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**RESIDENTS' PREFERENCE ON UTILISING
GREEN SPACE FACILITY**

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Abstract:

Golf-view property involves a niche market in which target customers possess specific characteristics related to income, tenure, age and lifestyle. In general, a golf view property is usually more expensive than a land in the same neighbourhood but has no direct view. The scarcity of golf view land, better view and air quality are additional value added for the golf view property. It is also a life style choice. In contrary, golf course has not been utilised by local residents. Some of them are not playing golf. Moreover, some golfers did not like to play in their backyard.

This paper analysed the resident's purchase preference on utilising adjacent green space facility provided in a master-planned community development. This study also compares residents who live near park and lake at the same location. The mail survey to the local residents was conducted at North Lake, Queensland.

Although residents nominated lifestyle as important motivation to purchase their golf-view property, more than 20 per cent of golf-view's owners did not have any involvement with this sport. Moreover, golfers are not frequently utilise nearby golf course (North Lake) compare to other golf courses. Therefore, golf membership is not related to the proximity of golfers' residents and it is not a key driver to make purchasing decision.

Keywords: residents' preference, golf view property, golf course, North Lake, Queensland, master-planned community development

1. Introduction

Home buyers determine not just structural and location characteristics but also life style choice in their decision criteria. Traditionally, the proximity to public open space such as water, park and golf course has very closed relationship with the intention of residents to utilize the adjacent facilities. The selection of house location is not just based on the frequency of utilizing the facilities but more about quality of life.

Golf-view property involves a niche market in which target customers possess specific characteristics related to income, tenure, age and lifestyle. In general, a golf view property is usually more expensive than a land in the same neighbourhood but has no direct view. The scarcity of golf view land, better view and air quality are additional value added for the golf view property. It is also a life style choice. In contrary, golf course has not been utilised by local residents. Some of them are not playing golf. Moreover, some golfers did not like to play in their backyard.

In Australia, golf is one of the fastest growing sports and business with an approximated 1.2 million regular social golfers and over 500,000 registered golfers belonging to 1,745 golf clubs around the country (Tidbold 2001, 434). According to the Australian

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2. Golf course and residential development in a master-planned community

The term 'master planned communities' (MPCs) has been used to represent projects which are large scale, long term, private sector driven and integrated mix of housing types, recreation facilities, open space and sometimes employment opportunities. Ewing (1991, 2-3) determines the common characteristics of MPC development that distinguishes MPCs from planned unit developments (PUDs) which are:

- Large scale-there is no specific figure but Ewing (1991, 2) has used 2,000 acres (810 ha) as a threshold of an area;
- Designed to combine a complementary mix of land uses such as a wide range of housing choices, employment centers and retail units to support the community usage;
- Controlled by a master developer; and
- Master planned early in the development process.

Another way to define MPCs is through the benefits available to people while living in the MPC and these have been outlined by Schmitz and Bookout (1998, p.13):

- Natural environment: lots of natural, open space; wilderness areas; a nature interpretive center for environment awareness; preservation of historic sites.
- Walks and parks: interesting small parks; walking and biking paths; gardens with native plants and pedestrian pathways.
- Cul-de-Sac Neighborhoods: cul-de-sac streets circles, and courts instead of through streets; quiet, low-traffic areas.

- Community facilities and shopping: an amphitheater for public events and shows; a small cluster of convenience-oriented retail stores; a shopping center adjacent to the community; churches or other places of worship; a library where books circulate or can be read on site.
- A good community entrance: a distinctive community gateway; an open yet clearly marked entrance.

Residents who live by open spaces, such as golf courses, public parks and natural environment are surrounded by many amenities including recreation facilities and stunning view. However, these residents may have some disadvantages, like noise and traffic, living close to such area.

As stated the study of Lutzenhiser and Netusil (2001, 291) that there is a relationship between the home's sales price and its proximity to different open space type. Based on their finding homes with an increase in sales price are found to be located near golf courses.

Another study of Anderson (2002, 13-14) also stated that household in the suburb value the proximity to golf courses while city household do not. In addition, proximity to a larger amenity would have a stronger positive effect on home value.

Golf-view property involves a niche market in which target customers possess specific characteristics related to income, tenure, age and lifestyle. In general, a golf view property is usually more expensive than a land in the same neighbourhood but has no direct view. The scarcity of golf view land, better view and air quality are additional value added for the golf view property. It is also a life style choice. In contrary, golf course has not been utilised by local residents. Some of them are not playing golf. Moreover, some golfers did not like to play in their backyard.

The advantage of having a golf course along the residential development is not just an attractive house, but well planted, well-manicured backyards and well-maintained certainty of open space (Corrigan 2002). Covell (cited in Hertlein 2005, 29) says that only 40% - 50% of people who live on a golf course actually play golf because the reason that golf courses are such enticing places to live is a mixture of economic and psychological factors. Pompe and Rinehart (1999,1-6) stated that building on a golf course adds 7 to 8 percent to the value of property. In fact, prime sites that front on greens or that enjoy water views or fairway and open space vistas can command twice the average fairway premium between 30 and 50 percent. Further, golf courses are a key factor to accelerate the absorption of real estate. In other words, home sales pay for construction while player fees pay for maintenance. However, negative impacts may arise from a golf course location. Golf balls are one trouble area as well as heavy golfer traffic which can be annoying, and privacy may actually be reduced. Moreover, golf courses are sprayed with large amounts of pesticides and herbicides, which can produce environmental concerns, especially for the property owners nearby.

Golf course lots may be defined as the luxury residential properties. In brief, higher property values will generally attract a high earning, more skilled, and better educated work force which then attracts companies and industry. Some basic conditions must be met, growth can occur. These include adequate transportation options, proximity to jobs, and education providers. All of these outcomes are linked together as a large chain reaction in the community (Hearn 1999, 238-239). In the meantime, Hertlein (2005, 31) stated that this whole process of growth and expansion generates revenue into the local economy and pays into the local government in form of income taxes on construction labour, more property taxes on higher intensity land uses, and more sales tax from greater retail traffic.

The reputation of a golf course is nearly parallel with the value of residential allotments on an estate. As few golf estate residents actually play golf, there is a risk that interests of a golf club and residents living along the fairways will diverge. Stottrup (cited in Wilmot 2003) recommends that

the best strategy for protecting the golf course premium is the opportunity to own a share of a golf club, which itself owns the golf course and associated facilities. Then the important goal to maintain the value of a course can succeed. Consequently, the shares can be sold even though there is a cost of this membership transferable fee.

3. Survey and case study selection

The mail survey to the local residents was conducted at North Lake, Queensland. North Lakes is situated in the Pine Rivers Shire, which is part of northern corridor about 35 minutes drive from Brisbane CBD (figure 3.1). Pine Rivers Shire is currently the fastest growing major Shire in Queensland and the second fastest growing in Australia.

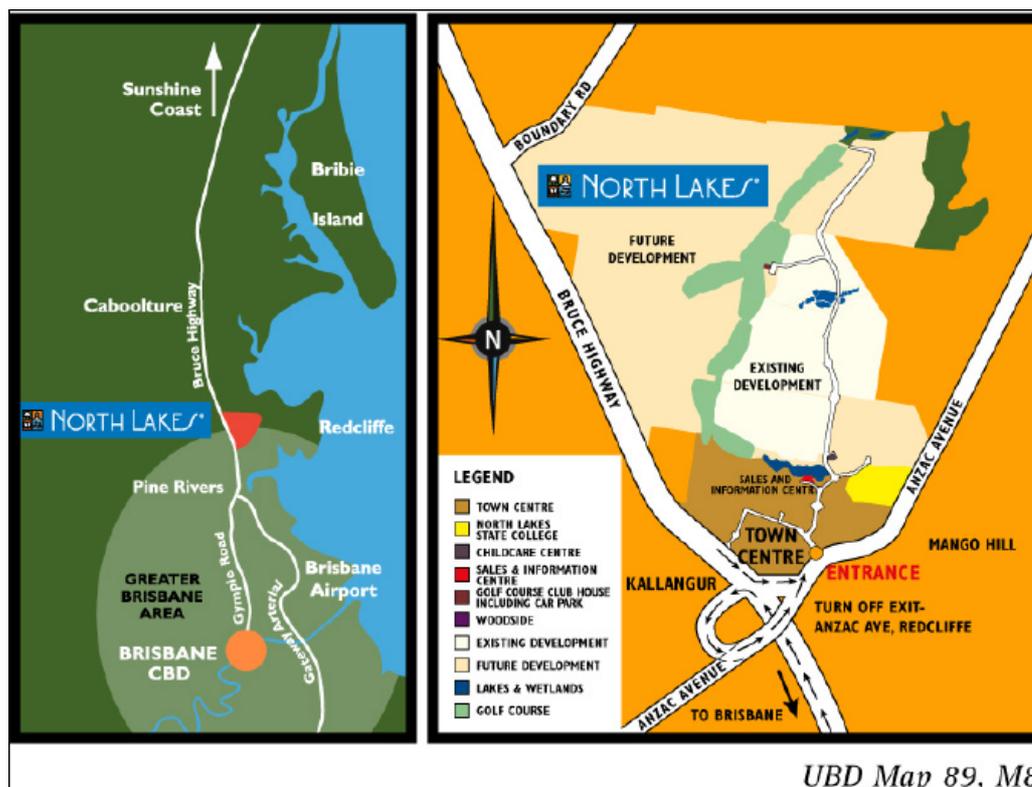


Figure 3.1 North Lakes location map

(Source: <http://cms.lensworth.com.au/archives/4/070.010/121/NL%20Location%20Map.pdf>)

North Lakes is a significant, mixed use, master planned community called for a town centre, a business park, shops, restaurants and cafes, 40 km of pedestrian and cycle paths, a golf course, playgrounds, sports fields, childcare centres and schools. Furthermore, within 20 years it will transform a 1,035 hectare parcel of former forestry land into a community of 8,500 homes and 13,000 job opportunities. Eventually, North Lakes will be home to approximately 20,000 people on 6,500 home sites. In the next 15 years, the population of North Lakes is expected to provide up to 20 percent of Pine Rivers Shire's growth (North Lakes, 2005, 5)

North Lakes is a development by the Lensworth group of companies, which owns the land, and Lend Lease development, which is development manager for the project. The former site characteristic was largely grassland with widespread regrowth of pines and wattles. Therefore, the new residential developer has to create the infrastructure such as roads, transport systems and community services which were lagged behind the needs at that period. A key feature of the site is its scale which allows the developer to control the whole visual setting of the project and develop it

in a way that is simple and harmonious. In addition, the milestones of the project have been outlined as follow (Ryder, 2002, p.2):

- August 1998 Pine Rivers Shire Council approves development of the site.
- November 1999 Lake Eden completed, first residential precinct under way.
- April 2000 North Lakes officially opened by Queensland Premier Peter Beattie.
- January 2001 First childcare centre opened.
- April 2001 First commercial sites offered for sale.
- June 2001 Golf course approved and construction started.
- August 2001 Work starts on first primary school (to open 2002).

The master plan of North Lakes has been described an open space system of “inalienable public land with natural man-made elements comprised of corridors for fauna movement, pedestrian pathways and cycle ways, stormwater channels, services easements and bushfire control zones” (Ryder 2002, 15). The total of around 200 hectares of open space has provided residences with a major park within 400 meters and a pocket park within 250 meters.

The questionnaire survey has been designed and distributed to the sampling residents in North Lakes area. The focus group targeted at property owners who reside in seven various villages located in North Lakes. This research investigates proximity to adjacent open space as a key property attribute require by the purchaser decisions criteria. The survey locations were chosen base on the property’s frontage of various types of open space such as golf course, lake and park. The locations are diverse follow by concept design layout of each village. However, the major chosen properties are adjacent along a golf course. The selected properties were based on the attachment of open spaces of subject location, especially golf course.

Combination of multi-stage cluster sampling and self-selection sampling technique are used in this study. Multi-stage cluster sampling is a development of cluster sampling. This technique is potentially subject for a large geographic area and some discrete groups including those that are not geographically based. At the same time, self-selection sampling technique allows researcher to identify the desire respondents to take part in the research (Saunders, Lewis and Thornhill 2003, 167&177). Total sample size by seven villages in Northlake are summarized in Table 3.1

Table 3.1 Total sample size by location

Village	Sales start year	Number of allotments	Golf view	Lake view	Park view	Sample size
Freshwater	2000	540	30	22	51	90
Crestwood	2001	515	28	-	111	85
Eastridge	2002	378	-	12	107	90
Shearwater	2003	258	15	23	44	80
Woodvale	2003	72	-	-	30	20
Woodside	2004	159	-	-	46	15
Greengate	2005	105	17	-	19	20
	Total	2027	90	45	420	400

Self-administered questionnaires are accompanied by a covering letter, aim to motivate the respondents to answer the attached questions and achieve as high respondent rate as possible (Bourque and fielder 1995, 126). After Research Ethics clearance has been granted by the university, the questionnaires were dropped in the participants' mail box which includes cover letter, questionnaire and a self addressed envelop.

A pilot study was conducted mainly to test the clarity of questionnaire. Eight respondents outside the above sampling frame provide useful feedback to improve the quality of the questionnaire. The questionnaire comprises of a series of questions to confirm the following:

- That the participant's inclusion as part of the residential in the North Lakes area and their property have an attachment of open space;
- The participant's attitude to a golf course and other open space;
- The examination of the buying purpose whether for daily living, weekend house or investment term;
- The type of household occupied their property;
- Whether they have any family members residing with them;
- The length of time that the property has been owned;
- The medium that provide knowledge of North Lakes;
- The role that lifestyle attributes played in the original purchase decision;
- Whether any correlation existed between the location and the satisfaction of open space;
- The key property attributes sought when making their property purchase;
- Whether these key attributes were still considered essential;
- Whether they and/ or their family members play golf;
- The length of time that they start play golf;
- The frequency of utilize at the driving range and golf course at North Lakes;
- Whether they are a member of North Lakes or other golf club;
- The key attributes sought when they paly golf at North Lakes;
- The intention that effect them to play golf;
- What type of work that they are engaged in;
- The duration that they spend to their work place; and
- The participant's attitude to a future residential development at another side of a golf course.

4. Analysis and discussion

Survey questionnaires were hand delivered, in the period 28 to 30 October 2005, to 400 potential respondents in seven characteristic villages in the North Lakes. In total, 92 responses were received, representing a response rate of 23% which is considered acceptable for surveys administered by mail. Of these responses two returned questionnaires were incomplete and were excluded from the sample. Thus, the survey sample comprises of 90 responses. The number of responses analyzed by group, excluding the two returned unanswered, is shown in Table 4.1.

Table 4.1 Respondents by location and landscape options

Village	Landscape options	Number of allotments	Sample size	Returned survey	Golf view	Lake view	Park view
Freshwater	Golf, lake, park	540	90	24	9	9	6
Crestwood	Golf, park	515	85	25	11	-	14
Eastridge	Lake, park	378	90	16		2	14
Shearwater	Golf, lake, park	258	80	17	3	5	9
Woodvale	park	72	20	5	-	-	5
Woodside	park	159	15	1	-	-	1
Greengate	Golf, park	105	20	2	1	-	1
	Total	2027	400	90	24	16	50

Majority of property owners characteristics who purchased a house adjacent to a golf course, parks and lakes are summarized in Table 4.2.

Table 4.2 Property owners' characteristics

	Golf view	Park view	Lake view
Duration of property occupancy	2-5 yrs (54%)	1-2 yrs (38%)	2-5 yrs (38%)
Number of other family members living at home	1 (33.5%)	0 and 1 (30%)	0 and 1 (32%)
Household structure	Couple with children (55%)	Couple with children (44%)	Childless couple and Lone household (38%)
Age group	36-45 (33.3%)	46-55 (28%)	56-65 (37.5%)
Duration that golfers have played golf	More than 10 yrs (69%)	More than 10 yrs (68%)	More than 10 yrs (34%)
Type of employments	Full time (42%)	Full time (54%)	Full time (56%)
Distance to work place	Not working (34%)	20-40 mins. (27.5%)	Less than 20 mins (32%)

The characteristics of property owners with a golf view have lived in North Lakes for more than 2 years with one other family member. Mostly range from 36 to 45 years old, who have played golf for more than 10 years.

As for park view property, the characteristics are owners that have lived in North Lakes more than 1 year but less than 2 years, and range from 46 to 55 years old. They have played golf more than 10 years, employed full time and take approximately 20 to 40 minutes to work.

Finally, owners with a lake view property, range from 56 to 65 years old who have lived in North Lakes for more than 2 years. Majority have played golf more than 10 years, full time employed, and takes less than 20 minutes to get to work.

Respondents were asked to nominate their age. Figure 4.1 illustrates that the golf view living locations were preferred by the owners in the age group between 36-45 years. Lake view living locations were preferred by the owners in the age group between 56-65 year. However, park view living locations were preferred by similar owners age group between 46-55 years.

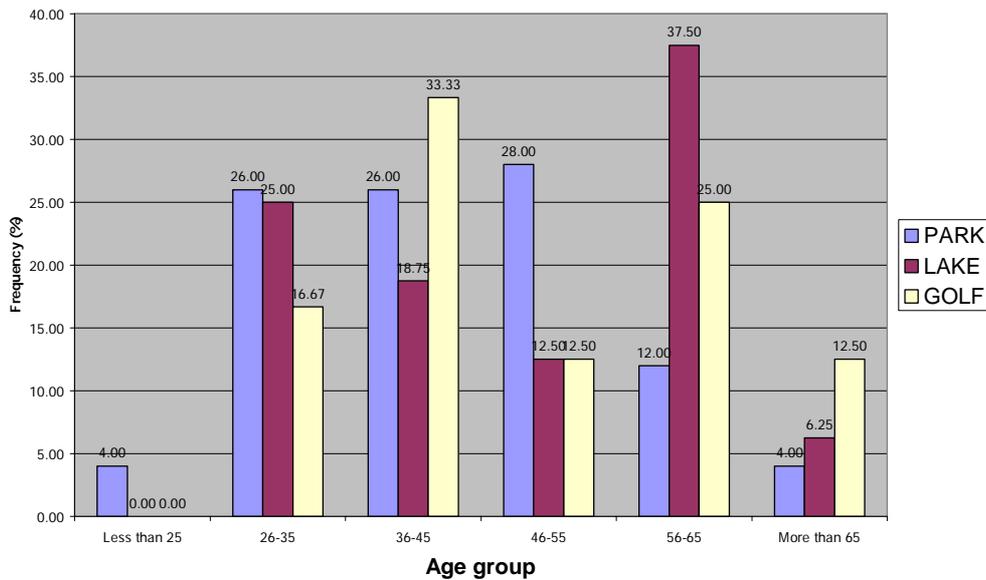


Figure 4.1 Age groups of property owners

Level of satisfaction is in sequence from ‘very satisfied’ to ‘not satisfied’ (with 1 being the most satisfaction and 5 being the least satisfaction).

Table 4.3 presents the result of the mean from each focus group divided by topics.

Table 4.3 The mean of motivation and satisfaction

		Golf	Park	Lake
Motivation	Access to current employment	3.04	2.68	3.06
	Current lifestyle choices	1.58	2.16	2.19
	Future lifestyle or retirement choices	1.83	2.54	2.63
	Proximity to surrounded facilities	1.63	2.02	2.13
	A learning community	2.75	2.90	3.31
	Investment aspect	2.04	2.88	2.56
Satisfaction	Lakes	1.50	1.76	2.19
	Parks	1.79	1.78	2.00
	Sport field/dog park	2.04	2.06	2.13
	Playgrounds	1.39	1.86	1.88
	Golf course	1.38	1.88	2.50
	Aquatic centre	2.09	2.12	2.63
	Pedestrians /cycle paths	1.21	1.60	2.13

The name Analysis of Variance (ANOVA) methods was used to test if there are any differences amongst the mean. The test statistic results show that there are no differences of purchase motivation and open space satisfaction amongst the mean of each focus group except in three topics: future lifestyle or retirement choices, golf course and pedestrian and cycle paths (see Table 4.4).

Table 4.4 Analysis of Variance (ANOVA)

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Motivation	3.084294	5	0.616859	11.20362	0.000764	3.325835
Columns	0.827011	2	0.413506	7.510242	0.010198	4.102821
Error	0.550589	10	0.055059			
Total	4.461894	17				

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Satisfaction	0.855314	6	0.142552	3.550285	0.029402	2.99612
Columns	1.190438	2	0.595219	14.824	0.000572	3.885294
Error	0.481829	12	0.040152			
Total	2.527581	20				

The results of the survey in each motivation, such as access to current employment, current lifestyle choices, proximity to surrounded facilities, a learning community and investment aspect, can not be distinguish by each focus group. However, the future lifestyle or retirement choices issue is the only purchase motivation that can obviously be determine.

As the result, golf view living respondents ranked the future lifestyle or retirement choices as the most important followed by park and lake view living respondents with the average mean at 1.83, 2.54 and 2.63.

What is evident from these results is that broadly the same themes are consistent across the entire sample group. The golf view living respondents were the most satisfy on both golf course and pedestrians/cycle paths followed by park and lake view living with the set of mean at 1.38, 1.88, 2.50 and 1.21, 1.60, 2.13 in order. The survey ranking reflect these issues with the satisfaction of golf course and pedestrian/ cycle paths clearly outweighing by the golf view living respondents. However, the residents are not experience with the golf game but they can enjoy the view of golf course while they walking or cycling along the pedestrians and cycle paths. Two respondents from this location provided opinions supporting this issue. One of the respondent stated that “it is a lovely area with a beautiful golf course. It is lively to see all the families both young and old who walk around it. My husband and I walk round it at least four times a week”. Another respondent also stated that “the feed back I get is because we have a golf view is that it is a positive thing as far as our visitors see our property. I feel having a park adjacent to our house is number one but the golf course feel adds to the appeal. We don’t see ourselves moving from here now we have lived here for over 1 year. We love the block; the views, the parks, bike tracks and the community feel”.

Golf Course Facilities Participation

The golfer respondents were asked to dominate the frequency of the usage of the golf course facilities at North Lakes such as golf course and the driving range. Surprisingly the survey results, North Lakes has a championship golf course facility within the community but 18% of golfer respondents are members of North Lakes Golf Club, while 35% of golfer respondents belong to other golf club memberships and almost the golfer respondents have played golf at North Lakes Golf Club less often than on other courses. Furthermore, 75% of golfer respondents concluded that they rarely practice their swing at the North Lakes driving rage.

The feedback from one of respondents stated that the golf course is out of reach for the residents due to the high green fee. Another respondent also stated that the golf course had no influence on our decision to build in North Lakes. However, it is something non-North Lakes residents associate with the estate.

Golfers and non golfers

Table 4.5 analyse the difference between golfers and non golfers for both their motivation and satisfaction. There are only few factors that significant different between golfers and non golfers (highlighted in Table 4.5), such as current lifestyle choices, investment aspect, satisfaction on playgrounds, golf course and pedestrian/cycle path.

Table 4.5 Golfers and non golfers (t-test)

		Golf	Non-golfer	T-test
Motivation	Access to current employment	2.96	2.69	0.1906
	Current lifestyle choices	1.78	2.31	0.0109
	Future lifestyle or retirement choices	2.25	2.51	0.1728
	Proximity to surrounded facilities	1.84	2.05	0.1524
	A learning community	2.90	2.97	0.3954
	Investment aspect	2.36	2.92	0.0294
Satisfaction	Lakes	1.63	1.92	0.0964
	Parks	1.76	1.90	0.2701
	Sport field/dog park	2.10	2.03	0.3904
	Playgrounds	1.54	2.00	0.0387
	Golf course	1.61	2.18	0.0135
	Aquatic centre	2.32	2.05	0.1475
	Pedestrians /cycle paths	1.63	1.92	0.0133

Respondents were asked whether they, their partner or their family member play golf. A total of 51 respondents (56%) indicated that golf is played by their family members. Among these, the family members who play golf and live in the property adjacent to a golf course were 19 out of 24 respondents. In other words, there were 5 respondents (21%) of owners who purchased the property near a golf course but who have no family members involved with this sport at all.

Figure 5.8 demonstrates the relationship between golfers and duration that they have played golf. 68% of golfers who live in the property adjacent to a golf course have played golf for more than 10 years.

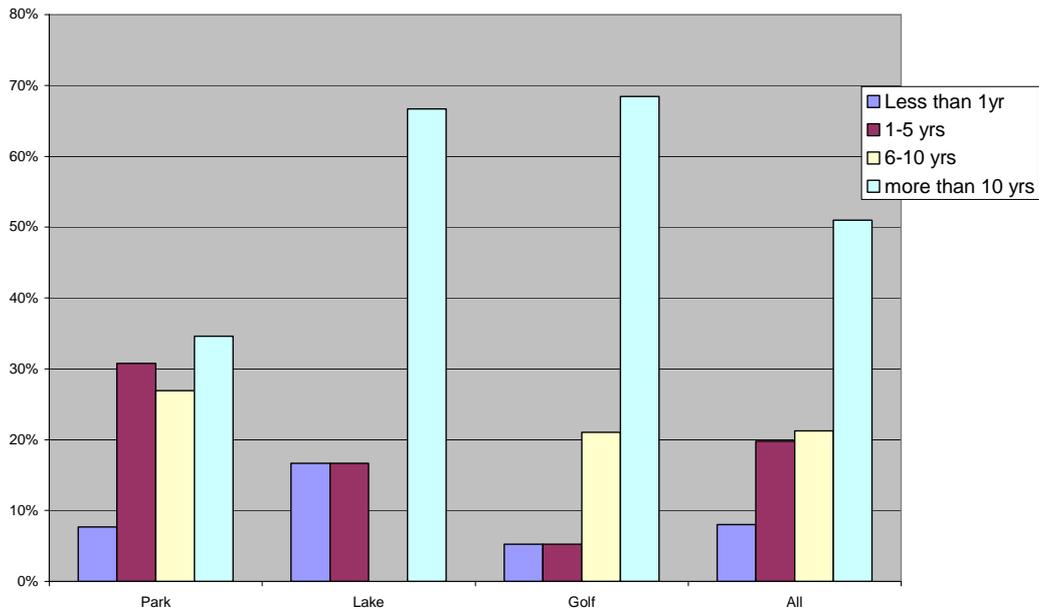


Figure 5.8 Duration that golfers have played golf

Golf club memberships

Respondents were asked whether they are members of North Lakes Resort Golf club or an other golf club. Only 9 golfer respondents (18%) are members of North Lakes Golf Club, while a total of 18 golfer respondents (35%) belong to other golf club memberships, for example, Redcliffe Golf Club, Virginia golf club, Wantima Golf Club, Woodford Golf Club and Club Pelican.

Frequency of golf playing

Respondents were asked to dominate the frequency of golf playing at both North Lakes and other golf clubs. Figure 5.9 illustrates that the average golfer respondent has played golf at North Lakes Golf Club less often than on other courses. Except for the ‘occasional’ type of frequency, a total of 42 out of 51 golfer respondents have played golf at North Lakes more than on other course.

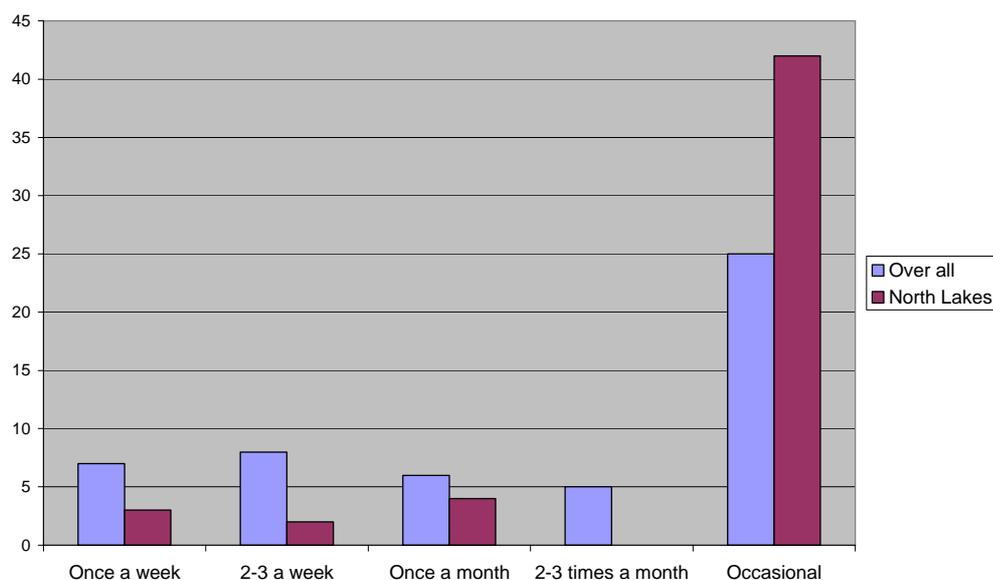


Figure 5.9 Frequency of golf playing

Key attributes to play golf at North Lakes

Respondents were asked to choose a key attribute to play golf at North Lakes. This question has been intentionally linked to the previous question concerning the persuasion to play golf. Figure 5.10 provides an overview of the key attributes.

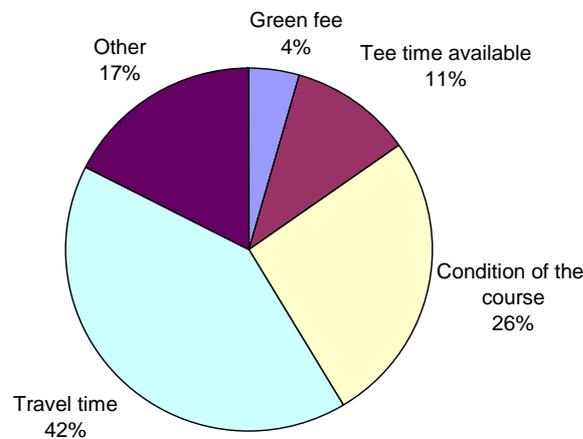


Figure 5.10 Key attributes to play golf at North Lakes

A total of 19 (42%) of golfer respondents stated that duration of travel time to a golf course was a key attribute for them to play golf at North Lakes. Only 2 (4%) have played golf at North Lakes due to the cost of green fee.

Although residents nominated lifestyle as important motivation to purchase their golf-view property, more than 20 per cent of golf-view's owners did not have any involvement with this sport. Moreover, golfers are not frequently utilise nearby golf course (North Lake) compare to other golf courses. Therefore, golf membership is not related to the proximity of golfers' residents and it is not a key driver to make purchasing decision.

Key survey finding:

- 54% of the golf view living respondents have resided in this place for between 2 to 5 years while respondents who have the property adjacent to lake are the only group that occupied their place more than 5 years;
- The golf-view living locations are most preferable for the 'couple with children' households (54%), but also popular choice for households without children (42%);
- 33% of the golf view living locations respondents were the owners in the age group between 36-45 years. 37.5% of the lake view living locations were the owners in the age group between 56-65 years. However, 28% of the park view living locations were the owners age group between 46-55 years;
- The golf view respondents ranked the mean of 1.83 on the future lifestyle or retirement choices as the most important for their purchase motivation;
- The golf view respondents ranked the mean of 1.21 and 1.38 on the pedestrian and cycle paths and a golf course as the most important for their open space satisfaction while living in the North Lakes area;
- 56% of respondents indicated that golf is played by their family members. However, there were 21% of owners who purchased the property near a golf course but who have no family members involved with this sport at all;
- 68% of golfers who live in the property adjacent to a golf course have played golf for more than 10 years;

- 18% of golfer respondents are members of North Lakes Golf Club, while 35% of golfer respondents belong to other golf club memberships;
- Almost the golfer respondents have played golf at North Lakes Golf Club less often than on other courses;
- 42% of golfer respondents stated that duration of travel time to a golf course was a key attribute for them to play golf at North Lakes;
- Most of North Lakes resident respondents are full time employees. However, 29% of the owners of properties adjacent to the golf course are engaged in part time work and also retired persons;
- Overall respondents spend less than 20 minutes per trip to their workplace. While, the Golf view location owners confirmed that they are not working, with the highest percentage of 33%.

5. Conclusion

This paper analysed the resident's purchase preference on utilising adjacent green space facility provided in a master-planned community development. This study also compares residents who live near park and lake at the same location.

Although residents nominated lifestyle as important motivation to purchase their golf-view property, more than 20 per cent of golf-view's owners did not have any involvement with this sport. Moreover, golfers are not frequently utilise nearby golf course (North Lake) compare to other golf courses. Therefore, golf membership is not related to the proximity of golfers' residents and it is not a key driver to make purchasing decision.

A Golf course has positive impact on residential property market. The inclusion of a golf course is common seen in residential development nowadays. A strong understanding of the impact of golf course is significant useful for the industry to produce the efficient product in order to response the high demand.

References

ABS (2002). Participation in Sport and Physical Activities, Australia (Category No. 4177.0), Australian Bureau of Statistics. 2002.

Australian Property Journal. 2001. North Lakes confirms benefits of community/environment planning. November 38(8). 680-681.

Anderson, S. 2000. *The effect on open space on single-family, residential home property values*. 1-7. (accessed August 22, 2005, from Scirus database).

Anderson, S. T. and S. E. West. 2002. *The value of open space proximity and size: city versus suburbs*. 1-34. (accessed August 22, 2005, from Scirus database).

Balnaves, M. and P. Caputi. 2001. *Introduction to quantitative research methods: An investigative approach*. London: SAGE

Brace, I. 2004. *Questionnaire design*. London: Sterling, VA

Bourque, L.B. and E.P. Fielder. 1995. *How to conduct self-administered and mail surveys*. London: SAGE

Crilley, G., D. Murray, G. Howat, H. March and D. Asamson. 2002. Measuring performance in operational management and customer service quality: A survey of financial and non-financial metrics from the Australian golf industry. *Journal of Leisure Property*. 2(4): 369-380 (accessed October 28, 2005, from ProQuest database).

Czaja, R. and J. Blair. 2005. *Designing surveys: a guide to decisions and procedures*. 2nd ed. The United States of America: SAGE.

Cory, G. L., R.M. Garl, L.A. Hirsh, D.L. Leininger, D.A. Mulvihill, W.B. Renner, Jr., J.J. Scavo, A.M. Welch, and S.A. Winter. 2001. *Golf course development in residential community*. Washington, D.C.: ULI-the Urban Land Institute.

Corrigan, M. 2002. Golf's property boom; Australians, particularly babyboomers, are flocking to buy homes attached to golf courses, Majella Corrigan reports on a booming trend in lifestyle change that provides a ready-made community. *The Bulletin*, 120 (4) (accessed November 23, 2005, from Factiva database).

Clout, J. 2005. Fairway views keep optimism on par. *Australian Financial Review*, 1(7) (accessed November 23, 2005, from Factiva database).

Corrigan, M. 2002. Golf's property boom; Australians, particularly baby boomers, are flocking to buy homes attached to golf courses. Majella Corrigan reports on a booming trend in lifestyle change that provides a ready-made community. *The Bulletin*, 120(44) (accessed November 23, 2005, from Factiva database).

Crompton, J. L. 1999. The analogous case of golf courses. *The impact of parks and open space on property values and the company tax base*. 101-108 (accessed August 22, 2005, from Scirus database).

Ewing, R. 1991. *Developing successful new communities*. Washington, D.C.: ULI-the Urban Land Institute.

Fowler, F.J.J. 1993. *Survey research methods*. London: Sage Publications.

Greengate premium golf course living. 2005, Mango Hill, QLD: Stockland Development Pty Ltd..

Hertlein, S. A. 2005. An exploration of the relationship between planned golf course communities and developmental impacts on suburban, Ohio Cities. *A Senior Honours Thesis*. 1-40 (accessed August 22, 2005, from Scirus database).

Hearn, J. 1999. How to analyze land values in the luxury market. *The Appraisal Journal*. 67 (3): 238-245.

Kotler, P. and G. Armstrong. 2006. *Principle of marketing*. 11th ed. New Jersey: Pearson Education, Inc.

Lutzenhiser, M. and N. R. Netusil. 2001. The effect of open spaces on a home's sale price. *Contemporary Economic Policy*. 19 (3): 291-298. (accessed August 22, 2005, from Scirus database).

MacGillivray, H.L. 2005. *Data analysis: introductory methods in context*. 2nd ed. NSW: Pearson Education Australia.

- Minnery, J. and B. Bajracharya. 1999. Visions, planning processes and outcomes master planned communities in South East Queensland. *Australian Planner*. 36(1): 33-41 (accessed November 12, 2005, from APA-FT database).
- Netusil, N. R. 2003. *The effect of environmental zoning and amenities on property values: Portland, Oregon*. 1-37. (accessed August 22, 2005, from Scirus database).
- North Lakes, 2005. www.northlakes.com (accessed November 30, 2005).
- North Lakes Resort Golf Club 2005. www.northlakesgolfclub.com.au (accessed November 30, 2005).
- North Lakes*. 2005, Mango Hill, QLD: Lensworth North Lakes Pty Ltd..
- O'Mara, W.P. 1978. *Residential development handbook*. Washington, D.C.: ULI-the Urban Land Institute.
- Pompe, J. J. and J. R. Rinehart. 1999. The effect of golf course location on housing value. *The Coastal Business Journal*. 1 (1): 1-12. (accessed August 22, 2005, from Scirus database).
- Pine Rivers Press*, 2005. Views attract premium. April 13, 7.
- Pine Rivers Shire Council (2005). www.pinerivers.qld.gov.au (accessed December 3, 2005)
- Ryder T. 2002. *North Lakes: environmentally sustainable urban development, a best practice case study*. Property Council of Australia.
- Schmitz, A. and L.W. Bookout. 1998. *Trends and Innovations in Master-Planned Communities*. Washington, D.C.: ULI-the Urban Land Institute.
- Sutton, C. 2001. Golfers tee up for North Lakes. *The Courier Mail*, July 7. (accessed November 23, 2005, from Factiva database).
- Sauders, M., P. Lewis and A. Thronhill. 2003. *Research methods for business students*.
- Schiffman, L., D. Bednall, A. O'Cass, A. Paladino and L. Kanuk. 2005. *Consumer behaviour*. 3rd ed. NSW: Pearson Education Australia.
- Tidbold, M. 2001. Golf games: How to score a hole in one. *Australian Property Journal*. 434-439. (accessed August 22, 2005, from Scirus database).
- Veal, A.J. 2005. *Business research methods: a managerial approach*. 2nd ed. NSW: Pearson Education Australia.
- Wilmot, B. 2003. Golfers wants a home in one. *Australian Financial Review*. 52. (accessed November 23, 2005, from Factiva database).