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Choosing a primary school in Australia: eliciting choice-determining factors using the theory of planned behaviour

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Publication Details

This conference paper was originally published as Goh, E & Dolnicar, S, Choosing a primary school in Australia: eliciting choice-determining factors using the theory of planned behaviour, in Proceedings of the Conference on Global Governance, Educational Change, & Cultural Ecology, Australian National University, Canberra, Australian New Zealand Comparative and International Education Society, 2006, 100-104.

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Abstract
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Keywords
market segmentation, a priori, commonsense, a posteriori, data-driven, post-hoc

Disciplines
Business | Social and Behavioral Sciences

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Choosing a Primary School in Australia
Eliciting Choice-Determining Factors using the Theory of Planned Behaviour

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Submission as refereed paper

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Introduction

Australian parents have a choice of sending their child to a Government, Catholic or Independent school (Kelley and Evans, 2004). Government schools have the largest market share (68%) of total student enrolments. However, over the past 25 years (1979 – 2004), Government schools have suffered a loss of 11% market share (83000 students) and Independent schools have seen a large increase in student enrolment figures of 9% (459000 students, ABS, 2004). These developments illustrate that schooling has developed to become a service industry with parents becoming customers in selecting a school for their child. This parental power of choice requires schools to adopt marketing strategies to protect or acquire market share. In order to compete for market share, schools need to understand reasons of parents for choosing or nor choosing a particular school or school type. Elicitation studies aim at revealing which the main reasons are for parents to send their child to a particular school.

Numerous such studies have been conducted in the past. These studies differ not only in the geographical region studies, but also in the methodologies applied.

The first group of studies elicits reasons for school choice to construct items for a quantitative (typically survey phase) of the project by literature review or secondary data (e.g. Government reports). Such studies were conducted by Bagley (1996), Goldring and Hausman (1999) and Denessen et al. (2005). Bagley's study (1996) resulted in 29 reasons leading to the key finding that the ethnic / racial composition of a school was not a significant factor influencing parents' choice of school. The elicitation stage of Goldring and Hausman led to 16 items, which were subsequently classified into four main reasons (academic, convenience, discipline and value community). The study results indicate that convenience guided most Government school choosers whereas academic reasons were more important for non government school choosers. Denessen et al. (2005) elicited 17 items; the main factors of school choice emerging from the study were religion, social milieu and ethnicity.

A second group of studies uses one single primary fieldwork method at the actual elicitation stage. For instance, Elacqua et al. (2005) asked 530 parents one single opened ended question using a questionnaire. Eight reasons (academic environment / curriculum, location / cost, morals / values, discipline / safety, class or school size, facilities, student demographics and others) emerged as most important factors. Bussell (1998) conducted 20 interviews with parents leading to 31 items. The child's happiness was the most frequently mentioned reason. West et al. (1995) conducted 70 interviews and identified 22 different reasons for school choice with the school's academic record ranking first. Schneider and Buckley (2002) observed parents' search behaviour on an education website. A total of nine items (student composition, location, test scores, basic programs, staff, facilities, after school programs and special programs) were identified.

Finally, a third group makes use of a dual method approach in which – typically - a literature review as well as primary fieldwork of some kind are used to elicit reasons from parents. Kleitz et al. (2000) used a literature review and interviews in which 1100 parents were asked five questions about the reasons for sending their child to a particular school. Five main reasons emerged: education quality, class size, safety, location and friends. Based on the findings by Kleitz et al. educational preferences do not differ by race or class. Jackson and Bisset (2005) took a dual method approach with two primary data collection tools: they elicited school choice reasons by asking 225 respondents to complete a questionnaire and by interviewing 15 parents. 13 reasons of school choice resulted. Their study showed exam results and school reputation as key reasons in influencing parents' school choices.

As can be seen from the brief review above, most elicitation studies of school choice reasons have the following limitations: (1) they do not use a theoretical framework to ensure that reasons of different nature are accounted for (such as personal attitudes, social pressures and factors that are entirely out of their control, and (2) they typically use one or two sources of information for collecting these reasons. Both of the above limitations can lead to the omission of important school choice reasons due to weaknesses of the one of two elicitation procedures chosen (Churchill, 1998).

The present study contributes to the field of school choice research by (1) eliciting reasons for choosing and reasons for not choosing different primary school types in regional Australia

using an established behavioural framework as a basis, (2) comparing the results with prior findings which were not based on a behavioural theory, and (3) evaluating the effectiveness of a mixed methods approach in the elicitation process of reasons for school choice.

The behavioural framework chosen for this study is the Theory of Planned Behaviour (TPB). This theory which was proposed by Ajzen and Fishbein (1980) and further developed by Ajzen (1991) postulates that human behaviour is affected by three independent constructs: attitudes (which reflect an individual's evaluation in terms of performing a particular behaviour), subjective norms (which reflect an individual's perception as to how others who are important to them think they should or should not perform a particular behaviour, a form of social pressure) and perceived behavioural control (which reflects an individual's perceived ease or difficulty in performing a particular behaviour). The TPB has been shown to predict human behaviour of different nature well (Armitage and Conner, 2001; Sutton, 1998).

Data and Methodology

A mixed methods approach consisting of four different data collection techniques (literature search, personal interviews, focus groups and written questionnaires) was used.

The literature search was conducted covering the academic literature on school choice. Cross referencing was used to ensure maximum search coverage. Elicited school choice reasons identified from this review were categorized by two researchers independently. The reasons were then classified into the three constructs of the TPB framework. A total of 74 variables were identified.

Interviews and surveys were implemented as both short and long versions in order to account for the fact that shorter instruments are known to achieve higher response rates (Smith et al. 2003). The fieldwork was conducted in March 2006. Surveys and interviews were conducted in front of major food stores. Respondents were asked on their way into the store if they would be willing to answer a few questions.

Independent variables of the TPB (attitude, subjective norm and perceived behavioural control) were used to guide the questions to be asked in the elicitation stage using open –ended questions, as recommended by Ajzen and Fishbein (1980). The following four questions were used: (1) Which schools did you consider sending your first child to? Why? (2) Are there any schools that you would not consider sending your first child to? Why? (3) Who are the important people whose opinions you value in the context of school choice? (4) What factors make it difficult or impossible for you to freely choose a school? Questions 1 and 2 were designed to capture the attitudes of the parents. Question 3 was designed to capture the subjective norms variable and Question 4 was designed to measure the perceived behavioural control variable.

The long questionnaire contained all four of the above questions. 45 respondents were approached and 13 agreed to participate (29% response rate). Out of the 58 respondents who were asked to complete a short survey containing one question (one of the 4 TPB questions), 40 agreed to complete the questionnaire (83% response rate). 38 parents were approached to

answer four questions under the long interview condition. 10 parents participated (26%). 18 parents were invited to answer one question in the short interview; eight (44%) participated. Finally, out of 35 parents approached to participate in a focus group only seven volunteered (20%). The total sample size for the study (n = 80) meets the recommended sample size (n ≥ 25) by Ajzen and Fishbein (1980) and Godin and Kok (1996).

Results and Discussions

Factors affecting school choice

Content analysis was used to analyse the variables identified from the elicitation study as recommended by Ajzen and Fishbein (1980). After gathering all the identified variables from the 80 respondents, key words, phrases and answer styles were identified and coded according to the three TPB components (attitude, subjective norm and perceived behavioural control). Similar codes were then arranged in descending order based on frequency counts. This resulted in the reduction of the initially large number of 284 variables identified from the various data gathering methods to a final 53 variables (30 attitudes, 13 subjective norms and 10 perceived behavioural control).

21 positive attitudes were identified. Close distance of school to home was the most frequently stated reason (31 respondents), followed by good academic reputation (16), religious reasons (15), same school as friends, relatives and neighbours' child there (11), local reasons (8), multicultural reasons (8), connections (6), parents and siblings' ex school (6), social class reasons (5), discipline reasons (5), sporting reasons (4), small number of class size (4), special needs reasons (3), parental involvement (3), safety (3), strict selection criteria (2), single sex (2), child related (happiness / friends) (2), less costly (1), large school (1), and good facilities (1). The main reasons for not considering a school were: poor discipline (15 respondents), followed by far distance from home (9), transport difficulties (6), poor academic reasons (5), racial reasons (5), cost reasons (4), wrong emphasis (3), safety reasons (3) and negative impression of public schools (1).

With respect to the reference group that may be influential in influencing the parents' school choice decision, a majority of respondents felt that friends (31 respondents) were the most important reference groups when making the school choice decision, followed by relatives (23), other parents (17) and neighbours (15). The others included child (13), family (11), church friends (9), teachers (8), colleagues (7), other children (5), pastor (5), principal (4) and headmaster (2).

With respect to perceived behavioural control, parents expressed the following difficulties considered when choosing a school: distance from home (30 respondents) followed by transport difficulties (17 respondents), government reasons (11), cost of private schools (7), long waiting list and limited places (7), lack of information (4), transport cost (3), distance from work (2), safety reasons (2) and special needs reasons (1).

These results indicate that parents choose schools for many reasons. Close proximity of school to home was found to be the most frequently stated reason for school choice.

Academic and religious reasons were the next two most frequently stated school choice reasons. A possible explanation for our findings is that the study was conducted in regional Australia where distance is likely to play a larger role that this is the case in metropolitan areas. Racial or social class aspects do not emerge as central in our study. Reasons why parents avoid certain schools were poor discipline, far distance of school, transport difficulties and poor academic performance. This shows that parents have different reasons for choosing and avoiding a school. This is in support of prior findings by Smedley (1995) who reported that most parents avoided a school because of its bad reputation and selected a school where the happiness of the child is the most important factor.

Friends and relatives are perceived as the two most important reference groups influencing parental school choice. These findings differ from prior work (refer to next section for a detailed explanation) according to which other parents and relatives were most heavily relied upon (Bussell, 1997). Another interesting finding is the identification of the church community as an important reference group, which includes church friends and the pastor, suggesting that normative influence can have a major impact on school choice decisions.

Far distance from home was seen as the most frequent stated perceived difficulty factor that reduces parents' intentions of choosing a school. This finding is in line with past research (Goldring and Hausman, 1999; Denessen et al., 2005; Kleitz et al., 2000; Bussell, 1998). Distance was followed by transport difficulties as the second most mentioned factor for not being able to freely choose a school. Our study also identified the role of Government in restricting and allocation of schools to local residential areas as another perceived difficulty faced by parents in attempting to select a school outside of their suburbs. Lack and limited information available of schools posed as another difficulty to parents.

Comparison of elicitation techniques

Two criteria were used to compare the effectiveness of elicitation techniques: (1) the number of total reasons elicited, and (2) the number of reasons elicited within each of the three TPB categories.

The total number of 53 elicited reasons identified in our study outperformed any of the prior studies reviewed above. Prior studies by Bagley (1996) elicited 29 items, Bussell (1998) 31 items, Denessen et al. (2005) 17 items, Elacqua et al. (2005) 8 items, Goldring and Hausman (1999) 16 items, Jackson and Bisset (2005) 13 items, Kleitz et al. (2000) 5 items and West et al. (1995) 22 items.

Furthermore we calculated the percentage of elicited reasons in each TPB category as a proportion of the total number of reasons for each of the above eight studies. This analysis indicates that most of the school choice studies have identified mostly attitudinal reasons. Out of the eight studies, seven (Bagley, 1996; Bussell, 1998; Denessen et al. 2005; Elacqua et al. 2005; Goldring and Hausman, 1999; Jackson and Bisset, 2005; West et al. 1995) had identified 75% or more attitudinal reasons. Social norms were the most neglected component. Out of the seven studies, two (Elacqua et al. 2005; Goldring and Hausman, 1999) did not account for social norms at all, five (Bagley, 1996; Bussell, 1998; Denessen et al. 2005; Jackson and Bisset, 2005; West et al. 1995) included less than 10% social norm related

factors, and one study (Kleitz et al. 2000) had 20%. Perceived behavioural control was covered by all studies. Six studies (Bagley, 1996; Bussell, 1998; Denessen et al. 2005; Elacqua et al. 2005; Jackson and Bisset, 2005; West et al. 1995) included 15% or less and two studies (Goldring and Hausman, 1999; Kleitz et al. 2000) contained 20% or more reasons from the category of perceived behavioural control. Our study elicited reasons within all three categories known to be predictive of human behaviour: attitude (30 variables, 57%), subjective norm (13 variables, 25%) and perceived behavioural control (10 variables, 18%). Consequently it can be concluded that using the TPB framework led to more school choice reasons across a broader range of behavioural constructs.

Evaluation of the mixed methods approach

One of the main purposes of performing a qualitative research study at the exploratory stage (elicitation study) is to identify variables that will lead to the development of a questionnaire for a quantitative study (Ajzen and Fishbein, 1980; Churchill, 1998). Two analyses were conducted based on the initial 284 variables identified from the elicitation study. First, we examined the number of variables identified by each research method. Next, we identified unique variables that only appeared in one research method.

The literature search identified the most number of 74 variables followed by the short survey (56 variables), long survey (53), focus group (39), long interview (37) and short interview (16). The literature search accounted for most (27%) of the total variables identified based on the total number of variables identified for all methods, followed by long survey and short survey (20% each), focus group (14%), long interview (13%) and short interview (6%). Each of the methods revealed variables that did not emerge from other approaches. The literature search identified 52 variables not revealed through other methods, long survey (14), short survey (20), long interview (6), short interview (4) and focus group (6).

Different types of research method can influence the responses of respondents differently (Gorard, 1997; Oppenheim, 1992). Although our literature search identified the greatest number of 52 unique variables, the failure to incorporate other methods would have resulted in a loss of 50 variables. This would reduce the value of the exploratory research phrase, making the study less rich in data. E.g. the reliance on literature search alone would have omitted single gender reasons identified from focus groups and child's choice identified from surveys. Since most school choice studies use a single or – at the most – two research methods, it if likely that some factors are not identified. The omission of certain reasons is a problem in itself, but it can also introduce a major bias into the quantitative study that is conducted on the basis of the elicited list of variables: other reasons appear to be more important than they truly are (Maddala, 1992). This can easily be avoided by making use of a broader portfolio of data collection techniques, by using a mixed methods approach in item elicitation.

Conclusion

All three components postulated in the TPB proved valuable in the school choice elicitation task. The application of the TPB framework consequently proved to be helpful for the elicitation study. Total number of factors identified was higher than in all reviewed studies. In addition, having a theoretical framework provided a more systematic collection of data sorted by various components of the theory to ensure coverage of all relevant constructs. The present study identified 30 attitudes, 13 reference groups and 10 perceived difficulties. Our results also provide empirical evidence that using a mixed methods approach can prevent omission of important items being left out, which results in a more complete elicitation study.

Results and conclusions reported in this study must be treated with caution. The present study data was collected in a single regional suburb, which is not as developed as the major metropolitan cities in terms of transportation and has a larger geographic area due to more land available. Therefore, our results can not be generalized to Australia as a whole.

The findings of this present study highlight several areas for future research. Most importantly, it would be interesting to use the elicited school choice reasons to conduct a quantitative follow-up study to actually assess how predictive each of these aspects is for actual school choice.

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