (Figure 4.15). The relationship between rarity and the Price Virus is still significant however, and therefore the hypothesis is not rejected.

**Figure 4.15 PLS regression: rarity/Price Virus.**

![PLS Regression Diagram](image)

Significant at **p<0.01

Despite the difficulty in actually comparing other people’s homes to one’s own objectively, the result showed a positive significant between rarity and the Price Virus. For instance, there are challenges such as not having the opportunity to understand the quality of other properties yet conclusions are often determined on a biased basis. The results show that a correlation between rarity and high prices can be established. However, the R-squared value of 0.09 indicates that 91 per cent of other variables affecting the Price Virus.

Rarity was measured using five questions investigating attributes associated with this factor. For example, the perception of scarcity increases the perception of value (Cialdini, 1984) and to command a rarity premium, something must not be freely available at a marginal cost (Stoller, 1984).

Questions included in the survey were: ‘sellers often consider their home to be unique and irreplaceable; therefore, it is worth a higher price’, and ‘sellers think that their home is individualistic; therefore, it is worth more money’. Some elements of the endowment effect were also incorporated into these questions, in order to further investigate the influence of rarity.

Appendix C lists the five questions relating to rarity. The answers from these five questions indicated that between 62.9 and 92.5 per cent of participants’ answers were
within categories ranging from ‘slightly agree’ to ‘strongly agree’. These outcomes, respondents positively identified rarity with sellers. More than 97.8 per cent from the 229 respondents answered these questions.

Mediation effects were also considered in the model, in order to gain a more accurate explanation of the causal effect that rarity has on the Price Virus, and focus on the mechanisms that make this causal chain possible. Rarity has a positive and significant indirect effect on the Price Virus through three different variables: greed, expected negotiation and pride. Rarity influences greed and in turn influences the Price Virus as the strongest among the three variables, as indicated by the value $R^2=0.37$, compared to expected negotiation and pride at 0.34 and 0.14 respectively (see Figure 4.16, 4.17, 4.18).

**Figure 4.16 PLS regression: rarity/greed/Price Virus**

The model fit indices are $ARS=0.238$, $P<0.0010$; $APC=0.336$, $P<0.001$; $AFVIF=1.561$.

![Diagram](Image)

Significant at **p<0.01, *p<0.05

→ Significant relationship

Instead of hypothesising a direct causal relationship between greed and the Price Virus, this mediational model hypothesises that the independent variable rarity influences greed, the mediator variable, which in turn influences the Price Virus, the
dependent variable. Hence, greed, the mediator variable, explains the nature of the relationship between rarity and the Price Virus (Mackinnon, 2008). In this particular model, mediating relationships occur when greed plays an important role in governing the relationship between the other two variables.

In Figure 4.17, similarly with greed, rarity, the independent variable influences expected negotiation, the mediator variable, which in turn influences the Price Virus, the dependent variable. Likewise, the mediating relationships occur when expected negotiation plays an important role in governing the relationship between rarity and the Price Virus. Figure 4.18 also show the mediating variable of pride in relation to rarity and the Price Virus.

**Figure 4.17 PLS regression: rarity/expect negotiation/Price Virus**

The model fit indices are ARS=0.224, P<0.001; APC=0.330, P<0.001; AFVIF=1.561.
Figure 4.18 PLS regression: rarity/pride/Price Virus

The model fit indices are ARS=0.204, P<0.001; APC=0.317, P<0.001; AFVIF=1.561.

![Diagram showing PLS regression: rarity/pride/Price Virus](image)

Significant at **p<0.01

→ Significant relationship

Figure 4.19 shows that when all the mediating variables were tested collectively, the beta value of rarity decreased and became non-significant. The mediating variables were tested because the direct relationship between rarity and the Price Virus had a low R-squared value of 0.09. When rarity is shown to have a direct influence on pride, greed and expected negotiation, it shows a non-significant relationship with the Price Virus.
A direct relationship between rarity and the Price Virus was thus excluded in the final model, because when the other factors were considered, rarity did not appear to be an important factor influencing the Price Virus.

### 4.11 Summary of moderating effects of greed

Because of greed’s functional significance, a summary of its moderating effects is discussed here. By incorporating the moderating effects of greed, the R-squared value was increased considerably to 0.65 in the final model. Moderating effects are most commonly introduced into research analysis when there is an unexpectedly weak relationship between a predictor and a dependent variable. In this study, potential

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**Figure 4.19 Mediating effects on the relationship between rarity and Price Virus**

![Diagram showing the mediating effects on the relationship between rarity and Price Virus.](Diagram.png)

- **Expected Negotiation**: $R^2 = 0.20$
- **Pride**: $R^2 = 0.31$
- **Greed**: $R^2 = 0.32$
- **Price Virus**: $R^2 = 0.32$

- **Significant at $**p≤0.01**
  - Significant relationship
  - Non-significant relationship - deleted relationship

- **Rarity**
  - $\beta=0.52^{**}$
  - $\beta=0.28^{**}$
  - $\beta=0.02$

- **Expected Negotiation**
  - $\beta=0.14^{***}$
  - $\beta=0.16^{**}$
  - $\beta=0.20^{**}$
  - $\beta=0.33^{**}$
moderators such as greed itself, pride, lack of trust, expected negotiation and rarity were examined. These potential moderators were tested to see whether such effects existed, and whether they might strengthen the model.

As indicated in the conceptual model of the five constructs investigated, greed has a meaningful moderating effect on relationships between pride and the Price Virus; between lack of trust and the Price Virus; and between expected negotiation and the Price Virus. However, all of the path coefficients have a negative value.

The moderating effects of greed were considered to be essential to the model. The R-squared value for the dependent variable (Price Virus) increased to 0.64 (Figure 4.20) when greed’s moderating effect was included, showing influence on the direction of the relationship between pride, lack of trust and expected negotiation and the Price Virus.

**Table 4.9 The moderating effect values of greed**

<table>
<thead>
<tr>
<th>Higher Greed is associated with:</th>
<th>Path Coefficient = (-0.15) p&lt;0.01 Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) a lower relationship between pride and Price Virus</td>
<td></td>
</tr>
<tr>
<td>b) a lower relationship between lack of trust and Price Virus</td>
<td>Path Coefficient = (-0.13) p=0.02 Significant</td>
</tr>
<tr>
<td>c) a lower relationship between expected negotiation and Price Virus</td>
<td>Path Coefficient = (-0.20) p&lt;0.01 Significant</td>
</tr>
</tbody>
</table>

Greed is deemed to influence the relationships between these variables and the Price Virus, but negatively. When vendors are greedy, the relationship between these three variables (pride, lack of trust and expected negotiation) and the Price Virus is weaker. This suggests that greed is a powerful factor, and that when vendor greed is excessive, it seems to reduce the strength of the relationship between these variables and the Price Virus.
Based on observations, independent variables’ relationship is affected by another independent variable. Hence, the moderator variable of greed affects the direction of the relationship between the predictors and Price Virus and changes the influence of the three predictors (Table 4.9). The model fit indices are ARS=0.637, p<0.001; APC=0.208, p<0.001; AFVIF=1.698.

4.12 Study framework/model: results

In this analysis, the outcomes are analysed not only in relation to the direct effects that appeared in the hypotheses (shown in Figure 4.21) but also in terms of the moderating effects that occur between measurements through the moderating variable.
The analysis was conducted using the statistical software package WarpPLS 5.0, which was deemed appropriate because of its capacity to detect any non-linear relationships that may exist in a hypothesised relationship. All hypotheses proposed in this study were supported. The independent variables of greed, pride, lack of trust and expected negotiation were all shown to link to the Price Virus, with rarity being shown to be the exception following composite analysis. Even though there is a positive relationship
between rarity and the Price Virus, as tested in hypothesis 5, when the overall effects of all factors were integrated into the model, rarity was shown to have a non-significant relationship with the Price Virus.

Using the WarpPLS software, greed is shown to have a moderating effect, while expected negotiation, greed and pride were identified to be mediators. In the model, the R-squared value shows the degree to which one variable can explain another variable. Pride has an $R^2$ of .31, expected negotiation has an $R^2$ of .20 and greed has an $R^2$ of .32 respectively. The result shows that 65 per cent ($R^2 = .65$) of the price virus can be explained by pride, rarity (indirect effect), expected negotiation, greed, and lack of trust. It also shows that 20 per cent ($R^2 = 0.20$) of expected negotiation can be explained by lack of trust and rarity. The model thus explains significant variation in the expected negotiation ($R^2 = 0.20$) construct. Rarity and expected negotiation can explain a variation of 0.31 for the pride construct. Thirty one per cent of the total variation for the pride construct is explained by the feeling of rarity, and expected negotiation by buyers. Rarity and expected negotiation also explain 0.32 of variation for the greed construct.

The R-squared values are acceptable and are greater than 0.2. In the hypothesis testing, the regression coefficient is a beta value. Based on these evaluations, the following subsection includes a composite analysis of the model: see Figure 4.21. Even though the mediator and the moderator are the same in some of the relationships (e.g. greed), according to Baron and Kenny (1986), this is acceptable and the results validate the model.

4.13 Assessment of hypotheses

The WarpPLS software was used to measure and translate the outcomes of the hypothesis testing. The initial stage in the interpretation process was an assessment of the data-quality outputs to ensure they were appropriate. Findings from each phase of the study provided insights into the influence of the various emotional components affecting high price (Price Virus) and thus contributed to answering the fundamental
research question. Once the validity of the structural model was verified, the path of the proposed structural model was measured. Figure 4.21 presents the structural model and the analytical outcomes. Each path corresponds to one of the proposed hypotheses in this study. Testing of each hypothesis was achieved by observing the statistical significance of the path coefficient (β) between the latent variable and its dependent variable. All the proposed relationships except rarity showed significance at p<0.01 and p≤ 0.05.

Table 4.10 illustrates the proposed hypotheses and their results, and whether the results show a relationship with the Price Virus. As indicated, all the hypotheses except H5 are supported in this composite analysis.

**Table 4.10 Structural Model Results**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Beta Value (β)</th>
<th>Results</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: There is a positive and significant relationship between greed and the Price Virus</td>
<td>β=0.33**</td>
<td>Positive Relationship</td>
<td>Yes</td>
</tr>
<tr>
<td>H2: There is a positive and significant relationship between pride and the Price Virus</td>
<td>β=0.16**</td>
<td>Positive Relationship (weak)</td>
<td>Yes</td>
</tr>
<tr>
<td>H3: There is a positive and significant relationship between lack of trust and the Price Virus</td>
<td>β=0.22**</td>
<td>Positive Relationship</td>
<td>Yes</td>
</tr>
<tr>
<td>H4: There is a positive and significant relationship between expected negotiation and the Price Virus</td>
<td>β=0.20**</td>
<td>Positive Relationship</td>
<td>Yes</td>
</tr>
<tr>
<td>H5: There is a positive and significant relationship between rarity and the Price Virus</td>
<td>β=0.02NS</td>
<td>No Direct Relationship</td>
<td>No</td>
</tr>
</tbody>
</table>

Significant at **p<0.01; NS= not statistically significant.

According to the model, greed, pride and expected negotiation achieve full mediation for rarity, since rarity has no significant path to the Price Virus after analysis. Hence, rarity has no direct effect on the Price Virus, but did achieve full mediation influence
on the Price Virus through the other three variables. By incorporating greed’s moderating effects into the final model, the total variance of the model increased from 0.50 to 0.65. The results are identified to be meaningful.

4.14 Recommended research model

The model was confirmed to be a feasible model, given that the dependant variable is explained by the independent variables. After the final analysis, the model had to be adjusted slightly, given that rarity has no direct association with unrealistic price, but was still important due to its full mediation influence on other direct variables. Baron and Kenny (1986) laid out several requirements that must be met to establish a true mediation relationship. Firstly, the independent variable must be a significant predictor of the mediator. Secondly, the regression on the dependent variable by both the mediator and independent variable must confirm that the mediator is a significant predictor of the dependent variable. Finally, it must be demonstrated that when the mediator and the independent variable are used simultaneously to predict the dependent variable, the previously significant path between the independent and dependent variable is now greatly reduced, or even non-significant. After mediation relationships were established between the various variables, rarity was the only variable that showed a non-significant path.

The observed relationship between rarity and the Price Virus can be identified through the inclusion of three explanatory variables. Rather than hypothesising a direct causal relationship between rarity and the Price Virus, a mediational model hypothesises that rarity influences the mediator variables (greed, pride and expected negotiation), which in turn influence the Price Virus. Therefore, greed, pride and expected negotiation play an important role in governing the relationship between rarity and the Price Virus.
Figure 4.22 shows the final model after the hypotheses had been analysed and interpreted. The model is unchanged except that, after the final analysis, one variable (rarity) was shown not to have a direct influence on the Price Virus. Greed, pride, lack of trust and expected negotiation were verified to have a positive and significant relationship with the Price Virus. All the variables in the model thus influence the unrealistic high price either directly and indirectly.

4.15 Conclusion

As discussed previously, the majority of the 229 respondents gave answers in the ‘slightly agree’ to ‘strongly agree’ categories, indicating that the majority of the respondents were inclined to agree that home owners do positively relate to the questions, thus giving relevance to the constructs. Questions relating to home sellers
having an inflated price for their homes were also frequently answered by the respondents. This is in line with feedback obtained from the questionnaire data collected from the Fairfax websites, which provide an indication that the existence of the high price syndrome being investigated can be confirmed. Secondary data from REIWA also revealed that 70 per cent of home sellers did not achieve the price they wanted, which also substantiates the notion that there is a gap between selling and buying price.

Based on results from the responses, a statistical analysis was performed to determine the relationships between the independent variables and the dependent variable and a set of propositions was established to test whether to reject the hypotheses or not. The partial least square (PLS) approach using WarpPLS version 5.0 software was used to analyse the empirical data. WarpPLS 5.0 uses the PLS method based on the SEM technique (PLS-SEM). The findings of this data were used to test the hypothesised relationship between the five constructs and the Price Virus proposed in the theoretical model.

This chapter has presented and examined the data collected and considered the statistical results of the multivariate analysis. The main objective was to report the results after using SPSS and WarpPLS 5.0 statistical analytical software to determine the answers to the research questions. The study confirms the results of the Price Virus study and supports the notion that emotional factors play a role in producing unrealistic high price among vendors.

The research question outlined in Chapter One has thus been answered and the purpose of this study achieved through the results obtained. It was not expected that the rarity construct, on which a great deal of emphasis had been placed, would be shown not to have a direct influence on the Price Virus. However, the study has demonstrated that rarity was mediated by three of the constructs, which have positive and direct influences on the dependent variable. In the next chapter further measurements which were applied to this data to assess the applicability of the Price Virus model will be discussed.
CHAPTER 5
DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

In this study, results of findings were collected and analysed. The outcomes for the statistical investigation of the data and hypotheses were discussed and interpreted with reference to the literature in Chapter Four. The objective of the project was to examine the influence of greed, pride, lack of trust, expected negotiation and rarity on unrealistic high prices set by home sellers. The study investigates the complex and subjective emotional elements that influence home sellers to arrive at unrealistic selling price.

This chapter includes a discussion of the importance of the research and its shortcomings. In summing up, this chapter discusses the implications based on the empirical study’s research findings. The discussion in this chapter is designed around the five research hypotheses as follows.

5.1 The research question

This study was designed in accordance with the research question, and involved focussing on specific emotions which influence vendors to determine a higher price. Human emotions tends to be biased and personal, and therefore may interfere with people’s capacity to objectively predict outcomes. Similar situations may generate diverse emotions in different individuals, with the same individual experiencing different emotions at different times in response to the same stimuli (Fellous, 2007). The conclusions are based on the empirical research findings. This study was based on a representative sample of anonymous respondents (N=229) who participated in the survey. The final model should be useful real estate industry, and thus the purpose of the study has been achieved.
5.2 Contribution to knowledge

The model makes a contribution in the field of price perception within the real estate industry, in which vendors’ perceived prices are influenced by their emotions. It is possible that the findings will improve awareness for real estate agents of how and why vendors determine the value of their homes, as well as helping them to see how to address the issue of unrealistic high prices caused by emotional attachment to the home.

There is no similar research published that has investigated the emotions of greed, pride, lack of trust, expected negotiation and rarity influencing decision making in the real estate industry. Specifically, the emotion of greed and its strong impact on financial decision making in the real estate industry is an original contribution.

Vendors are currently lacking in trust towards agents, and 65.5 per cent of respondents agreed with the statement that agents ‘only care about their commission’. Although this may not always be true, negative vendor perception may be detrimental to the vendor-agent working relationship. Achieving a better understanding of the various emotions which influence price perception is vital for both the agent and the vendor. Through a better understanding of these emotional influences, vendors may be able to make decisions based more on rational and logical principles, and be more conscious of the emotions of greed, pride, lack of trust, expected negotiation and rarity when determining their selling price.

‘According to the Property Council of Australia, property is now Australia’s biggest industry’ (Bleby, 2015, para. 2). The industry, including property-related financial, professional and construction services, contributed $182.5 billion to the economy last financial year – 11.5 per cent of GDP – compared with the $147.1 billion value of home ownership and the $140.9 billion mining industry, according to research commissioned for the Property Council of Australia by consultancy AEC Group’ (as cited in Bleby, 2015, para. 2). The total value of real estate in Australia was $4.54 trillion in 2011 (RP Data, 2012a), thus representing an enormous contribution to the economy. The pricing discrepancy between the saleable price and the unrealistic high price can lengthen the
sale process, thus creating a waste of resources and time which can actually be measured. If agents and vendors became more conscious of the emotions discussed in the model, and how they can lead to irrational decisions (Sutherland, 1992), then perhaps the price gap could be reduced, thus leading to a shorter average selling time, thus leading to higher revenue (Das, 2015). However, it remains to be seen whether vendors will accept such findings.

5.3 Discussion and interpretations of results

WarpPLs software was used to measure and translate the outcomes of the hypothesis testing. The initial stage in the interpretation process was an assessment of data quality outputs, to confirm they were appropriate. Findings from each phase of the study provided insights into the influence of the various emotional components on high price, thus highlighting their connection to the fundamental research question.

‘Every home is unique’ is an often quoted real estate axiom which highlights the difficulty of determining the precise value of a home, especially given how rarely houses are sold by their owners (Melser, 2013). The gap between asking price and buying price is frequently discussed in the literature, and many general claims have been made about the price gap and what can be inferred from it (Plott & Zeiler, 2005). These studies highlight how these difficulties in determining a reasonable price for a home are further complicated by the fact that vendors’ perception of value is influenced largely by emotional factors. Appraisal theory (Smith and Lazarus’s cognitive-motivational-emotive system model), the theory of planned behaviour (TPB), goal framing theory/goal directed behaviour model, and the endowment effect all suggest that information, emotion, experience, and perception influence our responses to making choices.

Appraisal theory states that emotions derive from our evaluations or appraisals of events which cause precise reactions. Basically, vendors’ appraisal of the home selling situation is influenced by emotional or affective responses. When an agent appraises the home at higher than the average market price, the vendor experiences this as
positive, and may anticipate a positive long-term effect, for example, by making a profit through the sale. By contrast, if the appraisal is low, and is perceived negatively, then emotions like fear or unhappiness may come into play instead. Appraisal theory thus explains and predicts coping mechanisms and people’s patterns of emotionality. The Price Virus model suggests that one way in which vendors manage the situation is by setting an unrealistic high price, in response to their fear they may make a loss.

The theory of planned behaviour (TPB) links beliefs and behaviour. According to this theory, attitudes toward behaviour, subjective norms and perceived behavioural controls collectively influence an individual’s behavioural intentions and behaviours. TPB’s concept of perceived behavioural control is distinct from self-efficacy theory (SET) (Tolma, Reininger, Evans & Ureda, 2006) which was originally proposed by Bandura (1977), who argued that self-efficacy is the conviction that one can successfully execute the behaviour required to achieve a certain outcome. In our case, the outcome expectancy refers to a vendor’s belief that a given behaviour will lead to certain outcomes, namely, obtaining the highest possible price from the sale. Bandura (1977) argued that self-efficacy is the most important precondition for behavioural change, since it determines the initiation of coping behaviour.

According to Montier (2010, p. 194) ‘the endowment effect purports that once you own something you start to place a higher value on it than others would.’ Endowment effect relates to the hypothesis that people value a great deal more to their possessions. The endowment effect clearly encourages vendors to want more money from the sale. These theories support the research model of the thesis. These theories take into account beliefs, self-efficacy, intentions, motivations, behaviour and emotions associated with ownership, which may bring about high selling price.

5.3.1 Direct positive relationship between greed and Price Virus

Greed appears to be a core and significant influence on the price increase tendencies. According to Levine (2013), greed can never be satisfied, and any attempt to understand this emotion is bound to fail. In contrast, greed can teach some people to be more balanced and not necessary that greed can never be satisfied. There are
known millionaires who gave away their fortunes to help the less fortunate ( Stranger, 2015 ). Rather, it is suggested some people may never learn how to control and regulate greed tendencies.

Greenfeld (2001) argues that greed is a motivator for economic growth, in the sense that the maximisation of profit by economic actors can be seen as enhancing the economy. Wachtel (2003) has suggested that greed is an engine of social progress and a form of enlightened self-interest which is also based on a form of self-deception, and which obscures key issues through a single-minded focus on material wealth. This may be the reason why the majority of vendors propose an unrealistic high price for their homes. Wachtel further suggests an association between greed and the desire for money, so that the Price Virus can be seen as central to the present study. Greed is a strong influence to increase price as found in this thesis.

Childs (2000) identifies three related dimensions of human greed: desire for goods and wealth, money, and greed itself. He also argues that excessive greed manifests itself in its extreme form in a disproportionate concern with self and enlarged self-perception. Childs’ definition of greed is supported by Belk’s notion (1988) of the effects of ‘self’, the unrealistic price model is developed through the emotion of lessening of ‘self’ if one loses something, hence asking for more than the lost object’s actual value to compensate the loss. Seuntjens et al. (2015) states that greed is disconnected from any concern about the wellbeing of others, because people only focus on their own need to acquire more. Greed is a human universal expression of wanting more tangible goods and satisfaction relating to our sensory drive. Greed is related or manifested in the desire of material possession, such as tangible goods, money and food. The sensory needs create desires in the greed feelings. This research’s findings show that greed definitely influences high price and that vendors tend to be greedy.

5.3.2 Direct positive relationship between pride and Price Virus

The results show pride has a direct influence on the Price Virus. Williams and DeSteno (2008) illustrated that the feeling of pride motivates vendors to achieve a higher price, even though they know their home is over-priced; this is due to the motivation and/or
incentive to pursue success. Most people view themselves in a significantly more positive light than reality can sustain (Taylor, 1989; Taylor & Brown, 1988). People tend to perceive themselves as being better than others on desirable attributes (Gabriel, Critelli, & Ee, 1994; Messick, Bloom, Boldizar, & Samuelson, 1985; Svenson, 1981) and have unrealistically positive self-evaluations (Brown, 1986). Based on several empirical studies, pride has been classified as a “human universal” (Brown, 1991) and has recently been shown to have a cross-culturally recognised nonverbal expression (Tracy & Robin, 2007); and it is likely that it is an evolved functional emotion (Tracy & Robin, 2007). Being a functional emotion, pride can elevate a person’s feeling of worth and consequently influenced to chase the high price.

These attributes mentioned above directly link to pride and are seen to be credible persuasions to the high price and supports the hypothesis that pride does contribute to the high price. From the findings, pride’s relationship with the high price is also influenced by greed in a negative way. Pride of ownership of the home is less influential to the high price when greed is abundance. It suggests pride doesn’t really matter as long as there is more money in the sale. Essentially if vendors can obtain more money for the sale, it doesn’t affect what is being said about the house and pride is not influential by any negative comments to influence the high price. The perceived high price is already established by the feeling of greed.

5.3.3 Direct positive relationship between lack of trust and Price Virus

Lack of trust motivates the vendor to seek a higher price out of self-protection, in case the agent tries to undersell the property. Distrust is a common reaction to threats such as increased uncertainty (Flynn, Slovic & Kunreuther, 2001), and may be a reaction to manipulative sales tactics (Brown & Krishna, 2004; Campbell & Kirmani, 2000). Agents are perceived to only pursue their own interest and their commission. The framing effect articulated in goal framing theory highlights reasoning bias, for example, in the way vendors may react to a particular choice in different ways, depending on whether it is perceived to lead to loss or gain (Plous, 1993). In this study, gain and loss are described as consequences, for instance in the case of financial loss if the agent sells the property for less to achieve a quick sale. According to the framing effect, lack of
trust could influence the Price Virus, in a scenario where vendors decide to set a high selling price in case the agent does not act in their best interests. Hence, lack of trust leads to self-protecting behaviour, and leads to an increase in the selling price, to avoid a low price.

The model also showed that lack of trust has a direct influence on expected negotiation. Due to their lack of trust in real estate agents, vendors believe agents will not act in their best interests, and expect that buyers will try to negotiate a lower price. Lack of trust thus influences vendors to expect buyers to negotiate, which in turn motivates behaviour leading to high price.

The relationship between lack of trust and high price is also influenced by greed. When greed is high, the relationship between lack of trust and the Price Virus is weaker and vendors’ lack of trust in the agent is not a factor which influences them to seek a high price. When greed is high, lack of trust is not significant, because the Price Virus has already been activated by greed.

5.3.4 Direct positive relationship between expected negotiation and the Price Virus

Statistical measurements support Hypothesis H4 that expected negotiation leads to the Price Virus. Numerous researchers (Bounds, 1996; Fujimoto, 1999; Humphreys, Shiu and Chan, 2001; Nishiguchi, 1994; Nishiguchi & Beaudet, 1998) have described a characteristic pattern of buyer behaviour which they term power-based bargaining, which leads to ongoing conflict between buyers and sellers, where sellers try to sell at the highest price and buyers try to buy at the lowest (Neslin & Greenhalgh, 1983). Negotiation is expected in any buying and selling process (Thompson & Hastie, 1990), but negotiators’ impartiality judgments are not purely objective (Bazerman, Baron & Shonk, 2002) and both parties tend to overemphasise views which favour themselves, thus resulting in a motivational bias (Babcock & Loewenstein, 1997; Diekmann, 1997).

In such circumstances, vendors expect purchasers to negotiate over price, and therefore instinctively raise the price level.
The research findings confirm that expected negotiation has a direct and indirect influence on the Price Virus, and that greed also influences the relationship between expected negotiation and high price (Figure 5.1). When greed is high, vendors are unaffected by the expectation that buyers will negotiate, because they simply maintain their own desired price. Since high price has already been established by greed, it will not be affected by expected negotiation.

**Figure 5.1 Direct and indirect influence**

Direct relationship
Moderation effect

Conversely, motivational biases associated with expected negotiation positively influence greed (Ramaprasad, 2013). Although greed influences the relationship between expected negotiation and the Price Virus, expected negotiation also has a direct influence on greed. According to the analysis, when the vendor puts their house on the market, they will expect negotiations by prospective buyers, and thus be inclined to highlight only facts which favour their own case. The preferred outcome is higher price, and this desire can be interpreted as greed (Balot, 2001; Wachtel, 2003; Childs, 2003; Diamond, 2012), or a sense of being competitive, and wanting to achieve a better negotiated financial outcome than the buyer’s offer (Kiyosaki & Lechter, 2001). According to this finding, expected negotiation has a direct influence on greed, because when vendors anticipate buyers will try to negotiate the price downwards, they become greedy, and react defensively, fearful that they may lose money.
Therefore, expected negotiation influences greed, and greed subsequently influences unrealistic high price.

Expected negotiation also has a direct influence on pride. One of the major subjects emerging from the literature is that negotiators are prone to a variety of judgment biases that may adversely affect process and outcome (Neale & Bazerman, 1991; Thompson & Hastie, 1990). The model also reveals that when vendors expect buyers to negotiate over price, this leads to a pride reaction. As discussed, vendors’ pride can be understood as self-confidence in maintaining the perceived higher value in the face of expectation that buyers will negotiate. Pride is positively influenced by expected negotiation, in the sense that pride is present in vendors prior to the negotiation process, and is associated with self-esteem, which is linked to accomplishment and confidence (Carver et al., 2010). Why is pride activated in the negotiation phase?

When negotiations favour the buyer, the vendor’s pride is hurt by the suggestion that their home is not worth the asking price, and is not as good as the vendor perceived it to be. Expected negotiation thus influences pride, and pride leads to an increase in the selling price, to forestall potential financial loss. Conversely, if negotiations favour the vendor, pride also sets in as self-esteem is elevated. However, this scenario seems unlikely, since according to REIWA statistics (2012), the majority of vendors do not achieve the price they asked for. The hypothesis that expected negotiation has a direct influence on pride and the Price Virus was confirmed in the study, while greed was shown to mediate a negative correlation between expected negotiation and the Price Virus.

5.3.5 No direct relationship between rarity and the Price Virus

The research analysis shows that there were no direct correlations between rarity and the Price Virus. While other factors such as greed, expected negotiation and pride acts as mediators between rarity and the high selling price, rarity does not appear to be an important factor influencing the selling price. Although the study proposes a positive relationship in the original hypothesis about rarity, the results found no evidence for the direct influence of rarity on high price, only an indirect influence in which rarity is fully enhanced by intermediate variables such as pride, greed and expected
negotiation. Rarity thus plays a significant role within the Price Virus model in the sense that it is fully mediated by pride, greed and expected negotiation (Figure 5.2).

**Figure 5.2 Indirect influence between rarity and the Price Virus**

Rarity’s direct influence on greed relates to vendors’ feeling that their home is rare and extraordinary, which leads them to seek a higher price. Rarity tends to optimise value, thus encouraging the greed factor in vendors. The perceived value of the home will also increase as the feeling of rarity affects emotions of ownership, influences greed and leads to a high listing price, or the Price Virus.

When vendors are affected by a feeling of the rarity of their home, this stimulates feelings of pride and subsequently influences the Price Virus. Feelings of pride manifest themselves when vendors feel their home is unique and not widely available. Vendors influenced by feelings of rarity also tend to have a perception that when something is rare, one should not negotiate, but rather pay the asking price. However, the results show instead that even when a perception of rarity exists, vendors will still expect negotiation. Cohen (1982) states that ‘people can negotiate anything.’ The reason people negotiate is to achieve better results than those which can be obtained without negotiation (Fisher, Roger, Ury & Patton, 1987), even though an item may be deemed rare. Hence, vendors who have perceptions of the rarity of their homes will still expect buyers to negotiate.
5.4 Conclusion

The study has reviewed patterns of emotion leading to behaviour that influence home sellers’ decision-making and how these emotions have a direct impact on home sellers, and are manipulated by them in deriving a high selling price. This empirical research study was carried out to explore the factors which influence the Price Virus, and investigate the inter-relationships between these factors. These factors may have a positive or negative association with particular emotions. Therefore, further two relationships are established amongst some of the factors in this study through moderating effect and mediating. For example, greed moderates the relationships between other emotions such as pride, lack of trust and expected negotiation, and the Price Virus.

This empirical research study was carried out to explore the factors which influence the Price Virus, and how some relationships between the variables are themselves affected by influences from other variables, depending on whether they are positively or negatively associated with a particular emotion. An example is the way in which greed moderates the relationships between other emotions such as pride, lack of trust and expected negotiation in relation to the Price Virus.

To understand consumer behaviour in the real estate industry in relation to the selling process, one must examine the emotional attachment people have to their homes. This study thus examined emotional attachment to the home and the effect this has on how they value their homes. The literature highlights the way in which our possessions may be used to reflect identity. This relationship between possessions and sense of self relates to consumer behaviour, which is linked to preferences, biases, and acts of self-preservation and our social existence as human beings (Belk, 1998).

According to Bargh and Chartrand (1999), most human behaviour is not based on conscious cognition, but is automatic, and is processed only in the limbic system (which deals with emotion, behaviour and motivation), rather than in the prefrontal cortex (which deals with planning complex cognitive behaviour, personality expression
and moderation of social behaviour). According to Brunnermeier and Jonathan (2005), when the stakes are high, as in selling a house, people are motivated to regulate contradictory biases, and tend not to be objective in their decision-making process.

The findings in this study confirm connections between the various emotional factors and the Price Virus. Even though, in the final analysis, perceived rarity was found not to have a direct influence, it was mediated by most of the other independent variables linked to the Price Virus, confirming that it is still relevant. In terms of the other constructs and their relationships with the Price Virus, the overall findings indicate that the proposed model explains how these emotional factors contribute to the formation of an unrealistic high selling price, which ultimately motivates the decision to list the property at above the market value (Figure 5.3).

Figure 5.3 Factors causing unrealistic high selling price

Greed has the greatest effect on home sellers. When vendors expect buyers to negotiate, this also influences greed, and inevitably lead to an unrealistic high selling price. Hence, greed is deemed to be the strongest influence on unrealistic high price. This research investigation contributes to explaining the gap between home seller asking price and buying price, thus providing future researchers with a model which can be expanded to further examine the influences of various emotional factors. Understanding the process of decision-making which leads to the selling price is vital. The study results have the potential to provide a better understanding of how real estate agents can do business with home sellers with the awareness that greed is the main motivating element in the sale.
The study shows that the five factors in the proposed model (greed, pride, lack of trust, expected negotiation, and rarity) can explain why certain types of behaviour occur when vendors sell their homes. Emotions and motivations may influence vendors to desire better financial outcomes, or may motivate home owners to act out of self-preservation, to forestall possible loss by seeking a higher asking price. To address this issue, real estate agents may therefore need to pay more attention to developing strategies which will help them gain acceptance and cooperation from sellers at an early stage (Lazer, Murata & Kosaka, 1985).

5.5 Recommendations for the industry

The urge for a higher price is not likely to disappear from the human emotional landscape, but it may vary according to different individuals. The findings show that the desire to want more money is influenced by particular emotions, and this is an important conclusion which should not be ignored, particularly by members of the real estate industry. The Price Virus causes the gap between the selling and the buying price, which is likely to prolong the selling process. Since this will make the real estate industry less productive, it is a problem which needs to be addressed.

If the price gap between actual market price and unrealistic seller price were smaller, productivity in the industry would improve through faster sales turnover (Das, 2015), and might also help to create a better working relationship between agents and vendors. Better pricing execution can help generate better financial outcomes from these generally more uncertain initiatives (Davidson & Simonetto, 2005, p. 8).

In having a better perception of the Price Virus, real estate agents should focus on understanding the sale process from a seller’s perspective. The agent should make available comparative market analysis that serve as a reliable appraisal of the home’s value for pricing centred on comparable sales in the neighbourhood, the condition of the property, and the market condition at the time of the estimate. Even though vendors may not favour the report should the price fall below expectation due to the
Price Virus, agents should persistently present new sales transactions that are below vendor’s asking price to counter the influences leading to the unrealistic price. The process of conditioning vendors’ behaviour is vital to closing the gap. Agents are known not to write offers that are below the asking price which is detrimental in trying to convince the vendor that the price is unrealistic. All offers below vendors’ expectation should be written and presented so that over time the saleable price sinks in.

Greed has the strongest influence on the Price Virus. To counteract the effects of greed and/or the other emotions discussed in this study, the researcher suggests introducing a more objective view into the process to undermine the effect of such emotions. The researcher also recommends that instead of merely appraising the property using past sales records, real estate agents should consider using a summation method where the cost of the land and the cost of replacing the building are applied in order to arrive at a selling price. This may encourage the vendor to assess value based on facts, namely, the practical replacement value of the property, rather than comparative sales data. Appraising property values using past records can be a flawed process if approached from too broad a perspective, and may ignore the fact that each home may have different attributes.

The summation method would of course require real estate agents to equip themselves with knowledge of construction and the skills to evaluate the type of building materials and systems that would be needed to build a similar property. By presenting data on the replacement cost of the house to vendors, the agent may be able to help vendors understand and accept a more rational valuation of their property. This approach would require further research to substantiate whether vendors would be receptive to the summation method, and whether it may produce more rational price perceptions in relation to the home, and thus counteract the Price Virus. However, greed is still likely to maintain a very strong influence over home sellers.
5.6 Recommendations for future research

The analysis of the findings and discussion of the application of these findings aims to highlight how home vendors subjectively rationalise the valuation of their homes. The findings of the study did not substantiate the expectation that rarity would be a significant factor influencing unrealistic price, since no direct link to the Price Virus was confirmed in the final results. It is recommended that any further research exploring rarity in relation to the Price Virus among home sellers should be conducted using interviews, in order to obtain further insights through qualitative research methods. Further research on the feeling of rarity could be examined whether it correlates only with designer and expensive homes, and not cheaper homes.

The feeling of typicality was not tested in this study, since most previous research findings suggest rarity is more likely to influence the Price Virus. However, there may be a significant number of vendors who feel their home is not rare, but rather typical, and if people are influenced by this typicality effect, there is a possibility to explain why no direct relationship between rarity and Price Virus was established. Apart from the typicality effect, further research should also explore the probability that there may be other factors affecting rarity such as cultural values, perceptions, designs, locations, community services and natural attractions.

Levy and Schuck (2005) have raised the interesting point that vendors may tend to influence agents to overvalue their houses, and some findings support the notion that sellers may be able to manipulate agents into overvaluing prices (Levy & Schuck, 2005; Park, Bahng & Park, 2010). In this case, vendors seek to direct agents to comply with their requests. In order to get the business, the agent may appease them by complying with the vendor price. Clearly, this differs from the view that vendors are being influenced by agents, but instead they appraise their house higher than market price on their own accord. Levy and Schuck suggest that sellers possess not only the motivation, but also the ability to influence appraisal outcomes, and in their view, the appraisal process is managed to a larger degree by the sellers, who exercise their influence over the agents (Park et al., 2010). If vendors require agents to implement their desired price, then lack of trust will have no effect on the Price Virus, since it will
be a self-imposed decision influenced by other factors. The essence of the real estate business is that vendors set an asking price, and this sets the benchmark for what they want, in a rational manner. Further research is also recommended in this particular area.

The other concept for consideration in this area is the conceptual overlap with optimism. Self-mastery is the perception that one can control events in one’s life (Pearlin & Schooler, 1978). Self-mastery and/or optimism seem to integrate a strong sense of positive expectation in relation to the future. People tend to have more confidence about achieving their goals and will also strive harder to achieve them when self-esteem is at higher aspiration levels (Kramer et al., 1993). Research findings suggest that people’s behaviour is strongly influenced by their confidence in their ability to perform specific behaviours (Bandura et al., 1980). SET explains various relationships between beliefs, attitudes and intentions, which link to influences that can lead to high price. The desire for maximum sale price leads to a decision that the asking price should be as high as possible. The goal framing theory/goal directed behaviour model similarly suggests that vendors’ desires create a direct motivation for their intentions, and then transform the motivational content of behaviour (Perugini & Bagazzi, 2001). When selling, vendors thus desire a high price for their home and activate this intention by proposing a high asking price.

Self-esteem thus shares some common ground with optimism, although in a more diffuse manner, yet the two constructs are conceptually linked (Scheier, Carver & Bridges, 1994). Another major topic emerging from research is that negotiators are prone to a variety of judgment biases that can adversely affect the negotiation process and outcome (Neale & Bazerman, 1991; Thompson & Hastie, 1990). Optimism, confidence and judgment biases could also be considered in future research, to determine whether they are influencing factors for the Price Virus.

Whether the Price Virus is caused by expected negotiation or simply greed, higher price is a key factor in the buying and selling of houses that must be considered. Thomson & Hastie (1990) show that negotiating parties often lack the information and ability to perform a full, accurate, rational analysis of negotiation situations, and
consequently may have perceptions which differ greatly from objective economic analyses. In other words, vendors may simply raise prices based on their own imperfect knowledge, without fully understanding the price norms of similar properties to their own. If this is the case, the Price Virus may be influenced not by emotions, but simply by ignorance on the part of the vendors. Thus, further investigation is recommended to study whether vendors are not so much affected by emotions in relation to the high unrealistic price, but instead are simply ill-informed.

Greed relates to the Price Virus through vendors’ self-interest and their focus on gaining more wealth from the sale Wachtel (2003) has discussed how greedy consumers (in this case the house vendors) may behave in ways which are morally reprehensible, and are also unlikely to be able to achieve genuine contentment or satisfaction. The greed factor (one of the main influencing emotions) is often concealed to avoid being seen as narcissistic (Morrison, 2014), yet it is important that real estate agents are aware of its role. Narcissism even though is seen as an element found in greed and pride, further research on narcissism itself can suggest whether it influences high price with vendors.

Home sellers would normally want to sell their property for an amount at least equal to its market value or more, unless the seller has constraints and is prepared to accept a lower price to achieve a faster sale (Forgey, Rutherford & Springer, 1996). The housing search model shows that home sellers who are induced to sell quickly will set a lower listing price, have a lower reserve price and accept earlier and lower offers (Glower, Haurin & Hendershott, 1998). This is because they have no choice if financial institutions recall their loan, or if they have other pressing financial needs. There were restrictions in this study in terms of questions relating to personal financial information. According to Gilovich, Savitsky and Medvec (1998), people also act as though others can easily understand their feelings in social interactions, even though it is often difficult for others to surmise a person's true feelings, according to a psychological principle termed ‘the illusion of transparency’. According to the findings of Glower et al., (1998), anxious or desperate sellers will tend to set a lower selling price. It is anticipated that some respondents to the questionnaire may fall within this
category. Whether desperate vendors have a significant relationship with the Price Virus could also be tested in future research.

Buyers’ lack of trust in real estate agents is not part of the scope of this study and it could be investigated for future studies. Buyers’ lack of trust in agents may influence them to offer lower than expected prices which may influence the intensity of expected negotiations with vendors.

There are numerous areas recommended for future research which could investigate and expand on the current model or generate new models in relation to rarity, optimism or other relevant constructs. Such research could enhance the overall model, and provide a contrast between the outcomes of some inter-model evaluations using different methodological tools.

5.7 Limitations of the research

When a survey is conducted, it is often implied that its supervision is conducted anonymously. Being an anonymous survey, no names were recorded so participants’ answers cannot be tracked back to confirm the information provided. While this type of method may help to protect individual identities, the method is not without shortcomings. For example, it is impossible to identify who has completed the survey and who has not and there are no means to regulate which responses are duplicates and thus, replica submissions could have been presented. Another challenge that is more difficult to identify and solve is bias. When respondents are biased, they may not truthfully address the information the survey is trying to capture. In this case, respondents may methodically increase or decrease their assessments.

The internet is undoubtedly the quickest and most inexpensive way of collecting data, but it has the key weakness of making it impossible to tell whether a respondent is answering the questions truthfully. Personal face-to-face discussions are the most time-consuming method, but in some ways provide the highest achievable quality outcomes (Bradley, 2010).
We rely on affect and emotion for a quicker, easier, and more efficient way of navigating a complex and uncertain world (Epstein, 1994). As with all research, the findings in this particular study may have been affected by a number of dynamics, including:

- the level of supply and demand for homes on the market while the study was conducted;
- new migrants to the country may tend to buy houses at higher prices, which may contribute to high price perception;
- the state of the Australia economy at the time of the research; and
- the positive or negative effect of changing global economic conditions at the international, as well as domestic level

These factors may possibly have produced some bias in the conclusions outlined. However, this study represents overall an important step towards increasing knowledge about perceptions are affected by various emotions, and is supported by the analysis findings. In conclusion, it is suggested that vendors first decide (influenced by emotions), then try to rationalise (Cheng & Monroe, 2012).
Appendix A

Information Letter

Title
Emotional Influences on Vendor’s Price Perception

Introduction
You are invited to participate in a research study pertaining to how homeowners derive the selling price of their homes. This research is part of a doctoral thesis conducted by Leon Wong with Murdoch University; supervised by Associate Professor John Gountas and Emeritus Professor Lanny Entrekin.

Before you begin, take a few minutes to read about why we are inviting you to participate and what will be done with the information you provide.

Aim of the Study
The purpose of this study is to evaluate the price perception of homeowners and the influences on their decisions. This will involve communicating with people who have sold their homes or are currently selling, which will explain how they perceive the value of their properties. The evaluation of homeowners’ perception is important as it fosters a greater understanding of the complex nature of the influences of price levels which involves the intersection of social, cultural and other personal factors. A proper evaluation in this analysis is essential for the understanding of the rationale behind the behaviours that persuade this type of decision.

What is entailed in the Participation Process?
You will be asked to fill out a short questionnaire that aims to investigate the home sellers’ pricing behaviour. It is estimated that the survey will take approximately 10 minutes. Kindly fill out the answers with as much accuracy as possible.
Voluntary Participation and Withdrawal from the Study

Your participation in this study is entirely voluntary. You may withdraw at any time without discrimination or prejudice. You have the right to choose not to answer any specific questions if you do not wish to and you are not required to provide explanations for any refusal to any answer.

Privacy

All information is confidential and no names are required in this survey or other details that might identify you will not be used in any publication arising from the research. The study is strictly anonymous. In no instance will you be asked to reveal any personal information.

Possible Benefits of the Study

It is possible that there may be no direct benefit to you from participation in this study, but the findings could help and assist the working relationship between sellers and agents. For the professionals in the real estate industry, this could also offer a platform on how to deal with their clients and improve the gap that exists in the real estate industry between sellers, buyers and agents.

Possible Risk

There are no specific risks anticipated in this study for participants. However, if you do have any concerns or questions about this project please feel free to contact the researcher Leon Wong (L.Wong@murdoch.edu.au), Dr John Gountas (J.Gountas@murdoch.edu.au) or Dr Lanny Entrekin (L.Entrekin@murdoch.edu.au). The persons named are happy to discuss with you any concerns you may have about this study.

To participate in this survey, you have to currently own at least one house or previously have sold one.
This study has been approved by the Murdoch University Human Research Ethics Committee (Approval 2014/013). If you have any reservation or complaint about the ethical conduct of this research, and wish to talk with an independent person, you may contact Murdoch University’s Research Ethics Office (Tel. 08 9360 6677 (for overseas studies, +61 8 9360 6677) or e-mail ethics@murdoch.edu.au). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

1. If you agree to participate in this survey, please click the 'I Agree' button below.
   I Agree [ ]
Appendix B

Questionnaire

Section A (Seller’s Motivation)

2. Home owners tend to believe that they will get a high price for their home even though they know it is over-priced.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agree

Section B (Seller’s Rationale)

4. In general, home owners believe that their home is worth more than other similar homes because there is pride of ownership.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agree

5. Home owners believe that even though their home is not as valuable as others, they still think it is worth more than its true value.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agree

6. Home owners tend to over-price their home because they are confident it will sell at that price.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agree

7. Home owners tend not to accept a lower price appraisal by an agent even though it may be a more realistic price.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agree

8. The pride of home ownership has a strong influence in motivating a higher price.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agree

Section C (Seller’s Outlook)

9. Home sellers’ ego is linked to higher selling prices.

   - strongly disagree
   - disagree
   - slightly disagree
   - slightly agree
   - agree
   - strongly agreed

10. Home sellers strive to sell their home at a higher value because of they consider their own self-interest.

    - strongly disagree
    - disagree
    - slightly disagree
    - slightly agree
    - agree
    - strongly agree
11 Home sellers primarily consider their own financial benefits as more important than being truthful with buyer.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

12 Achieving a high price for the home elevates the seller’s self-satisfaction.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

13 Sellers will only accommodate the buyers request for an improvement only if they pay the higher price.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

Section D (Seller’s Approach / Price Perspective )

14 Sellers are motivated by greed (getting the highest price) when selling their home.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

15 Sellers would still push for higher prices even when prices are down in a weak market.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

16 Sellers would exploit the buyer for a higher price if they are in the position to do so.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

17 Home sellers often choose the agent who is offering the lowest fee because they hope to get more money at the end of the sale.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

18 Home sellers’ ultimate priority and wish/aim is to sell their house at the highest possible price.

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree
Section E  (Seller’s Expectation)

19  Home sellers often ask for higher prices because market trends show that property prices always appreciate in value.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

20  Home Sellers over-price their home because they expect buyers to negotiate for a lower price.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

21  Sellers over-price their home because instinct (gut feeling) tells them they could get a higher price.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

22  Home sellers tend to appoint a real estate agent who gives a value higher than expected selling price.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

23  Optimism drives home sellers to over price/value their homes.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

Section F  (Seller’s Opinion / Emotions )

24  Home owners often feel that their own home is outstanding/special and therefore their home is worth more money.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

25  Home owners think that their home is individualistic; therefore, it is worth more money.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree

26  Home owners often consider their home to be unique and irreplaceable; therefore, it is worth a higher price.

   ○ strongly disagree  ○ disagree  ○ slightly disagree  ○ slightly agree  ○ agree  ○ strongly agree
27 Home sellers usually love their home and would feel a sense of loss after selling, therefore, a higher selling price compensates their loss.

| 〇 strongly disagree | 〇 disagree | 〇 slightly disagree | 〇 slightly agree | 〇 agree | 〇 strongly agree |

28 Home sellers tend to believe their property are very different to most other homes, therefore they expect and want a higher price.

| 〇 strongly disagree | 〇 disagree | 〇 slightly disagree | 〇 slightly agree | 〇 agree | 〇 strongly agree |

Section G (Seller’s Perception)

29 Even in difficult situations, people are reluctant to sell their home at a lower price than they have bought it for.

| 〇 strongly disagree | 〇 disagree | 〇 slightly disagree | 〇 slightly agree | 〇 agree | 〇 strongly agree |

30 Home owners tend to believe that their house is always worth more that the estimated value, no matter what others say.

| 〇 strongly disagree | 〇 disagree | 〇 slightly disagree | 〇 slightly agree | 〇 agree | 〇 strongly agree |

Section H (Seller’s Attitude)

31 Real estate agents primarily care about their own commission, not about the home owner’s interest; therefore, agents cannot be trusted entirely.

| 〇 strongly disagree | 〇 disagree | 〇 slightly disagree | 〇 slightly agree | 〇 agree | 〇 strongly agree |

32 Home sellers do not trust agents but will put up with them if they can get the highest price for the house.

| 〇 strongly disagree | 〇 disagree | 〇 slightly disagree | 〇 slightly agree | 〇 agree | 〇 strongly agree |
Section I (Seller's Concern)

33 Sellers tend to over-price their home for fear of losing out (by selling at a lower price if a higher price was possible).

☐ strongly disagree ☐ disagree ☐ slightly disagree ☐ slightly agree ☐ agree ☐ strongly agree

Section J: Participant's Profile and background

33. How many properties have you owned?

☐ None
☐ One
☐ Two
☐ More than two

34. Gender

☐ Male
☐ Female

35. Your age group

☐ Under 18 years
☐ 18 to 24 years
☐ 25 to 34 years
☐ 35 to 44 years
☐ 45 to 54 years
☐ 55 to 64 years
☐ 65 years and above

36. Gross annual household income

☐ Less than $40,000
☐ $40,000 to $79,000
☐ $80,000 to $119,000
☐ $120,000 to $159,000
☐ $160,000 to $199,000
☐ $200,000 to $239,000
☐ $240,000 or more
37. Where is your state or country of residence?

38. Employment status

- Employed (full time)
- Employed (part time / casual)
- Self-employed
- Unemployed
- Retired

39. Education level

- Primary school
- Secondary school
- Certificate
- Diploma
- Bachelor degree
- Postgraduate degree

40. Have you sold or attempt to sell a property before?

- Yes
- No

END OF QUESTIONNAIRE

Thank you!
## Appendix C

### 1. Frequency responses on Price Virus

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Slightly to strongly agree 4,5,6</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.16- Select agent offering the lowest fee for hope to get more money</td>
<td>1</td>
<td>26</td>
<td>30</td>
<td>52</td>
<td>87</td>
<td>33</td>
<td>172 80.1%</td>
<td>-</td>
<td>229</td>
</tr>
<tr>
<td>Q.17- Sellers ultimate priority to sell at highest price</td>
<td>4</td>
<td>16</td>
<td>17</td>
<td>52</td>
<td>93</td>
<td>47</td>
<td>192 83.8%</td>
<td>-</td>
<td>229</td>
</tr>
<tr>
<td>Q.18- Sellers often ask for higher Prices</td>
<td>2</td>
<td>10</td>
<td>20</td>
<td>69</td>
<td>106</td>
<td>19</td>
<td>194 84.7%</td>
<td>3</td>
<td>229</td>
</tr>
<tr>
<td>Q.21- Appoint gent who gives higher evaluation of home</td>
<td>2</td>
<td>15</td>
<td>25</td>
<td>82</td>
<td>80</td>
<td>21</td>
<td>183 79.9%</td>
<td>4</td>
<td>229</td>
</tr>
</tbody>
</table>

1. strongly disagree; 2. disagree; 3. slightly disagree; 4. slightly agree; 5. agree; 6. strongly agree

### 2. Frequency responses on greed.

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Slightly to strongly agree 4,5,6</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.10- Own financial benefits More important</td>
<td>2</td>
<td>16</td>
<td>26</td>
<td>57</td>
<td>87</td>
<td>40</td>
<td>184 80.4%</td>
<td>1 .4%</td>
<td>229</td>
</tr>
<tr>
<td>Q.11- High price elevates sellers' self-satisfaction</td>
<td>1</td>
<td>8</td>
<td>12</td>
<td>38</td>
<td>117</td>
<td>52</td>
<td>207 90.4%</td>
<td>1 .4%</td>
<td>229</td>
</tr>
<tr>
<td>Q.14- Sellers push for higher price in weak market</td>
<td>4</td>
<td>18</td>
<td>25</td>
<td>63</td>
<td>101</td>
<td>18</td>
<td>182 79.5%</td>
<td>-</td>
<td>229</td>
</tr>
<tr>
<td>Q.15- Sellers exploit buyer for higher price if in position to do so</td>
<td>3</td>
<td>9</td>
<td>18</td>
<td>62</td>
<td>98</td>
<td>38</td>
<td>198 86%</td>
<td>1 .4%</td>
<td>229</td>
</tr>
<tr>
<td>Q.28- Reluctant to sell at lower price than purchase price</td>
<td>4</td>
<td>11</td>
<td>10</td>
<td>36</td>
<td>77</td>
<td>89</td>
<td>202 88.2%</td>
<td>2 .9%</td>
<td>229</td>
</tr>
</tbody>
</table>

1. strongly disagree; 2. disagree; 3. slightly disagree; 4. slightly agree; 5. agree; 6. strongly agree
3. Frequency responses on pride.

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>6</th>
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<tr>
<td>Q.2 - High price for home</td>
<td>10</td>
<td>4.4%</td>
<td>23</td>
<td>19</td>
<td>76</td>
<td>84</td>
<td>17</td>
<td>177</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10%</td>
<td>8.3%</td>
<td>33.2%</td>
<td>36.7%</td>
<td>7.4%</td>
<td>77.3%</td>
<td>100%</td>
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<tr>
<td>Q.3 - Home is worth more than similar homes</td>
<td>3</td>
<td>1.3%</td>
<td>30</td>
<td>26</td>
<td>54</td>
<td>96</td>
<td>19</td>
<td>169</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13.1%</td>
<td>11.4%</td>
<td>23.6%</td>
<td>41.9%</td>
<td>8.3%</td>
<td>73.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Q.4 - Home is worth more than its true value</td>
<td>4</td>
<td>1.7%</td>
<td>32</td>
<td>30</td>
<td>60</td>
<td>85</td>
<td>16</td>
<td>161</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14%</td>
<td>13.1%</td>
<td>26.2%</td>
<td>37.1%</td>
<td>7.0%</td>
<td>70.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Q.5 - Over price home, confident of sale</td>
<td>2</td>
<td>.9%</td>
<td>44</td>
<td>27</td>
<td>65</td>
<td>72</td>
<td>16</td>
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<td></td>
<td></td>
<td>19.2%</td>
<td>11.8%</td>
<td>28.4%</td>
<td>31.4%</td>
<td>7.0%</td>
<td>66.8%</td>
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1. strongly disagree; 2. disagree; 3. slightly disagree; 4. slightly agree; 5. agree; 6. strongly agree

4. Frequency responses on lack of trust.

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<th>Question</th>
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<th>4</th>
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<th>6</th>
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<tr>
<td>Q.30 - Agents care about commission, therefore seller raises price</td>
<td>4</td>
<td>1.7%</td>
<td>31</td>
<td>40</td>
<td>75</td>
<td>55</td>
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<td>150</td>
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<td></td>
<td></td>
<td>13.5%</td>
<td>17.5%</td>
<td>32.8%</td>
<td>24.0%</td>
<td>8.7%</td>
<td>65.5%</td>
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<tr>
<td>Q.31 - Agents are not trusted; seller will put up if higher price achieved</td>
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<td>1.3%</td>
<td>23</td>
<td>29</td>
<td>56</td>
<td>77</td>
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<td>170</td>
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<td>24.5%</td>
<td>33.6%</td>
<td>16.2%</td>
<td>74.3%</td>
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1. strongly disagree; 2. disagree; 3. slightly disagree; 4. slightly agree; 5. agree; 6. strongly agree
5. Frequency responses on expected negotiation.

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<th>6</th>
<th>Slightly to strongly agree</th>
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<td>Q.9- Higher selling value for own self-interest</td>
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<td>10</td>
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<td>111</td>
<td>58</td>
<td>211</td>
<td>1</td>
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<td>Q.19- Sellers over-price home as buyers negotiate lower price</td>
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<td>3</td>
<td>229</td>
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<tr>
<td>Q.22- Optimism drive sellers to over-price home</td>
<td>1</td>
<td></td>
<td>17</td>
<td>71</td>
<td>100</td>
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<td>201</td>
<td>3</td>
<td>229</td>
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1. strongly disagree; 2. disagree; 3. slightly disagree; 4. slightly agree; 5. agree; 6. strongly agree

6. Frequency responses on rarity

<table>
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<tr>
<th>Question</th>
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<th>5</th>
<th>6</th>
<th>Slightly to strongly agree</th>
<th>Missing</th>
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</thead>
<tbody>
<tr>
<td>Q.23- Home is special therefore worth more</td>
<td>3</td>
<td>1</td>
<td>15</td>
<td>74</td>
<td>101</td>
<td>18</td>
<td>193</td>
<td>4</td>
<td>229</td>
</tr>
<tr>
<td>Q.24- Home is individualistic therefore worth more</td>
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<td>78</td>
<td>88</td>
<td>9</td>
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<td>Q.25- Home is unique and irreplaceable therefore worth more</td>
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<td>35</td>
<td>75</td>
<td>74</td>
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<td>162</td>
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<tr>
<td>Q.26- Home is loved and due to Loss worth more</td>
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<td>42</td>
<td>63</td>
<td>65</td>
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<tr>
<td>Q.27- Home is very different to others therefore expect higher price</td>
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<td>70</td>
<td>72</td>
<td>18</td>
<td>160</td>
<td>5</td>
<td>229</td>
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</tbody>
</table>

1. strongly disagree; 2. disagree; 3. slightly disagree; 4. slightly agree; 5. agree; 6. strongly agree
References


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RP Data (2012b). Housing data provided to researcher by RP Data research department, 10 October 2012.


