

Digital Awareness: A Model for School Counselors

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Abstract

As the integration of technology into schools is becoming prevalent, school counselors and educators must work together to identify students who may be suffering from digital addiction. As a student advocate and leader within their schools, school counselors are in an optimal position to educate school staff, students, and community members on the signs and symptoms, dangers, and treatments of digital addiction. Early identification of digital addiction is essential for the well-being of all students.

Keywords: addictions, Internet usage, technology, adolescents, behavioral addictions

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The current youngest generation has been given the name Generation Z, for those individuals born after the year 2000 (Barr, 2016). This generation has grown up with a fully functioning Internet, social media, and a constant proliferation of information. According to Beall (2016), 40% of Generation Z self-identify as being addicted to their digital devices including computers and smartphones (Beall, 2016). Given the high usage of digital technology, how do school counselors work with stakeholders to educate a generation “born and raised in an era of technological explosion and currently encompassing the student body of our schools” (Perez-Escoda, Castro-Zubizarreta, & Fandos-Igado, 2016, p. 72)?

Today, the pervasiveness of Internet usage by adolescents is well documented (Gross, 2004; Pew Research Center, 2019); however, there is a lack of research showing how the Internet is related to adolescents’ well-being and development (Gross, 2004). This lack of research is alarming given the increased push for the integration of technology within schools. According to the U.S. Department of Education (n.d.), 48 states and the District of Columbia currently support online learning opportunities that range from fully online classrooms to supplementing classroom instruction. Although schools are embracing the push of technology within the classroom, few resources have been provided to schools to help identify students who may struggle with technology or Internet integration. Although studies have shown that the integration of technology within the classroom has the potential to increase educational productivity by accelerating the rate of learning (U.S. Department of Education, n.d.), Simuforosa (2013) determined that high levels of engagement in social networking can cause

adolescents to lose focus on academic tasks and negatively impact academic success. These negative effects include, but are not limited to, poor dietary behaviors, irregular bedtime, alcohol and tobacco usage, internalizing of problems, and lower social connectedness (Kim et al., 2010; Tsitsika et al., 2014). Identifying and assisting students who may be negatively affected by the overuse of technology in classrooms and outside of classrooms can be difficult for school counselors.

School counselors, who work primarily with students to address their mental health concerns, can serve as advocates to inform and educate stakeholders on the positive and negative benefits of prolonged Internet usage. According to the American School Counselor Association (ASCA, 2017), school counselors collaborate with “staff, schoolwide teams, parents/guardians, and the community to identify students who are participating in harmful behaviors and intervene with these students to limit or eliminate the risk of harm or negative consequences” (para. 3). As digital integration into society continues to emerge at increased rates, it is essential that school counselors stay abreast of current research and trends within this area to address the needs of their students and community. School counselors may help to identify and provide services to students who may be struggling with digital addiction or who need support in developing healthy technology habits. Thus, the purpose of this article is to discuss the prevalence of digital addiction in adolescents and to provide a model for school counselors to address digital addiction within their schools.

History of Technology

Technology has developed rapidly since the 1990's. By the mid-1990s, computers were becoming more common for American families and the first computer

with wireless capability was introduced (Coyne, Padilla-Walker, & Howard, 2013). In the late 1990s *Google* was founded and by the early 2000s there were over 180,000,000 websites (Coyne et al., 2013). Since then social networking and additional ways for social connection have emerged in the online environment.

Since the early 2000s, technology and the use of the Internet has entered our lives in many forms. Ease of access, availability, low cost, anonymity, timelessness, disinhibition, and loss of boundaries appear to contribute to the entire Internet experience (Greenfield, 2003). The Pew Research Center (2016) began systematically tracking Americans' Internet usage in early 2000 and reported that about half of all adults were already online. Recent research shows, roughly 90% of American adults use the Internet (Pew Research Center, 2016) and 92% of teens report going online daily (Pew Research Center, 2015).

Behavioral Addiction

Today, people use the Internet to function in nearly all of life's domains. Information technology helps individuals connect to others, acquire information, satisfy leisure and entertainment wants, as well as other personal needs (Sigerson, Li, Cheung, & Cheng, 2017). However, for many, the use of technology becomes compulsive and develops into addictive types of behaviors (Kuss & Lopez-Fernandez, 2016; Meerkerk, van den Eijnden, Vermulst, & Garretsen, 2009; Sigerson et al., 2017). Despite research being performed for 20 years on "Internet addiction," there is still no consensus on the "conceptualization of Internet overuse and its operationalization" (Tzavela, Karakitsou, Halapi, & Tsitsika, 2017, p. 246). Although no formal definition exists in the Diagnostic and Statistical Manual V (DSM-V) regarding Internet addiction,

behavioral addiction has been defined within DSM-V as “. . . a repeated behavior leading to significant harm or distress. The behavior is not reduced by the person and persists over a significant period of time. The harm or distress is of a functionally impairing nature” (Kardefelt-Winther et al., 2017, p. 212). The recent addition of behavioral addiction to the DSM-V to include non-substance addictions as a psychiatric diagnosis opens the door for studies of non-substance addictions including digital addictions (Samaha & Hawi, 2016).

For the purpose of this article, digital Internet addiction can be conceptualized as an inability to control one’s Internet/digital use that begins to cause impairment (Yoo et al., 2004). Further, as individuals are spending increased time on the Internet and digital devices, the chances for digital addiction are also increasing (Zhang, Amos, & McDowell, 2008). One depiction of digital addiction is that it is a behavioral disorder with signs including salience, mood modification, tolerance, withdrawal symptoms, conflict, and possible relapse (Griffiths, 2000). Additionally, low self-esteem, poor motivation, fear of rejection, and the need for approval are other symptoms that may be prevalent with increased time spent on digital devices (Young & Rodgers, 1998). Individuals suffering from digital addiction have also reported developing a preoccupation with Internet use such as those “cravings” experienced by substance dependent individuals (Yoo et al., 2004; Young, 1998).

In 1998, Young developed eight criteria for assessing for digital addiction, they include: (a) preoccupation with the Internet, (b) needing increasing amounts of time on the Internet, (c) unsuccessful efforts to control Internet use, (d) irritability or moodiness when unable to use the Internet, (e) staying online longer than planned, (f) jeopardized

relationship, job, educational, or career opportunity due to Internet use, (g) lied to family member or counselor about Internet use, and (h) use of Internet as an escape. Young (1998) found in his research that use of Internet and lack of control increased an individual's risk of digital addiction as well as increased personal problems, students' difficulty in completing assignments, and time spent on the Internet while at work or school. Young also found that the use of Internet and lack of control was correlated with decreased time spent with family. These findings echo similar studies that have highlighted the negative effects of digital addiction on behavior (Iyitoglu & Celikoz, 2017; Kim et al., 2010; Malak; 2017; Sigerson et al., 2017).

Digital addiction as a behavioral addition is unlike substance abuse, in that it cannot be fully avoided in today's digital world (Hagedorn & Young, 2011; Gunuc, 2015; Young, 2007). Conducting research in the field of digital addiction and of non-substance addictions is expanding. Cheng and Li (2014) suggested that Internet addiction and its prevalence vary considerably among countries and indicated that Internet addiction is inversely related to the quality of life.

Adolescents and Technology

In 2013, Davis investigated interpersonal relationships and the effects of digital media (e.g., use of smartphones, social networking sites, and multiplayer online games) use on adolescents' sense of identity. Findings from the study suggested that digital media may either enhance or diminish interpersonal and intrapersonal experiences for adolescents depending upon the uses to which adolescents put them. Although excessive use may be both a symptom and criterion for digital addiction during adolescence, it may be inadequate in itself as far as identifying problematic use or

predicting negative outcomes (Shen & Williams, 2011; Young, 1998). In determining the nature of an adolescent's online behavior as adaptive or maladaptive, consideration should also be given to the basis of adolescence online experiences, personal meanings, motives for use, and self-perceived consequences (Israelashvili, Kim, & Bukobza, 2012; Shen & Williams, 2011).

Society's understanding of the effects of Internet usage on adolescents is still being developed (Gunuc & Dogan, 2013). Kraut et al. (1998) proposed the social displacement hypothesis stating that social communication through the Internet reduces the time spent with friends and family which may result in maladjustment. The period of adolescence is notably one in which rapid and important developments take place in terms of not only biology and psychology, but also social changes (Whitehead & Corbin, 1997). School counselors must work with students based on their needs to address the student's maladaptive behaviors and introduce healthier alternatives. School counselors should keep in mind that although Internet usage may not be fully avoidable, it can be highly addictive and has been shown to produce similar psychological effects in the brain as drug and alcohol usage (Ding et al., 2013; Hagedorn & Young, 2011; Hong et al., 2013).

Evidence-Based Therapy and Internet Addiction

Currently, there is a lack of evidence-based therapies for use with Internet addiction and no practice recommendations tailored for adolescents (Tzavela et al., 2017). Despite the lack of research on Internet addiction, some researchers suggest using cognitive behavioral therapy (CBT) as an intervention tool when working with adolescents who may suffer from Internet addiction (Caldwell & Cunningham,

2010; King, Delfabbro, Griffiths, & Gradisar, 2012; van Rooij, Schoenmakers, Vermulst, van den Eijnden, & van de Mheen, 2011). Currently, CBT is showing promising signs of reducing both the frequency of Internet use and symptoms of Internet addiction (King et al., 2012). In 2010, a study by Du, Jiang, and Vance incorporated a multimodal school-based approach to treating adolescents who were identified as having an Internet addiction. The multimodal approach included adolescents participating in group CBT and provided psychoeducation for teachers on the recognition and psychological treatment of Internet addiction. Lastly, group cognitive behavioral training was provided for parents of adolescents showing signs of Internet addiction. Results of the study showed that the multimodal approach was effective for adolescents with Internet addiction, specifically improving emotional state and regulation ability as well as cognitive and behavioral symptoms. Similar results have been found with adults suffering from Internet addiction who have been treated with CBT. Young (2007) found that clients with Internet addiction who are treated with CBT were able to manage their presenting complaints and manage symptoms from their addiction in follow up sessions. Although early research is showing successful trials using CBT with Internet addiction, continued research is needed.

Because the use of technology impacts adolescents both inside and outside of classrooms, recommendations for teachers, parents, and counselors can be beneficial (Simuforosa, 2013). Since statistics show that most adolescents are using digital technology almost daily (Pew Research Center, 2015), the model below is designed to assist school counselors in addressing maladaptive use of digital technology among adolescents ages 12 through 19. These ages are specifically targeted because prior

studies have found disruptive Internet usage among these populations (Iyitoglu & Celikoz, 2017) and formal assessments have been developed to assess the presence and severity of Internet addiction in this population (Meerkerk et al., 2009; Pawlikowski, Altstotter-Gleich, & Brand, 2013; Young, 1998). The steps are designed to help school counselors understand their role and responsibilities to all stakeholders, and to provide comprehensive services to these individuals. School counselors should work to adapt the model to the needs of their schools and students, while adhering to state and local district policies. Additionally, school counselors should continue to engage in professional development activities related to digital addiction to ensure they are aware of emerging trends in research and treatment.

Digital Addiction Model for School Counselors

Step 1: School Counselor's Role

According to ASCA (2012), a comprehensive school counseling program is an integral part of a school's academic mission that is driven by student data and based on standards of academic, career, and personal/social development of all students. As part of this comprehensive school counseling program, school counselors provide responsive services to meet each student's immediate needs and concerns. Addictive disorders would fall into these categories of concerns (Hagedorn & Young, 2011). Students who suffer from Internet addiction may have lower GPAs and suffer from social anxiety, as well as many other co-morbidities (Caldwell, & Cunningham, 2010; Iyitoglu & Celikoz, 2017; Ko, Yen, Yen, Chen, & Chen, 2012; Young, 2007).

School counselors should work within their schools to help educate all stakeholders on the signs, symptoms, and consequences of Internet addiction.

Additionally, school counselors should work to ensure that students who suffer from Internet addiction are receiving the appropriate level of care (Hagedorn & Young, 2011). As leaders within schools and school counseling programs, school counselors have a responsibility to address the problems of today's schools (ASCA, 2012; Caldwell, & Cunningham, 2010; Dollarhide, 2003). With the continued integration of technology into our schools and everyday life, school counselors must be prepared to confront the issues associated with Internet addiction (Caldwell & Cunningham, 2010; Hagedorn & Young, 2011). To address this emerging trend, school counselors must be prepared to provide training for all stakeholders as well as be able to identify students who may have a digital addiction and provide counseling services or referrals as needed.

Step 2: Professional Development

School counselors have a professional obligation to continually engage in professional development training to stay abreast of current trends within society (ASCA, 2012). Since Internet addiction is a relatively new behavioral addiction, school counselors must continually research this emerging disorder to be aware of developing trends and possible treatment options. As school counselors increase their knowledge of Internet addition, they can provide more comprehensive services to students and connect students to the appropriate resources when they are exhibiting the addictive symptoms. Training should be an ongoing goal of school counselors to ensure proper alignment of their school counseling program. National, state, and community conferences and workshops can be great opportunities for school counselors to engage in professional development activities as well as to network with other professionals

who have knowledge of digital addiction. Additionally, ASCA and other mental health organizations offer monthly webinars to address ongoing mental health concerns.

Step 3: School-Wide Training

According to ASCA (2019), school counselors should conduct “in-service training or workshops for other stakeholders to share school counseling expertise” (p. 5). Due to the high students-to-counselor ratios within schools, school counselors cannot fully monitor all students needs efficiently. It is essential that school counselors partner with school personnel to ensure that all student needs are being met. ASCA (2012) recommends incorporating school counseling leadership teams within the school to ensure effective delivery of services. As leaders within the school, school counselors can and should provide training to school personnel to help them understand the signs and symptoms of Internet addiction and the procedures to notify the school counselor when these signs are present. School counselors can provide training after school, during pre-planning days, on teacher workdays, or through an online-training module. School counselors should also take the lead on gathering and distributing information about Internet addiction to all stakeholders (Caldwell & Cunningham, 2010). Working in a collaborative team, school counselors and school personnel can work together to advise students of the appropriate use of technology that will advance both academic and personal achievement (Stone, 2013).

Step 4: Parent and Community Training

Students are typically at school approximately six to seven hours per day. This means that most of their time is spent in the home setting. School counselors should work to educate parents and community members on the signs and consequences of

Internet addiction. By providing parenting workshops, school counselors can help parents develop ideas and guidelines for addressing Internet usage within the home. Educating parents and community members about the potential consequences of Internet addiction before students develop a problem can help reduce the prevalence rates in succeeding years. The goal is not to eliminate Internet usage, but rather to inform parents and community members about Internet addiction and assist them in setting appropriate limits for their children. These efforts are intended to promote an enjoyable Internet experience for their children and limit the consequences of Internet addiction (Hagedorn & Young, 2011). Prevention is key when providing training on Internet addiction (Caldwell & Cunningham, 2010).

Step 5: Student Assessment

Although school counselors are typically not responsible for addiction-related psychotherapeutic interventions, school counselors are trained mental health professionals who are best equipped to identify maladaptive behaviors in students (Hagedorn & Young, 2011). School counselors should use a brief screening tool to assist in their identification of students who may be suffering from the effects of Internet addiction (Hagedorn & Young, 2011). Although there are no clear diagnostic criteria that conclusively predicts Internet addiction, there are standardized assessments designed to identify the symptomatology of Internet addiction in students (Caldwell, & Cunningham, 2010; Laconi, Rodgers, & Chabrol, 2014).

One assessment that has been highly evaluated is the Internet Addiction Test (IAT) which was developed by Young (1998). This assessment is a 20-item scale that measures the presence and severity of Internet dependency among adults and

adolescents. This assessment can be found online at www.netaddiction.com. This assessment uses a 5-point scale where participants rate their frequency of loss of control, preoccupation, and psychological dependence. This assessment was shortened by Pawlikowski et al. in 2013. The newest version on the assessment consists of 12 items which assess participants' loss of control/time management and craving/social problems. Another assessment that has been thoroughly evaluated is the Compulsive Internet Use Scale (CIUS); this assessment was developed by Meerkerk et al. in 2009. The assessment consists of 14 items and is based on a 5-point Likert-type scale. The scale assesses the severity of compulsive Internet usage.

Although there are numerous Internet addiction assessments available, school counselors should identify at least one inventory to use within their school to help identify students who exhibit the signs of Internet addiction. Failure of school counselors to address addictive behaviors may result in efforts to enhance students study skills or organization when the problem is much more profound (Hagedorn & Young, 2011). Results of these assessments can help ensure that students receive proper mental health services to meet their individualized needs.

Step 6: Student Intervention

School counselors should work to provide direct services to support the achievement of all students (ASCA, 2012). School counselors may work with a variety of stakeholders to promote this achievement. To address the needs of students, school counselors gather data about student developmental issues, problems, or successes (ASCA, 2012). When developing a comprehensive plan for Internet addiction, school

counselors need to follow the steps outlined by the ASCA (2012) and outlined in the previous steps of this model.

Pre-student intervention. First, school counselors should engage in professional development to ensure they are knowledgeable about Internet addiction and the consequence of this behavioral addiction. School counselors should seek training to ensure they are prepared to provide training and information to students, school staff, parents, and community members. School counselors' background in human development, coupled with the professional development knowledge of digital addiction, allows them to provide educators and families with guidelines on appropriate technology usage for students (ASCA, 2017; Stone, 2013).

Next, school counselors should develop a needs assessment survey to determine the needs of their school related to digital addiction. Needs assessment surveys can be used to help school counselors assess the needs of students, parents, and faculty members. Data from this survey may help school counselors tailor the training provided to each group and help school counselors develop an action plan within their school. It is essential that school counselors implement school-wide training to help school faculty and staff members understand and identify the signs and symptoms of Internet addiction. Training should also be provided to parents and community members to help them understand the consequences for Internet addiction. Providing training to school staff, parents, and community members can help reduce the shame some students may feel when they are dealing with Internet addiction and help identify students who need assistance to address maladaptive behaviors.

Classroom guidance. To reach the whole student body or entire grade levels, school counselors can integrate classroom lessons into their school's guidance curriculum (ASCA, 2012). These lessons should be designed to develop students' knowledge, attitudes, and skills appropriate for their developmental level (ASCA, 2012). School counselors should review the results of their needs assessment survey when designing classroom guidance activities. Since classroom guidance is provided to the whole school, lessons provided in this delivery model should focus on educating students about digital addiction and providing knowledge of resources.

Group counseling. Group counseling can be provided to students to help them overcome issues impacting academic achievement (ASCA, 2012). Since research shows that digital addiction can impact students socially and academically, school counselors should tailor small group activities to help students manage their maladaptive behaviors related to digital addiction. Small groups can be beneficial to individuals suffering from addiction because small groups provide peer support and allow group members to practice adaptive behaviors within a controlled environment. Research on group counseling with adolescents displaying signs of digital addiction have shown positive correlations with group counseling interventions (Bagatarhan & Siyez, 2017).

Individual counseling. School counselors should use a standardized assessment to evaluate students who exhibit signs of digital addiction. Once an evaluation has been completed, school counselors should work with the students' parents and teachers to develop a plan to address each student's individual needs. Individual counseling may be provided by school counselors as part of this plan when

appropriate. Individual counseling in school counseling is “planned and goal-focused, and it is short-term in nature” (ASCA, 2012, p. 86). School counselors do not provide long-term therapy or counseling to address psychological disorders (ASCA, 2012). If a student requires long-term or more intensive services, then school counselors should provide a referral to a qualified mental health professional. After a referral is made, the school counselor should continue to work with the student’s parents to ensure appropriate accommodations are being provided in the school setting to address the student’s needs.

Step 7: Resources

School counselors could maintain a resource list for parent and community members. Below is a list of resources that school counselors can utilize when working with students and families addressing issues of Internet addiction (Caldwell & Cunningham, 2010; Hagedon & Young, 2011).

- The Center for Internet Addiction Recovery (www.netaddiction.com) is a website established in 1995 by Dr. Kimberly Young with information for individuals and professionals about Internet addiction.
- Support groups can also be used for students who are suffering from Internet addiction or family member of individuals who are suffering from Internet addiction. If Internet support groups are not available in your area, other addiction support groups may be beneficial.
- Addiction.com is a website designed to answer questions and provide resource about a variety of addictions.
- The Center for Internet and Technology Addiction (<http://virtual-addiction.com/>) is a website that focuses on treatment, research, and education.
- Safekids.com provide tips on Internet safety for children and adolescents.

School counselors should also search for a list of mental health professional in their area that specialize in Internet addiction or behavioral addictions. Having a resource list on hand when issues arise will help ensure students receive continuous and efficient services.

Limitations

The steps outlined above provide school counselors with procedures to follow when addressing digital addiction; however, school counselors must modify each step to meet their schools' specific needs. School counselors should keep in mind that Internet usage varies by community/individual demographics (Pew Research Center, 2015). Needs assessment should be used when developing a plan to assist school counselors understand the unique needs of their students, parents, faculties, and communities. School counselors must also adhere to state and district policies when developing their unique model. This model is designed to be a tool for school counselors to use when developing their school's plan to address digital addiction. Additionally, assessment procedures and student plans may need to be modified based on student culture or ability level.

Summary

As the integration of technology into school is becoming prevalent, school counselors and educators must work together to identify students who may be suffering from digital addiction. As student advocates and leaders within their schools, school counselors are in an optimal position to educate school staff, students, and community members on the signs and symptoms, dangers, and treatments of digital addiction. These educational initiatives should include prevention strategies, methods for

assessment, interventions, treatment options, and resources. School counselors should work in conjunction with school staff, students, parents, and community members to identify students who may be suffering from digital addiction and to provide appropriate services. As the emergence of technology continues to grow within schools and at home, the prevalence of digital addiction is likely to become more salient. Early identification of addiction is essential to reduce its prevalence within schools and at home.

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