INTERNATIONAL REAL ESTATE REVIEW

2009 Vol.12 No.3: pp. 273 – 294

Residential Real Estate Purchase Decisions in Australia: Is It More Than Location?

Thanakon Ratchatakulpat

TCC Capital Land Limited, 56th Floor Empire Tower, 195 South Sathorn Rd., Bangkok 10120, Thailand; Tel. +66-2344-6666, Ext. 3019; Fax. +66-2344-6677, +66-2343-1399; E-mail: <u>thanakon.r@tcccapitalland.co.th</u>

Peter Miller

Associate Professor, Graduate College of Management, Southern Cross University, PO Box 42,Tweed Heads, NSW 2485, Australia; Tel. +61-7-5506 9311; Fax. +61-7-5506 9301; Email: <u>peter.miller@scu.edu.au</u>

Teresa Marchant

Graduate College of Management, Southern Cross University, PO BOX 42, Tweed Heads, NSW 2485, Australia; Tel. +61-7-5506 9311; Fax. +61-7-5506 9301; E-mail teresa.marchant@scu.edu.au

This study investigates the factors that prospective buyers consider when purchasing residential property in Queensland, Australia. A dropoff survey is used, with 376 property buyers and a response rate of 62.7 percent. Affordability, maintenance and interior design, and a good neighbourhood are considered as most important. Of least importance are the affluence and quality of the area, water, views and roads, and features, such as a pool or air-conditioning. Therefore, location is important in the sense of neighbourhood and community, rather than prestige. Affordability should receive more attention in the literature and real estate marketing. Different market segments consider a number of factors when purchasing residential property. Since the factors vary according to the purpose (live in or investment) and the property type (house or unit), these variables provide a basis for identifying market segments. Agents can use the findings to better understand buyers. Researchers can further analyse buyer considerations and property characteristics to condense a large number of factors into a small number of coherent dimensions. The study may be limited by its focus on a geographical section of the Australian real estate market and some difficulties in identifying and operationalising property characteristics.

^{*} Corresponding author

Keywords

Purchase; Investment; Australia; Residential; Buyer preferences

1. Introduction

Property market analysis has increasingly recognised the significance of the behaviour of market participants. Scholars, professionals and the property industry accept behavioural research as a valid and relevant aspect of property market analysis (Gallimore 1999). Behavioural research focuses on concepts that affect the market search and price-setting processes. Greater knowledge of the factors which influence buyer behaviour will lead to better understanding and prediction of decision making in real estate markets (Daly et al. 2003). Without an understanding of this behaviour, appraisers do not have systematic methods for minimising the zone of uncertainty around the most probable selling price (DeLisle 1985). Most real estate acquisitions would be considered high-involvement goods that require complex decision-making for perhaps the most important financial commitment of a buyer's lifetime (Daly et al. 2003).

Behavioural research can be organised into two categories: the macro-oriented and micro-oriented. Macro-oriented research is interested in demographic shifts as well as society's evolving values, beliefs and practices that affect buyer interaction with the marketplace. Micro-orientated research investigates individual behaviours and the reasons behind them. This research is microoriented.

The organization of this paper is as follows. The next section will provide a synthesis of variables indicating buyer preferences, and justify the research. We will then provide a description of the method used and the data collected. After this, the empirical findings and implications are discussed. The final section provides a conclusion.

1.1 Buyer Preference Variables in Residential Property

Buyer preferences are related to the quality of property. A study on housing prices in Australia between 1970 and 2003 finds that quality tends to rise over time. The quality includes size, which increased by approximately 2 percent per annum; specific attributes such as garage, swimming pool, heating and kitchen; location attributes reflecting neighbourhood or infrastructure improvement; and repair and maintenance, on which households regularly spend about 2 percent of GDP (Abelson & Chung 2005).

Previous research have provided an overall view of the variables identified by buyers purchasing residential property in Australia, the United Kingdom and Ireland (Daly et al. 2003). One problem with the Daly et al. (2000) study is that location is an all encompassing term. The received wisdom is that location is of utmost importance in real estate, but does this assumption hold? What meaning does location signify in the minds of buyers, agents and sellers? Other research employs a content analysis of American and British valuation, and econometric literature which yield 55 variables that are categorised into four groups; namely, property, distance, environmental and financial characteristics (Adair et al. 1996). Roulac (2007) has attempted to argue that the idea of branding can be applied to luxury properties and that brand, beauty and utility are three characteristics that buyers seek. However, the existing literature uses more common property descriptors. Table 1 synthesises buyer preference variables in residential property found in the researched literature. Variables which have similar theoretical meanings are collapsed into the 4 categories representing buyer preferences.

This research uses a summary of existing variables identified previously as a framework for buyer preference variables in residential property which determine buyer behaviour. This research can be justified on three grounds: gaps in current academic research, the size of the industry involved, and the potential benefits for practice of the research outcomes. Academics have not comprehensively examined the variables considered by buyers when they purchase residential property in Australia. The second justification relates to a trend in this country of increasing awareness of real estate by most investors. Australian property has been considered as one of the most profitable investments according to an increase in demand (Newell & Eves, 2000), although property investors use relatively naïve risk assessment measures (Farragher & Savage, 2008). In summary, the research is justified by gaps in the Australian literature, the high growth of the industry and increased investment in the sector. The research outcomes will be important to property investors, buyers, and agents in meeting buyer needs and buyers will have a better understanding of decision making context and influences. Scholars may gain further insight into the numerous variables that influence prospective buyer behaviour and ways of synthesising these variables.

The overall aim of the research is to investigate factors that are important to buyers of residential property, including location. The specific research objectives are to: identify the characteristics of buyers, isolate the most important factors considered in the purchase of residential property, determine whether these factors vary between buyers intending to live in compared to those seeking to invest, identify differences between types of residential property, and discern the dimensions underlying characteristics of interest to prospective buyers.

Property Physical	Distance Environmenta Location		Financial
-House size	-Distance to work	-Condition of neighbourhood	-Interest rate
-Number of bedrooms	-Distance to school	-Attractiveness of the area	-Maximum mortgage (absolute amount)
-Number of bathrooms	-Distance to local shops	-Steepness/	-Maximum monthly repayments
-Accessible garage	-Distance to shopping centre	topography of the land	-Rateable value of the house
-Low maintenance	-Distance to central business district	-Attractive views	-Length of time house was on the market
-Interior décor and design	-Proximity to amenities	-Open space	
-Manageable garden	-House on a main bus route	-Vacant sites nearby	
-Well built		-Traffic noise	
-House type		-Security from crime	
-Layout of accommodation		-Quality of schools	

Source: Adapted from Daly et al. (2003); Adair et al. (1996)

2. Method

A survey was hand-delivered by real estate agents amongst prospective real estate buyers in South East Queensland, Australia. The sample size was 376 and is comparable to other studies in the field. The questionnaire consisted of two main sections: background information of respondents and variables from the literature that are created for this research(see Appendix 1).Questions used a seven-point Likert scale from 1 = 'very unimportant' to 7 = 'very important'.

A modified Delphi technique assisted in developing the questionnaire, consisting of a panel of acknowledged and experienced experts drawn from the real estate profession. The panel reviewed the draft questionnaire and deleted items that were considered irrelevant and suggested additional variables. The consensus of the experts' responses suggested 7 additional items. The survey was also pilot tested on 40 potential respondents.

The research population consisted of potential real estate buyers in the Brisbane and Gold Coast areas of Queensland. Recruiting respondents was purely on the basis of convenience and carried out with participating real estate agents. The purpose was to obtain a large number of completed questionnaires quickly and economically. To ensure a sample of 400, 600 questionnaires were given to 7 real estate agent offices for distribution by hand. This survey technique is normally inexpensive and may yield a high response rate of 70 to 80 percent (Webster 1997). The real estate sales offices agreed to ask customers to complete the survey over a period of 2 weeks. Three hundred and seventy six questionnaires were returned, representing a 62.7 percent response rate. According to Malhotra (1999), the response rate is considered very satisfactory and aligns with Jackson's (1993) predictions about good response rates for hand-delivered surveys.

3. Results

This section summarises the findings, commencing with demographic details of prospective residential property buyers. The results are then dissected to highlight interactions between buyer demographics and property characteristics. Following this, buyer preferences are condensed into a smaller number of underlying dimensions. The final part highlights differences in preferences between buyers intending to live in and those seeking an investment property.

3.1 Demographic Characteristics and Purchase Intentions

The first results of interest are the demographics of intending property purchasers as shown in Table 2. The number of males and females are approximately equal. The respondents represent a range of ages with the

278 Ratchatakulpat, Miller and Marchant

largest group relatively young at 25-35 years of age (29.3 percent) and the second largest group relatively old at 46-55 years of age. Respondents in the two youngest groups combined (18 to 35 years) represent almost half of the sample. Around half of respondents are single (54 percent), and the majority have no children (55.3 percent). The second largest group is children not at home (20.2 percent). Hence, three quarters do not have children living with them. Almost half the respondents hold a Bachelor degree (44.7 percent) while another large group hold a college award (TAFE or VET) (25 percent).

Characteristic	Frequency	Percentage
Gender		
Male	205	54.5
Female	171	45.5
Age group		
18-24 years	74	19.7
25-35 years	110	29.3
36-45 years	69	18.4
46-55 years	81	21.5
Over 56 years	42	11.2
Marital Status		
Single	203	54
Married	173	46
Children		
None	208	55.3
Children aged under 15 at home	70	18.6
Older children at home	22	5.9
Children not at home	76	20.2
Education		
Up to secondary school (high school)	23	6.1
Technical and Further Education(TAFE) or Vocational Education and training (VET) award (college)	94	25
Bachelor's degree (university)	168	44.7
Master's degree (university)	72	19.1
Higher than Master's degree (university)	19	5.1

 Table 2
 Respondent Demographic Characteristics

Table 3 provides the details of respondent purchase characteristics. Two thirds of respondents in all age categories have considered purchasing a property to live in, and one third as an investment. Around one third of the respondents have considered borrowing 76 to 100 percent of the property cost (32.2 percent), with the second largest group considering borrowing 26 to 50 percent of the cost (20.5 percent). Around 13 percent of respondents are cash buyers. The largest group is the first time buyers (49.7 percent). Half of respondents have considered purchasing a house (51.9 percent) rather than a unit or townhouse. The majority of respondents have considered purchasing a property valued between AUD \$250,000 and \$300,000 (34.6 percent).

Characteristic	%			
Purpose				
A residential property to live in	66.5			
An investment property	33.5			
Percentage of Borrowings				
No finance	13			
up to 25% of property cost	18.4			
26-50% of property cost	20.5			
51-75% of property cost	16			
76-100% of property cost	32.2			
Purchase of Residential Property				
First purchase	49.7			
Second purchase	23.9			
More than the second purchase	26.3			
Type of Property				
A house	51.9			
A townhouse/villa	17.3			
A unit	26.3			
Other	4.5			
Property Value (AUD 2005 Values)				
Under 250,000	21.5			
250,000-300,000	34.6			
300,001-350,000	27.4			
350,001-400,000	7.7			
400,001-450,000	6.9			
Over 500,000	1.9			

 Table 3
 Respondents Purchasing Characteristics

Table 4 provides details of the respondent age related to purpose. Younger respondents (18 to 35 years) have considered a property to live in, and older respondents (over 56 years) have considered purchasing for investment.

Age	Live in %	Investment %
18-24	82.6	17.4
25-35	75.5	24.5
36-45	59.7	40.3
46-55	57.0	43.0
Over 56	40.5	59.5
Total	65.7	34.3

 Table 4
 Cross-characteristics
 of
 Respondents
 between
 Age
 and
 Purpose

Table 5 provides details of respondent age related to the type of property considered. More respondents between 25 and 55 have considered purchasing a house, with a higher percentage considering a unit in the age groups of 18 to 24 and over 56. Table 6 provides details of respondent purpose related to the type of property under consideration.

Table 5 Cross-characteristics of Respondents between Age and Property Type

Age	House %	Unit/Townhouse %
18-24	43.5	56.5
25-35	58.8	41.2
36-45	61.2	38.8
46-55	59.5	40.5
over 56	40.5	58.5
Total	54.3	45.7

Table 6Cross-characteristics of Respondents between Purpose and
Type of Property

	Type of property %			
	House Unit/townhouse			
Purpose				
Live in	65.3	34.7		
Investment	33.3	66.7		

Table 7 provides details of respondent purpose related to the value and type of property. The most notable features of these results is that the lower value houses are considered for living in (81.1%) rather than as an investment, and conversely high value units are considered as an investment (86.1%) rather than live in.

		Purpose %		
Property value	Type of property	Live in	Investment	
Low ^a	House	81.1	18.9	
Low	Unit/Townhouse	61.4	38.6	
Total		71.1	28.9	
High ^b	House	77.1	22.9	
High	Unit/Townhouse	47.6	52.4	

Table 7Cross-characteristics of Respondents between Type of
Property, Purpose and Value

^a Low property value - less than AUD\$ 250,000 to AUD\$ 300,000

^b High property value - AUD\$ 300,001 to over AUD\$ 500,000

3.2 Condensing Factors Considered Important to Buyers

A factor analysis reduces property characteristics to underlying dimensions. This analysis starts with physical characteristics, indicating 5 factors with eigenvalues greater than 1 (Coakes & Steed, 2003), and explaining for 58.87 percent of the variance. Visual examination and reliability tests lead to the factors being labeled for further analysis. The *external propertyscape* is what a buyer would see on inspecting the outside of the property or viewing photographs. The *size and configuration* of the property include the standard information provided in advertisements on the number of bedrooms, bathrooms and car spaces. *Features* consist of a pool, air-conditioning and so on. The final factors are *appearance* and *maintenance, and interior design*.

The next set of analysed characteristics is the 7 distance items, producing 2 factors that explain for 65.54 percent of the variance and the minimum eigenvalues of 1 or greater. The factors are labeled *wider positioning* in terms of transport, central business district (CBD) and other general amenities and *community distance*, meaning proximity to local schools, shops and workplaces.

A factor analysis of 15 environment items produces 4 factors with eigenvalues exceeding 1, explaining for 61.69 percent of the variance. The factors are *topography*, a *good area/neighbourhood*, *location* in the sense of affluence and quality, and *green/environmental* issues.

A factor analysis of 6 items about financial considerations indicates 2 factors with eigenvalues exceeding 1. These two factors account for 75.11 percent of the total variance. The main factor is lender constraints on finance for purchase or *borrowing/affordability* with *timing* being the second.

A factor analysis of 10 other locational influences produces 2 factors with eigenvalues exceeding 1, explaining for 57.23 percent of the variance. The

factors are labeled *access and compatibility* and *water/views/roads*. Items within the remaining characteristics form 1 factor each labeled *psychological* and *evaluation* respectively.

3.3 Most Important Factors Considered by Prospective Buyers

Ratings of the factors from the above analyses were compared for potential purchasers intending to live in the property and those considering investment. These results are shown in Table 8. Overall, for all prospective buyers of residential property, the 3 most important factors are maintenance and interior design, borrowing/affordability, and a good area or neighbourhood. Also of note is the fact that features (pool, heating air-conditioning and so on) are rated as least important for both types of buyers, along with water, views and roads, and affluence or quality of the area.

	Live in	Investment
Maintenance and interior design	5.750	5.655
Borrowing/affordability	5.706	5.591
Good area/neighborhood	5.702	5.665
Size and configuration	5.495	5.341
Psychological (image and risk)	5.373	5.601
Access and compatibility	5.306	5.324
External propertyscape	5.222	5.067
Appearance	5.188	5.194
Legal	5.108	5.246
Community distance	5.047	4.727
Green/environmental	4.890	5.044
Evaluation	4.867	5.214
Wider positioning	4.865	5.351
Timing	4.746	5.048
Topography	4.705	4.716
Affluence/quality	4.666	4.581
Water/views/roads	4.586	4.663
Features	4.241	4.405

Table 8Summary of Property Factors in the Analysis and Ratings
on Each from Highest to Lowest

3.4 Differences between Intending Live in and Investment Buyers

ANOVAs were conducted to identify factors that are significantly different between prospective live in compared to investment property buyers. These factors are wider positioning, community distance, psychological and evaluation. As shown in Table 9, investment buyers consider the wider positioning factor ($\underline{M} = 5.351$, $\underline{SD} = 1.337$) significantly more important than those who intend to live in the property ($\underline{M} = 4.865$, $\underline{SD} = 1.254$). That is, investment buyers are more concerned with distance to shopping centres, the CBD, amenities and public transport. On the other hand, live in property buyers consider the community distance factor ($\underline{M} = 5.047$, $\underline{SD} = 1.373$) as significantly more important than investment buyers ($\underline{M} = 4.727$, $\underline{SD} = 1.308$). Live in property buyers are more concerned with distance to the workplace, local schools and local shops.

Prospective investment buyers consider the psychological factor ($\underline{M} = 5.601$, SD = 0.995) as significantly more important than those who intend to live in the property ($\underline{M} = 5.373$, SD = 0.956). Investment buyers are more concerned with the image of the locality and property, perceived risk, and supply and demand. The evaluation factor is also significantly different. Prospective investment buyers consider it ($\underline{M} = 5.214$, SD = 1.054) significantly more important than buyers who intend to live in ($\underline{M} = 4.867$, SD = 1.191). Investment buyers are more concerned with inspecting fewer than 10 properties and the purchasing process taking under 2 months. They also prefer real estate agents who explain the forms and legalities of the process.

 Table 9
 One-way ANOVA of Purpose and Factors

Factors	Live in		Inves	tment	F	Sig. p-value
	mean	sd	mean	sd		
Wider positioning	4.865	1.254	5.351	1.337	12.040	0.001*
Community distance	5.047	1.373	4.727	1.308	4.671	0.031*
Psychological	5.373	0.956	5.601	0.995	4.643	0.032*
Evaluation	4.867	1.191	5.214	1.054	7.690	0.006

4. Discussion

This section first explores the implications for practice, including for real estate agents, older buyers, affordability and the significance of location compared to minor features of the property. Next, implications for theory are discussed, particularly for the contingency theory. In the last part of this section, limitations and opportunities for further research are presented.

4.1 Implications for Practice

As with Hemphill's (2007) finding that agents and buyers evaluate their interactions differently, it is likely that agents and buyers have varying views about factors that are important in purchasing residential property. Our results assist agents in having more accurate details. A picture emerged of intending

residential property buyers who are a relatively young, single, educated cohort of both men and women, with no children at home. There is a relatively large proportion of people seeking to buy residential property who are not currently required to accommodate children.

The proportion of buyers considering an investment property is lower than ACNielsen's (2003) findings of 4 in 10. Half of the respondents have considered purchasing a house rather than a unit. This proportion is different from previous research where more were seeking a house (ACNielsen 2003). It is possible that more people are looking for a unit recently if it is more affordable than houses. On the other hand, more buyers are perhaps looking for high price investment units as Australia's economy booms. A direct comparison of the reasons between the two studies is not possible. The salient point is that more people are looking for a house to live in rather than invest, whereas units are more likely to be considered for investment. This is consistent with previous, similar research (ACNielsen 2003).

A pattern emerged of young people seeking a unit, as an investment or to live in; the middle aged looking for a house to live in; and the older age group looking for a unit for investment. This accords with generally expected life style and stage perceptions of community patterns and is consistent with previous research (ACNielsen 2003), even though the contemporary composition of home purchaser households is more varied than the traditional family (Smits & Mulder 2008). Despite this overall pattern, the study shows that buyers come from a range of demographic groups that belay the stereotype of a young family with children observed in real estate advertising. Buyers are mostly young, but there are also a substantial proportion of baby boomers. There are some young investors and some older buyers looking for a property to live in. Therefore, buyers should not be stereotyped by age. In addition, many of the prospective buyers do *not* have children or children living at home. The real estate industry may need to widen its views on buyers of residential real estate.

Another implication from this research is the strategies that real estate agents have for the older demographic. This group will increase with the ageing population. At present, much of the advertising and options for this cohort appears to be aimed at purpose-specific retirement villages or over 55 estates. However, it is likely that a broader range of residential options to both live in and invest in, will be required for this cohort.

Real estate agents often advertise low cost houses as investment options, whereas lower cost house buyers in this study are generally seeking to live in. This suggests that the marketing strategy may not be aligned with buyer intentions. It is also interesting that buyers see high priced units as an investment. Such units may be desirable for the negative gearing advantages available in Australia. It may also be that units in Queensland, particularly on

the Gold Coast, are holiday let and thus have the potential to generate higher than normal returns. This study does not investigate what investors are hoping to achieve from their investment in residential property, but it will be an interesting avenue to pursue in further research.

The significance of borrowings is high for both types of prospective buyers, and thus agents are advised to quickly qualify their buyers with regards to finance. Agents can do more to assist buyers in this regard. Affordability is clearly a major consideration which suggests that properties advertised with no price details (auctions, price on application) are not meeting the needs of buyers. Secondly, agents can help buyers in understanding the affordability of a property in more detail, such as the amount of the deposit, amount of repayments at current interest rates, and other monthly outgoings, such as council charges. Some real estate websites provide these services, but agents can take a more active role with prospective buyers, by exploring and ascertaining affordability. Our findings conform with Daly et al. (2003) in terms of a house purchase being a high involvement, significant financial decision.

Those intending to purchase residential property for investment want different services from agents, including: more targeted viewing (view fewer unsuitable properties) and a quicker decision process. Investors seek more efficient service from agents.

Location has long been considered a critical factor in real estate and this study elucidates the meaning of location for buyers. Neither home buyers nor investors rate the affluence of the suburbs as a key factor. This suggests that many people may aspire to live in the best location, but when it comes to seeking a property to purchase, affordability, community distance and neighbourhood factors take precedence. Other aspects of location include distance from various facilities. There seem to be two aspects. One is a general factor of transport and proximity to amenities and the CBD. The second aspect is specific proximity to work, shops and schools, suggesting a more personal or community interest in key work and family related aspects of purchases. Properties should be advertised with clear indications of location and nearby amenities.

Features are relatively less important, suggesting that the fine details of a property are not as influential. Affluence of the area, water, views and roads are the least important, implying that location, in the sense of prestige, is not highly salient to these prospective buyers. House buyers place more emphasis on overall external characteristics, such as the size and slope of the block, sunlight, and garden manageability. Live in prospective purchasers are also more interested in a good suburb with an attractive area, security and less noise. These factors can receive more emphasis in agent marketing of properties, as opposed to features, such as the finer details of the interior fit out.

4.2 Implications for Theory

In terms of implication for theory, a large numbers of property characteristics may be taken into account by buyers of residential real estate, but some are clearly more significant than others. Furthermore, these characteristics cluster into logical groupings and can be reduced into reliable factors. The groupings may not necessarily be the same as reported in the extant literature. If researchers complied with a coherent categorisation that is consistently used, then more legitimate comparisons between areas, countries and types of buyers can be carried out. Certain important constructs in the real estate literature, such as location and the new ones identified here (such as affordability), can have a common, accepted meaning. Our study further confirms that buyer behaviour can be usefully analysed. This study has shown that a micro-oriented approach has merit as a means of distinguishing between different buyers, thus adding to the body of knowledge.

4.3 Limitations and Further Research

The limitations of this study were observed to have some impact on the interpretation of the outcomes. This section will discuss 5 limitations and their possible impact. First, the study is limited to a sample of prospective buyer respondents in the Brisbane and Gold Coast region and therefore, the outcomes may not apply to other regions or countries. Secondly, the one-shot survey only captures a certain point in time. Given the nature of buyer behaviour, in-depth case studies may have added to the quality of output and produced additional insights into prospective buyer practices and processes over time.

The third limitation arises from the way that respondents are recruited. Since respondents were in contact with real estate agents, it was assumed that they are the prospective purchasers of property. However, individuals who contact real estate agents vary in their intentions regarding the likelihood and timing of actually purchasing a property. Some may view a single or small number of properties with no immediate intention to purchase. Others may have definite intentions to purchase a property within a short, specified time frame (for example, 3 months). Prospective purchasers may also have been looking at property without a clear cut decision to live in or invest.

An implication of these issues is that the distinctions between live in and investment made in the analyses may be less reliable since buyer intentions may not have been clear enough to categorically place them as either live in or investor. Furthermore, prospective buyers at earlier stages of the process (for example, considering a purchase, but have not yet started contacting agents and viewing properties) may not allocate the same importance ratings to factors. Prospective buyers who are further advanced in the process (for example, have already viewed several properties or are closer to making a decision) may consider different factors to be important as a result of a longer and more in-depth search, and decision making process. Similarly, prospective buyers who only search on the internet or other media contact only a few real estate agents or view limited properties before becoming discouraged, may not be adequately represented. They may place greater emphasis on different factors.

Thus the results may be subject to truncation bias since we may have omitted respondents from earlier or later stages of property purchase. Due to their stage, they may represent higher or lower values on the importance ratings of the various factors. These limitations can be addressed in future research by asking respondents the number of properties that they had already viewed, amount of time that they had been seeking a property and when they intend to purchase. The sample could then be split on these variables and analyses conducted to determine if there are any significant differences between those at early and later stages of the buying process. Prospective investors and live in buyers might then be more reliably allocated to groups. Prospective buyers could also be recruited from other sources, such as internet real estate sites and newspaper real estate supplements.

This study relies on existing variable groupings in the literature. In retrospect, there appears to be considerable interdependence between these variables, constituting a fourth limitation. Although this research proceeds with groupings garnered from previous research, future research could first combine all items relating to buyer preferences in one factor analysis and establish a more accurate set of factors. A final limitation is that the analysis relies on uni-variate statistics. In future research, probit-logit regression could be conducted to simultaneously investigate which of the factors best distinguish between intended live in purchasers and investors. In addition, property buyers who have made the decision and settled on a property would add a retrospective analysis of specific factors that influenced their actual decision.

There are a number of other avenues for future research. This exploratory study has provided valuable information about prospective buyer behaviour in residential property in Australia, particularly in the Gold Coast and Brisbane. Further research may examine: in-depth buyer behaviour on purchasing decisions over time, target groups, types of property and industry structure. These are not investigated in this paper.

5. Conclusion

This study represents one of the first investigations into residential property buyers which identifies the variables influencing purchase intentions of live in and investor buyers. Particular reference is made to the Australian residential property market in Queensland. As such, the research has implications for this property market and in particular, the Gold Coast and Brisbane, as well as contributing to the body of knowledge on buyer behaviour.

The major contribution to practice is the provision of substantial guidelines on the factors to be considered in developing effective marketing strategies, defining a strategy for the sale of property based on buyer demographics, and whether the buyer might be purchasing a property for investment compared to live in. Buyers may have different views from agents on what constitutes an investment and such buyers want more efficiency and speed in the buying process.

Prospective real estate purchasers are concerned with more than property location. Overall affordability determined by buyer borrowing capacity along with maintenance, design and a good area or neighbourhood are the main characteristics. Agents should emphasise the maintenance and overall interior design of the property. In terms of location, the factors important to buyers are a good area, such as the general standard of the neighbourhood, security and noise. These are liveability requirements rather than prestige aspects, such as water views, affluence, or image. In other words, location is important in terms of the amenity of the neighbourhood, and nearby facilities, rather than an affluent suburb.

In terms of contribution to the body of knowledge, the major implication is that the numerous variables which influence real estate decisions can be narrowed down to a smaller set of underlying factors. These factors and their contribution to live in versus investment decisions merit further in-depth analysis.

Acknowledgements

The authors appreciate the comments of the editor and reviewer for improving the paper. Dr. Thanakon Ratchatakulpat was affiliated with Southern Cross University as a student during the conduct of this research.

References

Abelson, P.W. (1979). Property Prices and the Value of Amenities, *Journal of Environmental Economics and Management*, **6**, 11-28.

Abelson, P.W. & Chung, D. (2005). Housing Prices in Australia: 1970 to 2003. Macquarie University: Sydney. viewed 17 May 2005, http://www.efs.mq.edu.au/news/housing.htm.

ACNielsen (2003). *Uncovering Buyer Behaviour*. The Real Estate Institute of Queensland: Brisbane.

Adair, A., Berry, J. & McGreal, S. (1996). Valuation of Residential Property: Analysis of Participant Behaviour, *Journal of Property Valuation & Investment*, **14**, 1, 20-35.

Belch, G.E. & Belch, M.A. (1995). Introduction to Advertising and Promotion: An Integrated Marketing Communications Perspective (3rd edition). Irwin: Chicago.

Coakes, S.J. & Steed, L.G. (2003). SPSS: Analysis without Anguish. John Wiley & Sons: Brisbane.

Daly, J., Gronow, S., Jenkins, D & Plimmer, F. (2003). Consumer Behaviour in the Valuation of Residential Property: A Comparative Study in the UK, Ireland and Australia, *Property Management*, **21**, 5, 295-314.

DeLisle, J.R. (1985). Behavioral Theory and Residential Appraisal, *the Appraisal Journal*, October.

Farragher, E.J. & Savage, A. (2008). An Investigation of Real Estate Investment Decision-making Practices, *Journal of Real Estate Practice and Education*, **11**, 1, 29-40.

Gallimore, P. (1999). Editorial, *Journal of Property Investment and Finance*, **17**, 4, 323-324.

Hemphill, E. (2007). Factors Affecting Real Estate Broker Selection: What Really Counts?, *International Real Estate Review*, **10**, 1, 1-25.

Jackson, S. (1993). *An Introduction to Sample Surveys: A User's Guide*. Commonwealth Government: Canberra.

Malhotra, N.K. (1999). *Marketing Research: An Applied Orientation* (3rd edition). Prentice Hall: Upper Saddle River, N.J.

Newell, G. & Eves, C. (2000). Recent Developments in Property Education in Australia, *Australian Property Journal*, Nov, 275-278.

Roulac, S.E. (2007). Brand + Beauty + Utility = Property Value, *Property Management*, **25**, 5, 428-446.

Smits, A. & Mulder, C.H. (2008). Family Dynamics and First-time Homeownership, *Housing Studies*, **23**, 6, 917-933.

Webster, C. (1997). Effects of Researcher Presence and Appeal on Response Quality in Hand Delivered, Self-administered Surveys, *Journal of Business Research*, **38**, 2, 105-14.

Whipple, R.T.M. (1995). Property Valuation and Analysis. Law Book Company: Sydney.

Appendix 1

Questionnaire Item	Source
A. Physical influences	
1. The house size	Adair et al. (1996); Daly et al. (2003); Whipple (1995); Abelson (1979); Abelson & Chung (2005
2. The number of bedrooms in the property	**
3. The number of bathrooms in the property	**
4. The presence of a garage with the property	Delphi process
5. The number of garages with the property	Adair et al. (1996); Daly et al. (2003); Whipple (1995); Abelson (1979); Abelson & Chung (2005
6. The maintenance requirements of the property	**
7. The interior design of the property	<u></u>
8. The manageability of the garden	**
9. The structural soundness of the building	"
10. The size of the block of land	"
11. The construction of the property(brick,timber)	"
12. The plan of the property (layout)	"
13. How private the property is	"
14. The slope of the block the property is on	"
15. The services provided to the property (sewerage, garbage, etc)	"
16. Whether the property has a swimming pool	**
17. The amount of natural sun light that can enter the inside of the property	"
18. Whether the property has central heating	"
19. Whether the property is air conditioned	**
20. The construction year of the property	"
21. The exterior condition of the property	**
22. The frontage and depth of the land	"
B. Distance influences	"
23. The distance from the property to my work	Adair et al. (1996);
24. The distance from the property to local schools	"
25. The distance from the property to local shops	"
26. The distance from the property to a shopping centre	"
27. The distance from the property to the CBD	
28. If the property is on a main bus route	"
29. The proximity of the property to amenities(parks, etc)	"

C. Environmental influences

C. Environmental millences	
30. The general standard of the neighbourhood	Adair et al.(1996);Daly et al. (2003); Whipple (1995); Abelson (1979); Abelson & Chung (2005)
31. The attractiveness of the area	"
32. The steepness of the land in the general area	"
33. The views from the property	"
34. Any open space around the property	"
35. Any vacant sites near the property	"
36. The noise that can be heard from the property (i.e. traffic, aircraft, railway)	"
37. The general security in the area	"
38. The quality of the schools in the area	"
39. The flora and fauna near the property	"
40. The standard of the properties adjoining	"
41. The affluence of the general area	"
42. The impact of shadows from near properties	"
43. The likely impact of rain water runoff on the property	"
44. The use of solar devices in the property	Delphi process
D. Financial influences	
45. The current or likely future interest rate on loans	Adair et al.(1996);Daly et al. (2003)
46. The maximum mortgage I can borrow	"
47. The maximum monthly repayments I can repay	"
48. The rateable value of the property	"
49. The length of time the property was on the market	"
50. The settlement date of the property	<u></u>
E. Legal influences	"
51. Any restrictions on the property title (covenants, etc)	Whipple (1995)
52. Any restrictions on the user of the property (eg. can I run a business from the property)	"
53. Any encroachments on the property (eg easements)	Delphi process
F. Psychological influences	"
54. The image of the locality	Whipple (1995)
55. The image of the property	"
56. The perceived risks of the property (eg. from	"
passing traffic etc)	
57. The perceptions of supply and demand in the market	"

"

G. Locational influences	"
58. The safety of the access to the property	Whipple (1995); Abelson (1979); Abelson & Chung (2005)
59. The ease of the access to the property	
60. The compatibility of the property to the others in the area	"
61. Other properties in the area that are likely to detract from the property's value	"
62. The general location of the property	**
63. If the property has water views	**
64. The proximity of the property to the sea	**
65. The width of the road the property is located on	**
66. Any plans for road works at some future time	
67. The amount of road traffic near the property	"
H. 68-72 What other characteristics are important to you when you are considering purchasing residential property?	
I. Problem recognition for purchase decision	
73. The purchase of property is a means of saving money	Belch & Belch (1995)
74. Talking with others about residential property investment is necessary for my investment portfolio	
75. My spouse or partner's views on the property	Delphi process
76. Other family members views on the property	"
J. Search for external information	"
77. Searching for various sources of residential property information is necessary when making a purchase	Belch & Belch (1995); ACNielsen (2003)
78. Contacting Real Estate Agents and asking for residential property information is considered when purchasing residential property	"
79. The best method of finding residential property is by using a real estate agent	"
80. The best method of finding residential property is by seeing signage on the property	"
81. The best method of finding residential property is newspaper advertising	"
82. The best method of finding residential property is by searching the internet	"

294 Ratchatakulpat, Miller and Marchant

K. Evaluation of alternatives " 83. I usually inspect fewer than 10 properties when making a purchase 84. I prefer real estate agents who explain the forms and legalities of the buying process 85. The time taken for the purchasing process was under two months from when I started looking until signed the contract 86. The most influential person within my household in choosing the property is myself