A MODEL OF BEHAVIOURAL UNCERTAINTIES INFLUENCING PROPERTY VALUATION DECISION MAKING

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DEDICATION

This thesis is dedicated to my parents, parents-in-law and all my family members who made all of this possible for their endless encouragement and patience.

And also, to

My husband, ZULKAMAL RUHAIZAT OOI, daughters, MARYAM IRDINA and LANA KHALISA and son, QALEEF ISA as in appreciation for their love and support.

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ABSTRACT

Valuation is often to be said of combination "an art and science". However, it is well known that valuation is more of an "art" than science in regards which no two valuers could perhaps arrive at the same value, and the disparities in the valuation results pose a point of concern. The disparities in the valuation results exist due to the behavioural uncertainties occur during property valuation decision making. There are six (6) factors of behavioural uncertainties been recognized globally include heuristic and bias, ethical conduct, client influence, valuer's experience and knowledge, availability and accuracy of market data as well as negligence and professionalism. These factors have critically influenced the property valuation decision making of which valuers and Board of Valuers, Appraisers, Estate Agents and Property Managers, Malaysia (BOVAEP) should be aware of. Though property valuation has its own substantial and growing research on 'science' methodological analysis, however its 'art' (behavioural) property valuation uncertainties are often neglected or still in its infancy. In Malaysia, there is a lack of research that has been undertaken to examine the behavioural uncertainties in property valuation decision making holistically. There were few studies done on several factors of behavioural uncertainties that influence valuation judgment. Therefore, this study aims to develop a model of behavioural uncertainties' factors (relationship) and property valuation decision making which resulted in valuation inaccuracy from Malaysian context encompasses all identified behavioural uncertainties globally. To achieve research aim, this study has adopted both quantitative and qualitative through the distribution of survey involving public and private registered valuer of Klang Valley, Johor, Malacca and Penang recognized under the Board of Valuers, Appraisers, Estate Agents and Property Managers, Malaysia (BOVAEP). The data were analysed through the Confimatory Factor Analysis (CFA) prior to conduct Structural Equation Modeling (SEM) procedure. The results from the quantitative study then were validated by registered valuers through a feedback in a qualitative study and were analysed through Coding Analysis. The findings show that the most significant factors of behavioural uncertainties which influencing property valuation decision making are heuristic and bias, ethical conduct, client influence, valuer's experience and knowledge as well as negligence and professionalism. The proposed model provides valuable information on the behavioural uncertainties that significantly influence property valuation decision making, which the property valuers and other property market players should take into consideration in valuation process for reliable and defendable at end results. The significant behavioural uncertainties that are exhibited in the model were identified as strongly correlated to each other and considered to be significant factors in the property valuation decision making which encompasses five behavioural uncertainties' factors from Malaysian context.

ABSTRAK

Penilaian harta tanah sering dianggap sebagai kombinasi antara "seni dan sains". Walaubagaimanapun, penilaian harta tanah lebih dikenali dengan "seni" berbanding sains dimana tiada dua penilai yang mungking dapat menghasilkan nilai yang sama untuk harta tanah yang sama dan perbezaan nilaian ini telah menimbulkan tanda tanya oleh pelbagai pihak. Kajian mendapati perbezaan nilaian yang wujud adalah disebabkan ketidaktentuan tingkahlaku semasa penilaian harta tanah dijalankan oleh para penilai. Di peringkat global, terdapat enam (6) ketidaktentuan tingkahlaku yang telah dikenalpasti termasuklah heuristik dan berat sebelah, perlakuan etika, pengaruh klien, pengalaman dan pengetahuan penilai, kebolehdapatan dan ketepatan data pasaran serta kecuaian dan sikap professional. Faktor-faktor ini telah mempengaruhi keputusan penilaian harta tanah secara kritikal dan ianya penting diambilkira oleh penilai harta tanah dan Lembaga Penilai, Pentaksir, Agen Harta Tanah dan Pegurus Harta, Malaysia (LPPEH). Walaupun penilaian harta tanah telah mencapai penyelidikan yang besar dan membangun dalam analisis metodologi sains, namun sifat nya yang seni tingkahlaku penilaian harta tanah sering diabaikan atau masih di peringkat awal. Di Malaysia, terdapat kekurangan kajian secara menyeluruh yang dijalankan untuk mengkaji ketidaktentuan tingkahlaku dalam membuat keputusan penilaian harta tanah. Terdapat beberapa kajian yang dijalankan ke atas beberapa faktor ketidaktentuan tingkahlaku yang mempengaruhi keputusan penilaian. Oleh itu, matlamat kajian ini adalah untuk menghasilkan model yang menunjukkan hubungkait antara ketidaktentuan tingkahlaku dengan membuat keputusan penilaian harta tanah yang memberi kesan dalam ketidaktepatan penilaian di Malaysia yang merangkumi kesemua faktor ketidaktentuan tingaklaku yang dikenalpasti secara global. Untuk mencapai matlamat kajian, kedua-dua kaedah kuantitatif dan kualitatif digunapakai melalui edaran kaji selidik yang melibatkan penilai berdaftar awam dan swasta dari Lembah Klang, Johor, Melaka dan Pulau Pinang yang diiktiraf dibawah LPPEH. Data dianalisa melalui CFA sebelum menjalankan prosedur SEM. Hasil kajian dari kajian kuantitatif disahkan melalui maklum balas penilai berdaftar dalam kajian kualitatif yang dianalisa melalui Analisa Kod. Hasil kajian menunjukkan faktor ketidaktentuan tingkahlaku yang paling penting yang mempengaruhi keputusan penilaian harta tanah adalah heuristik dan berat sebelah, perlakuan etika, pengaruh klien, pengalaman dan pengetahuan penilai serta kecuaian dan sikap professional. Model penstrukturan yang dicadangkan menyediakan maklumat ketidaktentuan tingkahlaku yang bernilai berkepentingan dalam mempengaruhi keputusan penilaian harta tanah, di mana penilai harta dan lain-lain pemain pasaran harta tanah harus mengambil berat dalam proses penilaian untuk hasil akhir yang boleh dipercayai dan dibela. Kepentingan ketidaktentuan tingkahlaku ditunjukkan dalam model dikenalpasti mempunyai hubungkait yang kuat antara satu sama lain dan dianggap faktor pengaruh yang penting dalam keputusan penilaian harta tanah yang merangkumi lima faktor ketidaktentuan tingkahlaku yang penting di Malaysia.

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LIST OF ABBREVIATIONS

RICS	-	The Royal Chartered Institution of Chartered Surveyors
BOVAEP	-	Board of Valuers, Appraisers, Estate Agents and Property Managers, Malaysia
RISM	-	Royal Institution of Surveyors Malaysia
FGD	-	Focus Group Discussion
IVSC	-	The International Valuation Standards
NAR	-	National Association of Realtors
USPAP	-	Uniform Standards of Professional Appraisal Practice
TIAVSC	-	The International Assets Valuation Standards Committee
ITM	-	Institute of Technology MARA
MVS	-	Malaysia Valuation Standard
JPPH	-	Jabatan Penilaian dan Perkhidmatan Harta
NAPIC	-	National Property Information Centre
CCAB	-	Consutative Committee of Accountancy Bodies
EFA	-	Exploratory Factor Analysis
CFA	-	Confirmatory Factor Analysis
CVI	-	Content Validity Index
SEM	-	Structural Equation Modeling
CBRE-WTW	-	CH Williams Talhar & Wong Sdn Bhd
KMO	-	Kaiser-Meyer-Olkin
PCA	-	Principal Component Analysis
HB	-	Heuristic and Bias
EC	-	Ethical Conduct
CI	-	Client Influence
EK	-	Valuer's Experience and Knowledge
MD	-	Availability and Accuracy of Market Data
NP	-	Negligence and Professionalism
DPV	-	Determinant Factors of Property Valuation
TPC	-	Test of Professional Competence

OLS	-	Ordinary Least Square
AVE	-	Average Variance Extracted
CR	-	Composite Reliability
MI	-	Modification Indices

LIST OF SYMBOLS

α   -   Cronbach's Alpha

N -   Sample size

p -   Number of variablies being analysed

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CHAPTER 1

INTRODUCTION

1.1 Introduction

A professional valuer is known an analyst of human behaviour in the property market where his/her integral role is an estimator or predictor in valuing property (Aluko, Ajayl, & Amidu, 2004). The valuation surveyor is one of the professional members who are the experts in determining the value of real property, either in terms of capital value or rental value for specified purposes (Marcinskas & Galiniene, 2005 and Emirzon et.al, 2005). The valuation outcomes (opinion of value) are important to property owners, either corporate, institutional, financial or individuals, to make decision on the property, including inheritance, asset share, asset allocation, property performance measurement, privatisation and commercialisation of assets, property sales and purchases, as well as investment opportunities (Aluko et al., 2004). Their professional advices are crucial to the authorities, public, and organisations in the development of national economy. One should know that a valuer is not only setting price, but also making judgment and interpreting the market for an opinion of value (Aluko, 2007). Therefore, professional valuers for any valuation purposes are responsible to provide accurate and dependable bases of valuation decision-making, yet valuation variance and inaccuracy are in dubious (Effiong, 2015). This is because evidence has found that it is impossible for two valuers to have the same valuation outcomes for the same property. Based on this reason, many commentators have wondered and questioned valuer's function in providing market value (Aluko, 1998). As results, valuation variance and inaccuracy of these property valuations have become very worrisome to many market participants to make investment decisions (Crosby et.al, 1998; Geltner, 1998; Geltner et.al, 1994; Goetzmann, 1993 in (Aluko, 2007)).

It is agreed that, property value can be inaccurate due to the imperfection of the property market. In the imperfect property market, values are difficult to assess because property are heterogeneous and most of the transactions do not reflect real market value.

The reality is that valuation is more than "art", whereby the opinion of value is created from human judgement rather than science. Literally, human judgement is triggered by factors of human behavioural traits, in which most of the factors are extracted from people's beliefs and values that will be discussed further in the next chapter. Ayuthaya & Swierczek (2014) agreed that the valuation process relies on the personal knowledge and expertise of the valuer. It is proven that valuers are struggling to overcome the issue of valuation inaccuracy, and ultimately to curb the valuation variance in the valuation outcomes (Havard, 2001). Therefore, there is a need to focus on variables (behavioural traits) that also affect the valuation decision-making process, driven towards the inaccuracy of valuations. Iroham & Oloyede (2014) agreed that there is evidence to suggest that property valuers are exposed to various assumptions and speculation, emotional uncertainty, heuristics and cognitive biases and errors, negligence (misconduct) and other behavioural issues, which include that their valuation patterns tend to follow trends and clients' influence, in making valuation decisions. It is affirmed that valuation (estimation) is not pure science, but rather, the value is predominately derived from art or soft aspects as compared to science (Crosby, 2000; Warren-Myers, 2015), which has potential for inaccuracy, variation, and bias that are responsible on the context of a valuer's behavioural uncertainties (Damodoran, 2006). Although substantial and growing research in the "science" aspects of valuation have been carried out, there is still a paucity of investigation in terms of the behavioural uncertainties in valuations, particularly pertaining to how valuers respond or behave in the decision-making process. This eventually contributes to inaccuracy and valuation variance in the end results.

Property valuers need to play a crucial role as investor confidence is more concerned with less variation in value and best practice.

The combination of both science and art skills are crucial in assessing the property market inhibits valuers' ability to make accurate decisions when there is a significant alteration in the market such as; change in the economic cycle; or an innovation that is revolutionizing the industry. In short, valuers must take responsibility and risk in the decision-making process of their profession. Prior to that, it is important to understand basic human decision-making process for a better view and insight on how valuers behave to make valuation decisions. Behaviour, by definition, is a response that is observed directly or indirectly. Human behaviour is very much unpredictable. It is impossible to assume one set pattern of behavoiour. As according to Lavitt, there were three types of behaviour which are; (i) caused behaviour, (ii) motivated behaviour, and (iii) goal oriented behaviour. He added that it can be assumed that behaviour formed four basic assumptions regardless of the nature of people: individual differences, a whole person, caused behaviour (motivation), and value of the person (human dignity). Behaviour is the result of interaction between individual characteristics and the environment they live in. When a person works in an organization, his/her behavior interacts with the organization which either can make him/her effectively serve the organization. This situation also referring to how a person is motivated positively and resulted in an effective performance. A person also deserves to be treated with respect and valued for their hard work. The ability to understand the past and current behaviour, one can predict behaviour and eventually control behaviour. In short, behaviour is caused by instincts, genetic background, and personality traits that are formed at an early age. Change is very difficult for the individual and that one's capacity is severely limited. Behaviour is mostly learned through our interactions with the environment. Present events rather than past events are important to shape behaviour.

For the purpose of the study, cognitive model is chosen to understand the human behaviour in making decision. This model emphasizes the positive and free-will factors of human beings and uses concepts such as expectancy, demand and incentive. Tolman in his study found that the basis of learning as of 'expectancy' which is understood as one particular event leading to a particular consequence, for example, goal. Because, human behaviour is based on these goals. The cognitive model is represented as S-O-R model (Stimulus-Organism-Response model). Chapter 2 describes detailed explanation of each terms of human behaviour model, the classification system of understanding human behaviour, the process of decision making, as well as the behavioural uncertainties factors influencing valuers' decision making.

1.2   Background of the Study

Many parties including academicians, professionals and users of valuations either in Malaysia or developed countries of the world such as the United Kingdom (UK), the United States (US), Canada, and Australia demonstrate their interest on the issue about valuation accuracy and variance. The importance to find consistency and accuracy in valuations is crucial as the consequences can negatively affect the industry, adversely influencing the industry, and can become a burden to achieve accuracy among valuers (Wilkens, 2015). The existence of the issue about valuation inaccuracy and variance has become the center of discussion either locally or globally, and this has been proven by earlier studies. However, research on the factors that contributes to such issue is still in dubious or limited especially in the Malaysian context. The question of valuation accuracy has prompted a research study in 1985, whereby there was the first published debate on valuation accuracy on the estimation of market price and the methods used to provide valuation outcomes (Hager and Lord, 1985). The paper found that there was a failure of valuations to accurately and quickly reflect the changing market conditions and expectations of

demand and supply. However, the criticisms received immediate responses in defense of the valuation profession (Brown, 1985; Fraser, 1985; Reid, 1985). The problem lies in the approach adopted in Hager and Lord (1985), which was the small sample of valuers and this was criticised by Brown (1986), who addressed the issue of valuation accuracy and proven that valuations are a good proxy for market values or prices. His results concluded that the sample indicated no systematic bias and emphasised that one firm's valuations were a good proxy for those of another. The issue over valuation accuracy is continuously debated over the years and when another reply made by Udo-Akagha (1985) noted that, "there ought to be no reason why two or more valuers valuing the same interest in a property for the same purpose and at the same time should not arrive at the same or similar results if they make use of the same data and follow the same approach". This statement has raised the issue of valuation variance, which should be distinguished from valuation accuracy. As a result, many have wondered and questioned the role of valuers. This endless debate has proven that the existence of twin problems of inaccuracy and inconsistency in the valuation practice occurred in the UK, the USA, Canada, Australia, and even Nigeria.

Earlier commentaries mostly focusing on valuation accuracy quantitatively. However, the study was extended in the UK, the USA, and Australia where they conducted empirical qualitative studies and suggested high levels of accuracy (Brown, 1991; Parker 1999). In the UK and Nigeria, it was found that there are similarities on the study of valuation inaccuracy and variance. Nevertheless, there is still no conclusive findings on the subject of valuation variance and accuracy as most scholars has contradict in opinions about the subject matter. Although, it was undeniable that there have been many improvements in the quality and quantity of empirical data and statistical analysis, which lead to measurement of valuation accuracy. However, the causes and sources to the valuation inaccuracy still in vague and remain unanswered (Babawale & Omirin, 2012).

Though scholars strive to find consistency and accuracy in valuations, UK courts have concluded that the acceptable margin of error is in the range of ±5% to ±10% as a measurement to valuation accuracy. The Royal Institution of Chartered Surveyors (RICS) committee has also considered the issue of valuation accuracy and has produced a policing operation of the Valuation Guidance Notes and emphasised that valuers must practise valuations in accordance with the Red Book. The main requirements of the Red Book are merely that the valuer must be properly qualified and must have experience in the area of valuation to avert issues concerning accuracy or competence (Effiong, 2015; Crosby, 2000).

Despite the debated issue, it is known that earlier commentaries only focused on providing insight into the existence of valuation inaccuracy and the level of accuracy achieved by valuers. As consequences, they leave the factors that contribute to valuation accuracy unexplained. Since most studies only focusing on the theory of valuation bias from the methodological perspective, most of the work are based on conjecture and none has fully explained the phenomenon, leaving the debate unresolved (Lai and Wang, 1998; Geltner, 1998). Evidently, recent studies have shown interest on the behavioural uncertainties, particularly in the valuation practice, and especially on factors related to the existence of valuation accuracy (Diaz et.al, 2002; Havard, 2001; Gallimore and Wolverton, 2000; Levy and Schuck, 1999; Gallimore, 1994; Kinnard et.al, 1997). There are a few researches on valuation behavioural aspect conducted globally; however, there is a paucity in the body of knowledge in the area particularly in the Malaysian context. The attempt to conduct this research in the area of behavioural aspects in the property valuation may provide answers to the issue of valuation inaccuracy and variance. This focused research of behavioural aspects in valuation judgment is to examine the way valuers make valuation judgments and decisions from the perspective of human behaviour. Hence, the study seeks in the merging of behavioural research and valuation accuracy by incorporating the human judgment, bias and an irrational behaviour in a way to help in improving the way valuers' judgments for more reliable valuations Gallimore, 2004).

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Unfortunately, there has been no holistic approach to research on factors contributing to valuation inaccuracy, and neither has there been any attempt to assess the extent to which the contributory factors (behavioural uncertainties) influence the valuers' decision-making behaviour. This study seeks to fill this gap.

1.3   Problem Statement

Few studies have been carried out to address the behavioural uncertainties that hugely affect the credibility of valuers to deliver accurate and reliable valuation results. Occasionally, valuers strive to find consistency in valuation with hope to curb the discrepancies of valuation and yet the gap of the study pertaining to valuation inaccuracy is still at a perilous state. Akinjare, Iroham, & Oloke (2013) and Kucharska - Stasiak (2013) identified human behaviour as one of the factors that contribute to valuation inaccuracy. Predominantly, earlier studies focused on justifying the existence of inaccuracy and variance in valuation while neglecting causes to such issues. Later, behavioural research in property valuation began to be explored by academicians as one the factors that lead to the occurrence of valuation inaccuracy. Diaz (1990) emphasised that a host of behavioural studies were utilised to understand valuers' behaviour and discovered that valuers demonstrated heuristics behaviours in the valuation practice. There was also stress on the importance to explore deeply into the role and behaviour of valuers in valuation decision-making (Gallimore, 1994; Diaz and Wolverton, 1998; Black and Diaz, 1996; Diaz and Hasz, 1997).

Early issues in the behavioural aspects related to valuation practice include locational familiarity, the use of heuristics, valuers' level of knowledge and experience as well as the data interpretation and utilisation (Levy & Schuck, 1999). Havard (2001) also focused on valuation reliability and valuer behaviour, whereby the findings brought a few considerable implications, particularly in commercial valuation practice.

The implications are summarised as follows: (i) the use of heuristics and biases in valuation decision-making should be valuers' main concerns for more reliable valuation results; (ii) reasonable quality assurance should be revised for better quality of valuation process in case of negligence claim; an, (iii) there should be a standardisation in valuation procedures. However, these implications are merely for better quality in the valuation output. The study has shown a significant correlation between the behavioural uncertainties and valuers' opinion of value. On the other hand, Boyd & Irons (2002) incorporated the issue of valuation accuracy and negligence. It was concluded that all aspects in the valuation process from the methodology, the data utilisation, and the analysis of data must be undertaken in a competent manner to avoid valuation negligence. Moreover, valuers' knowledge and competency are essential to ensure the valuation practice is in compliance with the duty of reasonable care; hence, produce more accurate valuation outcomes.

In other study conducted by Wright, Croft, & Hoyt (2002), they related age, experience, and education with ethical conduct in the valuation practice. The study found that the older, more experienced, and more knowledgeable a valuer, the less tolerant they will be to an unethical scenario. This shows that senior valuers provide more dependable value opinions as compared to fresh valuers, therefore offering more accurate valuations. Eventually, this explains the importance of valuers to constantly upgrade their knowledge and competency in the valuation exercise. Another research that relates valuer's behavioural uncertainties and valuation inaccuracy was conducted by Ajibola (2011) whereby the finding showed that the lack of reliable databank has caused difficulty for valuers to arrive at accurate and reliable decisions. Achu (2011) conducted a review study on client influence in property valuation globally and found that there was a significant effect of client influence on valuers' behavioural uncertainties, which has pressurised and challenged the valuers to alter their opinion of value. Wilkens (2014) also explored the client influence in valuation judgment in South Africa and the results have positively confirmed the existence of client influence in the valuation judgment which resulted in valuation inaccuracy.

Narayan, Biswas, & Sahib (2017) further discussed the prevalent valuation practices and standards in Fiji. The findings recommended for valuations improvement towards a better implementation of standards and more reliable market information databases. This showed that the importance of quality standards and accessible market data may influence valuers' decision-making behaviour to produce accurate and reliable valuation results. Meanwhile, Adegoke, Olaleye, & Oloyede (2013) pointed out that valuers should stress on high ethical standards, independence, and professionalism in the valuation practice to produce more accurate and reliable valuations.

Based on the above studies, it can be summarised that researchers only emphasised on identifying the behavioural factors that exist in valuers' behaviour and how the factors affect the valuation accuracy. However, there is insufficient research that relates and explains to what extent such behavioural uncertainties are significant to valuers' decision-making behaviour, resulting in an inaccuracy of valuation results. This is particularly true for the Malaysian context because as far as this matter is concerned, there is a lack of research emphasising on behavioural uncertainty issues in a holistic way. There were only a few issues prior to property valuation in Malaysia, whereby they only focused on several factors of behavioural uncertainties, such as client influence, heuristic and bias, and negligence and professionalism (Achu, 2011, 2012; Ali, 2018). A study by Ali (2018), conducted a phenomenological-case-study based on a focus group discussion with ten (10) public and private valuers from Johor Bahru district, Malaysia to discover the issue on behavioural uncertainties in making their valuation judgement. It is found that public and private valuers tend to adopt behavioural biases and irrationality in their valuation decisions. The panel of expert agreed that the behavioural uncertainties also occurred in the Malaysian context as highlighted in the previous studies globally. Therefore, it can be concluded that there is a presence of behavioural uncertainties occurring within the property valuation industry in Malaysia, which results in valuation discrepancies.

Based on the previous studies, it is highlighted that there is a need to conduct an investigation on the relationship between the factors of behavioural uncertainties and property valuation decision-making to curb valuation discrepancies in the Malaysian context. Therefore, the study encapsulates that the prominent factors of behavioural uncertainties are necessary to be addressed in order to find more consistency, low levels of variance, and high accuracy valuation results.

1.4   Research Questions

The main research questions that will be a guidance to the research are as follows;

     i)   What are the behavioural factors that affects valuer's decision making which resulted in valuation inaccuracy and valuation variance?

     ii)   What are the most significance behavioural factors that highly influence valuer's decision making?

     iii)   To what extent the relationship between the behavioural factors and valuer's decision making which resulted in valuation inaccuracy?

1.5   Research Aim

The research aim of the study is to establish a relationship between the factors of behavioural uncertainties and property valuation decision making which resulted in valuation inaccuracy from Malaysian context.

1.6   Research Objectives

The objectives of the research are:

i)   To identify the behavioural uncertainties that affects property valuation decision making which resulted in valuation inaccuracy.

ii)   To examine the most significance behavioural uncertainties that highly influence property valuation decision making.

iii)   To develop a structural model of significant behavioural uncertainties influencing property valuation decision making which resulted in valuation inaccuracy.

1.7   Research Methodology

The objectives above will be achieved by using the following quantitative and qualitative research methods:

i)   A detailed literature review of a number of journals pertaining to this research topic in global context. An understanding of previous studies undertaken to grasps the most critical factors of behavioural uncertainties that affects valuer's decision making which resulted in valuation inaccuracy and variance.

ii)   A survey questionnaire is generated based on issues that have been highlighted in literature review in the context of behavioural factors in valuation practice. The questionnaires are targeted at the registered property valuers (public and private) under the Board of Valuers, Appraisers, Estate Agents and Property Managers, Malaysia.

iii)   The design, distribution and collection of questionnaires will be done by using Google Forms (Internet-based survey construction website).

iv)   Interview survey (feedback) through a conference call is conducted among registered valuers to validate quantitative findings.

1.8   Research Scope

The study only focuses on three main scopes;

i)   The research only applicable on professional registered valuers from Klang Valley, Johor, Malacca and Penang. The four states are selected based on their active and diverse property market.

ii)   The registered valuers are from public and private sectors that recognized under the Board of Valuers, Appraisers, Estate Agents, Property Managers, Malaysia (BOVAEP) and the Royal Institution of Surveyors Malaysia (RISM). The respondents consist of registered valuers due to their competency and credibility in various field of property valuation practices.

iii)   The research only focusing on the behavioural uncertainties in property valuation practice for Malaysian context.

iv)   The research is not subject to certain valuation methods, valuation purpose and types of property. It may be applicable to all aspects of valuation practice. Further research on certain aspects of valuation is suggested.

1.9   Research Significance

i)   The findings can be a platform of behavioural knowledge and insights to the valuation practice.

ii)   The findings can be a guideline to the valuation practitioners in carrying out valuation practice.

iii)   The findings can curb value discrepancies, resulted in more accurate and reliable valuation outcomes

iv)   To provide and establish more comprehensive approaches to the behavioural factors.

v)   The findings may capture client confidence as well to maintain the statutory exclusive preserve of valuation from other contending professionals.

1.10   Organization of the Study

The research report consists of six chapters as follows;

Chapter 1   Introduction   In this chapter, a brief outline of the research topic will be addressed. This outline will consist of a very brief preliminary literature review aimed at addressing the pertinent and relevant research in line with research topic. Under this chapter, there will be a guideline which lead to the subject of the research topic and the guidelines involve the research

problem, research question, research objective, research methodology and research scope.

Chapter 2   Literature Review   In this chapter, a thorough literature review will address property valuations globally. The readings will attempt to uncover research done on the valuer's behavioural uncertainties at international level. An investigation on human behaviour model and how human decision making process are taken into consideration to comply with property valuation practice in the Malaysian context. This literature should form a base of understanding into how this issue can comply with the Malaysian context.

Chapter 3   Methodology   This chapter aims to address and describe the research methodology, design and strategy used to discover the research questions and research problem presented. The procedures and framework used to elaborate and qualify the research question will be addressed. It also describes ways in order to achieve the research objectives.

Chapter 4   Research Analysis   The data gathered from survey questionnaires distributed to the respondents will be analysed and presented using method proposed. A numerical data in quantitative research is presented in the form of a statistical analysis. The results obtained will be validated via the feedback-interview session and will be analysed qualitatively.

Chapter 5	**Results and Disucssions**	From the data analysis, results will be explained and a structural model of significant behavioural factors influencing property valuation decision making are presented in the form of path diagram.
Chapter 6	**Conclusions and Recommendations**	In this chapter, a research conclusion will be brought together. There will be discussions as to the extent to which further research on the topic could be pursued and recommendations for future research.

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