Coping and Technology Use during Adolescence

Jessica Schulz and Christine McCauley Ohannessian, University of Delaware

Abstract

During late adolescence and emerging adulthood, adolescents experience a vast number of changes. With technology becoming a more prominent figure in adolescents' lives, researchers have begun to focus on how this context relates to adolescent adjustment. Recent research has examined adolescents' technology use and identity formation (Mazur & Kozarian, 2010) or cyberbullying (Patchin & Hinduja, 2006), but few studies have examined the relationship between adolescents' technology use (talking on the phone, texting, emailing/IMing, listening to an iPod/MP3 player, playing video games, using the computer, and surfing the web) and coping. The goal of this longitudinal study was to examine whether adolescents' technology use predict coping strategies or if coping strategies predict adolescents' technology use. The sample included 1,036 10th and 11th graders (58% Caucasian, 53% female) from the Mid-Atlantic region. Surveys were given to the students at school. For both girls and boys, coping strategies predicted adolescents' technology use. However, adolescents' technology use did not protect coping strategies for either gender.

Sample

1,036 10th and 11th grade students (53% girls)

Participants were attendied a public high school in Pennsylvania, Maryland, or Delaware

58% Caucasian; 22% African-American; 11% Hispanic, 2% Asian

Age range = 13-18; Mean age = 15.05 (SD=.78)

The majority of the adolescents (56%) lived with both biological parents; 85% lived with their biological mother and 61% lived with their biological father

Measures

Technology Use Questionnaire The Technology Use Questionnaire was used to assess frequency of technology use (watching television, talking on the phone, listening to a stereo/radio, texting, playing video games, listening to an IPOD/MP3 player, working on a computer, and surfing the web). The questionnaire was comprised of nine items with responses ranging from 1 = *none* to 6 = *4 hours or more per day*.

To obtain a copy of this poster, please visit www.aap.udel.edu

COPE Inventory The COPE Inventory (Carter et al., 1989) was used to assess adolescents' coping strategies. A representative COPE item is "I usually do other activities to take my mind off things." The response scale ranges from 1 = *don't do this at all* to 4 = *do this a lot*. Previous research has supported the validity of this measure (Carter et al., 1989). In the present study, the Cronbach alpha coefficient was .83 for denial, .86 for emotional social support, .83 for venting emotions, and .55 for mental disengagement.

Procedures

During the spring of 2007 and 2008, trained research assistants administered surveys to 10th and 11th grade students who provided assent and had parental consent. The survey took approximately 40 minutes to complete. Participants were told they were volunteers and had permission to withdraw from the study at any time. All participants were aware that their answers would be kept confidential. After finishing the survey, the participants were provided with a movie pass. Participants were invited to be involved in the study again the following spring.

Results

Two sets of linear regression models were conducted. All of the models were conducted by gender. In the first set, the COPE scales (assessed at Time 2) were the dependent variables and the technology use variables (assessed at Time 1) were the independent variables. None of these regression models were significant. In the second set, the technology use variables (assessed at Time 2) were the dependent variables and the COPE scales (assessed at Time 1) were the independent variables. Table 1 presents these findings.

Males

For males, when the model predicting adolescents' technology use from coping strategies was conducted, high mental disengagement predicted more iPod (β=.17, p<.05) and computer use (β= .20, p<.005), and low venting emotions predicted more text messaging (β=-.22, p<.05). None of the models predicting phone use, playing video games, or surfing the web were significant for males (see Table 1).

.

Females

For females, the pattern was more consistent. High levels of denial predicted more frequent email use (β=.18, p<.002), iPod use (β=.13, p<.05), and video game playing (β=.13, p<.05). High mental disengagement also predicted more video game playing (β=.12, p<.05) and web surfing (β=.12, p<.05). Interestingly, low levels of emotional social support predicted more video game playing (β=-.20, p<.05). None of the coping strategies predicted phone use for females. (see Table 1).

Table 1

Linear Regression: Predicting Technology Use at Time 2 from Adolescent Coping Strategies at Time 1

	Mental Disengagement		Venting Emotions		Denial		Emotional Social Support	
	Males	Females	Males	Females	Males	Females	Males	Females
iPod	.17*	.11	-.14	.01	.11	.13*	.14	-.10
Computer Use	.20**	.07	-.04	.12	.09	-.05	-.09	.01
Text messaging	.13	.01	-.22*	.01	.09	.13	.12	.00
Phone use	-.04	-.06	-.04	-.01	.13	.16	.21	.10
Videogame playing	.07	.12*	-.08	.12	.01	.13*	.07	-.20*
Surfing the web	.09	.12*	-.02	.11	.08	.10	.01	-.16
Email	.15	.01	.00	.09	.07	.18**	.08	-.04

*p<.05, **p<.01,***p<.001.
Note: Standardized regression coefficients presented
!

Conclusions

Results from the present study indicate a consistent relationship between adolescents' technology use and coping strategies. Interestingly, adolescent technology use did not predict coping strategies; however, coping strategies predicted adolescents' technology use. Late adolescence and the beginning of emerging adulthood is characterized by a multitude of changes and therefore higher stress levels. Perhaps youth who experience these high stressors are more likely to use technology to cope and escape from their problems. For example, females who did not rely on emotional social support and males who did not vent their emotions frequently used technology more frequently. Future research needs to focus on the relationship between technology use and coping strategies, given young people may use technology as important means of coping today.

*Supported by NIAAA K01AA015059