Marketing to Healthy Lifestyle Segment in Today's Competitive Environment

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Abstract

This study attempts to examine the distinct exercise group differences in social cognitive and personality characteristics. Data gathered via self-administered surveys generated 512 usable responses, which represented proportionate sampling to reflect the ethnic group and gender basis in Malaysia. Results showed that exercise groups differ in responding to emotional context of attitude, perceived control and personality variables. 'High active' group rated more favourably towards affective attitude and perceived control over exercising. Being extraverts, this group was more conscientious and open to new experiences whilst scoring lower on neuroticism. Moreover, results from logistical regression analysis suggested that conscientiousness was the most important factor in discriminating between the two exercise groups. While this study contributes to the development of social cognitive and behavioural theories, the findings further implicates marketing and public policies.

Keywords: Health, social cognition, personality, exercise, public policy

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Introduction

Towards the end of the 20th century, the increased demand for health-related products was driven by segments that make purchase decision based on their health orientation and lifestyle (Granzin, Olsen and Painter, 1998). Fuelling this trend of health-conscious consumers in the last decade, coupled with the ageing population in Malaysia, business potential for health-related offerings has sored to a sizable market with strong growth (Euromonitor, 2010). Healthy lifestyle encompasses variety of behaviours such as regular exercise, healthy eating, tobacco-free lifestyles, weight control, and stress management undertaken to protect, promote or maintain health (Nahas, Goldfine and Collins, 2003). Despite the tremendous financial impact that this healthy lifestyle segment has on the marketplace, there has been limited research on this segment in the marketing literature (Divine and Lepisto, 2005) to examine the marketing implications on how best to reach appropriate target audiences. Exercise is recognised as an important aspect of healthy lifestyles (Bolton, Reed, Volpp and Armstrong, 2008). Exercise research has received great attention in the health science, medicine, health and social psychology discipline in the Western literature. This study attempts to reduce the contention that there is a dearth of research related to exercise in the marketing literature (Adams and Mowen, 2005) by drawing implications from the marketing perspective. Thus, the research aims to examine the distinct exercise group differences in social cognitive and personality characteristics.

Literature Review

Bridging from the social and psychology dimensions to explain health behaviour, Ajzen (1991) Theory of Planned Behaviour set to study the antecedents of the behavioural intention, commonly determined by three social cognitive predictors [i.e., attitude, subjective norm and perceived behavioural control (PBC)]. These predictors were originally measured as a single concept but Rhodes, Blanchard and Matheson (2006) argued in their study that these three constructs should each comprise of two specific components. Moreover, Rivis and Sheeran (2003) also pointed out the past studies to address added constructs were relatively small. Hence, deriving from these two examinations, a disaggregated multidimensional TPB structure was adopted for this research to better understand the psychometric quality compared to the traditional one dimensional measure.

Attitude refers to the subjects' favourable and unfavourable views towards the perceived benefits in both instrumental and affective manner (Hagger and Chatzisarantis 2005). For instance, views to improve physical health or relieve stress and for enjoyment or pleasure might influence the participation in exercise. An individual's attitude towards exercise is likely to be positive if that person perceives that there are positive outcomes resulting from exercising (Rhodes, Jones and Courneya, 2002). PBC aims to understand subjects' means and resources to exert control, as well as their capability and self confidence or self-efficacy in exercise. To further analyse other potential influences that could be triggered by social means or others (Brickell, Chatzisarantis and Pretty, 2006; Rhodes, Blanchard and Matheson 2006), injunctive norm (normative influences) and descriptive norm (social influences) were included in this study.

Human behaviour or decision is usually determined by an individual's personality traits and preferences (McCrae and John, 1992; Szabo, 1992). Personality factors that are postulated as background variables in the TPB can provide further insights into the understanding of a target behaviour (Ajzen and Fishbein 2004). However, Bakker, Van Der Zee, Lewig and Dollard's (2006, p.34) commented that "the inclusion of certain personality variables in a research design seems to have been dependent more often on the arbitrary choice of the researcher than on a theory of personality". Bogg, Voss, Wood and Roberts (2007) found that past studies have either compared the personalities of inactive/unfit persons to active/fit persons, or examined personality role in predicting exercise adherence independently. Besides, most social cognitive researchers often overlook personality traits in the investigation of exercise behaviour (Bogg, 2008). Thus, this study incorporated more comprehensive dimensions of personality and social cognitive factors into an integrated model deriving from the Five Factor Model of Personality (FFM) (Tupes and Christal, 1961) and TPB, respectively, in predicting exercise behaviour. The FFM model is chosen as it is a comprehensive and yet parsimonious model for studying personality factors, consisting neuroticism, extraversion, openness, agreeableness, and conscientiousness (McCrae and Costa, 1991). Previous studies found links between openness, agreeableness and exercise behaviour (Schnurr, Vaillant and Vaillant, 1990; Marshall, Wortman, Vickers, Kusulas and Hervig, 1994; Adams and Mowen, 2005), supported the notion that regular exercisers are more extraverted and conscientious (Bogg and Roberts, 2004; Why, Huang and Sandhu, 2010). These regular exercisers possessed greater emotional stability (i.e. lower neuroticism) than those non-exercising and/or non-regular exercising groups (Rhodes, Courneya and Bobick, 2001).

This study conceptualised exercise group as a dependent variable, and the social cognitive components (derived from the TPB) and the five personality factors are posited as the independent variables. The behavioural intention construct has been excluded from the study model, given that individuals who intended to exercise may not actually do so eventually (Milne, Orbell and Sheeran 2002). Further, this study aims to examine distinct exercise group differences; therefore the subjects' actual behaviour would be of the main interest.

Methodology

The research instrument adapted the social cognitive components items developed by Hagger and Chatzisarantis (2005) and Rhodes and Courneya (2003), which were tested as reliable in other studies. The personality factors were measured using a 44-items Big Five Inventory (BFI) developed by John, Donahue and Kentle (1991), as shorter personality inventory model has been preferred (Rammstedt and John, 2007). Despite its brevity, the BFI is a psychometrically sound measure of the five personality factors (John and Srivastava, 1999). All social cognitive and personality measurements were adapted from previously published work using a 7-point Likert-type scale and respondents were asked to indicate their frequency of exercise participation based on this scale (Godin, Jobin and Bouillon, 1986). Respondents who meet the exercise recommendations (i.e., 4 or more times per week) are classified as 'high active' exerciser; respondents who did not meet the recommendations (i.e., 3 or less times per week) are categorised as 'low active' exerciser (Symons Downs, Graham, Yang, Bargainier and Vasil, 2006). Health experts have agreed that this exercise group classification is appropriate and congruent with the international guidelines for physical activity (USDHHS, 2004). The questionnaires were pre-tested using a sample size of 40 respondents (i.e. Faculty members, undergraduate and post-graduate students).

In the United States, people who are living in urban area exercise more than those who live in rural areas (Tierney 2000). Similarly, this trend is evidenced in Malaysia urban population (Ngui, 2005). Hence, this study was conducted in the Klang Valley area, the largest urban centre in Malaysia. In selecting the samples, prospective respondents were considered qualified if they reported exercising at least once a week during leisure time for at least 20 to 30 minutes in duration each time for the last 3 months. A sample size of 600 respondents was targeted. Quota sampling was used by setting a 50-50 quota for gender and a, 50-30-20 quota for ethnic groups (Malay, Chinese, and Indian) to reflect the ethnic composition of urban population in Malaysia. A briefing on the research purposes, objectives, and procedures was provided prior to data collection. Lecturer-facilitators were appointed from the respective college / university to facilitate the data collection.

Results and Discussion

Upon completion of the data collection, only 512 completed questionnaires were usable. Chi-square analysis showed no significant demographic differences between the usable and unusable responses. A logistic regression model (using maximum likelihood method) is preferred due to its robustness when the assumptions of multivariate normality are not met (Press and Wilson, 1978). A positive coefficient implies less regular participation in exercise activities, whereas a negative coefficient implies otherwise. The results (see Table 1) indicate that the overall model fit is significant ($p<.0001$) with the chi-square value of 440.01. The present model's Nagelkerke R^2 is 0.791, suggesting a very good model fit. Evidence of model fit is also shown in the overall model's classification rate (or hit ratio) of 92.8%, indicating strong discriminating power of the predictor variables in comparison with the hit rate of 54.1% for proportional chance criterion (Hair, Black, Babin, Anderson and Tatham, 2010). Of the eleven predicting variables, seven of them were found to be significant in distinguishing between high active and low active exercise groups.

Among the social cognitive components, only affective attitude and perceived control were found to be significantly discriminating between the two distinct exercise groups. The associated negative coefficients implied that subjects with greater affective attitude towards exercise and perceived to possess greater control are more inclined to participate in exercise regularly. In many TPB studies, attitude (as a general construct) has consistently produced strong effect on one's intention to perform a given behaviour (Armitage and Christian, 2003). However, this present study found instrumental attitude did not predict exercise behaviour. This finding inferred that one might think favourably about the benefits of exercising (and possibly form intention to do so), but this does not automatically translate into the actual exercise behaviour. Nevertheless, in line with Lawton, Conner and Parker (2007) findings, affective component plays a more important role in predicting health behaviour than instrumental attitudes. The finding that perceived control was a significant predictor in discriminating the exercise groups makes theoretical sense as a person is less likely to exercise if he or she perceives to have less control over the performance of exercise activities (Sheeran, Trafimow and Armitage, 2003). Self-efficacy did not predict exercise behaviour contradicts with most past exercise studies in the West that researched undergraduate students (Hagger and Chatzisarantis 2005). While the generalisability of this study to the larger population is questionable, an evidenced explanation deriving from this study's findings suggests that cultural differences and homogeneity in group selection could be the reasons, which set as a reference for future researches.

Table 1 Multinomial Logistic Regression Results

Effects	-2 Log Likelihood	Likelihood Ratio Tests (χ^2)	Coeff.	Wald Chi-square	Sig.	Exp(B)
Intercept	291.522	63.967	31.055	42.954	-	-
Instrumental Attitude	229.180	1.624	-.528	1.624	.203	.590
Affective Attitude	231.863	4.307*	-.639	4.247	.039	.528
Injunctive Norm	228.117	.561	.176	.550	.458	1.193
Descriptive Norm	228.186	.631	-.139	.628	.428	.870
Perceived Control	236.124	8.568**	-.741	7.827	.005	.477
Perceived Self-efficacy	228.126	.570	.247	.579	.447	1.280
Extraversion	236.466	8.910**	-1.123	8.528	.003	.325
Agreeableness	245.855	18.299**	1.246	15.297	.000	3.476
Conscientiousness	316.293	88.737**	-3.745	53.694	.000	.024
Neuroticism	232.646	5.090*	1.071	4.933	.026	2.919
Openness	235.601	8.045**	-.688	7.434	.006	.502
Log-likelihood value		227.556				
Model Chi-square		440.011, p<.0001				
Goodness of fit		807.392, df = 499, p<.0001				
Nagelkerke R Square		0.791				
Overall hit ratio		92.8%				
Proportion chance criterion		54.1%				

*p<.05; ** p <.01

Conscientiousness emerged to be the most important factor in discriminating between the two exercise groups. Congruent with past research (see Rhodes and Smith 2006; Bogg 2008 for a review), the negative coefficients associated with extraversion and conscientiousness implied that 'high active' exercisers were found to be more conscientious and scoring higher on extraversion. It was reported that 'high active' exercisers tended to score lower on the neuroticism compared to 'low active' exercisers. While this finding contradicts with Raynor and Levine (2009), it is congruent with the finding of Rhodes, Courneya, and Bobick (2001) that low neuroticism is associated with increased exercise participation. In contrary to Marks and Lutgendorf's (1997) argument that openness dimension is least relevant to health behaviours, the findings found significant positive relationships between openness and exercise participation. In spite of its statistical significance, the positive sign associated with agreeableness was the opposite of the hypothesised direction. Generally, agreeableness has been found to be the most controversial personality factor. While Rhodes and Smith (2006) reported agreeableness to be unrelated to exercise participation, other studies found agreeableness to be positively associated with exercise (Schnurr, Vaillant and Vaillant, 1990) but negatively related to dieting behaviour (Adams and Mowen, 2005).

Conclusions and Implications

This paper seeks to examine multi-dimensional social cognitive and personality factors in predicting exercise behaviour using a more comprehensive and integrative approach. Marketing practitioners from diverse industries as healthcare, fitness centres, advertising, insurance, retail businesses as well as organisations who are interested to pursue agenda of wellness would benefit from the empirical findings. In the marketing perspective, consumers adopting a healthy lifestyle can be viewed as a specific market segment. Understanding the social cognitive and personality profile of the distinct healthy lifestyle groups is paramount to designing appropriate marketing strategy. For instance, the present finding suggests that fitness centre operators could employ a

multifaceted approach that take into account affective attitude, control factor and several personality traits such as conscientiousness, extraversion, neuroticism, and openness to develop more effectively tailored communication messages.

Traditionally, health promotional programs have been focused on instrumental attitude. However, the assumption that one will exercise because of the health benefits may not be sufficient to promote behavioural change. This finding suggests that it is more effective to adopt the affective-based interventions that involve creating positive experiences associated with exercise rather than merely focusing on persuasion through factual information. For instance, fitness clubs operators may use trial period, various promotion efforts to entice customers to try their services and experience the fun and enjoyment of exercising at their fitness centre. The finding also suggests the importance to increase the facilitators and/or decrease the barriers of exercise (relating to perceived control factor). For health and fitness clubs business, perceived price (i.e., membership fees) and availability of service may become a potential impediment to action. Health club operators should pay greater attention to ensure easy accessibility and convenience for service delivery such as having longer operating hours, easy and free parking and strategic location.

The finding that 'high active' exercisers are extraverts, more conscientious, and more open to new experiences whilst scoring lower on neuroticism has important marketing implications. Appropriate advertising messages and media selection could be planned to make their advertisement more appealing to segments that carry such personality profile. The current findings also have important implications for sport marketing. Sport event organisers must ensure the sport activities fit the personality types of their target market and vice versa in order to make marketing appealing. Although openness appears to be substantially neglected construct in the health literature, this finding suggests the potential role of openness in examining healthy lifestyle behaviour that should not be overlooked.

Past health research have relied heavily on cognitive-based factors (Why, Huang and Sandhu, 2010). This may be partly attributable to the conviction that interventions aimed at changing one's cognition are more likely to be effective (Weinstein, 2007). This finding that conscientiousness has a stronger impact on exercise behaviour compared to the social cognitive components is novel as past research found the effects of social cognitive factors on exercise behaviour to be greater than personality dimension (Rhodes, Courneya and Jones, 2004). The integration of personality with social cognitive components in examining health behaviour certainly contributed value to the marketing and health literature. In conclusion, practitioners and public health officials may also use such information to effectively curb the growing incidence of obesity and other illnesses such as diabetes and heart attack that relate to physical inactivity and unhealthy diet.

The focus of this study is on exercise behaviour, future research should investigate other healthy lifestyle behaviours such as healthy eating, substance use, health preventive practices, and weight control to cover other aspects of healthy lifestyle. Although subjects were assured of anonymity and confidentiality, potential social desirability may have artificially inflated the observed relationship when self-report measures are adopted. Future research should consider more objective measures such as fitness class attendance or activity monitoring. Lastly, since there might be social and behavioural differences between rural and urban dweller, future research should include other rural states in Malaysia.

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