

# THE IMPACT OF INTERNET ON SOCIAL ANXIETY AND LEARNING ADAPTABILITY FOR YOUNG ADULT INTERNET USERS

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**Keywords:** Social anxiety; Self-efficacy; Achievement expectancy, Career awareness, Learning adaptability.

**Abstract:** This research is to explore the factors affecting the social anxiety and learning adaptability for young adult Internet users. Results found that achievement expectancy, network self-efficacy, network usage rate and career awareness have significantly affected social anxiety. This result also displayed that achievement expectancy, network usage rate and career awareness have significantly influenced learning adaptability. Social anxiety has a negative effect on learning adaptability. The implications for the academic and educational bureau are also discussed within this paper's closing.

## 1 INTRODUCTION

Is Internet bringing people more convenient communication or bringing them more anxiety in their daily lives? The network technology has changed the way of people's lives. Individuals probably obsess with net activities, thereby impacting adolescents lifestyle or changes their interpersonal interaction among groups, and then causes social interaction anxiety or learning adaptability problems. However, little evidence has yet come forth in this field. It is worthy of investigation within current college students' social anxiety and learning adaptability.

Several studies have shown that people with people with high social anxiety have poor social capability (Zou, 2007). Faludi (1991) also found people with high social anxiety usually hesitate to communicate with other people. Thus, what factors affect college students' social anxiety and learning adaptability are the main issues being examined in this research.

## 2 THEORETICAL AND HYPOTHESES

### 2.1 Related Constructs

Clark et al. (1995) argued that fear of negative evaluation and social avoidance is the hallmarks of social anxiety. In this study, social anxiety is defined as the young Internet users' worrying about negative evaluation by other people and fear of interaction with other people. Several studies have shown the factors affecting the social anxiety. The higher the self-focused attention is, the higher the social anxiety is (Kashdan et al., 2004). Expectation and self-awareness have a significant impact on social anxiety, respectively (Bogels et al., 2002). Previous study has also shown that high social anxiety leads to poor social adaptability (Haemmerlie et al., 1988).

Learning adaptability generally includes learning method, learning habit, learning attitude, learning environment and physical adaptability (Li, 1996). Ashforth et al. (2007) presented that the socialization process affects learning adaptability. Career achievement expectation also affects learning adaptability (Kenny et al., 2005). Gong (2003) found that achievement affect learning adaptability. Palthe (2004) noted that self-efficacy affect adaptability.

Bandura (1977) suggested three outcomes of self-efficacy that can predict the changes in people's behavior: choice behavior, effort expenditure and thought patterns and emotional reactions. Thus, in this study Internet self-efficacy focuses on what individuals believe they can accomplish surfing online. Griffin et al. (1998) found that self-efficacy affected the test anxiety. Self-efficacy has a positive effect on achievement and negative impact on test anxiety (Griffin et al., 1998).

Expectancy's theory suggests that the individual will consider the outcomes associated with various levels of performance. Rapee et al. (1997) displayed that social anxiety have an external negative psychological effect on performance. An individual's self-evaluation affects social anxiety. They also presented that task-focused attention would affect social anxiety Rapee et al. (1996) found that self-evaluation had affected social anxiety. Griffin et al. (1998) found that achievement affected text anxiety. Previous evidence also found that achievement affected learning adaptability and social anxiety (McEwan et al., 1999).

Our definition of career awareness is the students' consideration of future job-orientation and its social value. Fadale (1973) developed a Career Awareness Inventory to measure students' career awareness. Career awareness affects life adaptability (Super, 1990). Clark & Wells (1995) wrote that individuals have social anxiety because of their overt self-awareness. Bogels et al. (2002) found social anxiety was affected by self-awareness.

Usage rate is generally classified into light users, middle users and heavy users in the marketing field. In this study, the network usage rate is based on the time that users use the Internet. We classify Internet users into light users, middle users and heavy users. Some evidence has been found to support the impact of network usage rate on anxiety and adaptability. Kaltiala-Heino et al. (2000) found the frequency of involvement in bullying has a significant effect on anxiety. Ybarra et al. (2007) found that network harassment behavior has a positive influence on psychosocial behavior.

## 2.2 Hypotheses

Based on the previous empirical research, nine hypotheses are developed and shown below.

H1: network self-efficacy has a negative influence on social anxiety;

H2: network self-efficacy has a positive influence on

learning adaptability;

H3: network usage rate has a positive influence on social anxiety;

H4: network usage rate has a negative impact on learning adaptability;

H5: achievement expectation has a negative impact on social anxiety;

H6: achievement expectation has a positive affect on learning adaptability;

H7: career awareness has a positive affect on social anxiety;

H8: career awareness has a positive affect on learning adaptability;

H9: social anxiety has a negative influence on learning adaptability.

## 2.3 Instrument Development

Responses are provided using a 7-point Likert scale for all constructs, rated from 1 (not at all) to 7 (extremely). The scales of social anxiety, learning adaptability, career awareness, Internet self-efficacy, achievement expectation and network usage rate is adapted and modify from Mattick & Clarke's (1998), Li's (1996), Fadale's (1973), Yang et al.'s (2008), and Ybarra et al.'s (2007) usage scale.

## 3 RESULTS

### 3.1 Characteristics of Samples

The mean Internet experience of the young adult respondents was 6.73 years (N=516). The distribution of hours spent on the Internet per week (19.5% under five hours; 22.1% six to ten; 10.6% eleven to fifteen; others are over sixteen hours) and length of Internet usage (continuous use is 30.6% and 43.4% is at least once a day) among respondents indicated that the Internet has become pivotal communication tool for young adult Internet users.

### 3.2 Reliability and Validity

The alpha value of each construct exceeds the minimum value of 0.7, providing satisfactory reliability as proposed by Nunnally (1978). In this study, the reliability coefficients were 0.88 for achievement expectation, 0.91 for network self-efficacy, 0.78 for network usage rate, and 0.87

for career awareness. All constructs display excellent psychometric properties. Confirmatory factor analysis (CFA) was testing the validity. The CFA is using the EQS software to determine whether the measurement model fitted to our collected data (Bentler, 1995). CFA is conducted using the maximum likelihood method. The measurement model should find  $\chi^2$  to be nonsignificant; the goodness-of-fit-index (GFI) should be above 0.90; and root mean square error of approximation (RMSEA) should be below 0.05 (Bentler, 1995). The CFA yields  $\chi^2/df < 3$ ,  $p < .0001$ , NFI=.886, NNFI=.904, IFI=.921, CFI=.920, GFI=.898, and RMSE=.037 ( $< 0.05$ ). Although the NFI and GFI were slightly below 0.9, these results indicate that the measurement model does fit the data and validate the model proposed by this research.

### 3.3 Results and Discussions

Structural Equation Modelling (SEM) was used to test hypotheses. The chi-square, RMSEA and a number of goodness-of-fit indices should fit the theoretical requirements (Bentler, 1995). The measures indicate that the model provided a good fit for the data (CFI=.963; NFI=.915; NNFI=.946; GFI=.927; AGFI=.894; RMSEA=.008). Among the nine hypotheses, eight of the nine hypotheses are significant at levels between 0.05, and 0.001, shown in Figure 1. There are four hypotheses involving factors to predict social anxiety. Network self-efficacy and career awareness have a significant impact on social anxiety ( $\beta = -.120$ ,  $P < 0.05$ ;  $\beta = .524$ ,  $P < 0.001$ ) as the hypotheses predicted. This result indicated that if users have high network self-efficacy, they would have more confidence surfing the Internet. They would thus have no problem in social interaction occasions perceiving the feelings of anxiety. Stronger career awareness would result in higher social anxiety on the part of individuals because young adult will worry about their future and be anxious that they can not survive in society. Clark & Wells (1995) thought individuals have social anxiety because of over self-awareness. Network usage rate and achievement expectation have a direct negative effect on social anxiety ( $\beta = -.116$ ,  $P < 0.01$ ;  $\beta = -.159$ ,  $P < 0.05$ ) as the hypotheses predicted. These results indicated that young adult Internet users spent too much time on the Internet and may cause social anxiety. The current study also supported the relationship between achievement expectation which conjunction

with past research (Rapee et al., 1997). This result shows that young adult with high achievement expectation will try to solve the problems they face, so they will have low social anxiety.

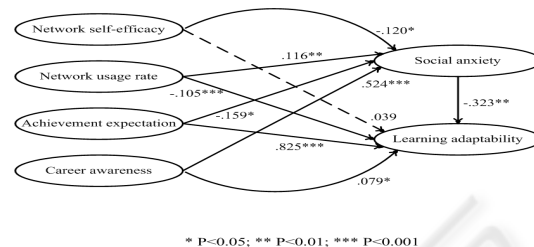


Figure 1 Results of hypotheses.

In turn, five hypotheses involved to predict learning adaptability and all were supported. Network usage rate, achievement expectation, career awareness and social anxiety have a significant effect on learning adaptability ( $\beta = -.105$ ,  $P < 0.001$ ;  $\beta = .825$ ,  $P < 0.001$ ;  $\beta = .079$ ,  $P < 0.05$ ;  $\beta = -.323$ ,  $P < 0.01$ ) as hypothesized (H6, H7, H8 & H9). The results indicated that if young adults spend too much time on the Internet, and could cause a learning adaptability problem. Internet users with high achievement expectation more easily adapt to different environments, so they have better learning adaptability. Young adults with higher career awareness would take precautions against the problems they may face planning before they act and simulate the problems they may need to overcome. They will thus have better learning adaptability. Finally, this research also found that social anxiety and learning adaptability have a negative relationship. This means that if young adults have higher social anxiety, they would have less learning adaptability in their daily lives. This result is also consistent with previous research (Zou et al., 2007). However, the influence of network self-efficacy on learning adaptability is not significant ( $\beta = .039$ ,  $P > 0.05$ ) unlike as hypothesized (H5) (Griffin et al., 1998; Palthe, 2004). The possible argument is the measurement problem of learning adaptability causing the result.

## 4 CONCLUSIONS

This study represents an initial effort in mapping some attributes of young adult networking users to social anxiety and learning adaptability. This study

is noteworthy to academic researchers and educators alike. From an academic researcher's perspective, the majority of social anxiety research comes from a medical perspective in studying patients. Little prior research is from the young adult networking users' view to investigate the factors affecting social anxiety. The research results can serve as a reference for advanced study. From the educational perspective, schools have more chance to understand college students' social anxiety and learning adaptability after using Internet in networking society to reduce and prevent the percentage of students from quitting school and enhance their studying adaptability.

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