Positive and Negative Effects of Internet Usage

on Adolescent Identity Construction

Kelly Boerckel and Julie A. Finlay

University of Texas at San Antonio

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Abstract

The ubiquity of the Internet despite its relatively young age as a medium has prompted researchers to study its effect on the medium's users and their psychological development. This paper examines the most recent literature on that topic, specifically related to the Internet's positive and negative effects on adolescents — heavy Internet users who are entering the critical developmental stage of identity construction. Research indicates that the Internet's positive effects on adolescent identity construction include providing an extension for identity exploration, opportunities for self-reflection, and a forum to self-present. Potential negative effects reported in the research include Internet addiction, enabled support for negative behaviors, and the increasing incidences of bullying among adolescent users, made easier by the presence of the Internet.

Keywords: identity development, adolescence, Internet

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Since the early 1900s, the Western world has recognized the transition from child to adult as more than a single, swift step (Stern, 2008). In fact, psychologists have labeled this developmental transition as *adolescence,* a multi-year, in-between period during which teens adjust to biological changes and profound cognitive transformation on the journey to adulthood. During this stage, teens' operational skills have developed enough to allow them to construct more abstract self-portraits and to see distinctions between their real and ideal identity characteristics (Stern, 2008). Developmental psychologists assert that the adolescence stage, especially for younger teens (Erikson, 1959), is tailor-made for self-reflection, psychological exploration, and experimentation that lead teens toward identity construction, or understanding who they are and how they characterize themselves to others (Gergen, 1991; Rosenberg, 1986). This adolescent period of emerging identity construction is foundational development that is critical for building a healthy adult life and relationships (Riley, 2008).

Erikson (1959) addressed this developmental period with his Eight Stages of Man theory, positing that adolescents use the Identity and Repudiation versus Identity Diffusion period to begin identifying, sorting, and ultimately choosing their identity characteristics. Scores of other developmental psychologists have built upon that theory, suggesting that this intense mental exploration and construction period may have many stops and starts, with some adolescents finding themselves unable to commit to one identity, a phenomenon labeled by Marcia (1967) as *moratorium* (Miller, 2010). This developmental phase may yield what seems like multiple identities, due to the competing influences of peers, parents, and individuals themselves in identity construction (Marcia, 1967; Riley, 2008; Stern, 2008). The goal of adolescence is an

eventual melding of the competing identities into one defined, integrated self that an individual can feel comfortable with and be able to share with others (Erikson, 1959; Marcia, 1993). Adolescents embark on this identity consolidation primarily through a combination of internal reflection and externally-focused self-presentation that has traditionally taken the form of face-to-face interaction with peers and parents.

Internal reflection tactics for adolescents constructing identities may include journaling, writing poetry or music, or spending time alone — all activities that encourage individuals to think deeply about their beliefs, goals, dreams, and to express those thoughts in some way. Regarding the externally-focused activity of identity construction, Jones and Pitman (1982) described three ways in which self-presentation may be manifested: *ingratiation* (the process of convincing others of your best qualities); *intimidation* (making others fear you); and *self-promotion* (convincing others of your competence and need to feel respected). Integration of these three self-presentation developmental tasks is critical for the positive development of adolescent self-esteem and self-awareness, which supports identity construction. These self-presentation tasks, combined with self-reflection tactics already mentioned, should put an adolescent on the path to successful identity construction.

For generations, adolescents have pursued identity construction and integration through real-world interactions and activities. However today, with 93 percent of American teens ages 12 to 17 spending time online (Pew Internet & American Life Project, 2010), it should come as no surprise that recent developmental psychology research suggests that virtual activity is increasingly significant to identity construction. In short, the Internet plays a strong supporting role in identifying, constructing, and integrating identities (Valkenburg, Schouten, & Peter, 2005; Stern, 2008; Katz & Rice, 2002; Gross, 2004; Zhao, Grasmuck, & Martin, 2008).

This paper will review current literature regarding the Internet's influence on adolescent identity construction, and explore the question of whether adolescent use of the Internet has a more positive or negative effect on that developmental process. The presentation of research will be followed by a discussion of the implications of this research and suggestions for further study.

Positive Effects of Internet Usage on Adolescent Identity Construction

Bandura's theory of Triadic Reciprocal Causation (1986) proposes that humans are mutually influenced by personal, behavioral, and environmental factors. During adolescence, biological and cognitive changes define the personal and behavioral factors influencing identity construction. A key environmental factor affecting identity construction may be identified as adolescents' desire to switch from parents to peers as their most important influences. The resulting increase in peer interaction is an integral part of adolescent identity development. Based on media usage studies (Pew Internet, 2010), much of the peer interaction going on between adolescent peers today is happening through media, especially the Internet.

Research suggests that media in general extends literal peer interaction that happens in the real world into virtual interaction in online worlds (Mazalin & Moore, 2004). Internet interaction and socialization, which takes the form of participating in online communities, chatting, talking and texting on mobile phones, instant messaging, social networking, e-mailing, and blogging, gives adolescents even more opportunity to experiment safely with identity formation (Padilla-Walker, Nelson, Carroll, & Jensen, 2010). It is a natural means for adolescents to explore their social worlds and identities (Siibak, 2009; Larsen, 2007: Livingstone, 2008; Gross, 2004) because it is an evolutionary extension of the face-to-face social exploration that adolescents have conducted for years (Zheng, Burrow-Sanchez, & Drew, 2008).

Turkle (1995) refers to identity construction's evolution from real-world to virtual-world exploration as "post-modern identity construction," where adolescent Internet users "talk, exchange ideas, and assume the personae of [their] own creation" (p. 9) in a world of "eroding boundaries between real and virtual" (p. 10). While the Internet connects adolescents to their peers, media in general allows adolescents chances to express autonomy and individuality (Padilla-Walker, 2006), and to become more self-perceptive (Padilla-Walker et al, 2010), which are more building blocks of identity construction.

While early research by Kraut et al (1998) suggested that individual use of the Internet may be potentially isolating and therefore inhibiting to social exploration of identity, later studies have provided positive "evidence of the socially grounded nature of identity building and interaction in cyberspace" (Katz, 2002, p. 282). Rather than debating *if* the Internet has an effect, Padilla-Walker et al (2010) propose that developmental experts assume that it does based on the research, and instead focus on *how* the Internet is used to get a better gauge of its effect on identity development. In support of identity construction, the Internet as a medium provides anonymity, de-emphasis on the physical self, less inhibition, and limited commitments (Valkenburg et al, 2005; Subrahmanyam, Smahel, & Greenfield, 2006) to try on adult identities (Matsuba, 2006). All of these Internet characteristics encourage increasingly self-conscious adolescents to identify, sort, construct, reconfigure, and present their self-portraits within a public space that is protected from potentially stinging face-to-face criticism (Stern, 2008; Turkle, 1995).

In particular, Stern (2008) points to the construction of personal web sites as a positive effect of Internet use among teens, suggesting that they allow adolescents to self-reflect and self-actualize through social sharing, or self-presenting. Some adolescents exercise control of self-

presentation through *blogs* (Papacharissi, 2002), which are defined as shared online journals that record a chronological record of experiences. A qualitative study of 20 young adult female bloggers offered evidence supporting this theory, concluding that blog authorship helps young adult females better understand their own identity through self-reflection and self-presentation (Davis, 2010). Along the same lines, Boyle and Johnson (2010) demonstrated that teens are increasingly turning to social networks such as MySpace and Facebook for a similar reason — to self-present. An analysis by Zhao et al (2008) determined that while the identities adolescents construct through self-presentation on Facebook in particular tend to be idealized selves rather than their true selves, this trend may actually be viewed as a positive indication of aspiration in their identity construction journey.

Negative Effects of Internet Usage on Adolescent Identity Construction

As previously mentioned, early Kraut et al's research (1998) on the effect of Internet usage pointed to negative consequences for identity development, including isolation that might stunt identity construction. While the negative results of some of those early studies have been repeated and even reconsidered (Kraut, Kiesler, Boneva, Cummings, Helgeson, & Crawford, 2002), developmental psychologists continue to explore the potentially negative influence from a variety of angles, due to the rising ubiquity of the Internet (Pew Internet, 2010).

An area of continuing interest is the topic of *Internet addiction,* a relatively new and still evolving term (Chou, Condron, & Belland, 2005) that is defined in the literature as excessive, compulsive, problematic or even pathological dependence on the Internet to escape negative feelings (Guan & Subrahmanyam, 2009). Young (1998) performed a qualitative study to develop a set of criteria that distinguished Internet addiction from normal Internet usage. The study results identified addicted Internet users as "dependents," or those who spent an average of

38 hours per week using the Internet. Dependents admitted that their Internet usage caused them to ignore their personal relationships, creating a potentially negative threat to identity construction, since peers in personal relationships play a significant role in this development. In addition, addictive Internet usage patterns among adolescents in Young's study (1998) caused disrupted sleep patterns due to late-night use, sleep deprivation, and a compromised immune system, all of which could also interfere with concentration on identity construction, one of the primary goals of adolescence (Subrahmanyam et al, 2006). Young's research (1998) helped set the stage for the theory that the Internet itself is *not* addictive, but that specific Internet applications may be the true root of the problem.

Establishing interpersonal relationships with peers is one of the most important developmental tasks of adolescent identity construction. Reading social cues is a critical component of this development, and that is best achieved in face-to-face settings, which the Internet does not typically afford. As such, the Internet lacks the optimal socialization opportunities that adolescents need to have positive peer relations (Harman, Hansen, Cochran, & Lindsey, 2005; Leung, 2007). Adolescents who develop poor peer relationships may experience social anxiety, withdrawal and social phobia, all of which may stunt, stall, or derail identity construction.

As previously stated, anonymity may be viewed as a positive influence on identity construction in adolescents, but on the negative side, anonymity enables the opportunity for adolescents to create false personas, especially considering decreasing parental supervision of adolescents online as they step toward independence. Qualitative research by Harman et al (2005) determined that adolescents who used the Internet to escape their reality and emerge into false identities by misrepresenting themselves on the Internet had lower self esteem, high social

anxiety, and poorer social skills than those who had represented themselves truthfully. Those characteristics resulting from heavy Internet usage could negatively affect identity construction.

The content on the Internet is largely ungoverned, as is its usage by individuals, making it a potential playground for inappropriate, inaccurate, and even harmful information distribution (Bremer & Rauch, 1998) and perhaps leading impressionable, unsupervised adolescents to make poor decisions. Young teens already suffering from low self-esteem and prone to borderline personality disorders such as non-suicidal self-injury, for example, can easily locate hundreds of self-injury-focused online communities that help them identify with like-minded peers. On the positive side, interaction in such communities presents an opportunity to anonymously reach out of loneliness and isolation to positively affect behavior (Murray & Fox, 2006). However, on the negative side, participation in these communities also can pose a risk to personal recovery (Whitlock, Lader, & Conterio, 2007) due to misinformation and "narrative reinforcement" (p. 1142) or support for such negative behaviors as cutting, eating disorders, or other forms of self-harm noted as growing problems among teens. That peer interaction, which is enabled by the Internet and promotes negative behavior, could disrupt healthy identity construction and perhaps even lead a teen toward a physically harmful personality disorder.

The age-old adolescent practice of bullying has found a ripe environment in electronic media, and has a new moniker: *cyberbullying*. Recent headlines have made the issue a heated conversation topic among concerned parents of adolescents, teachers, and developmental psychology researchers. Among the research studies on this negative effect of the Internet is a survey of U.S. students ages 13 to 18 years old (Raskauskas & Stolz, 2007), 49 percent of which claimed to have been cyberbullied. Smith et al (2008) researched the nature and impact that cyberbullying had on adolescents, finding that 99 percent of students who cyberbully use the

Internet to do so. The fact that the Internet enables anonymity may be contributing to the

increasing incidences (Patchn & Hinduja, 2006), and its effects could be even more widespread

than traditional bullying. Research by Kowalski and Limber (2007) has suggested that girls have

become more involved in cyberbullying as both perpetrators and victims, and swift distribution

through electronic channels can heighten the impact of bullying efforts. As with traditional

bullying, cyberbullying often occurs during adolescence and the genesis of identity construction,

when teens are particularly vulnerable to criticism. Blows to self-esteem distributed far beyond

the schoolyard may have longer-lasting effects than traditional bullying, thereby inhibiting

healthy identity construction and development.

Implications of the Research and Suggestions for Further Study

Identity construction achievement during adolescence allows individuals to journey

successfully through identity crisis, making personal commitments to who they are and how they

present themselves to others (Miller, 2010). As stated previously, developmental psychologists

believe that identity construction serves as a foundation for healthy developmental growth and

maturity into adulthood. Individuals who do not complete identity construction may remain in

moratorium and lack self-esteem, potentially leading to issues with intimacy and attachment

(Arseth, Kroger, Martinussen, & Marcia, 2009). With the rise of the Internet as an influence on

adolescents experiencing identity construction, it's critical to understand both the positive and

negative effects of this medium to help ensure that the Internet can aid the completion of this

important developmental task.

This literature review revealed nearly equal weight on research regarding positive and

negative effects of Internet usage in general. With respect to the Internet's effect on adolescent

identity construction, more research is clearly needed to draw any conclusions. The fact that

Internet technology is constantly changing makes this topic a moving target for researchers. Some of the current negative effects may shift positive, and vice versa.

For example, relatively new capabilities such as Skype (free video telephone service offered through the Internet) could nullify current negative arguments that the Internet does not allow users to read social cues from influential peers. Skype, iChat, and similar services that enable video chat now offer Internet users that capability. In many ways, this emerging experience rivals the characteristics of traditional face-to-face interaction, during which the reading of social cues of others plays a critical part in identity construction. As society becomes more dependent on the Internet to connect and communicate, adolescents may rely more heavily on capabilities such as Skype than face-to-face. Rather than condemn it for its lack of personal touch, hopefully researchers and technology developers will continue to monitor its use and search for ways to amplify its communication capabilities to support, not hinder, identity construction.

On the other hand, decreasing adolescent involvement in blogs and the shift to micro-blogging (Pew Internet Life, 2010) may weaken positive arguments that the Internet enables deep self-reflection, which is key to identity construction. Taking the place of blogging is *micro-blogging* (providing short status updates through social networks), which has grown in proportion to the rise of Twitter and Facebook users. Although micro-blogging does offer some self-reflection opportunities, this medium's greater emphasis is self-presentation. Micro-blogging posts tend to be shorter and less substantive that blog posts, often focusing on specific states in time rather than reflecting on deeper thoughts that might be associated with identity construction. This shift from blogging to micro-blogging bears watching to gauge its evolving

effect on identity construction. Lacking depth in the self-reflection opportunity may end up turning micro-blogging into a negative influence on identity construction in adolescents.

From the recent literature reviewed, there was some concentration on gender comparisons with respect to the Internet's influence, however there was a dearth of comparative studies on how the Internet affects adolescents in different cultures. While we found several studies based on research conducted with adolescents in a variety of countries, few, if any, compared adolescent experiences across cultures and countries. Developmental psychologists studying this topic in the future should consider this gap in the research, and propose, conduct, and analyze studies that compare the Internet's effect on adolescent identity construction across socioeconomic groups, races, ethnicities, and sexual orientations.

Another gap in the literature is research focusing on adolescents' proactive choice to use the Internet over traditional methods for constructing identity. The literature seemed to confirm that adolescents do use the Internet in identity construction, but few studies explored adolescents' motives for doing so, and none of the literature we reviewed compared motives for using the Internet versus face-to-face or usage comparisons between different age groups. Longitudinal studies exploring these aspects could prove useful to building arguments for the positive and negative effects of the Internet's influence.

Conclusion

Considering the ubiquity of the Internet, it is no wonder that developmental researchers are devoting noteworthy resources to better understand its effect on the daily lives of its users, many of whom are adolescents at the beginning of their journeys to construct identities that they will carry into adulthood. The Internet's relatively young age as a medium juxtaposed against its growing influence is a phenomenon that developmental researchers simply cannot ignore.

Naysayers who suggest that the Internet has a purely negative influence on adolescents must accept that the Internet is here to stay; and those who see the Internet as a purely positive influence should not overlook the potentially negative effects on adolescent identity construction. Rather than simply condemning it or praising the Internet, supporters on both sides of this issue may best spend their efforts searching for ways to harness the power of the medium. As the medium evolves, enabling new ways to communicate and connect, public perception of the effects of adolescent Internet usage on identity construction should be weighed against reliable research to build a fact-based case for both the negative and positive sides of the debate.

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