Taiwanese Adolescents’ Intention Model of Visiting Internet Cafés

YI-CHUNG HSU, Ph.D.¹ and TAI-KUEI YU, Ph.D.²

ABSTRACT

This study intended to construct an intention model of visiting Internet cafés. Four hundred eighty-three Taiwanese high school students were surveyed during March 2002. The results indicated that intention increased with positive attitude toward visiting Internet cafés, the intention was only rarely affected by significant others, intention strengthened with the quantity of resources and skills perceived, and past behavior negatively influenced the intention. Three conclusions were drawn: (a) The proposed model can effectively predict adolescent intention to visit Internet cafés. (b) Past behavior was the main predictor of intention. (3) In terms of intention to visit Internet cafés, there is a strengthening of individualism and a weakening of normative influences. Finally, suggestions and recommendations were made for practice and future research.

INTRODUCTION

Computer games have reached new heights of popularity. The computer and video gaming industries combined accounted for over $7 billion in the United States in 2004.¹ Facing low rates of PC ownership and broadband, Internet cafés have become popular all over the world, with 26,000 in Korea and 4,000 in Taiwan.²–³ Most adolescents see Internet cafés as a recreational place where they can interact with friends and relieve pressure.³–⁴ Adolescents believe negative media reports regarding Internet cafés are exaggerated and do not let such reports influence their intention to visit such places.³ However, media reports caused considerable concern among parents and educators, who then inhibited youngsters from visiting.⁵

Computer games have been widely recognized as a popular leisure activity; however, related studies frequently focus only on the negative impact of video games on adolescents, including addiction, violence and aggression, interpersonal alienation, social anxiety, depression, shyness, and loneliness.⁶–⁸ Consequently, computer gamers have been labeled as negative or deviant. Negative attitude and comments from the media caused the stereotyping of computer gamers, leading to their being described as addicted, introverted, and socially inept.⁹

Few studies have specifically targeted Internet café-related issues. Some example studies include Net café subculture,³,⁹ experience of Internet users,⁴ and school policy.⁵ However, no research exists on the attitudes of Internet café users, social norms,
perceived behavioral control, and intention to visit. Ajzen’s theory of planned behavior (TPB) assumes increasing positive attitude, reducing social pressure, and increasing perceived behavioral control contribute to increasing intention to visit Internet cafés.10 Ajzen11 and others proposed that past behavior should be added to TPB to improve predictions of behavioral intention, especially for habitual behaviors.12–13 Therefore, this study proposed an intention model (see Figure 1) for visiting Internet cafés, by adding past behavior to Ajzen’s TPB model.10

METHODS

Participants

Four hundred eighty-three Taiwanese high school students participated in the study. Their age range was 16–18. Forty-six percent were male and 54% were female.

Measures and procedure

Using Ajzen’s instrument, this study measured behavior beliefs and evaluation and attitudes toward visiting Internet cafés; normative beliefs, motivation to comply, and subjective norms; control beliefs, control power, and perceived behavioral control; and intention to visit Internet cafés by. All constructs were measured using multiple items. All 42 items were measured using a seven-point Likert-type scale. Participants were also asked to provide estimates of their past behavior over the previous six months using a six-point scale, from never, once or twice, 3–4 times, 5–10 times, 11–20 times, and over 20 times.

Statistical analysis

The study used structural equation modeling (SEM) analysis to validate the causal relationships among latent constructs.

RESULTS

Measurement model

The reliabilities ranged from 0.50 to 0.97, and all loadings were significant, indicating that all measures were highly reliable. The composite reliability coefficients ranged from 0.630 to 0.969, suggested that the data had high internal reliability. Six out of seven constructs had average variance extracted, exceeding the benchmark of 0.5. The variance extractions demonstrated satisfactory reliability and validity. To satisfy the discriminant validity criteria, the fit of the model with the unconstrained correlation should be significantly better than the fit of the constrained model. The results showed that the unconstrained model had a significantly lower chi-square value than 22 of the models with constrained pairs, strongly suggesting that all the construct measures in the measurement model achieved discriminant validity.

Structural model

A structural model is analyzed to investigate and depict the link among variables in the research model. Results of SEM obtained for the theoretical model revealed a chi-square of 724.61 ($df = 293; p \leq 0.01$), chi-square$/df$ of 2.473, goodness of fit index (GFI) of 0.89, adjusted GFI of 0.86, root-mean-squared error of approximation (RMSEA) of 0.058, and comparative fit index (CFI) of 0.97 (Table 1). Although GFI and AGFI values exceeding 0.90 are preferable criteria, the more liberal cutoff of 0.80 has been used for good model fit.14 Therefore, the overall analytical results suggested that the model had adequate fit.

Figure 1 shows that the model explained a significant portion of the variance of all the endogenous variables, including 75% for attitude, 89% for subjective norms, 97% for perceived behavioral control, and 89% for behavioral intention.

<table>
<thead>
<tr>
<th>Fit index</th>
<th>Suggested criteria</th>
<th>Results</th>
<th>How fit is the model</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$ (Chi-square)</td>
<td>Smaller better</td>
<td>$724.62$ ($P &lt; 0.01$)</td>
<td>Not fit</td>
</tr>
<tr>
<td>Ratio of $\chi^2$ and degrees of freedom</td>
<td>$&lt; 3$</td>
<td>$2.473$ ($df = 293$)</td>
<td>Good fit</td>
</tr>
<tr>
<td>Goodness of fit index, GFI</td>
<td>$&gt; 0.9$</td>
<td>$0.89$</td>
<td>Moderately fit</td>
</tr>
<tr>
<td>Adjusted goodness of fit index, AGFI</td>
<td>$&gt; 0.9$</td>
<td>$0.86$</td>
<td>Moderately fit</td>
</tr>
<tr>
<td>RMSEA (root mean square error of approximation)</td>
<td>$&lt; 0.08$</td>
<td>$0.058$</td>
<td>Good fit</td>
</tr>
<tr>
<td>Comparative fit index, CFI</td>
<td>$&gt; 0.9$</td>
<td>$0.97$</td>
<td>Good fit</td>
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</tbody>
</table>
The main findings of this study were as follows. First, the respondents were more likely to have a positive attitude toward visiting Internet cafés if they believed that Internet cafés offered high-speed Internet and allowed them to make good use of extra time, share interests with friends, play and learn about new online games, and relieve stress. Second, respondent intention to visit Internet cafés was unlikely to be affected by significant others. Third, respondents were more likely to visit Internet cafés if they were invited by friends, had free time, or perceived themselves to be good at playing games. Lastly, past behavior negatively correlated with respondent intention to visit Internet cafés.

DISCUSSION

The study demonstrated that the proposed intention model could effectively predict the intention of adolescents to visit Internet cafés. Applying SEM analysis seems appropriate for TPB research to prove satisfactory validity of the TPB framework. Furthermore, although some argued that past behavior could not effectively predict behavioral intention, others suggested past behavior could increase predictive power for intention and future behavior.12–13 The study proved that the past behavior construct should not be ignored if TPB is applied, particularly for habitual behaviors such as consuming seafood12 and binge drinking.13

This study showed that Internet café experience discouraged respondent intention to visit Internet cafés. Playing online games is extremely time consuming, and yet time is extremely precious for high school students in Taiwan because they are preparing for extremely competitive college entrance examination. The subjects thus realized that they did not have enough time to visit Internet cafés; additionally, since most of their friends were also preparing for the collegiate entry exam, individual students were unlikely to have friends available to accompany them to Internet cafés. If the speculation is correct, it can be inferred that Taiwanese adolescents can balance recreation, schoolwork, and other aspects of their lives.9 Pessimistic views regarding computer and online games thus may be worth further consideration, as we might overestimate the negative effects of online games on adolescents and underestimate their defensive mechanism against online game addiction.

Research has shown that negative media reports caused great concern among parents, who then restricted their children from visiting Internet cafés.3 In response to their parents, adolescents developed various strategies, such as completing their homework so the parents have no basis for objection, hiding their gamer identity,9 or seeking a balance among computer games, schoolwork, and family life.9 These strategies showed a rise of individualism and a weakening of subjective norms among adolescents. As visiting Internet cafés has become an important part of adolescent culture, adolescents have selected to consider only their behavioral beliefs and attitude, and not the opinions of others.
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REFERENCES


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