Rapid Communication

Shyness, Internet Use, and Personality

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ABSTRACT

To investigate the association between shyness and Internet usage, 88 undergraduate students completed the Revised Cheek and Buss Shyness Scale, the Online Cognition Scale, a computer/Internet familiarity scale, the Eysenck Personality Questionnaire Revised (short version) and the Abbreviated Duke Social Support Index. Significant correlations were found between shyness, Internet use, and personality traits. A stepwise regression analysis indicated that shyness was predicted by introversion, neuroticism, and problematic Internet usage as assessed by the Online Cognition Scale.

INTRODUCTION

KIM (2004) NOTED that three out of four Americans now have Internet access from home. The Internet is used by young and old alike, and people access the World Wide Web in a variety of ways and for a variety of reasons. Research into this field has attempted to delineate between healthy and problematic use of this medium. Several studies have shown that Internet use is associated with feelings of loneliness and depression.[1] Problematic Internet use has been associated with increases in impulsivity and increases in social comfort while online.[1] Social discomfort is a factor associated with shyness, and several studies have looked specifically into the extent to which the shy, introverted person uses the Internet as a form of socializing. Not surprisingly, when looking at relationships formed by shy individuals, Ward and Tracey found that shy people reported more trouble with face-to-face relationships than with online relationships.[2] Chak and Leung found that shyness was associated with Internet addiction.[3] Specifically, the computer addict tends to be a shy, full-time student who spends longer times online per session and is online more times during the week than less shy individuals. Hamburger and Ben-Artzi found that introverted and neurotic females tend to show increased use of the Internet for social purposes, using e-mail, chat rooms, and discussion services via the Internet more than do nonneurotic and nonintroverted males and females.[4] The present research was to investigate further the relationship between the trait of shyness and Internet usage.

METHOD

Thirty-four male and 54 female undergraduate students enrolled in an introductory psychology class at a state college completed questionnaires for this study (M_{age} = 19.2 yr, SD = 1.8). Fifty of the stu-

TABLE 1. CORRELATION MATRIX FOR ALL VARIABLES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Age	—														
(2) Sex	−0.07	—													
(3) Total shyness	−0.02	−0.13	—												
(4) Global OCS	−0.10	−0.13	0.41*	—											
(5) Social comfort	−0.05	−0.11	0.44*	0.79*	—										
(6) Loneliness/Depression	0.02	0.03	0.28*	0.77*	0.43*	—									
(7) Distraction	−0.11	−0.12	0.22*	0.79*	0.47*	0.54*	—								
(8) Diminished impulse control	−0.16	−0.17	0.30*	0.81*	0.45*	0.61*	0.53*	—							
(9) Computer familiarity	−0.09	−0.16	0.09	0.54*	0.43*	0.30*	0.50*	0.46*	—						
(10) Extraversion	−0.01	0.21*	−0.63*	−0.32*	−0.37*	−0.21	−0.23*	−0.16	−0.09	—					
(11) Neuroticism	−0.09	−0.08	0.38*	0.13	0.20	0.06	−0.03	0.14	−0.07	−0.35*	—				
(12) Psychoticism	−0.08	−0.34*	−0.01	0.14	0.11	0.01	0.21*	0.09	0.15	−0.02	−0.05	—			
(13) Global social support	−0.07	0.14	−0.17	−0.19	−0.29*	−0.06	−0.09	−0.09	−0.01	0.28*	−0.21*	−0.27*	—		
(14) Social interaction	−0.11	0.03	−0.11	−0.12	−0.19	−0.07	−0.05	−0.05	0.04	0.22*	−0.15	−0.20	0.96*	—	
(15) Social satisfaction	0.08	0.37*	−0.25*	−0.31*	−0.43*	−0.04	−0.22*	−0.17	−0.15	0.30*	−0.28*	−0.34*	0.59*	0.35*	—

*$p < 0.05$ or better.

dents were freshmen, 29 sophomores, and 9 upper classmen.

The questionnaire used in this study included the following:

1. A demographic page asking for age, sex, and the respondent's preference for face-to-face or online conversing.
2. The Revised Cheek and Buss Shyness Scale,[5] which has 14 items answered on a 5-point Likert scale; the mean score was 34.9 (SD = 9.2).
3. The Online Cognition Scale (OCS),[1] which has 36 items answered on a 7-point Likert scale. This is a global measure of problematic Internet use. There are four subscales on the OCS: social comfort (M 36.6, SD = 11.7), loneliness/depression (M 17.9, SD = 6.4), diminished impulse control (M 23.9, SD = 9.2), and distraction (M 25.6, SD = 8.8).
4. The Yang and Lester Computer Usage Scale,[6] which asks which of 20 computer/Internet activities respondents had engaged in (such as created a Web site, installed extra memory, and bought something on eBay). The mean score was 11.7 (SD = 3.7).
5. The Eysenck Personality Questionnaire Revised, short version,[7] which has 12-item subscales to measure extraversion–introversion, neuroticism, and psychoticism; each item is answered yes or no. Mean scores were extraversion 8.7 (SD = 3.1), neuroticism 5.9 (SD = 3.4), and psychoticism 2.4 (SD = 2.0).
6. The Abbreviated Duke Social Support Index,[8] an 11-item self-report questionnaire comprising two subscales: social satisfaction (7 items) and social interaction (4 items), answered on a 4-point Likert-type scale. Mean scores were social satisfaction 29.2 (SD = 5.4) and social interaction 22.0 (SD = 16.0).

RESULTS

The matrix of correlations is shown in Table 1. Shyness scores were significantly associated with conversational preference (online versus face-to-face), the total OCS scores and all four subscales (social comfort, loneliness/depression, distraction and diminished impulse control), extraversion (negatively), neuroticism, and the Social Support Index subscale score for social satisfaction (negatively). In a backward multiple regression, shyness scores were predicted by the total OCS, extraversion, and neuroticism (β = 0.23, −0.49, and 0.19 respectively), with a multiple R of 0.69.

A backward regression analysis indicated that the total OCS score was predicted by shyness and computer/Internet familiarity scores (β coefficients = 0.51 and 0.36 respectively, p < 0.001), with a multiple R = 0.65. The same two variables (shyness and computer/Internet familiarity) also were the two significant predictors of each of the OCS subscales of social comfort, loneliness/depression, distraction and diminished impulse control.

The preference for online conversing versus face-to-face conversing was associated positively with shyness (r = 0.48, p < 0.001), the OCS (r = 0.39, p < 0.001) (and with scores on each of the four subscales), and negatively with extraversion (r = −0.38, p < 0.001) and social satisfaction (r = −0.23, p = 0.03). Thus, a preference for online conversing was associated with shyness, problematic Internet use, and introversion.

DISCUSSION

The main goal of this study was to investigate the trait of shyness and its association with Internet use. Correlational analyses showed that shyness scores were associated with a preference for conversing online, and this finding was consistent with the associations between shyness and neuroticism, introversion, and obtaining less satisfaction from social interactions.

Shyness scores were also associated with problematic Internet use, that is, using the Internet to decrease a perceived deficit in their real-life social network by establishing virtual friendships online (the social comfort subscale), to relieve feelings of loneliness and depression (the loneliness/depression subscale), and to avoid instead of attend to stressful matters at hand (the distraction subscale). Shyness scores were also associated with staying online longer and thinking about the Internet more than the respondents believed they should (the diminished impulse control subscale). It appears, therefore, that the Internet offers shy individuals a medium through which to communicate with the world around them even though their online behavior may be viewed as "problematic" according to some psychological measures.

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