Through the Eyes of Chinese: The Theory of Planned Behaviour and Chinese Consumer Behaviour in Relation to Australian Products and Services

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Abstract

An expanded theory of planned behaviour (TPB) model was used to examine the influence of attitudes, subjective norms, perceived behavioural control, self-identity, and past behaviour on Chinese consumers’ intention to purchase Australian products and/or services. Data were obtained via an electronic survey completed by 3,171 respondents in China. Hierarchical multiple regression analyses revealed support for the ability of the expanded TPB model to predict Chinese consumers’ intentions to purchase Australian products and services. Specifically, attitudes, subjective norms, perceived behavioural control, self-identity, and past behaviour all predicted purchase intentions.

Key words: Attitude; behaviour; consumer; Intention

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Chinese Consumption of Australian Products and Theory of Planned Behaviour

The tremendous economic growth in China has led to its strong import and export relations with countries across the globe. Economic restructuring, raised living standard, innovative retailing practices and increased household income have led to a burgeoning consumer spending (Deloitte, 2005). China is now Australia’s largest trading partner with combined imports and exports valued at 43.8 billion USD (Embassy of China, 2008). However, the challenge for Australian firms is not market entrance but whether their businesses can be competitive and sustainable emergent consumer driven markets in China (Liu et al., 2009). To address this challenge, we need to develop a comprehensive understanding of the factors that influence Chinese consumer behaviour, particularly in relation to Australian products. This study aimed to examine a number of determinants that predict Chinese consumers’ intention to purchase Australian products and services.

One of the most influential and well-supported theories for predicting human behaviour, including that of consumer behaviour, is Ajzen’s (1985, 1991) theory of planned behaviour (TPB). In its original formulation, the TPB is a parsimonious model of the attitude-behaviour relationship. The central premise of the model is that behavioural decisions are not made spontaneously, but are the result of a reasoned process in which behaviour is influenced, albeit indirectly, by attitudes, norms, and perceptions of control over the behaviour. Specifically, the model proposes that attitudes (i.e., the evaluation of the target behaviour), subjective norms (i.e., perceived social pressure regarding performance of the behaviour), and perceived behavioural control (i.e., perceived control over performance of the behaviour) influence behaviour primarily through their impact on behavioural intention. In this model, intention is seen as the proximal determinant of behaviour. The predictive ability of the TPB has been demonstrated across a range of consumer domains including travel intentions (Lam and Hsu, 2004), retail bargaining behaviour (Lee, 2000), green purchasing behaviour (Chan and Lau, 2001), and customer dissatisfaction responses (Cheung, Lam, and Hsu, 2005). However, research on the ability of the model to predict Chinese consumers’ intentions to purchase imported products and services is limited.

Ajzen (1991) has suggested that additional predictors can be included in the model if they add to the predictive ability of the model. For example, Conner and Armitage (1998) reported that the addition of past behaviour to the TPB explains, on average, an additional seven percent of the variance in intentions and 13 percent of the variance in behaviour. The role of self-identity has also been examined in applications of the TPB to consumer intentions (Mannetti, Pierro, and Livi, 2002). Sparks and Shepherd (1992) found that the extent to which people thought of themselves as a green consumer predicted intentions to consume organically grown vegetables independently of other TPB variables. In this study we consider past behaviour and self-identity as a consumer of imported products and services as additional determinants of intentions to purchase Australian products and services.

The present study tests the ability of an expanded TPB model to account for the intentions of Chinese consumers to purchase Australian products and services. The study, therefore, poses two hypotheses. First, attitudes, subjective norms, and perceived behavioural control will
predict intentions to purchase Australian products and/or services, even after demographic characteristics are taken into account (H1). Specifically, individuals with a positive outlook towards the behaviour (attitude), who believe that important others would approve of the behaviour (subjective norm), and who believe they have control over engagement in the behaviour (perceived behavioural control) will be more likely to intend to purchase Australian products and/or services in the near future. Second, past behaviour and self-identity will predict intentions. That is, intentions to purchase Australian products and/or services will increase to the extent that people have purchased Australian products and/or services in the past and they have a self-identity as a consumer of imported products (H2).

Method

Sampling and Demographics

In order to reach a wide range of potential respondents throughout China, a local media research firm was employed to assist with an online survey. A random sample of 35,000 people was drawn from the firm’s representative panel of 789,500 people across China. An invitation to participate in the survey was sent to each potential respondent and a total of 3,171 surveys were completed, making a response rate of 9 per cent. This is well within the range expected for internet based survey, which can typically vary between 1 and 30 per cent (Wimmer and Dominick, 2003). The pool of the respondents consisted of 57 percent females; the age ranged from 18 to over 65 years with 80 percent under 35 years of age. Respondents came from over 20 cities and provinces in mainland China that are classified into one of four tiers based on levels of development in health, education, economy, and the environment (China Development Report, 2007). Tiers one and two comprise more developed regions (e.g., Beijing, Shanghai, Guangzhou) and Tiers three and four include less developed areas (e.g., Hunan, Tibet). The majority of respondents came from Tier one (33 percent) and Tier two (35 percent) cities (Tier three = 23 percent; Tier four = 9 percent). The respondents held a diverse range of occupations including managers, administrators, self-employed business people, professionals, students and retirees. Approximately 60 percent of respondents had a monthly income between 1,000 RMB and 3,000 RMB (1 USD=about 7 RMB); five percent of respondents had a monthly income greater than 9,000 RMB. These income ranges are representative of average income levels for employed persons in mainland China, which is 2,022 RMB per month (China Statistical Yearbook, 2007).

Measures

At the start of the survey, respondents were given a standard definition of Australian products and services. Australian products were defined as products with Australian branding regardless of where they were manufactured, such as knitwear, wine, health products and appliances. A number of Australian services were mentioned, such as tourism, education, and banking. All questions were constructed in accordance with the recommendations of Ajzen (2002) and, unless stated otherwise, all constructs were assessed with multiple items on 7-point scales.

Intention. Strength of respondents’ intention to purchase Australian products and services was assessed with four items (e.g., “I intend to buy Australian products and/or services in the near future”; 1 definitely do not, 7 definitely do). Responses were combined to form the behavioural intention index (α = .89).
**Attitude.** The direct measure of attitude was assessed with six semantic differential scales. Respondents responded to the following question: “Buying Australian products and/or services in the near future would be”: bad-good, useless-useful, unsatisfying-satisfying, negative-positive, pointless-worthwhile, harmful-beneficial. Items were scored such that higher scores indicated a more positive attitude to purchasing Australian products and services ($\alpha = .93$).

**Subjective norm**
Respondents completed four items about the extent to which significant others would approve of them purchasing Australian products and/or services in the near future (e.g., “Most people who are important to me [e.g., family, friends, relatives] would think I should buy Australian products and/or services in the near future”; 1 strongly disagree, 7 strongly agree). Responses were averaged to create an index of subjective norm ($\alpha = .89$).

**Perceived behavioural control (PBC).** Perceptions of control over purchasing decision were assessed with three items (e.g., “For me to buy Australian products and/or services in the near future it is: 1 extremely difficult, 7 extremely easy”). Higher scores indicated greater perceived control over purchasing behavior ($\alpha = .84$).

**Past behaviour.** Respondents were asked to indicate whether they had purchased Australian products and services in the past (1 = yes, 2 = no). Four items measured self identity as a consumer of imported products (“I am the type of person who buys imported products and/or services”; 1 strongly disagree, 7 strongly agree; see e.g., Armitage and Conner, 1999) and were combined to form a scale such that high scores reflected a stronger sense of self-identity as a consumer of imported products ($\alpha = .89$).

**Results**
Significant intercorrelations were found among the predictor variables ($r = .01$ to $.69$), but these did not exceed the mean scale reliabilities, suggesting that the scales are empirically distinct (Campbell and Fiske, 1959).

Hierarchical multiple regression was used to regress intentions to purchase Australian products and services onto the expanded TPB model (see Table 1). The demographic variables of age, gender, marital status, employment status, monthly income, and residence tier were entered at Step 1. Attitude, subjective norm, perceived behavioural control, positive perceptions, self-identity, and past behaviour were entered at Step 2. Inclusion of the demographic variables at Step 1 accounted for a small but significant amount of the variance in intentions, $R^2_{ch} = .05, F(6, 3162) = 26.01, p < .001$. Inspection of the beta weights revealed significant effects for age ($\beta = .06, p < .05$) and monthly income, ($\beta = .21, p < .001$), indicating that as age and monthly income increased, intentions to purchase Australian products and/or services also increased. At Step 2, inclusion of the TPB variables was associated with a significant increase in the variance explained, $R^2_{ch} = .35, F(5, 3157) = 373.57, p < .001$. In line with the TPB, attitude ($\beta = .25, p < .001$), subjective norm ($\beta = .18, p < .001$), and perceived behavioural control ($\beta = .19, p < .001$) all predicted intentions. The more positive the attitude towards the target behaviour, the more people perceived that important others approved of the target behaviour, and the more control people felt they had over the target behaviour, the stronger the intention to purchase Australian products and/or services. There were also significant beta weights for self-identity as a consumer of imported products ($\beta = .14, p < .001$), and past behaviour ($\beta = .04, p < .01$). Intentions to purchase
Australian products and/or services increased as self-identity as a consumer of imported products increased, and if respondents had purchased Australian products and/or services in the past.

**Table 1 Hierarchical Multiple Regression Predicting Behavioural Intention from an Expanded Theory of Planned Behaviour Model**

<table>
<thead>
<tr>
<th>Demographic controls</th>
<th>β</th>
<th>TPB Predictors</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.04*</td>
<td>Attitude</td>
<td>.25***</td>
</tr>
<tr>
<td>Gender</td>
<td>-.01</td>
<td>Subjective norm</td>
<td>.18***</td>
</tr>
<tr>
<td>Marital status</td>
<td>-.01</td>
<td>Perceived behavioural control</td>
<td>.19***</td>
</tr>
<tr>
<td>Monthly income</td>
<td>.00</td>
<td>Self-identity</td>
<td>.14***</td>
</tr>
<tr>
<td>Employment status</td>
<td>.00</td>
<td>Past behaviour</td>
<td>.04**</td>
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<td>Tier</td>
<td>.01</td>
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</tbody>
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* p < .05, ** p < .01, ***p < .001.
Note. The beta weights reported are the values at the final step.

**Discussion**

The aim of the present research was to investigate the social psychological factors underlying Chinese consumers’ intention to purchase Australian products and/or services by testing the effectiveness of the TPB in this context. The impact of additional factors, namely self-identity and past behaviour, was also considered. The results supported the effectiveness of our expanded TPB model. As expected, attitudes, perceived behavioural control, and subjective norms all significantly predicted purchase intentions, providing support for the original TPB model in this context (H1). That is, individuals with positive attitudes toward the behaviour, who believed that important others would approve of the behaviour, and who believed they had control over carrying out the behaviour were more likely to intend to purchase Australian products and/or services in the near future. In addition, there was support for the inclusion of self-identity and past behaviour into the TPB model - individuals who had a self-identity as a consumer of imported products and individuals who had purchased Australian products and/or services in the past were more likely to intend to purchase Australian products and/or services in the future (H2).

The present research extends the current literature in a number of ways. Our research is a novel test of the predictive ability of the TPB in relation to the purchase of imported products in China and contributes to a growing literature demonstrating the ability of the TPB to account for behavioural decision-making in non-Western contexts (Chan and Lau, 2001; Cheng et al. 2005; Lam and Hsu, 2004; Lee, 2000). This is important, given the increasingly global nature of the consumer market and the strategic importance of China to global companies in general and to Australian firms in particular. The results revealed that the TPB is able to account for consumer decisions in relation to the consumption of imported products in Chinese context.

Self-identity as a consumer of imported products and/or services predicted intentions to purchase Australian products and/or services. Individuals who perceived themselves as the kind of person who purchase imported products and/or services were more likely to intend to
purchase Australian products and/or services. The role of self-identity in this context has important implications for the marketing of Australian products and/or services in China. Material goods are associated not only with their functional benefits, such as the satisfaction of physical needs, but are adopted as signifiers of taste, lifestyle, and identity (Dittmar 1992). Future research may investigate how these self-identities are developed and what it means to have a self-identity as a consumer of imported products and services.

Findings from this study also supported the inclusion of past behaviour into tests of the TPB model in consumer contexts. Consumers who had purchased Australian products and/or services in the past were more likely to intend to do so in the future. It should be noted, however, that past behaviour was actually the weakest predictor of consumer intentions ($\beta = .04$). This is inconsistent with past research, in which past behaviour often emerges as one of the strongest predictors of consumer intentions and consumer behaviour (Lam and Hsu, 2004; Smith et al., 2007, 2008). The weak effect might reflect respondents’ lack of experience with purchasing Australian products and/or services: only 37 percent of respondents had engaged in the target behaviour in the past. Nevertheless, the significant effect of past behaviour suggests that if Australian companies can encourage initial contact with Australian products and/or services, such behaviour might become habitual and self-sustaining.

The present research had a number of strengths: it used established measures of the constructs of interest and a large random sample of consumers from across China. This latter point is notable, given that other research on Chinese consumer behaviour has sampled exclusively from urban and developed areas (Chan and Lau, 2001; Cheng et al., 2005; Lam and Hsu, 2004). Accounting for the social psychological factors predicting Chinese consumers’ intention to purchase Australian products and services will enhance the ability of Australian firms to effectively manage these exchange relationships to minimize the liability of foreignness and to maximize the sustainability of such a relationship. Nevertheless, this research is not without its limitations. First, intention, rather than behaviour, was assessed. However, it should be noted that many tests of the TPB on consumer behaviour (Mannetti et al., 2002; Sparks and Shepherd, 1992), including those with Chinese consumers (Chan and Lau, 2001; Choi and Geistfeld, 2004; Lee 2000), have focused on the prediction of behavioural intentions. Future research should endeavour to test the full TPB model in this context. Second, the research relied on self-report measures. The use of such measures may inflate the relationship between predictors and criterion as a result of common method variance and response bias. In future, it would be useful to include other types of measures, such as observations of shopping behaviour. Third, the research employed the Internet to distribute the survey, which necessarily restricts the sample to those with access to the Internet and email. However, the use of the Internet methodology enabled us to sample throughout China, rather than relying on urban and well developed regions.
References


