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## **The Interactions of Consumption Characteristics on Social Norms**

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## **The Interactions of Consumption Characteristics on Social Norms**

### **Purpose**

An extended Theory of Planned Behavior (TPB) model tests how customer loyalty intentions may relate to subjective and descriptive norms. The study further determines whether consumption characteristics – product enjoyment and importance – moderate norms-loyalty relationships.

### **Methodology**

Using a two-study approach focusing on youth, an Australian study ( $n = 244$ ) first augmented TPB with descriptive norm. A Singapore study ( $n = 415$ ) followed up with how consumption characteristics might moderate norms-loyalty relationships. With both studies, linear regressions tested the relationships among the variables.

### **Findings**

Extending TPB with descriptive norm improved TPB's predictive ability across studies. Further, product enjoyment and importance moderated the norms-loyalty relationships differently. Subjective norm related to loyalty intentions significantly with high enjoyment, whereas descriptive norm was significant with low enjoyment. Only subjective norm was significant with low importance.

### **Research limitations**

Single-item variables, self-reported questionnaires on intended rather than actual behavior, and not controlling for cultural differences between the two samples limit generalizability.

### **Practical implications**

The significance of both norms suggests that mobile firms should reach youth through their peers. With youth, social pressure may be influential particularly with hedonic products. However, the different moderations of product enjoyment and importance imply that a blanket marketing strategy targeting youth may not work.

**Originality/Value**

This study extends academic knowledge on the relationships between norms and customer loyalty, particularly with consumption characteristics as moderators. The findings highlight the importance of considering different norms with consumer behavior. The study should help mobile firms understand how social influences impact customer loyalty.

**Keywords:** Theory of Planned Behavior, subjective norm, descriptive norm, product importance, product enjoyment

**Classifications:** Research paper

## 1. Introduction

The Theory of Planned Behavior (TPB), well known for predicting social (Ajzen, 2002) and consumer (Bansal and Taylor, 2002; Lim and Dubinsky, 2005) behaviors, relies upon three factors: attitude towards a behavior, perceived control over performing the behavior, and subjective norm regarding the behavior. Along with considerable support for the TPB's predictive ability, researchers have evolved TPB's concept of norm from the original *subjective* norm (Ajzen, 1991), to a *descriptive* norm (Schofield et al., 2001), and to both norms (Norman, Clark, and Walker, 2005). Dual social norms have support in research with social behaviors such as volunteering (Warburton and Terry, 2000), binge drinking (Johnston and White, 2003), using condoms (Norman et al., 2005), and consuming healthful food (Berg, Jonsson, and Conner, 2000).

In contrast to the above TPB studies on dual norms and social behavior, few TPB studies concern dual norms with consumer behavior (for an exception, see Smith, Terry, and Hogg, 2006). Similar to their influence on social behavior, subjective and descriptive norms could influence consumer behavior, particularly customer loyalty. Furthermore, the relationship between social norms and customer loyalty should not be studied in isolation, but along with how consumption takes place. As people are likely to consume products differently, ignoring consumption characteristics may result in misleading academic outputs or misguided managerial initiatives. Research has found that product enjoyment (Nysveen, Pedersen, and Thorbjørnsen, 2005) and importance (Amine, 1998) might relate to customer loyalty. Yet, no published studies have investigated how social norms relate to customer loyalty as consumption characteristics vary.

To address this question, this research applies the TPB in two studies. Study 1 investigates whether augmenting the TPB with a descriptive norm improves the model's prediction of loyalty intentions. It examines the extent that consumers perceive subjective norm from social pressure, and descriptive norm from observing and adopting others' behaviors, when remaining with a brand. Study 2 replicates and extends the first study by investigating how norm-loyalty relationships vary depending on two consumption characteristics: perceived product enjoyment and product importance. Figure 1 depicts the model for Study 1 along with the additional moderating variables from Study 2.

**(Take in Figure 1)**

The study extends TPB research in consumer behavior by highlighting the roles of different social norms and considering consumption characteristics as moderators. Investigating the moderating influence of these consumption characteristics could shed light on the psychological underpinnings of subjective and descriptive norms with customer loyalty. Understanding how social norms differ could also help address confounding findings that subjective norm is often insignificant and the weakest among TPB's three predictors (Conner and Armitage, 1998). This study uses youth and their consumption of mobile services as the context. Youth are particularly susceptible to social influences, especially when consumption – as with mobile services – takes place in groups (Martin and Bush, 2000). For mobile service providers, this study helps managers understand the roles of social influences in customer loyalty. As youth are an important growth segment (Wilska, 2003), understanding how youth consume mobile services would help mobile service providers develop marketing strategies to target youth.

## 2. Study 1 – Augmenting TPB With Descriptive Norm

The TPB posits that behavioral intentions evolve from attitudes towards the behavior, perceived control of performing the behavior, and subjective norm.

*Attitude*, or favorableness towards a behavior, stems from beliefs about the behavior.

Acknowledging that perceived difficulties or impediments might inhibit behavioral intentions, *perceived behavioral control* reflects volitional control of a behavior.

*Subjective norm* is social pressure to perform a behavior (Ajzen, 1991). This norm stems from seminal works on reference group influence, which surmise that one or more persons can influence another person's values, norms, or perspectives (Deutsch and Gerard, 1955; Kelley, 1947).

Meta-analyses support TPB's three-variable model in predicting behavioral intentions and behaviors across domains (Armitage and Conner, 2001). To test Ajzen's (2001) contention that TPB is non-domain specific, this study extends TPB to intended customer loyalty towards mobile service providers, yielding three hypotheses for the model's core variables:

**H1:** Attitude relates positively to intended customer loyalty.

**H2:** Perceived behavioral control relates positively to intended customer loyalty.

**H3:** Subjective norm relates positively to intended customer loyalty.

### 2.1 TPB's Norm Can Be Descriptive

Despite considerable support for TPB, studies often found subjective norm weak in predicting intentions and behaviors (Conner and Armitage, 1998). For example, a study across 30 social behaviors such as visiting dentists regularly and volunteering,

found subjective norm the dominant predictor in only one behavior (Trafimow and Finlay, 1996). The results of a stepwise regression showed that subjective norm accounted for a meager change in variance (median  $\Delta R^2 = .02$ ), and changes in variance for 10 of the 30 behaviors were not significant.

A fundamental problem with TPB's norm could be its traditional conceptualization as a social pressure to conform to others' expectations (Rivis and Sheeran, 2003; Schofield et al., 2001). Instead of a subjective norm from complying with social pressure, and consistent with early research on social influence (Deutsch and Gerard, 1955; Kelley, 1947), norms may also evolve from individuals observing and adopting others' behaviors, a *descriptive* influence.

Illustrating the differential roles between the two norms, the first of two TPB studies on intentions to react violently in sports found that descriptive (structural path coefficient  $\beta = .17, p < .05$ ) and subjective ( $\beta = .28, p < .01$ ) norms from home fans related to intentions to confront away soccer fans (Norman et al., 2005). In the second study of intentions to injure a hockey opponent, descriptive ( $\beta = .30, p < .001$ ) and subjective ( $\beta = .16, p < .05$ ) norms from teammates related to intentions. In contrast to the first study, however, descriptive norm was stronger than subjective norm. The authors surmised that the descriptive norm in the first study—what home fans would do—operated in a less relevant context than in the second study, what teammates would do, thereby heightening teammates' influence. Subjective (complying with peers' wishes to injure opponents) and descriptive (perceptions that peers would injure opponents) norms predicted intentions significantly in both studies.

Furthermore, adding descriptive norm may improve model predictions above those predicted by TPB's three variables of attitude, subjective norm, and perceived



behavioral control (Berg et al., 2000; Ravis and Sheeran, 2003). Therefore, in addition to the hypothesized relationship between subjective norm and intended customer loyalty in hypothesis 3,

**H4:** Descriptive norm relates positively to intended customer loyalty.

**H5:** A TPB model with descriptive and subjective norms predicts intended customer loyalty better than a model with only subjective norm.

## **2.2 Methodology**

Youth are ardent mobile phone users and are particularly susceptible to social norms influencing their consumer behavior (Martin and Bush, 2000). In order to highlight the roles of different norms with consumer behavior, this research investigates youth's consumption of and loyalty intentions with mobile phone services. The survey instrument was a questionnaire, where 263 undergraduates in an Australian university self-reported perceptions of their mobile service providers. A facilitator explained the questionnaire and requested only those with mobile phones and active accounts answer the survey. No questions identified individuals, and the facilitator assured students of anonymity.

To reduce order effects, questions were ordered randomly. To reduce scaling effects, all evaluative questions used the same seven-point Likert scale anchored on strongly agree and strongly disagree. The cleaned sample contained 244 records, 116 males and 128 females ranging in age from 18 to 24 years (mean and median = 20 years).

### 2.3 Measures

The analysis used single items for all variables. Although some researchers favor multi-item variables (Churchill, 1979), single-items can avoid psychometric and scaling problems and can be as good as multi-item measures (Bagozzi, 1984; Bergkvist and Rossiter, 2007). For example, a meta-analysis of 17 studies using single- and multi-item measures of job satisfaction found a mean correlation of .67 between single- and multi-item measures, suggesting the two formats converged and neither format was consistently advantageous (Wanous, Reichers, and Hudy, 1997).

In line with its classic definition, *attitude* was favorableness towards a mobile service provider (Lim and Dubinsky, 2005). *Perceived behavioral control* (PBC) reflected perceived switching costs that deter customers from switching mobile service providers (Bansal and Taylor, 2002). *Subjective norm* was social pressure to choose the same mobile service provider as peers in order to gain their approval, and *descriptive norm* related to how peers' mobile service provider influenced an individual's choice (Smith et al., 2006). *Intended customer loyalty* was intentions to retain the same mobile service provider rather than switch providers (Chaudhuri and Holbrook, 2001). Testing for collinearity, correlations among attitude, PBC, subjective norm, and descriptive norm ranged from .119 to .439, below the threshold of .9 (Hair et al., 2006). As no collinearity existed, the four variables may serve as independent variables in a regression model.

### 2.4 Results

Table 1 shows the results of entering descriptive norm after the three core TPB variables in a hierarchical multiple regression. As hypothesized, attitude, PBC, and subjective norm showed a significant positive relationship with intended customer

loyalty, supporting hypotheses 1 to 3 and TPB's predictive ability across domains. Moreover, subjective norm was the strongest determinant of intended loyalty. Descriptive norm was also positive and significant, supporting hypothesis 4. However, augmenting the basic TPB model with descriptive norm improved overall model prediction by a mere 4% ( $\Delta R^2 = .01$ ), providing weak support for hypothesis 5.

**Table 1: Hierarchical Multiple Regression of Intended Customer Loyalty**

Dependent Variable: Loyalty Intentions		Standardized Coefficients, Beta	T	Sig.	Adjusted $R^2$
Step 1	Attitude	.229	3.894	< .001	
	PBC	.151	2.727	.007	
	Subjective Norm	.280	4.439	< .001	.236
Step 2	Descriptive Norm	.121	2.051	.041	.246

## 2.5 Discussion

Subjective and descriptive norms traced back to researchers who surmised reference group influence was multi-dimensional (Deutsch and Gerard, 1955; Kelley, 1947). Despite past findings and calls for including descriptive norm as a core TPB predictor (Johnston and White, 2003), this study found that descriptive norm was weak and added little to the predictive efficacy of the model. At least within this context, the three-component TPB model is sufficient in explaining loyalty intentions, and adding descriptive norm makes little difference to the explanations.

Nonetheless, Study 1 results show that two social influences—subjective and descriptive norm—relate to youth. Moreover, a combined subjective and descriptive norm was about twice as strong as attitude and thrice as strong as PBC in relating to

intended loyalty. This outcome buttresses the importance of social influences on youth.

That descriptive norm was weaker than subjective norm, and contributed little to model explanations, may be due to consumption characteristics. No previous studies have investigated how these norm-loyalty relationships vary with two consumption characteristics, product enjoyment and product importance. Study 2 helps address this question, and the generalizability of the Study 1 results, by replicating Study 1 while also considering the moderating influence of these consumption characteristics on norm-loyalty relationships. In contrast to Study 1, which used a convenience sample of Australian undergraduate students, Study 2 tapped a broader population via an intercept survey in Singapore.

### **3. Study 2 – Moderating Influence Of Consumption Characteristics**

Having shown TPB's social norms as subjective and descriptive in Study 1, Study 2 proposes that as *product enjoyment* increases, subjective norm relates to intended customer loyalty more than descriptive norm does. Two arguments support this contention, particularly within this research's context of mobile services. First, youth often use mobile phones for hedonic purposes such as sharing jokes, chatting, and playing interactive games (Spero and Stone, 2004). As mobile service providers typically allow people within their networks to communicate at no or low cost (Nelson and Cooper, 2004), youth may worry about peers contacting them less should they use different networks, and hence feel pressure to choose the same networks as their peers. Second, youth may fear that making a wrong brand choice would lead to negative social and psychological consequences (Chaudhuri and Holbrook, 2002; Lachance, Beaudoin, and Robitaille, 2003). Therefore, they may

prefer the same mobile service providers as their peers, knowing that the selection would be ‘right’ and approved by their peers. Support for this premise also comes from studies suggesting that consuming products in groups intensifies social influences on behaviors (Dickinger, Arami, and Meyer, 2006; Schofield et al., 2001). When individuals share common activities, such as using mobile phones, they tend to conform to each other’s behaviors. Therefore:

**H6a:** When enjoyment is high (low), subjective norm relates to intended customer loyalty more (less) positively.

**H6b:** When enjoyment is high (low), subjective norm relates to intended customer loyalty more (less) than descriptive norm does.

Literature on *product importance* suggests that perceived importance relates positively to customer loyalty. As importance increases, consumers tend to exercise more care in selecting and staying with a chosen brand. Rather than a direct relationship with customer loyalty, this study posits that product importance moderates loyalty. Consumers who perceive products as important tend to associate high risks with purchasing the products (Bloch and Richins, 1983). As a result, they may be sensitive to product information. Extending this argument to norms, consumers who perceive products as important may rely on peers for information—descriptive influence—in order to mitigate risks when selecting a brand.

Resonating with this argument, an experiment involving 60 US undergraduates found that search for product information increased with product importance (Jacoby, Chestnut, and Fisher, 1978). As products became more important, subjects were more likely to seek product information. This sensitivity to,

and search for, information as product importance increase suggests that consumers should be more concerned learning about and selecting brands by observing others rather than adopting brands to comply with others' approvals.

**H7a:** When importance is high (low), descriptive norm relates to intended customer loyalty more (less) positively.

**H7b:** When importance is high (low), descriptive norm relates to intended customer loyalty more (less) than subjective norm does.

### **3.1 Methodology**

Data collection targeted shopping malls in north, east, west, and central Singapore. To improve sampling, interviews at each region took place twice daily, at two train station exits, and over three days. Aided by structured questionnaires, seven trained interviewers approached people at the station exits. Respondents received no reward for participation. The cleaned sample contained 415 records, 216 males and 199 females. Respondents ranged in age from 18 to 28 years (mean = 22 years; median = 21 years), owned a mobile phone and had an active account.

### **3.2 Measures**

Study 2 used the same measures for attitude, perceived behavioral control (PBC), subjective norm, and descriptive norm as in Study 1. In addition, respondents reported two consumption characteristics. *Product enjoyment* was the extent that respondents enjoyed using the services of their mobile service provider. *Product importance* was how important respondents perceived their mobile phone service to be. Similar to Study 1, correlation tests among the above seven variables ( $r$  ranged

from .119 to .484) were below the .9 collinearity threshold (Hair et al., 2006), thereby permitting their use as independent variables for regression.

### 3.3 Results

Similar to Study 1, the results in table 2 show all four variables related positively and significantly to intended customer loyalty, further supporting the first four hypotheses. Model prediction improved slightly upon hierarchically entering descriptive norm after the three core TPB variables. This marginal improvement ( $\Delta R^2_{\text{adjusted}} = 3\%$ ), about the same as Study 1, affirmed that descriptive norm was a poor additional predictor of the model. Hence, support for hypothesis 5 was weak.

**Table 2: Hierarchical Multiple Regression on Intended Customer Loyalty**

Dependent Variable: Loyalty Intentions		Standardized Coefficients, Beta	T	Sig.	Adjusted
Step 1	Attitude	.345	8.183	< .001	
	PBC	.136	3.367	.001	
	Subjective Norm	.229	4.397	< .001	.373
Step 2	Descriptive Norm	.145	2.908	.004	.386

To investigate the moderating influence of consumption characteristics on norm-loyalty relationships, the sample was divided into terciles on product enjoyment and importance. Similar to other studies, the first and third terciles represented low and high conditions, while the middle tercile was discarded (Price, Nir, and Cappella, 2006; Schofield et al., 2001). For each sub-sample, multiple regressions using the model in Figure 1 yielded the results in table 3.

As table 3 shows, subjective norm related to intended loyalty significantly with high, but not low, product enjoyment. This finding supports hypothesis 6a. Table 3 also indicates that with high enjoyment, subjective norm related to intended loyalty more than descriptive norm did. Conversely, with low enjoyment, descriptive norm was stronger, hence supporting hypothesis 6b. The results, however, rejected hypotheses 7a and 7b. Descriptive norm was insignificant with low and high product importance.

**Table 3: Moderating Influence of Consumption Characteristics (Sub-Samples)**

Dependent Variable:	Standardized Coefficients, Beta			
	Low Enjoyment	High Enjoyment	Low Importance	High Importance
Loyalty Intentions				
Attitude	.379, <i>p</i> < .001	.343, <i>p</i> < .001	.269, <i>p</i> < .001	.344, <i>p</i> < .001
PBC	-.024, <i>p</i> = .757	.248, <i>p</i> < .001	.163, <i>p</i> = .027	.179, <i>p</i> = .02
Subjective Norm	.152, <i>p</i> = .108	.295, <i>p</i> = .001	.312, <i>p</i> = .001	.138, <i>p</i> = .175
Descriptive Norm	.179, <i>p</i> = .049	.063, <i>p</i> = .460	.102, <i>p</i> = .249	.129, <i>p</i> = .185

### 3.4 Discussion

Study 2 found that with increasing enjoyment, subjective norm related to intended loyalty more than descriptive norm did. As enjoyment increased, youth were probably under more social pressure to adopt the same mobile service providers as their peers. As hypothesized, the increased social pressure may come from youth



fearing that choosing different mobile service providers would alienate them from their peers and lead to negative psychological repercussions. This argument may also explain the strong and significant PBC with high enjoyment, but not with low enjoyment. For the same reasons that pressured youth into using the same mobile service provider, high-enjoyment youth might perceive high switching barriers when contemplating switching to mobile service providers different from their peers.

In contrast, subjective norm was weak, but descriptive norm was strong with low product enjoyment. Consistent with the above arguments, PBC was also weak and insignificant with low enjoyment. A possible explanation may be that with low enjoyment, youth use mobile phones for utilitarian purposes such as to stay in contact or for emergencies. With low rather than high product enjoyment, youth may be concerned with seeking information from their peers – hence strong descriptive norm – to guide their brand selection.

The results with product importance as a moderator were partially contrary to expectations. Product importance did not moderate descriptive norm as descriptive norm was insignificant with both low and high importance. An explanation may be the research context–youth. Youth tend to use mobile services for hedonic rather than utilitarian purposes (Lee and Murphy, 2006). As a result, they may be concerned with how much they enjoy using mobile services, but not with how important the services are. This explanation may also account for subjective norm's significance at low importance. At low importance and high enjoyment, peer pressure may drive youth's loyal intentions.

#### **4. Conclusions**

Across both studies, the results aligned with research supporting the predictive ability of the Theory of Planned Behavior. Furthermore, in both studies descriptive norm showed a significant relationship with intended customer loyalty. However, augmenting the three-variable—attitude, perceived behavioral control, and subjective norm—TPB with descriptive norm made little improvement to overall predictive efficacy. This outcome supports the robustness of the original three-component TPB structure. The similar results across the two studies suggest generalizability beyond youth and customer loyalty.

Accounting for the moderating influence of product enjoyment, however, revealed that subjective and descriptive norms behaved differently as product enjoyment varied. Subjective norm was strong with high product enjoyment, whereas descriptive norm was strong with low enjoyment. This suggests that rather than augmenting subjective norm with descriptive norm, as proposed by some researchers (Johnston and White, 2003; Sheeran and Orbell, 1999), descriptive norm should replace subjective norm depending on the context. This research proposes that subjective norm may suit contexts where social pressure is likely in consumer decisions, while descriptive norm is for contexts where information search is important. The former may suit hedonic applications, whereas the latter may suit utilitarian applications. Not accounting for the hedonic versus utilitarian nature of the context could help explain meta-analyses where subjective norm was the weakest of TPB's three predictors (Conner and Armitage, 1998; Farley, Lehmann, and Ryan, 1981).

Another contribution of this study is the role of consumption characteristics with dual social norms and intended customer loyalty. As the significance of

subjective versus descriptive norm varied with product importance and enjoyment, subjective and descriptive norms have different psychological underpinnings depending on consumption behaviors or contexts. Sweeping conclusions on norms without considering consumption characteristics would yield an incomplete picture, resulting in misleading conclusions and ineffective managerial applications.

This research also has managerial benefits, as insights into how reference groups influence consumer behavior will help marketers develop strategies for youth in different countries. Overall, the findings support the importance of social norms with youth's intended loyalty. Mobile service providers have peer-based initiatives such as incentives for calls between 'buddies' on the same network (Nelson and Cooper, 2004) and tariff discounts around school hours (Pawsey and Mendez-Villamil, 2004). The providers should expand their peer-based services to cement social bonds and influence their mutual choice of mobile service providers.

As the significance of subjective and descriptive norms differs with consumption characteristics, mobile service providers should segregate how they reach youth through their peers. For example, as subjective norm is strong with high enjoyment, marketing messages focusing on the fun aspects such as mobile games may help pressure youth into using the same provider. Likewise, as descriptive norm is strong with low enjoyment, mobile service providers could reach such youth by providing information on functional features.

In summary, varying norm-loyalty relationships as consumption characteristics change implies that mobile service providers may find difficulties reaching youth via a blanket marketing strategy. They should tailor unique approaches in areas such as advertising media, pricing structures, or sub-brands for each youth segment.

#### **4.1 Future Research**

Future research could address several limitations of this study. First, the study failed to consider if youth acted on their intentions. A longitudinal approach to relate actual behavior to intentions could test this extended model. Also, the strong subjective norm in both studies may be due to surveying just youth. Future research should consider age as a moderator of norm-loyalty relationships. Researchers could also consider other moderating consumption characteristics such as relationship duration and hedonic versus utilitarian products. Studies suggest that these characteristics relate directly to customer loyalty (East, Lomax, and Narain, 2001), and future researchers could test whether they moderate norm-loyalty relationships.

Studies indicate that the strength of TPB's norm changes with the types and relevance of referents (Holtz and Miller, 1985). Questions remain how different referent types, such as families or peers, exert different norms, and how consumption characteristics moderate these norms and loyalty. For example, for products that are important to a family, are family members more likely to exert influence via pressure or through their overt behaviors? Another future research avenue is the impact of network effects on norm-loyalty relationships. Research suggests a network's value increases with its size, thereby leading to more people adopting the network (Katz and Shapiro, 1985). For mobile services, the size of a customer's contact group as well as contact frequency may relate to loyalty. Hence, a related question is how group size and contact frequency moderate norm-loyalty relationships.

Last, the studies took place in Singapore's collectivistic Eastern culture and Australia's individualistic Western culture (Hofstede, 2001). This research did not consider cultural factors, or how interactions among cultural factors and consumption characteristics could moderate norm-loyalty relationships. Considering

cultural settings could further researchers' understanding of the relationships among norms, consumption characteristics, and customer loyalty.

### **Managerial Implications and Applications**

This study's findings of significant subjective and descriptive norms underpin the importance of social influences on consumer behavior, particularly with youth. As consumers, youth are susceptible to peer influence. Peers are a key agent in youth's consumer socialisation, the process by which they develop consumer-related skills, knowledge, and attitudes (Moschis and Churchill, 1978).

Within this study's context, youth are an important growth market for mobile service providers, who face saturated market conditions (Kydd, 2005; Landor, 2003). Hence, mobile firms should focus their youth marketing on peer networks. For example, as youth use mobile services to develop a sense of belonging and maintain a good image with their peers (Aoki and Downes, 2003; Wilska, 2003), marketing messages could play up the negative psychological impacts of being excluded from social gatherings should youth use a network different from their peers. Mobile service providers should expand their peer-based services to cement social bonds and influence youth's mutual choice of mobile service providers.

Further, products and brands should reach youth through youth-dominated media such as online social networks (e.g., Facebook and MySpace). Reaching youth through cyberspace would also help mobile firms discover what youth bloggers and social networks say about their products or brands. Products and brands should also consider aligning with emerging social networks focused on mobile phones such as [www.moko.mobi](http://www.moko.mobi) and [www.bluepulse.com](http://www.bluepulse.com).

As the significance of subjective and descriptive norms differ with consumption characteristics, firms targeting youth should rely on different norms depending on whether their products or brands serve utilitarian or hedonic purposes. As this study's findings indicate, subjective norm is strong with high but not low enjoyment. Hence, marketing messages focusing on fun and enjoyment with peers may help pressure youth's brand choice of hedonic products. Likewise, as descriptive norm is strong with low enjoyment, utilitarian products or brands could reach youth by providing information on functional features. When youth view a product as serving utilitarian needs, peer pressure is less pertinent to brand decisions. Instead, youth may rely on information or advice from their peers. This suggests the importance of garnering positive word-of-mouth through peer networks to promote utilitarian products or brands.

With mobile services, while utilitarian voice communication remains an important function, youth tend to use mobile services for hedonic purposes such as downloading music and ringtones, and swapping jokes (Lee and Murphy, 2006; Wilska, 2003). Mobile firms should introduce hedonic applications such as interactive games and fun content downloads to spur sales to youth.

In summary, varying norm-loyalty relationships as consumption characteristics change implies that companies, including mobile service providers, may find difficulties reaching youth via a blanket marketing strategy. Recognizing the differences between utilitarian and hedonic products, they should tailor unique approaches in areas such as advertising media, pricing structures, or applications for each youth segment. Although the mobile services market is not currently mature enough to identify long term brand loyalty trends, capturing today's youth market may produce enduring benefits for providers. Understanding youth's brand loyalty

behavior would help businesses develop sustainable retention strategies over customer lifetime.

## References

- Ajzen, I. (1991), "The Theory of Planned Behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.
- (2001), "Nature and Operation of Attitudes", *Annual Review of Psychology*, Vol. 52, pp. 27-58.
- (2002), "Residual Effects of Past on Later Behavior: Habituation and Reasoned Action Perspectives", *Personality & Social Psychology Review*, Vol. 6 No. 2, pp. 107-22.
- Amine, A. (1998), "Brand Loyalty, Product Importance and Consumer Expertise: Some Empirical Evidence about Their Relationships", in *New Developments and Approaches in Consumer Behaviour Research*, ed. I. Balderjahn, C. Mennicken and E. Vernet, London, UK: MacMillan Press, pp. 69–84.
- Armitage, C. J. and Conner, M. (2001), "Efficacy of the Theory of Planned Behaviour: A Meta-Analytic Review", *British journal of social psychology*, Vol. 40, pp. 471-99.
- Aoki, K., and Downes, E. J., 2003, "An Analysis of Young People's Use of and Attitudes toward Cell Phones", *Telematics and Informatics*, Vol. 20 No. 4, pp. 349–364.
- Bagozzi, R. P. (1984), "Expectancy-Value Attitude Models an Analysis of Critical Measurement Issues", *International Journal of Research in Marketing*, Vol. 1 No. 4, pp. 295-310.
- Bansal, H. S. and Taylor, S. F. (2002), "Investigating Interactive Effects in the Theory of Planned Behaviour in a Service-Provider Switching Context", *Psychology and Marketing*, Vol. 19 No. 5, pp. 407-25.



- Berg, C., Jonsson, I., and Conner, M. (2000), "Understanding Choice of Milk and Bread for Breakfast among Swedish Children Aged 11-15 Years: An Application of the Theory of Planned Behaviour", *Appetite*, Vol. 34 No. 1, pp. 5-19.
- Bergkvist, L. and Rossiter, J. R. (2007), "The Predictive Validity of Multiple-Item versus Single-Item Measures of the Same Constructs", *Journal of Marketing Research*, Vol. 44 No. 2, pp. 175-84.
- Bloch, P. H. and Richins, M. L. (1983), "A Theoretical Model for the Study of Product Importance Perceptions", *Journal of Marketing*, Vol. 47 No. 3, pp. 69-81.
- Carroll, J., Howard, S., Vetere, F., Peck, J., and Murphy, J. (2002), "Just What Do the Youth of Today Want? Technology Appropriation by Young People", *Proceedings of the 35th Annual Hawaii International Conference on System Sciences*, Hawaii, pp. 1777- 1785.
- Chaudhuri, A. and Holbrook, M. B. (2001), "The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty", *Journal of Marketing*, Vol. 65 No. 2, pp. 81-93.
- (2002), "Product-Class Effects on Brand Commitment and Brand Outcomes: The Role of Brand Trust and Brand Affect", *Journal of Brand Management*, Vol. 10 No. 1, 33-58.
- Churchill, G. A. Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, 16 No. 1, pp. 64-73.
- Conner, M. and Armitage, C. J. (1998), "Extending the Theory of Planned Behavior: A Review and Avenues for Future Research", *Journal of Applied Social Psychology*, Vol. 28 No. 15, pp. 1429-64.

- Deutsch, M. and Gerard, H. B. (1955), "A Study of Normative and Informational Social Influences Upon Individual Judgment", *Journal of Abnormal and Social Psychology*, Vol. 51, pp. 629-36.
- Dickinger, Astrid, Mitra Arami, and David Meyer (2006), "Reconsidering the Adoption Process: Enjoyment and Social Norms - Antecedents of Hedonic Mobile Technology Use", *Proceedings of the 39th Annual Hawaii International Conference on System Sciences*, Hawaii, Vol. 1, pp. 1-11.
- East, R., Lomax, W., and Narain, R. (2001), "Customer Tenure, Recommendation and Switching", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 14, pp. 46-54.
- Farley, J. U., Lehmann, D. R., and Ryan, M. J. (1981), "Generalizing From "Imperfect" Replication", *Journal of Business*, Vol. 54 No. 4, pp. 597-610.
- Hair, J. F. Jr, Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2006), *Multivariate Data Analysis*, Upper Saddle River, NJ: Pearson Prentice Hall.
- Hofstede, G (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*, Beverly Hills, CA: Sage Publications.
- Holtz, R. and Miller, N. (1985), "Assumed Similarity and Opinion Certainty", *Journal of Personality and Social Psychology*, Vol. 48 No. 4, pp. 890-98.
- Jacoby, J., Chestnut, R. W., and Fisher, W. A. (1978), "A Behavioral Process Approach to Information Acquisition in Nondurable Purchasing", *Journal of Marketing Research*, Vol. 15 No. 4, pp. 532-44.
- Johnston, K. L. and White, K. M. (2003), "Binge-Drinking: A Test of the Role of Group Norms in the Theory of Planned Behaviour", *Psychology & Health*, Vol. 18 No. 1, pp. 63-77.

- Katz, M. L. and Shapiro, C. (1985), "Network Externalities, Competition, and Compatibility", *American Economic Review*, Vol. 75 No. 3, pp. 424.
- Kelley, H. H. (1947), "Two Functions of Reference Groups", in *Readings in Reference Group Theory and Research*, ed. Herbert H. Hyman and Eleanor Singer, New York: Free Press, pp. 77-83.
- Kydd, J. (2005), "Marketing to Youth: Virgin Still Young at Heart", *Brand Strategy*, Iss. 9 June, pp. 52.
- Lachance, M. J., Beaudoin, P., and Robitaille, J. (2003), "Adolescents' Brand Sensitivity in Apparel: Influence of Three Socialization Agents", *International Journal of Consumer Studies*, Vol. 27 No. 1, pp. 47-57.
- Landor, P. (2003), "Understanding the Foundation of Mobile Content Quality: A Presentation of a New Research Field", *Proceedings of the 36th Hawaii International Conference on System Sciences*, Hawaii, pp. 1-10.
- Lee, R. and Murphy, J. (2006), "The Consumption of Mobile Services by Australian Students", *International Journal of Mobile Marketing*, Vol. 1 No. 1, pp. 13-20.
- Lim, H. and Dubinsky, A. J. (2005), "The Theory of Planned Behavior in E-Commerce: Making a Case for Interdependencies between Salient Beliefs", *Psychology and Marketing*, Vol. 22 No. 10, pp. 833-55.
- Martin, C. A. and Bush, A. J. (2000), "Do Role Models Influence Teenagers' Purchase Intentions and Behavior?" *Journal of Consumer Marketing*, Vol. 17 No. 4/5, pp. 441-54.
- Moschis, G. P., and Churchill, G. A., Jr. (1978), "Consumer Socialization: A Theoretical and Empirical Analysis", *Journal of Marketing Research*, Vol. 15 No. 4, pp. 599-609.

- Nelson, R. and Cooper, J. (2004), "Tariff Strategies in Asia-Pacific: Defined by Market Maturity", London, UK: Ovum.
- Norman, P., Clark, T. and Walker, G. (2005), "The Theory of Planned Behavior, Descriptive Norms, and the Moderating Role of Group Identification", *Journal of Applied Social Psychology*, Vol. 35 No. 5, pp. 1008-29.
- Nysveen, H., Pedersen, P. E., and Thorbjørnsen, H. (2005), "Explaining Intention to Use Mobile Chat Services: Moderating Effects of Gender", *Journal of Consumer Marketing*, Vol. 22 No. 4/5, pp. 247-56.
- Pawsey, C. and Mendez-Villamil, M. M. (2004), "Mobile Pricing: What is Innovative about Your Tariffs?" London, UK: Ovum.
- Price, V., Nir, L., and Cappella, J. N. (2006), "Normative and Informational Influences in Online Political Discussions", *Communication Theory*, Vol. 16 No. 1, pp. 47-74.
- Ravis, A. and Sheeran, P. (2003), "Descriptive Norms as an Additional Predictor in the Theory of Planned Behaviour: A Meta-Analysis", *Current Psychology*, Vol. 22 No. 3, pp. 218-23.
- Schofield, P. E., Pattison, P. E., Hill, D. J., and Borland, R. (2001), "The Influence of Group Identification on the Adoption of Peer Group Smoking Norms", *Psychology & Health*, Vol. 16 No. 1, pp. 1-16.
- Sheeran, P. and Orbell, S. (1999), "Augmenting the Theory of Planned Behavior: Roles for Anticipated Regret and Descriptive Norms", *Journal of Applied Social Psychology*, Vol. 29 No. 10, pp. 2107-42.
- Smith, J. R., Terry, D. J. Terry, and Hogg, M. A. (2006), "Who Will See Me? The Impact of Type of Audience on Willingness to Display Group-Mediated

- Attitude-Intention Consistency”, *Journal of Applied Social Psychology*, Vol. 36 No. 5, pp. 1173-97.
- Spero, I. and Stone, M. (2004), “Agents of Change: How Young Consumers Are Changing the World of Marketing”, *Qualitative Market Research: An International Journal*, Vol. 7 No. 2, pp. 153-59.
- Trafimow, D. and Finlay, K. A. (1996), “The Importance of Subjective Norms for a Minority of People: Between Subjects and within-Subjects Analyses”, *Personality and Social Psychology Bulletin*, Vol. 22 No. 8, pp. 820-28.
- Wanous, J. P., Reichers, A. E., and Hudy, M. J. (1997), “Overall Job Satisfaction: How Good Are Single-Item Measures?” *Journal of Applied Psychology*, Vol. 82 No. 2, pp. 247-52.
- Warburton, J. and Terry, D. J. (2000), “Volunteer Decision Making by Older People: A Test of a Revised Theory of Planned Behavior”, *Basic & Applied Social Psychology*, Vol. 22 No. 3, pp. 245-520.
- Wilska, T. A. (2003), “Mobile Phone Use as Part of Young People's Consumption Styles”, *Journal of Consumer Policy*, Vol. 26 No. 4, pp. 441-63.

**Figure 1: The Research Model for Studies 1 and 2**

