

RESIDENTS' EVALUATION OF ADVANTAGES AND DISADVANTAGES OF GOLF COMMUNITY LIVING IN ALICANTE, SPAIN

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ABSTRACT

The number of golf communities is growing with house buyers attracted by a variety of features and experiencing different levels of neighborhood satisfaction. A survey indicates that the course was not a decisive factor for many golf community homebuyers in Alicante, Spain. A multinomial logistic regression analysis with follow-up ANOVA reveals that homeowners who believe there are more advantages than disadvantages to living in a golf community are more likely older, Spanish, play golf, considered accessibility and the landscape environment created by the golf course important in choosing their house, think automobile dependence is not an issue, and evaluate the natural environment of their community as better. Meanwhile, those who perceive more disadvantages cite the limitations on using the golf course for non-golf activities, high housing costs, and the lack of services and shops. Thus, demographic characteristics and preferences contribute to the residents' evaluation of their communities.

Keywords: Consumer satisfaction; Golf communities; Housing preferences

INTRODUCTION

Golf communities continue to grow as a residential option in many countries. While the pioneering golf course communities were developed in the early 1890s in the southern US, incorporation of golf courses into real estate development began in earnest in the 1950s with Hilton Head Island. By the 1980s, about one-third of new golf courses in the US were being designed as an integral part of a real estate development, rising to almost half in the 1990s (Crompton, 2004). Similar developments can now be found throughout the world.

During the 1960s and 1970s, the Spanish national government supported development of golf and promoted the sport both nationally and internationally. The number of golf courses in Spain subsequently increased from 50 in 1980 to 348 in 2015 (Garau-Vadall and De Borja-Sole, 2008; KPMG, 2015). New developments are often constructed within areas of up to 180 hectares containing an 18-hole golf course occupying 50 hectares of land surrounded by residential development at 15 to 20 houses per hectare, creating communities of 2,500 to 3,500 households (Taltavull and Ortuño, 2010). Governments in the Valencian region have supported golf course developments to attract the positive economic impact of tourists, the inflow of new residents, and the resulting increase in property values (Priestley, 2006). By 2006, 15 golf courses had been constructed in the Alicante region (Gomis et al., 2006). Golf communities may be attractive to potential buyers because of the views, open space, and unique environment that increases the status and raises the profile of the development (Gimmy and Benson, 1992). The success of these developments, however, depends upon whether they can attract and retain satisfied tourists and residents.

Despite the growth in the number of golf communities around the world, only limited research has been conducted about these developments. This exploratory study investigates the perceived advantages versus disadvantages of owning a house in a golf community. We compare perceptions

among consumer demographic groups as well as among those living in different types of housing pooled across six Spanish golf communities. The influence of the importance of the golf course as well as other neighborhood characteristics in the choice of the house is explored as well as the residents' evaluation of their golf community neighborhoods¹ after they purchased the house. We also consider whether participating in the sport affects residents' opinions. The study is undertaken in Spain in a region that has experienced a high influx of international retirees along with increased tourism, both of which have contributed to the incentive to develop golf communities for foreign as well as native residents. The paper contributes to the literature through increasing the understanding of the motivations for purchasing a house in a golf community and the resulting satisfaction or dissatisfaction among consumers. The growing number of golf communities, which require the dedication of large land areas often on the periphery or at a distance from urban areas, create self-contained developments that can exert significant ongoing influences on the natural environment, local infrastructure, and residential market.

PREVIOUS RESEARCH

The evaluation of the advantages and disadvantages of a residential environment is subjective and is based not only on objective house and neighborhood characteristics, but also on consumers' preferences and their perception of how well the residential environment satisfies those preferences (Galster and Hesser, 1981). Residential satisfaction is a complex construct affected by environmental and socio-demographic factors (Lu, 1999). Amérigo and Aragonés (1997) present a conceptual framework to examine how a person interacts with the residential environment, leading to satisfaction or dissatisfaction. Each individual evaluates the objective attributes of a residential environment through an individual prism. The resulting subjective interpretation of the quality of the objective residential environment leads to the personal level of satisfaction. It is basically a non-economic and normative quality evaluation. The relevant personal characteristics include socioeconomic and personal characteristics as well as a normative element of the preferred housing environment based on experience and preferences. Residential satisfaction results from comparing one's needs and expectations with one's interpretations of the residential environment, including neighborhood quality (Phillips et al., 2005), and determining if there is a person-environment fit. Satisfaction with one's residential environment indicates a high degree of agreement between actual and desired situations whereas differences between real environment and preferred conditions may lead to dissatisfaction. This provides the foundation for a model in which a resident interacts with the residential environment, resulting in a subjective evaluation of the neighborhood that creates a level of satisfaction or dissatisfaction. Subjective measurements may include perception, satisfaction, aspiration and disappointment with the neighborhood (Mohit and Nazyddah, 2011).

Empirical research on residential environment satisfaction has been undertaken in a variety of markets. Studies in the US, Ireland, UK, Malaysia, Turkey and Brazil identify conditions commonly associated with overall positive evaluation of neighborhood characteristics and resident satisfaction. These are safety/security, satisfaction with neighbors, satisfaction with access or public transport, the condition of nearby properties, and access/view of open/natural space (Lansing and Marans 1969; Campbell et al., 1976; Davis and Fine-Davis, 1981; Galster and Hesser, 1981; Boehm and Ihlanfeldt, 1991; Adams, 1992; Carvalho et al., 1997; Basolo and Strong, 2002; Parkes et al., 2002; Kaplan and Austin, 2004; Kearney, 2006; Kellekci and Berköz, 2006; Salleh, 2008; Hur et al., 2010). Of lesser importance is quality of leisure facilities. Gruber and Shelton (1987) identify three neighborhood and community characteristic factors based on satisfaction scores: attractiveness (open space, quiet, near neighbors, friendly people), public services (quality of roads, public health services/hospitals, police, and fire protection), and facilities and services (quality of library, church, private health services/doctors). Attractiveness is the most important factor among these in determining overall satisfaction with the neighborhood. Ahlbrandt (1984) identifies satisfaction with public services as a significant predictor of neighborhood satisfaction.

A resident's evaluation of a neighborhood may be influenced by personal characteristics; however the results of studies focusing on demographic characteristics are mixed. Kellekci and Berköz (2006) find that the relative importance of objective characteristics in determining the level of neighborhood satisfaction varies with demographic and socioeconomic characteristics. Several researchers identify a positive relationship between neighborhood satisfaction and resident age (Campbell et al., 1976; Galster and Hesser, 1981; Davis and Fine-Davis, 1981; Ahlbrandt, 1984; McHugh et al., 1990; Adams, 1992; Lu, 1999; Perez et al., 2001; Parkes et al., 2002; Chapman and Lombard, 2006; James, 2008); however, Tan (2012) finds a negative relationship in Malaysia. Perez et al. (2001) also find higher satisfaction among older Madrid residents living alone or only with a spouse. When a wider age range is considered, Galster and Hesser (1981) find lower neighborhood satisfaction among married residents whereas Lu (1999) finds that married couples are more likely to report high levels of satisfaction. In contrast, Basolo and Strong (2002) did not find age or marital status to be significant predictors and Tan (2012) did not find marital status to be significant.

Adams (1992) and Parkes et al. (2002) find that women express higher neighborhood satisfaction. Similarly, the Perez et al. (2001) study finds elderly women express higher levels of residential satisfaction than elderly men do in Madrid. However, Galster and Hesser (1981) find females less satisfied and Lu (1999) and Basolo and Strong (2002) do not find sex significant in predicting satisfaction.

A positive correlation appears between both income and education with neighborhood satisfaction in Lu's (1999) analysis, between income, race, housing structure type and neighborhood quality rating in the US (Boehm and Ihlanfeldt, 1991), and between income and neighborhood satisfaction in Ireland by Davis and Fine-Davis (1981), in the US (Ahlbrandt, 1984) and in the UK (Parkes et al., 2002); however, Campbell et al. (1976) find those least educated are more satisfied and Galster and Hesser (1981) as well as Basolo and Strong (2002) and Tan (2012) find no such relationships with socioeconomic variables.

The results concerning the relationship with length of residence in a neighborhood are also mixed (Ahlbrandt, 1984; McHugh et al., 1990; Lu, 1999; Basolo and Strong, 2002; Fleury-Bahi et al., 2008). The Perez et al. (2001) study considers lifestyle activities and the relationship with residential satisfaction. They find that people who participate more frequently in popular leisure activities are more satisfied. Ahlbrandt (1984) finds that residents who use more neighborhood leisure, shopping, health, and religious facilities express higher satisfaction with the neighborhood.

The research focusing on residents living in golf communities is more limited. Surveys indicate that golf is not the only or main attraction for many community residents. Eshuis et al. (2014) report that about 60% of the golf community residents studied in the Netherlands play golf. Similarly, Nicholls and Crompton (2005) find that 63% of College Station, Texas, golf community households contain a golfer, with 53% of households playing on the course located in the community. Non-golf features such as neighborhood safety, house/lot characteristics, anticipated resale value, neighborhood beauty, quiet neighborhood, and zoning restrictions are most important in the housing choice of those choosing non-frontage lots. Those who purchase property on the course, however, also rank view of the course and proximity to golf course/country club as important. Vogt and Marans (2002) find that Detroit, Michigan, golf community homebuyers consider the relaxed and comfortable environment, location of the community, natural features in neighborhood, and natural features of lot in making the purchase decision. Nicholls and Crompton (2005) suggest that non-golfers want to live in a golf development for the higher aesthetic/beauty/open space standards; however, houses not located directly on the course may not have a view and residents may not have access to the space for recreational purposes other than golf (Crompton, 2004).

Only two studies have looked specifically at golf community resident satisfaction. Kanters and McDonald (1999) find that resident satisfaction in a North Carolina golf community is related to community atmosphere (worth the investment, friendly, sense of freedom, quiet, like telling others where

I live), accessibility (to shopping, business, CBD, airport, highway), and cost of living (including price of home). Resident satisfaction is unrelated to the golf course (close, view, ability to play frequently, add to beauty of the house, telling others about golf club membership). Meanwhile, Australian owners with golf course views are more likely to cite pedestrian/cycle paths, golf course, and playgrounds as important for their satisfaction with open space whereas other homeowners are more likely to prefer lakes or parks (Susilawati and Virojanapa, 2007).

As shown, the research on golf communities is limited to a few studies in the US and Australia. Meanwhile, empirical research on how resident demographic characteristics and housing preferences influence evaluation of residential environment attributes and resulting satisfaction with traditional neighborhoods has produced mixed results. Thus, a gap exists in the literature as to how golf community residents evaluate the advantages and disadvantages of living in this increasingly common type of development.

METHOD

Empirical Specifications

Using the conceptual framework of Amérigo & Aragonés (1997), the subjective evaluation of a golf community may vary depending on the resident's characteristics, including demographic factors and reasons for choosing the neighborhood. For this study, the overall evaluation of the community is observed through a self-reported measure of whether the disadvantages outweigh the advantages of living in a golf community. Measures of the importance of a range of individual potential disadvantages of living in a golf community are also examined. Demographic characteristics, housing preferences and housing type are tested as influences on the perception of the disadvantages. The evaluations of residential environment characteristics that may contribute to the opinion as to whether the disadvantages outweigh the advantages are also considered. Because owners who think the disadvantages outweigh the advantages may be more likely to move out of the golf community, the length of tenure in the golf community house is also included in the study.

The dependent variable in the main specification is a nominal variable with three categories: more perceived advantages than disadvantages of living in a golf community, more perceived disadvantages than advantages, or neither/no opinion. The independent variables are a mix of categorical, ordinal, and interval scaled variables. Thus, the relationship can be expressed as a multinomial logistic regression model. The multinomial logistic regression models how the dependent multinomial response variable Y_i depends on a set of p explanatory variables, $X = (X_1, X_2, \dots, X_p)$, which can be continuous, discrete, or both. The multinomial logit compares the k groups of n observations through a combination of $k-1$ binary logistic regressions. Normally, the category with the highest numeric score is chosen as the reference category. The other logits in the multinomial case will be constructed relative to this reference level.

The model of the multinomial probability π with $\pi(x) = P(Y=1)|x_1, x_2, \dots, x_p$ is given by:

$$\text{Logit}(\pi(x)) = \log\left[\frac{\pi(x)}{1-\pi(x)}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_p x_p$$

The parameter β_i refers to the effect of x_i on the log odds that $Y = 1$, controlling the other x_j . By selecting category k as the base or reference level, π_j will denote the multinomial probability of an observation falling in the j th category. The probabilities of falling into each category sum to 1. Thus, a negative coefficient indicates a decrease likelihood of a respondent falling that response category with respect to the reference category whereas parameters with positive coefficients increase the likelihood of that response category. The multiple logistic regression model below depicts the relationship between this multinomial probability π_j and the p predictors, X_1, X_2, \dots, X_p .

$$\log \left[\frac{\pi_j(x_i)}{\pi_k(x_i)} \right] = \alpha_{0i} + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \dots + \beta_{pj}x_{pi}$$

where $j = 1, 2, \dots, (k-1)$; $i = 1, 2, \dots, n$. Since $\sum_j \pi_j(x) = 1$, the model reduces to:

$$\pi_j(x)_i = \frac{\exp(\alpha_{0i} + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \dots + \beta_{pj}x_{pi})}{1 + \sum_{j=1}^{k-1} \exp(\alpha_{0i} + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \dots + \beta_{pj}x_{pi})}$$

where $\pi_j(x) = P(Y=1)|x_1, x_2, \dots, x_p$ at a fixed value x for predictors. The odds ratio $\text{Exp}(\beta_i)$ is the multiplicative effect on the odds of $Y_i=1$ of a one-unit increase in x_i , at fixed levels of other x_j (Agresti, 2007; Hosmer et al., 2013).

For our analysis, Y_i = an individual's subjective evaluation of the advantages versus disadvantages of living in a golf course community with three categories: more perceived advantages than disadvantages of living in a golf community, neither/no opinion, and more perceived disadvantages than advantages. The highest numeric score is arbitrarily assigned to more disadvantages than advantages, and therefore used as the reference category. The explanatory variables consist of a vector of personal characteristics, a vector of house characteristics, a vector of preference attributes, and a vector of evaluations of residential environment characteristics derived from previous literature and available in the dataset.

One-way analysis of variance (ANOVA) is used to measure whether respondents' ratings of the importance of factors that can create dissatisfaction with living in a golf community differ among the groups of residents who report that the advantages outweigh the disadvantages, the disadvantages outweigh the advantages, or neither. Analysis of variance tests the hypothesis that the mean response by each group on an item is equal:

$$\mu_1 = \mu_2 = \dots = \mu_k$$

where k = the number of comparison groups, in this case, three. Once the existence of significant differences in the mean rating of a factor is determined by means of an F test, post hoc Bonferroni pairwise comparison tests are used to further identify which groups of residents significantly differ in their opinions.

Data Collection

The data used in this analysis were collected through self-administered written questionnaires of owner-residents in six golf communities (Club de Golf Sensol, Alicante Golf community, Torre En Conill, Oliva Nova Beach and Golf Resort, Club de Golf Ifach, and Club de Golf Alenda) as part of a larger research project examining the economic impact of golf course development in the Alicante region. In an attempt to obtain participation from as many residents as possible, the research project was publicized through a notice delivered to residents' mailboxes and support was solicited from the president of each community. The questionnaires were delivered in person between April and June 2007. Because of security concerns and varying levels of administration cooperation, the data collection method varied by property. At the Alicante Golf Community, surveyors went door-to-door. When a resident could not be located, neighbors were questioned and assisted in locating the resident and making an appointment to complete the survey. At Alenda, a mix of door-to-door surveys (with neighbor assistance) and interviewing at the social club was used. The social club was used at Oliva Nova. At Ifach, the property manager set up a table for the surveyors. Sensol residents were surveyed at a local retail development. Questionnaires were available in English and Spanish.

The questionnaire collected demographic data about the respondents along with whether they or other members of their household played golf. Limited information about their houses was also obtained. In addition, the consumers were asked about the role various attributes played in their purchase decision as well as their evaluation of their community's residential environment. The questionnaire asked about the importance of disadvantages of living near a golf course and whether there are more advantages or

disadvantages in having a house near a golf course. A total of 399 residents were surveyed; however, some questionnaires were returned with incomplete answers.

Variables

The primary dependent variable in this study is whether residents believe there are more advantages or disadvantages in having a house near a golf course. The responses are categorized as more advantages, more disadvantages, or neither/no opinion. In addition, a series of possible specific disadvantages of having a house near the golf course are rated on a 5-point Likert scale ranging from “not important at all” to “very important.” All the variables used in the analysis are listed in Table 1.

(Insert Table 1 about here)

The independent variables considered for the analysis come from previous research on neighborhood satisfaction. Because of the mixed results from empirical studies, the variables are tested individually for inclusion in the model. The demographic variables include age, sex and nationality (Spanish or foreign). Household size is grouped into three categories and highest level of education completed into two categories. Employment is categorized as either at least one among respondent and spouse (if relevant) employed or neither working.

Because each resident chooses a specific residence, the house may affect the resident’s evaluation of the golf community’s advantages and disadvantages. The housing characteristics considered in the analysis are the type (attached or detached) and floor area in five categories. Dissatisfied consumers may be expected to move away from the neighborhood and, therefore, those who have lived in their houses longer may have self-selected to remain because they evaluate a golf community as having more advantages than disadvantages. To account for this possibility, we use the year the resident purchased the house to create a length of residence measure.

Previous research indicates that many golf community residents do not play on the course and that other factors may be decisive in selecting the community. Neighborhood preferences are measured through ratings of the importance of possible pull factors in attracting the resident (friends/relatives, commercial areas, housing cost, proximity to the sea, accessibility, housing design) on a 5-point scale from “not important at all” to “very important.” In addition, respondents are asked if the presence of the golf course was decisive in their house choice. The golfer variable reflects whether the respondent or other household members play golf. Homeowners evaluate their community (green areas, natural environment, leisure facilities, sports facilities, residential environment, proximity to shops, proximity to public transport, safety, neighbors) and services (street lighting, water supply, sewer system, rubbish collection) with a 5-point Likert scale ranging from “very bad” to “excellent.”

RESULTS

A total of 399 residents were interviewed across the six communities. The respondents are profiled in Table 2. Because of nonresponse on some items, the number of respondents varies within the analysis. A mix of Spanish and immigrant owners participated in the survey. The opinions of both males and females are represented. The most common education level among the respondents is at least some college. Most of the respondents are between the ages of 30 and 70, with an average age of 50.6 and a median of 52.0 years. About half are living with just a spouse or partner. The respondents are also about evenly split between those who are employed and those who are completely retired or not working. About one-half of the households do not contain anyone who plays golf. This is about 10% higher than found by Nicholls and Crompton (2005) among College Station, Texas, golf community households and by Eshuis et al. (2014) among residents of a golf community in the Netherlands. While detached houses are most common (42%), all sizes and type of houses in the communities are represented. The majority of the homeowners purchased their houses within the seven years prior to the survey, which is consistent with the increase in golf course development in recent years.

(Insert Table 2 about here)

The relative importance of criteria that may be used to choose a house is illustrated by the mean importance scores in Table 3. Housing design is a major consideration while the least important for these buyers is having friends or relatives living in the urbanización. The relatively high standard deviations on the items rated least important, on average, indicate that substantial differences exist among homebuyers as to the importance of these criteria. The relative ambivalence of the residents about the golf course may be related to the fact that about one-half of the households do not contain a golfer and reflects that 52% of respondents said the existence of the golf course was not a deciding factor in choosing their home. This mirrors results in the US where Nicholls and Crompton (2005) find non-golf features such as neighborhood safety, house/lot characteristics, anticipated resale value, neighborhood beauty, quiet neighborhood, and zoning restrictions are most important in the housing choice of those buying non-frontage lots as well as the Vogt and Marans (2002) findings that Detroit, Michigan, golf community homebuyers consider the relaxed and comfortable environment, location of the community, natural features in neighborhood, and natural features of lot in making the purchase decision rather than specifically the golf course.

(Insert Table 3 about here)

The only neighborhood attribute that golf community residents as a group rate overall as “good” or better is water supply. However, the average evaluation of many neighborhood characteristics and services is at least “fair.” The lowest average ratings (shown in Table 4) are for the remote locations lacking public transportation. The natural environment and green areas are rated as between “good” and “fair.” Sports and leisure facilities are rated as between “fair” and “bad.” Because many residents do not play golf, they do not consider the course’s presence as sufficient to provide “good” leisure or sports facilities. While the residents were not attracted to the neighborhood by established personal ties, once they moved in, they are relatively satisfied with their neighbors.

(Insert Table 4 about here)

The residents, on average, do not perceive the potential disadvantages of living near a golf course as very important, as is illustrated in Table 5. The relative dependence on automobile transportation and lack of services in most golf communities is a result of construction in rural areas where sufficient open land is available for the course and the cost is lower; however, some communities are located close to major urban centers, so they do not suffer from these problems, which may account for the large standard deviation on these items. The expected higher housing prices associated with golf communities, the lack of access to the course for other types of leisure activities, and the influx of non-resident players do not appear to be important detractors from the communities. The most common disadvantage not listed as an option on the questionnaire, but volunteered by 14 respondents, is the presence of mosquitoes. Another 11 cited fumigation for insects as a disadvantage. More than two-thirds (72%) believe that the advantages outweigh the disadvantages whereas only 10% believe the disadvantages are greater than the advantages.

(Insert Table 5 about here)

Because of the exploratory nature of this analysis and the mixed empirical results from previous research on neighborhood satisfaction, the independent variables to be included in the model are uncertain. In addition, an examination of the independent variables indicates that correlation exists among some demographic variables as well as among some attitude and preference variables, so a stepwise procedure is used to select the variables that contribute the most explanatory power to the model. A stepwise multinomial logistic regression using backward elimination with an entry probability of .05 and removal probability of .10 is conducted with the advantages versus disadvantages of a house in a golf community as the dependent variable (the reference category is neither/no opinion). Demographic characteristics, house characteristics, housing preferences, and neighborhood evaluation variables described in Table 1 comprise the independent variables. A model containing eight variables is selected.

Because the resulting equation contains a reduced number of variables, the final multinomial logistic regression model can be re-estimated using a larger number of observations (328). When the 328 observations that have non-missing values for all the variables in the reduced model are included, the

Pearson goodness-of-fit test ($\chi^2 = 664.400$; $df = 626$; $p = .139$) is not significant, indicating the model adequately fits the data. The likelihood ratio test of the model against the null is significant ($\chi^2 = 88.867$; $df = 24$; $p = .000$), indicating the final model outperforms the null. The Nagelkerke pseudo R^2 is 32%.

The coefficients in Table 6 are the results of the multinomial logistic regression with the highest coded category of the dependent variable (more disadvantages) as the reference category and the highest coded (not highest value) category of nominal and ordinal independent variables as reference categories. Six of the variables are significant at the 10% level in estimating the probability of a resident believing the advantages of living near a golf course are greater than the disadvantages. The coefficients indicate that residents who think there are more advantages than disadvantages of living in a golf community are more likely to be older, Spanish, and have someone in the household who plays golf. Residents living in houses containing 75 to 100 m² are slightly more likely to believe the disadvantages outweigh the advantages than those living in the smallest houses in the communities. Those who perceive more advantages also considered the landscape environment created by the golf course as more important in choosing their house than other golf course community residents. Once living in the golf community, those who believe the advantages outweigh the disadvantages are most likely to evaluate the natural environment of their community as better than other residents.

(Insert Table 6 about here)

The relationship between the respondents' overall evaluation as to whether there are more advantages or disadvantages to owning a house near a golf course and the importance residents place on six specific potential disadvantages are revealed by the ANOVA results in Table 7. Significant F tests indicate that differences in the importance of certain potential disadvantages exist among the groups, specifically the limitation of the golf course as a leisure area, the high cost of housing, the lack of services and shops, and the excess dependence on an automobile. The potential problem of many people from outside the community coming in to play golf is significant at the 10% level.

(Insert Table 7 about here)

Post hoc Bonferroni pairwise tests on each disadvantage (Table 8) indicate that those who believe the disadvantages of owning a house near a golf course outweigh the advantages are significantly more likely than everyone else to see the limitations on using the golf course as a leisure area for walking, playing and other activities as an important disadvantage. They are also more likely to think the high cost of housing and the lack of services and shops are important disadvantages than those who think the advantages outweigh the disadvantages. Meanwhile, those who think there are more advantages than disadvantages rate the importance of excess dependence on an automobile as means of transport as significantly lower than everyone else.

(Insert Table 8 about here)

CONCLUSIONS

The number of golf course communities has been increasing in recent decades, providing an alternative residential environment for homeowners in many markets. Developers have been actively marketing golf communities to both locals and retirees relocating to Spain and other destinations that offer year-round golfing opportunities. These developments can have a substantial effect on the local infrastructure, natural environment, and housing market.

The residents of golf communities in the Alicante region of Spain appear to be typical golf community residents in that many do not play golf and many say that the presence of the golf course was not a deciding factor in choosing their house. The results suggest that golf communities are providing a desirable lifestyle that does not include golfing for many residents. However, the landscape environment created by the golf course is important to buyers and they are generally satisfied with the natural environment of their communities, but they are unhappy with the lack of other green space. The consumers appear similar to buyers in other countries who value the open space a golf course provides as a neighborhood amenity; however, perhaps the retiree immigrants from other countries are expecting

more green parks than they found in relatively arid Alicante. On average, the residents do not perceive lack of access to the golf course for other leisure activities such as walking as an important disadvantage of the neighborhood. It is interesting to note, however, that those who believe the disadvantages outweigh the advantages of living in a golf community place greater importance on the limitation of using the courses as a leisure area for other activities. Thus, inability to access to course for other pastimes appears to lead to dissatisfaction among a minority of the residents.

Accessibility and house cost were relatively important in selecting residents' houses, but not the presence of commercial areas and services. Overall, the residents evaluate their communities' proximity to shops as fair and public transportation as bad. The construction of golf communities in remote locations has contributed to reliance on automobiles to access retail and other services outside the local development. Public transportation is very limited in the region. The potential high housing cost and reliance on automobiles are not perceived, on average, as disadvantages of living in a golf community; however, those who believe the disadvantages outweigh the advantages place greater importance on the cost of housing, the lack of services and shops, and the dependence on automobiles. Thus, these are contributing factors to dissatisfaction among a minority of homeowners.

While the majority of residents believe that the advantages of living in a golf community are greater than the disadvantages, some demographic characteristics are related to differences in opinion. Older and Spanish residents are more likely to think that there are more advantages than disadvantages. While there may be some survivorship bias in the results, the length of time one has lived in the community is unrelated to the evaluation of advantages versus disadvantages; however, this conclusion is based on a sample of residents who mostly have lived in their houses for fewer than eight years. Foreign residents tend to be retiree migrants who have moved to Spain from the UK or Germany. Their purchase of a house in a golf community is part of a major life transition and many may not realize what life will be like in relatively isolated developments. Playing golf also leads to perceiving more advantages in golf community living. Thus, people who use the leisure facilities provided in the community are more likely to see the positive aspects of golf community living.

Placing more importance on the golf course as a landscape environment and a subsequent perception that the natural environment is better also contribute to a resident deciding that there are more advantages than disadvantages to living in a golf community. Thus, those residents who prefer the manicured appearance of golf courses may perceive them as a quality green space while those who prefer natural open spaces but thought that a golf course would be an appropriate substitute are less satisfied once living in the community. Golf courses are not successful substitutes for natural open space for these residents.

Further research is needed to explore the role of golf communities in the housing market and the broader economic and natural environment. Additional observations from more communities would provide a wider range of objective neighborhood attributes as inputs to the analysis and increase understanding of the different groups of consumers who are attracted to these communities. In addition, comparisons with residents in similar residential developments that do not contain a golf course would provide further insights into the expectations non-golfers have when purchasing a house in a golf community rather than in other neighborhoods. In addition, such comparisons would further understanding of the substitutability of golf courses for other open spaces when consumers are making housing choices.

ENDNOTES

¹ The terms golf community and neighborhood are used interchangeably when referring to the study areas. Each of the golf communities included in the analysis is a defined self-contained area. The survey that provided the data for this study referred to the golf community as the resident's neighborhood.

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Table 1 : Variable Specifications

Variable	Definition
Disadvantages	
DisVsAdv	More advantages than disadvantages = 1; neither = 2; more disadvantages than advantages=3
DisAuto	Excessive dependence on automobile ¹
DisShop	Lack of services/shops ¹
DisCost	High cost housing ¹
DisBalls	Danger of golf balls ¹
DisPlayers	Excess players who do not live here ¹
DisLeisure	Limitations on using course as leisure area ¹
Demographic characteristics	
Nationality	Respondent's nationality: 1=Spanish; 2 =other nationality
Age	Respondent's age in years
Sex	Respondent's sex: 1=male; 2=female
HHSize	Household size 1=3-6; 2=2; 3=1
Education	Respondent's highest level of education: 1=primary or secondary; 2=college or graduate degree
Employment	Respondent and spouse's employment/retirement status: 0=both retired/housewife; 1=at least one working
Length residence	Number of years since purchasing the house
Golfer	Respondent or other household member is golfer: 1=yes; 2=no
House characteristics	
House size	House area in m ² : 1= >200; 2=150-200; 3=100-150; 4=75-100; 5= <75
House type	1=Flat or semidetached; 2= Detached chalet, villa, bungalow
Preferences	
Golf decisive	Existence of golf course decisive to buying house: 1=yes; 2=no
Housing design	Importance of housing design in purchasing the home ¹
Accessibility	Importance of good accessibility to the complex in purchasing the home ¹
Landscape	Importance of landscape environment created by golf course in purchasing the home ¹
Housing cost	Importance of housing cost in purchasing the home ¹
Proximity to sea	Importance of proximity to the sea in purchasing the home ¹
Sport space	Importance of golf course as leisure sport space for family/friends in purchasing the home ¹
Commercial	Importance of the existence of commercial areas and services in the urbanization in purchasing the home ¹
Friend/relatives	Importance of existence of relatives/friends' housing in the urbanization and golf complex ¹
Neighborhood Evaluation	
Water supply	Evaluation of neighborhood water supply ²
Neighbors	Evaluation of neighbors ²
Residential environment	Evaluation of neighborhood residential environment ²
Natural environment	Evaluation of neighborhood natural environment ²
Rubbish collection	Evaluation of neighborhood rubbish collection ²
Sewer	Evaluation of neighborhood sewage and drainage system ²
Safety	Evaluation of neighborhood safety ²
Street lighting	Evaluation of neighborhood street lighting ²
Green areas	Evaluation of neighborhood green areas ²
Proximity to shops	Evaluation of existence or proximity to shops ²
Leisure facilities	Evaluation of neighborhood leisure facilities ²
Sports facilities	Evaluation of neighborhood sports facilities ²
Public transport	Evaluation of neighborhood public transport ²

¹scale of 1 to 5 with 1= not important at all and 5=very important.

²scale of 1 to 5 with 1= very bad and 5=excellent.

Table 2 : Respondent And Housing Profile

Percentage of Golf Community Respondents/Households			
(N=399)			
Nationality		Education	
Spanish	40.6%	Primary or secondary/technical	44.3%
Foreign	59.1%	College or graduate degree	46.6%
No answer	0.3%	No answer	9.0%
Age		Household size	
19-39	24.1%	1	9.3%
40-49	18.3%	2	50.1%
50-59	24.6%	3-6	35.6%
60-88	28.8%	No answer	5.0%
No answer	4.3%		
Employment		Golfer in the household	
Either respondent and/or spouse working	54.9%	Yes	49.4%
Neither respondent or spouse working	44.4%	No	45.1%
No answer	0.8%	No answer	5.5%
House type		Sex	
Flat, apartment, semi-detached	55.1%	Male	57.9%
Detached chalet, villa, bungalow	42.4%	Female	42.1%
No answer	3.1%		
Length residence (yrs)		House size	
1	10.0%	<75 m ²	15.8%
2	10.0%	75-100 m ²	19.8%
3	12.5%	100-150 m ²	22.1%
4	13.3%	150-200 m ²	18.0%
5	12.3%	>200 m ²	21.8%
6	10.8%	No answer	2.5%
7	10.5%		
8-39	11.0%		
No answer	9.5%		

Table 3: Important Purchase Criteria

Criterion ¹	Importance		
	n	mean	std dev
Housing design	361	3.99	1.11
Accessibility	370	3.69	1.31
Landscape	369	3.64	1.40
Housing cost	370	3.61	1.40
Proximity to sea	370	3.54	1.46
Sport space	371	2.85	1.69
Commercial	369	2.79	1.67
Friend/relatives	371	2.07	1.53
		Yes	No
Golf decisive	394	47%	52%

¹scale of 1 to 5 with 1=not important at all and 5=very important.

Table 4: Neighborhood Evaluation

Neighborhood Attribute ¹	Evaluation		
	<i>n</i>	mean	std dev
Water supply	378	4.01	0.99
Neighbors	371	3.87	1.06
Residential environment	376	3.72	1.05
Natural environment	377	3.69	1.13
Rubbish collection	378	3.44	1.34
Sewer	372	3.39	1.29
Safety	376	3.28	1.29
Street lighting	377	3.22	1.35
Green areas	378	3.16	1.43
Proximity to shops	373	3.09	1.27
Leisure facilities	378	2.89	1.35
Sports facilities	372	2.66	1.42
Public transport	372	2.14	1.36

¹scale of 1 to 5 with 1= very bad and 5=excellent.

Table 5: Disadvantages of Having a House Near a Golf Course

	<i>n</i>	More advantages	Neither	More disadvantages
More advantages than disadvantages	371	72%	18%	10%
Disadvantage	Importance			
	<i>n</i>	mean ¹	std dev	
DisAuto	371	3.07	1.73	
DisShop	371	2.87	1.71	
DisCost	372	2.29	1.52	
DisBalls	371	1.88	1.49	
DisPlayers	373	1.62	1.16	
DisLeisure	372	1.59	1.14	

¹scale of 1 to 5 with 1=not important at all and 5=very important.

Table 6: Multinomial Logistic Model Of Whether There Are More Advantages Or More Disadvantages To Living In A Golf Community

Variables	More Advantages Vs More Disadvantages		Neither/no opinion Vs More Disadvantages	
	Exp(B)	Signif	Exp(B)	Signif
Age	1.049	.024**	1.050	.062*
Landscape	1.427	.015**	.894	.534
Accessibility	1.189	.258	.863	.429
Natural environment	1.990	.000***	1.541	.040**
HHSize (ref = 1)				
2	.395	.261	.208	.102
3-6	.403	.291	.445	.412
House size (ref = <75m ²)				
75-100m ²	.203	.071*	.103	.042**
100-150m ²	.347	.241	.667	.692
150-200m ²	1.236	.836	.660	.725
>200m ²	.300	.174	.324	.268
Golfer (ref = no)	2.321	.062*	.676	.502
Nationality (ref = non-Spanish)		.022**	2.040	.274
<i>n</i> =328 * <i>p</i> <.10;** <i>p</i> <.05;*** <i>p</i> <.01				

Table 7: ANOVA of Importance of Specific Disadvantages Among Those Who Believe There Are More Advantages or More Disadvantages to Living in a Golf Community

Overall Evaluation of Advantages Vs Disadvantages					
Disadvantage ¹	More Advantages	More Disadvantages	Neither/no opinion	<i>n</i>	<i>F</i>
DisAuto	2.84	4.03	3.74	327	11.038***
DisShop	2.67	3.94	3.19	326	9.995***
DisCost	2.21	3.03	2.39	327	4.588**
DisBalls	1.82	2.00	1.92	326	0.277
DisPlayers	1.59	2.06	1.47	327	2.933*
DisLeisure	1.50	2.29	1.50	327	7.688***

¹mean importance based on scale of 1 to 5 with 1=not important at all and 5=very important.

²Means significantly different at .05 level based on Bonferroni post hoc paired comparisons.

* $p < .10$; ** $p < .05$; *** $p < .01$

Table 8: Bonferroni Post Hoc Paired Comparison of Importance of Specific Disadvantages Among Those Who Believe There Are More Advantages or More Disadvantages to Living in a Golf Community

Disadvantage ¹	<i>n</i>	Mean Difference in Importance of Disadvantage		
		More Advantages Vs Neither/no opinion	More Disadvantages Vs neither/no opinion	More Advantages vs More Disadvantages
DisAuto		.908**	.286	1.193***
DisShop	327	.528	.083	1.276***
DisCost	326	.182	.640	.822***
DisBalls	327	.097	.083	.180
DisPlayers	326	.114	.585*	.471*
DisLeisure	327	.004	.786**	.790***
	327			

¹mean importance based on scale of 1 to 5 with 1=not important at all and 5=very important.

* $p < .10$; ** $p < .05$; *** $p < .01$

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