

The Influence of Paranormal Belief on House Buying: Implications for Taiwanese Consumer Behaviour

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Despite the large impact of paranormal belief on human behaviour, we currently know very little about its implications for consumer behaviours. This study uses house buying as the target consumer behaviour, we seek to explore the influence of paranormal belief on the taboos Taiwanese adults encounter in their decision to buy a house. In addition to the seven dimensions of paranormal belief identified by Tobacyk (2004) in the western society, we also included two dimensions commonly observed in the eastern society: qi and feng-shui. Our results support the assertions that paranormal belief has influence on Taiwanese consumer behaviour and eastern paranormal belief adds to the predictive power of the traditional construct of the western paranormal belief in relation to predicting consumer behaviours in the eastern context.

Field of Research: Marketing

1. Introduction

Since ancient time people have believed that certain paranormal phenomena might have an impact on their luck. Paranormal, by definition, conveys beliefs that are beyond analytical thinking of human capacity and thus transcending the laws of nature, such as a belief in reincarnation or the existence of soul. Superstitious belief is a belief that results “from ignorance, fear of the unknown, trust in magic or chance, or a false conception of causation” (Merriam-Webster Online Dictionary). The separation of these two constructs at the conceptual level is not an easy task, but a recent study of 3,261 adults surveyed on Internet in Finland provided empirical support for the differentiation of these two concepts (Aarnio & Lindeman, 2007). Interestingly, paranormal belief and analytical thinking ability are not necessarily incompatible. In fact, scientific and paranormal thinking have been observed to coexist simultaneously both in children (Nemeroff & Rozin, 2000) and in adults (McClenon, 1993). A recent theory proposed by Sun, Slusarz, & Terry (2005) may be able to explain this phenomenon: People have two independent modes of processing information - intuitive and analytical reasoning, and these two modes of thinking rely on different databases and have different rules of operation. The idea of two co-existing cognitive systems in the human brain is consistent with the observation that believers of religion and magic often believe in two realities, a natural and a mystical reality.

Paranormal belief appears to manifest itself in various forms of luck-belief, which explains why people carry lucky charms and engage in luck-related behaviour in

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everyday activities across all cultures. In the current behavioural business literature, two previous empirical studies have attempted to explore the effects of superstitious belief on consumer behaviour using cognitive priming procedures (DeMarree et al, 2005; Kramer & Block, 2008). These two studies examined the commonly perceived connection between luck-based beliefs (the use of certain objects or the practice of certain rituals) and consumer behaviour. The cognitive priming procedures build on the assumption that the luck concept is stored in memory and functions in much the same way as other cognitive concepts and therefore allows situational factors to make luck-related concepts temporarily accessible in memory in circumstances to which they may be applicable. The two studies cited above demonstrates that a consumer's choice may be altered through the elicitation of temporary changes in one's self-perception of how lucky one feels. Despite the seemingly convincing arguments from these priming procedures, their effect on consumer's behaviour was not reported to be uniform. In four independently conducted experiments, Jiang et al (2009) showed that while Asian consumers may be primed with lucky numbers in the positive affect they report experiencing, such effect is nonetheless mediated by the monetary changes in how lucky they feel. These results suggest that the real effect of paranormal belief on Taiwanese consumers may in fact be moderated by the real stakes involved in making a monetary decision.

Much past research work has been focusing on the theoretical construct of paranormal belief in the western context. However, even in the western context there appears to be a paucity of empirical research work in relation to the effect of paranormal belief on consumers' behaviour, especially when real stakes are at risk. For most people the stakes will not be greater than those involved in the decision to buy a house. Prospective buyers holding paranormal belief in the housing market will make their decisions accordingly, in the hope that these decisions may bring their good luck and prosperity in the future. However, housing market is a competitive market. For paranormal belief to have an impact in this competitive market, two conditions must prevail: (1) the effect of this belief must persist over time, and (2) a sufficient number of people must hold this belief. Moreover, the effect of paranormal belief should be commensurate with the degree this belief is compatible with their religious teachings. Consequently, two hypotheses to be tested in this study are stated as the following:

H1: The effect of paranormal belief on people's house buying behaviour differs according to the compatibility of paranormal belief with their religious teachings.

H2: Eastern paranormal belief has more impact on the house buying behaviour than the traditional western paranormal belief in the Taiwanese context.

The rest of this article is organized to conform to the basic format of a scientific report: literature review, methods of inquiry, results, and conclusion and discussion. In the literature review section, we begin with a brief description of the dimensionality of paranormal belief found in western scientific research literature in juxtaposition with religious belief, followed by the distinctive nature of the eastern paranormal belief in differentiation from its western counterpart. In particular we focus on the efficacy of qi and feng-shui and their reported impacts on the current world. In the methods section,

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we begin with an introduction of our approach in contrast to its previous counterparts, followed by instrumentation of this study and our sampling design. The results and conclusions are arranged sequentially in relation to our two research hypotheses as stated above.

2. Literature Review

Reports of survey results concerning paranormal beliefs abound in literature. However, the most widely cited instrument may arguably said to be the Revised Paranormal Belief Scale (RPBS) developed by Tobacyk (2004) comprising seven supposedly orthogonal factors: traditional religious belief, psi belief, witchcraft, superstition, spiritualism, extraordinary life forms, and precognition. Since the onset of this instrument in research on paranormal belief, even prior to its formal publication, its applications and reports relating to its psychometric properties appeared in many reputable journals across multiple disciplines. In a search of studies published between 1993 and 1999, Goulding and Parker (2001) reported a total of 43 different instruments claiming to measure paranormal beliefs and experiences, with Tobacyk's Paranormal Belief Scale being the most widely used instrument.

Some studies have suggested that paranormal beliefs are directly related to religious beliefs (Goode, 2000; Orenstein, 2002). Another line of research suggests that religious and paranormal beliefs are negatively connected or independent of each other (Donahue, 1993; Rice, 2003). The latter seems to have obtained empirical support in the US in that Christians who follow the official doctrines strictly will likely abandon paranormal beliefs because of the incongruity of paranormal beliefs with the teachings of traditional Christianity (Goode, 2000; Rice, 2003). It is important to note that most research about the influences of paranormal beliefs on human behaviour was conducted in western countries, particularly the United States. One cannot assume that Taiwanese people are affected similarly as their western counterparts because the cultural settings are distinctively different. Koenig (1993) reported that 94% of Americans and 76% of the British people believe in one God, in contrast to the popular polytheistic beliefs of the folk religions in Taiwan. Moreover, there are significant differences in ways Taiwanese and westerners express their religious beliefs. Americans in particular are more likely to go to church and more outspoken about their religious beliefs, whereas Taiwanese people tend to be more reserved in the expression of religious views. In fact, by applying the semantic differential technique in a survey to a sample of 173 students in two top public universities, a local researcher had reported that avoiding taboos appears to be the main way of manifesting the religious beliefs of the Taiwanese college students (Song, 1998). Given these differences, there is a need for the effects of paranormal belief to be examined in the Taiwanese context.

Of course, one must also take into account the cultural impact on the paranormal beliefs when applying the RPBS to the Taiwanese sample. For instance, while the belief that black cats can bring bad luck may be a valid item for measuring paranormal belief in the western culture, it does not make much sense in the Taiwanese context. Consequently, the RPBS items will have to be culturally adapted for application in Taiwan. In addition to cultural adaptation, we will also include dimensions of specific Chinese paranormal

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beliefs commonly believed at the grass-root level (Chang, 2007; Chu, 1999), namely feng-shui and qi. The inclusion of paranormal beliefs unique to Taiwanese culture will allow us to assess the effect of cultural impact on differences in paranormal beliefs.

Feng shui has traditionally been used to orient buildings of all sort, ranging from tombs, temples, to residential homes as well as commercial buildings in an auspicious manner in reference to local features such as bodies of water, stars, or landforms. The purpose of feng shui as widely practiced in Taiwan is to properly situate the human structure on locations so as to ensure positive flow of air (qi or chi). Modern views of feng shui are mixed. The Sceptic Encyclopedia of Pseudoscience reports while some aspects of feng shui are rational, yet "folk remedies and superstitions... [have been] incorporated into feng shui's eclectic mix" (Shermer, 2011, pp.111-112). According to a recent large scale survey by the Institute of Sociology, Taiwan Academia Sinica (2009), a whopping majority of the Taiwanese adults do not regard feng shui as a superstitious scam. Instead, most believe that following its principles is important and very helpful in living a prosperous and healthy life. Some western researchers have also observed in the Orient that its practice is for both the wealthy when of the cost of hiring an expert and altering architecture or design are involved, and the common involving mirrors, forks, or woks in certain spots in the house to deflect negative energy (Emmons, 1992; Simmons & Schindler, 2003).

In light of the increasing popularity of feng-shui, Singapore Polytechnic as well as other institutions, have offered courses on feng shui with the aim of training feng shui consultants for commercial applications. In fact, feng-shui has also been seen to have increasing influence on the commercial activities in the Western world lately. One prominent example is the real estate mogul, Donald Trump who, after a steady loss of Asian clients, was reportedly to have hired a feng shui master to analyze his Trump Towers (Fengshuiave.com. Retrieved 2012-05-14). Even Disney acknowledged that feng shui was the reason for shifting the main gate of Hong Kong Disneyland by twelve degrees in their building plans, among many other actions suggested by the master planner of architecture and design at Walt Disney Imagineering (Holson, 2005). Given the increasing popularity of feng-shu in the commercial activities, there appears to be a need for better understanding its influence on people's decision to purchase a house through empirical means.

The concept of qi conceived in traditional Chinese culture is an active force inherently existing in any living thing. It is frequently translated in the West as life energy, life force, or flow of energy. It constitutes the central underlying principle in traditional Chinese medicine and martial arts. The literal translation is breath, air, or gas. It is a common Chinese belief that qi permeates everything and is a link between living things and their surroundings. It is likened to be the flow of energy around and through the body. The Chinese believe that a balanced rhythm and flow of qi may be achieved both through activities involving exercising the body and the mind and proper placement of objects in the living environment, and in doing so they may provide stability and longevity. There have been a number of attempts to scientifically study the effects of qi in the sense used by traditional Chinese medicine and acupuncture. These studies have been reported to be problematic because they are hard to compare with one another, as

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they lack a common nomenclature (White et al, 2007). More recently, a review of clinical trials investigating the use of qi for pain management found no convincing evidence that it was effective (Lee, Pittler, & Ernst, 2009). Since there has been no convincing evidence up to date to substantiate the efficacy of qi on health, the concept of achieving a state of well-being through qi is also treated as a unique eastern paranormal belief dimension in this study.

3. Methods

Historically the study of consumer behaviour has drawn more interest from business researchers and econometricians than psychologists and sociologists. The sociology of consumer behaviour mainly concerns the dialectical relationship between paranormal belief and society, whereas the psychology of consumer behaviour mainly concerns the psychological principles that are at work within individuals. This study adopts both psychological and sociological perspectives in its inquiry of efficacy of paranormal belief on Taiwanese adults' house buying behaviour. The commitment to objectivity is maintained throughout the collection of empirical data as stipulated in the methods of inquiry in social sciences. The psycho-sociological way of approaching paranormal belief differs from other ways of studying paranormal or superstitious belief (such as those that are philosophically, hermeneutically, or phenomenologically oriented) in that it does not seek to assess the validity of these beliefs. The approach adopted in this research will not allow us to address the truthfulness of a particular paranormal belief. However, the results will help us to determine with validity whether paranormal belief has behavioural consequences in Taiwanese consumer behaviour.

The locally developed Chinese Version of the Paranormal Belief Scale (by Shiah et al, 2008, translated from Tobacyk's 1983 Paranormal Belief Scale) was used to measure seven dimensions of traditional western paranormal belief: religious belief, psi, witchcraft, superstition, spiritualism, extraordinary life forms, and precognition. In addition to these seven dimensions, two aspects of paranormal belief, qi (3 items) and feng-shui (4 items), were also added into the paranormal belief questionnaire. The internal consistency reliability of these nine dimensions ranged between .672 and .924. Sixteen taboos were taken from ReHouser, an online local property valuation company providing advice to prospective real estate clients regarding local taboos associated with buying a house (<http://rehouser.com/wiki/index.php>). They are: ghost month, history of homicide, number 4, mulberry tree in front and willow at rear, facing T junction, yin structures nearby, facing the sharp corners of other buildings, overpasses nearby, at the intersection of two slanting roads, no-through road, at the corner of sewer passage, face-to-face with another house's main door, kitchen upon entry, visibility of beams in bedroom, line-up of three doors (main entrance, hallway, and rear entrance), and cemetery nearby. These taboos were presented in the check-list format (whether their desire to purchase a house would be influenced by these taboos? Y/N) and responses were summed to serve as the dependent variable in this study.

The sampling design adopted a three-stage stratified random sampling scheme in proportion to population size across all major population centers in Taiwan. It was conducted by the second author making field visits in a one-to-one interview setting

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under strict supervision and afterward post-interview verification. All electronic data have been confirmed through double checking before they were subjected to computer analyses. Two cohorts of respondents were collected. One cohort was collected from a number of major public locations such as train stations and airports of major cities. Another cohort was randomly obtained from those who participated in the major religious activities of three major religions. Both cohorts of respondents were obtained during the year 2011. To qualify for inclusion as subjects of this study, the respondents must be adults who have purchased at least one house in the past ten years. The demographic information collected in our survey included gender, age, geographic area of residence, education level, combined family income, and occupation. The age ranged between 21 and 81 with a median of 43. Females outnumbered males by roughly two to one. A total of 752 respondents were obtained under an approximate 60% response rate. The percentages of respondents from north, central, and south areas of Taiwan were 43%, 13%, and 44% respectively. The education level of the majority respondents was above high school. The respondents were classified into four religion types: Buddhism=258, Christianity=176, Folk-Religion=171, and No-Religion=147.

4. Results

The analysis of variance procedure revealed that highly significant differences among four religion types exist in all dimensions of paranormal belief, including both western and eastern dimensions. The results are summarized in Table 1. All figures are expressed on a 1-7 scale with 4 as the mid-point indicating a neutral attitude, with the higher value indicating stronger belief. People of all four religion types display low belief in superstition, with Folk-Religion followers showing highest (2.94) and Christians showing lowest (2.14). As seen, the pattern of differences coincides with the extent of compatibility of paranormal belief with their religious teachings. Buddhists tend to show high belief in their religious deities and qi, somewhat uncertain belief in psi, witchcraft, spiritualism, extraordinary life form, precognition, and feng-shui. Christians show high belief only in the God of their religion and witchcraft, and weak belief in all other aspects, including the two eastern paranormal dimensions. Folk-Religion followers score high in the belief of their religious deities, witchcraft, spiritualism, qi, feng-shui, and moderately high in psi, extraordinary life form, and precognition. People of the No-Religion type score moderately high in belief in religious deities (4.33, a phenomenon unique in the Taiwanese cultural background, which is compatible with the results of the 2004, and 2009 Taiwan Social Change Surveys), extraordinary life forms (4.27), qi (4.45), and feng-shui (4.23), while remain skeptical in the belief of psi, witchcraft, spiritualism and precognition.

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Table 1: Descriptive statistics in nine dimensions of paranormal belief among four religion types (Buddhism=258, Christianity=176, Folk Religion=171, No-Religion=147)

Dimension	Religion Type	Mean	STD	F	P-Value
Religious deities	Buddhist	4.94	1.12	43.43	0.0000
	Christian	5.76	1.12		
	Folk Religion	5.03	1.07		
	No-Religion	4.33	1.24		
Psi	Buddhist	4.27	1.34	6.43	0.0003
	Christian	3.79	1.44		
	Folk Religion	4.18	1.25		
	No-Religion	3.81	1.43		
Witchcraft	Buddhist	4.07	1.19	12.33	0.0000
	Christian	4.64	1.15		
	Folk Religion	4.43	1.09		
	No-Religion	3.98	1.24		
Superstition	Buddhist	2.45	1.09	14.82	0.0000
	Christian	2.14	1.05		
	Folk Religion	2.94	1.20		
	No-Religion	2.55	1.16		
Spiritualism	Buddhist	4.35	1.09	27.34	0.0000
	Christian	3.46	1.07		
	Folk Religion	4.42	1.16		
	No-Religion	4.03	1.28		
Extraordinary life forms	Buddhist	4.27	0.92	14.79	0.0000
	Christian	3.73	1.10		
	Folk Religion	4.37	0.95		
	No-Religion	4.27	1.11		
Precognition	Buddhist	3.94	1.16	32.60	0.0000
	Christian	3.06	1.24		
	Folk Religion	4.26	1.12		
	No-Religion	3.91	1.24		
Qi	Buddhist	4.85	1.05	43.08	0.0000
	Christian	3.60	1.46		
	Folk Religion	4.76	1.02		
	No-Religion	4.45	1.28		
Feng-Shui	Buddhist	4.03	1.31	74.54	0.0000
	Christian	2.66	1.48		
	Folk Religion	4.70	1.22		
	No-Religion	4.23	1.34		

With the total number of taboos (serving as factors affecting one's decision to buy a house) as the dependent variable, three regression models were constructed in a hierarchical manner. The first model analyzed the effect of four demographic variables

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(sex, education, area, and age), none of these demographic variables showed substantially significant impact on the house buying behaviour. Marginal significance was however, found with education and age in the Buddhist group. In Model 2, the western dimensions of paranormal belief were added into Model 1. For people of no religion, their house buying behaviour is not affected by the western paranormal belief dimensions at all. For the Folk-Religion followers, superstition dimension positively predicts taboos one has in consideration of buying a house. For Buddhists, belief in their religious deities negatively predicts the taboos, whereas positive prediction goes with belief in superstition and extraordinary life forms. For Christians, belief in superstition positively predicts the taboos and belief in extraordinary life form negatively predicts the taboos. Model 2 shows that by adding the western paranormal belief dimensions into the model, we gain a significant increase in the predictive power of the taboos one has in buying a house across all four religion types. In Model 3, we added the eastern paranormal dimensions into Model 2. While qi was found not to have any predictive power, feng-shui was found to be the most important positive predictor of the taboos in all four religion types, including Christians and people of no religion. By adding the eastern paranormal dimensions into Model 2, we gained a significant increase in the predictive power of the taboos. The standardized regression coefficients in Model 2 and Model 3, along with the F tests of incremental R-Squares across four religion types are summarized in table 2.

Table 2: Standardized regression coefficients of two models and testing the additional influence of qi and feng-shui

Variable	Model 2				Model 3			
	None	Folk	Buddhist	Christian	None	Folk	Buddhist	Christian
Demographic variable								
Sex	0.16	0.01	0.11*	0.02	0.11	-0.04	0.14**	0.00
Education	0.15	0.13	0.00	-0.03	0.14	0.07	-0.01	-0.04
Area	0.12	0.12	0.00	0.11	0.03	0.13	-0.02	0.10
Age	0.02	0.06	-0.02	-0.07	0.05	0.08	0.00	-0.07
Western paranormal belief								
Traditional deities	0.18	-0.01	-0.29***	0.10	0.11	-0.04	-0.17***	0.07
Superstition	0.21*	0.34**	0.36***	0.2**	0.14	0.20*	0.24***	0.09
Spiritualism	0.15	-0.01	0.32***	-0.24**	0.08	0.00	0.20**	-0.22
Precognition	-0.18	0.21	-0.06	0.17	-0.35	0.07	-0.24**	0.12
Eastern paranormal belief								
Qi					0.16	-0.01	0.09	-0.03
Feng-Shui					0.42***	0.48***	0.45***	0.28***
R-square	0.13	0.20	0.40	0.10	0.28	0.37	0.51	0.16
Delta-R-Square					0.15	0.17	0.11	0.06
F					5.40***	5.31***	24.05***	4.65**

5. Conclusion and Discussion

To summarize the findings from above, the following conclusions can be made: (1) paranormal belief does significantly affect Taiwanese adults' house purchasing behaviour, this phenomenon applies to people of all religion types, including those who claim to have no religion; (2) feng-shui adds significantly and substantially to the prediction of house purchasing behaviour in the Taiwanese context across all religion types, including those who claim to have no religion; (3) in terms of percent of variance explained for the house purchasing behaviour, the addition of eastern paranormal belief to the traditional western paranormal belief results in an average increase of slightly less than 15% for the no-religion, folk-religion, and Buddhist groups, the smallest increase is found with the Christian group (6%). These data support our assertion that eastern paranormal belief adds to the predictive power of the traditional western paranormal belief in relation to predicting consumer behaviours in the eastern context. In fact, the first important implication of our results is that Taiwanese people's house purchasing behaviour is more profoundly influenced by the eastern paranormal belief than the traditional western paranormal belief dimensions such as traditional religious belief, superstition, and precognition.

In many studies of paranormal belief, the effect of religion was inevitably confounded in the analyses of paranormal belief. Consequently, the association between paranormal belief and consumer behaviour was reported to be small, sometimes positive and sometimes negative in direction. This study also makes a methodological point in that the effect of paranormal belief is assessed in differentiation from the religious influence, by which we can clearly see that the effect of paranormal belief on the consumer behaviour is directly and positively related to its compatibility with their religious views. For instance, the construct of spiritualism as defined in the traditional paranormal belief is compatible with the Buddhist worldview, and yet goes quite against that of Christianity. The second implication of our results is that the effect of paranormal belief on consumer behaviour needs to be addressed in a more complex nexus of religion and belief. It would not be surprising to find that some religion types have a vested interest in denying legitimacy to the paranormal, and how the followers of these religions manage to suppress paranormal beliefs among followers of other religion types whose religious views would predispose them to such beliefs.

Perhaps paranormal belief may be viewed from the broader perspective of general superstitious behaviour. Tennis player Serena Williams, the five-time Wimbledon champion, always takes her shower sandals to the court, ties her shoelaces in a specific way and bounces the ball five times. Tiger Woods always wears a red shirt in the final rounds of golf tournaments because his mother told him red was his power color. Despite all the science and massive budgets involved in sport training, athletes at all levels of sport elaborate event rituals to enhance their performance. Psychological research in superstitious behaviour reveals that people often become superstitious when faced with unknown and stressful situations, which explains why so many athletes are superstitious and frequently bound to rigid preparation routines. Indeed when the stakes are high such as those involved in the act of buying a house and there is a great deal of uncertainty regarding financial gains and future life, paranormal belief kicks in.

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However, ultimately the question to ask is “does paranormal belief make a difference in terms of its effect on consumer behaviour?” Interestingly researchers of superstitious behaviour produced conflicting results in this regard. In a carefully designed study Kramer and Block (2008) demonstrated that superstitious belief has a robust influence on product satisfaction and decision making under risk. Nonetheless, its influence is only observed when such belief is allowed to work non-consciously. In the light of such a finding, we suggest that future research should be directed to demonstrate the distinct conscious versus non-conscious components from the impact of paranormal belief on the general buying behaviour of the Taiwanese public.

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