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PREVIEW

**The Relationship Between Use of the Internet and Social Development
in Adolescence**

By

Erica I. Heitner, M.S.Ed.

**A Doctoral Project Submitted in Partial Fulfillment of
the Requirements for the Degree of Doctor of Psychology
in the Department of Psychology at Pace University**

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ABSTRACT

Personal use of the Internet has increased dramatically over the past several years, and the number of American households with access to the Internet continues to multiply at a rapid speed. One of the fastest growing segments of Internet users are teenagers. To investigate the impact of this technology on adolescent social development, this study examined the relationship between Internet use and social development using a sample of adolescents. Data was collected by administering an Activities Questionnaire for Students and the Social Withdrawal scale and Social Skills Deficits scales from the Personality Inventory for Youth (PIY) to 104 adolescents in a private school setting. The Activities Questionnaire for Students, a self-report instrument designed by the researcher, was used to measure both frequency and type of Internet use. Frequency of Internet use was assessed by the number of hours typically spent on-line and type of Internet use was determined by considering the level of social involvement required by each of seven specific Internet activities: e-mailing, going to sites on the World Wide Web, participating in Chat Rooms, communicating with others through Instant Messenger, playing single-player on-line games, playing multi-player on-line games, and posting to message boards. Six social development variables were used: social introversion, isolation, and social withdrawal were measured by the Social Withdrawal scale of the PIY, and limited peer status, conflict with peers, and social skills deficits were measured by the Social Skills Deficits scale of the PIY. Pearson product-moment correlations were used to test the relationship between frequency of Internet use and the six social development

variables and between type of Internet use and the six social development variables. Results indicated that time spent on the Internet during the weekdays was significantly negatively correlated with limited peer status. Time spent on the World Wide Web was significantly positively correlated with limited peer status and social skills deficits. Time spent on E-mail was significantly positively correlated with limited peer status, social skills deficits, social introversion, and social withdrawal. Time spent in Chat Rooms was significantly positively correlated with limited peer status and social skills deficits. Time spent on Instant Messenger was significantly negatively correlated with limited peer status, social introversion, and social withdrawal. Time spent on Multi-player On-line games was significantly negatively correlated with limited peer status. In addition to calculating the correlations between each specific Internet activity and the social development variables, three categories of Internet use were created for statistical analysis. “Not Social” Internet users primarily surfed the World Wide Web and played single-player on-line games, “Asynchronous social” Internet users primarily communicated with others through e-mail and posted to message boards, and “Synchronous social” Internet users primarily communicated with others through Instant Messenger, participated in Chat Rooms, and played multi-player on-line games. A gender by type of Internet use 2 x 3 ANOVA found a main effect for type of Internet use for limited peer status, social skills deficits, social introversion, and social withdrawal. The results of this investigation can be utilized by school and child-clinical psychologists to identify adolescents who may be experiencing social difficulties.

INTRODUCTION

The past several years have borne witness to an incredible surge in the use of the Internet. Consider the following statistics: The share of homes with Internet access rose from 26.2% in December 1998 to 41.5% in August 2000, an increase of 58%. The share of Internet users rose from 32.7% in December 1998 to 44.4% in August 2000, an increase of 35.8%. In August 2000 more than half of all households had computers, an increase of 42.1% from December 1998. In August 2000 there were 116.5 million Americans online, an increase of 31.9 million users from 20 months prior (U.S. Department of Commerce, 2000). The Media in the Home 2000 survey discovered that in the year 2000 more households had Internet subscriptions (52%) than newspaper subscriptions (42%) (Woodard & Gridina, 2000). According to current 2002 statistics published by the U.S. Department of Commerce there are nearly 150 million Americans who are going online (Ubois, 2002).

Also on the rise is the percentage of households with children who have computers and online access. A 1999 survey entitled "Kids and Media at the New Millennium" conducted by the Henry J. Kaiser Foundation found that 21% of children ages 8 to 18 had computers in their bedrooms (Leland, 2000). According to data collected by the Alliance for Converging Technologies, in the year 2000, 30% of children had Internet access in their homes (Tapscott, 1998). Today more than 80% of households with computers are linked to the Internet and nine out of

ten children now have access to the Internet either at home or in school (Thomas, 2001).

More specifically, one of the fastest growing segments of Internet users are teenagers. In fact, 75% of adolescents between the ages of 14 and 17 are now online (Ubois, 2002). According to a 2002 America Online survey of 6,700 parents and teenagers, children ages 12-17 spend an average of 12 hours and 15 minutes online each week (Thomas, 2002). Geographically Pittsburgh ranked highest in teen Internet use, with 15 hours, 49 minutes of use per week, and New York City came in second place, with 14 hours, 54 minutes of teen Internet use per week. A 2002 Gallup Survey revealed that children between the ages of 8 and 17 would choose the Internet over the television, telephone, and radio if they could only have one medium of entertainment (Newsweek, 2002) Responding to the revolutionary impact of the Internet and other forms of digital technologies on today's children, Tapscott proclaimed that the children of today should be known as "The Net Generation" (1998). N-Geners, as he calls them, are growing up in a digital era in which "(they) are so bathed in bits that they think it's all part of the natural landscape. To them, the digital technology is no more intimidating than a VCR or toaster" (1998, p. 1).

Psychologists are beginning to explore issues relating to children's and adolescent's use of the Internet. Instead of taking a simplistic view of Internet use, they are examining both the potential risks and potential benefits. On the positive side, the Internet contains a wealth of information that can be accessed for

educational purposes. Today a child can turn to the Internet to conduct research on virtually any topic of their choice. Some of the noted risks of children's Internet use include possible exposure to child predators online and exposure to inappropriate material (Bremer & Rauch, 1998). For example, there is an abundance of pornography on the Internet that is easily accessed by children and adolescents. This has raised many ethical and legal issues regarding censorship, and several censoring programs, including SurfWatch and Net Nanny, have been created to allow parents to restrict their children's Web access. Parents are also concerned about their children's disclosure of private family information over the web (Turow & Nir, 2000).

With a virtually unlimited world available to children and adolescents on the Internet, a question being investigated is: What do kids actually do with computers? According to the "Kids and the New Millennium" study conducted by the Kaiser Foundation (Leland, 2000), children spend their computer time engaging in many different activities. Twenty-six percent of their computer time is spent playing games, and 22% of their computer time is devoted to schoolwork. Internet time is divided amongst Chat rooms (10%), Web surfing (15%), and Using e-mail (9%). Tapscott (1998) collected information from over 300 N-Geners through a series of "Growing up Digital" online forums. He found that children and adolescents use computers for entertainment, learning, communicating and shopping. A study of 291 elementary school students examined the frequency of Internet uses at home according to gender. The following results were obtained: E-

mail: girls 17%, boys 22%; Net Surfing: girls 28%, boys 43%; Chat rooms: girls 10%, boys 7%; and Information retrieval: girls 29%, boys 43% (Kafai & Sutton, 1999). Most recently, America Online's 2002 survey discovered that e-mailing (81%) and sending instant messages (70%) are the top Internet activities among children ages 12 –17. Fifty-eight percent of the teens in their sample use the Internet to do homework, 55% download music off the Internet, and 70% are involved in playing on-line games (Thomas, 2002).

Another study found that nearly three out of four online teenagers use the online program “instant messenger” (Thomas, 2001). This form of communication, which allows two individuals to instantly send text messages to one another while both are online, is dramatically altering the way that teenagers communicate and develop socialization skills. Twenty percent of this sample considered instant messenger to be their primary method of communicating with their peers. Many respondents (37% of the sample) indicated that an instant messenger conversation would allow them to say something to a friend that they would not otherwise say in person or on the telephone. In this capacity, Instant Messenger may be breaking down social barriers between individuals and facilitating more truthful exchanges. Another change brought about by instant messenger is the new possibility for teenagers to carry on multiple conversations simultaneously, a skill that has been termed “split attention.”

The widespread availability of the Internet among today's teenagers raises many compelling questions about how this technology may be impacting the