

Internet Addiction, Identity Distress, and Depression among Male Adolescents Transitioning to Young Adults: A Qualitative Study

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Online First Publication

CITATION

Sun, A., Mullen, L. J., Cash, H., & Rae, C. (2020). Internet addiction, identity distress, and depression among male adolescents transitioning to young adults: A qualitative study. *Future Review: International Journal of Transition, College, and Career Success*, 3(1).

Internet Addiction, Identity Distress, and Depression among Male Adolescents Transitioning to Young Adults: A Qualitative Study

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This qualitative paper focuses on exploring the relationship of three concepts—internet addiction, identity distress, and depression—as seen in male adolescents and young adults afflicted with internet use disorder. It includes in-depth interviews with eight participants. Recordings of the interviews were transcribed; themes and subthemes were identified and organized. The findings reveal two theories, indicating different sequences among the three concepts. One theory posits that participants initially encountered identity distress and subsequently experienced depression, prompting them to self-medicate with internet activities and gaming. The second theory suggests that the participants developed internet addiction first, and as a result, they lost the abilities and aspirations to pursue their life goals, and therefore suffered identity distress followed by depression. To effectively treat male adolescents and young adults afflicted with internet addiction, clinicians must possess knowledge and skills related to age-specific development, mental health, and addiction. Implications are discussed.

Keywords: adolescent and young adult males, depression, identity distress, internet addiction

In the past decades, internet technology has become accessible in many regions in the world, and the negative consequences of its excessive use or addiction by some individuals have led to serious public health issues globally (Darvesh et al., 2020; Kuss, Griffiths, Karila, & Billieux, 2014). Adolescents are particularly at risk for negative consequences as they are more susceptible to various mental health issues owing to the neuro-developmental plasticity in their stage of adolescence (Cerniglia et al., 2017). The rates and amount of time of adolescents' gaming engagement have increased in past decades, especially for males (Brand, Todhunter, & Jervis, 2017; Rideout, Foehr, & Roberts, 2010). Although some Asian countries appear to have high internet addiction prevalence and have attracted attention in this regard, other regions of the world have also been experiencing this phenomenon. For example, Darvesh and colleagues' (2020) scoping reviews indicate that among the general population, internet gaming disorder prevalence range was 0.21-33.33% for the European region, 0.25-38.90% for the region of the Americas, and 1.20-57.50% for the Western Pacific region.

Tang and colleagues (2018) compared US college students with Asian college students and found that overall, although the Asian college students have a higher prevalence in the areas of "internet addiction" (13.8% for China, 12.9% for Japan, compared to 8.0% for the US) and "online social networking addiction" (44.9% for China, 34.3% for Japan, and 25.4% for the US), the US college students have a higher prevalence in "online gaming addiction" (24.8% for the US compared to 20.4% for China and 14.6% for Japan). Some earlier studies showed lower internet addiction prevalence rates (4% - 6%) among the US college students (e.g., Christakis, et al., 2011; Yates et al., 2012). This could be attributable to the time-trend factor in that more recent prevalence studies may show a higher rate because of the wider internet accessibility and more addictive gaming options availability to more individuals. However, we should interpret internet addiction prevalence rates with caution as factors such as the various operational definitions and measurement tools for the variable of "internet addiction," different cut-off points, and diverse sampling methods may interfere with the outcomes, and scholars have long advocated for a standardized

definition and measurement tool for internet addiction research (Darvesh et al., 2020; Kuss et al., 2014). Regardless, the field has seen more adolescents and young adults who have dropped out of college because of their uncontrollable online gaming and who sought treatment either of their own accord or because of their parents' ultimatum. Using the data from the 2017 American College Health Association—National College Health Assessment (N=43,003 undergraduates), Stevens and colleagues (2020) found that 10 percent of the students reported that they experienced problematic internet use or internet gaming problems and that their academic performance has suffered because of it.

Although the World Health Organization included gaming disorder as a formal diagnosis in its 11th revision of the International Classification of Diseases (ICD-11), the inclusion has raised many debates (van Rooij, Ferguson, Carras, Kardefelt-Winther, Shi, & Aarseth, et al. 2018). The *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* states that “the seemingly high prevalence rates, both in Asian countries and, to a lesser extent, in the West, justified inclusion of this disorder in Section III of DSM-5” (American Psychiatric Association [APA], 2013, p. 796). The reason *DSM-5* includes Internet Gaming Disorder only under “Conditions for Further Study” in Section III is because they felt the field still has insufficient knowledge about this disorder and that “an understanding of the natural histories of cases [afflicted with internet addiction], with or without treatment, is still missing” (APA, 2013, p. 796). Regardless of whether internet gaming problems should be categorized as a formal diagnosis or not, it is a fact that more and more individuals, especially adolescents and young adults, require professional help to combat this problematic behavior. This paper, therefore, attempts to shed some new light on: (1) the issue of whether internet gaming can become addictive to a person; (2) how internet gaming affects an adolescent/young adult, from a developmental perspective, and how clinicians can better help this client population.

Method

Although we have seen many quantitative studies investigating the topic of internet gaming behavior and disorder, so far only limited research explores the qualitative nature of the formation, or the course, of such a disorder. Many researchers have advocated for more in-depth qualitative studies on internet addiction (e.g., Kuss et al., 2013). The data in this paper are from part of a larger qualitative research project that delves into the natural history of the course and formation of internet gaming/activities disorder. The project was approved by the university institutional review board and was

was implemented at a treatment program in a northwestern state in the US. In-depth interviews were conducted, each lasting about two-and-a-half hours. All interviews were audiotaped with participants' permission and informed consent. The project was funded by the University Faculty Opportunity Award and each participant was compensated with 30 dollars for their time.

A natural history of a disease timeline follows the sequence of the stage of susceptibility, exposure, pathologic changes, onset of symptoms, usual time of diagnosis, stage of clinical disease, and stage of recovery, disability, or death (Centers for Disease Control and Prevention, 2012). In addition to the background of the participants, such as their age, gender, race/ethnicity, and mental disorder diagnoses other than internet addiction, four guiding questions led the interviews: (1) their life stories: in what way internet addiction has entered and manifested in their lives; (2) the clinical courses of internet addiction as experienced by them; (3) factors that led them to seek treatment and their experiences of the treatment and the recovery journey; and (4) other related areas. The four guiding questions were supplemented with follow-up questions probing further critical elements initially shared by participants.

The audiotapes were transcribed verbatim and reviewed regarding the overall contents. Each interview transcript was again read in detail, and units or themes that connote meaning were identified and coded. Commonalities and differences within each transcript and among the different transcripts were sought and organized. Trends of theories were developed through the process of linking various relevant identified themes or variables, as well as of reconciling and justifying the relationships among them. This current paper is based on the narratives of eight participants who dropped out of college because of uncontrollable internet gaming and other activities.

Results

Brief Description of Respondents

All eight participants were males who were attending a technology addiction treatment program at the time of the interviews.¹ The mean age was 24 years (SD=3.30; Range=20-30). The ethnic/racial background included one African American, three Asian Americans, and four Whites. All participants were college dropouts. The treatment fees for all participants were self-paid by their parents. They had engaged in a variety of online activities, including multi-player and single-player games, videos, YouTube, Reddit, Netflix, various discussion forums, chatroom role-playing, animated character communities, and pornography.

¹ Note: To safeguard confidentiality, some background information that might have identified participants has been altered.

Three Elements Identified and Two Theories Emerged See Figure 1

We identified three elements (all capitalized and bolded in Figure 1) common to all eight participants, and from these, two theories. The three elements are: (a) **Internet addiction**: All participants consider themselves addicted to online activities, mainly gaming, but also a combination of porn, chat room, manga, anime, etc. All of them perceive that their internet addiction is severe and that it has interfered with their life. (b) **Identity distress**: All participants experience identity struggle, which takes various forms, including discordant values between the participants and their parents; accidents that shattered the participants' dreams; and impaired abilities to quit or cut down internet addiction, which thwarts participants' aspirations and life goals. (c) **Depression**: All participants experienced depression. Seven had a formal diagnosis of depression and were prescribed antidepressants; five of the seven had episodes of suicidal ideations, while two did not seek suicide but reported feeling no drive to live. One reported feeling depressed but was without a formal diagnosis or medications prescribed in that regard. The two theories have the same three conditions, but with different sequences.

The first theory: Identity distress precipitates depression, which subsequently prompts online addiction as self-medication. Three participants (Participants A, B, and C) were under this theory. This theory depicts a situation where there are incompatibilities between the life goals and identities adolescents would choose for themselves and those that reality actually imposes on them. Such incongruities create tremendous pressure in adolescents. To cope with the negative emotions, adolescents may resort to means that they know of, especially those that can bring about appetitive effects—in this case, online activities and gaming. At least two circumstances of identity crisis were discovered: (a) the adolescents suffer a physical injury or psychological trauma, which impedes them to pursue the life goals that they had previously set out for themselves; (b) the adolescents' choices of life goals are in conflict with those established for them by their parents. Adolescents also indicated two functions of their online addiction: (a) to help them escape stress and despair; (b) to link them with communities that provide nonjudgmental acceptance, and thus allow them to be themselves.

Identity distress and depression. *An accident ruined a dream.* Participant A was a basketball player since high school and had joined the basketball team after entering a university. He enjoyed athletics and was proud of his talent as a basketball player. Unfortunately, he was injured soon after his first year in college. He became very distressed, depressed,

and addicted to online gaming during his recovery from the injury. Although he had played video games since childhood, gaming had never taken priority over meaningful life goals and had never been a concern until he became injured and lost hope for his long-established professional goal.

Participant A described how his injury impacted him and the importance of offering support to the injured college athlete. He said: "I think getting counseling as soon as somebody gets injured is important, because it doesn't matter how tough you are, if you are injured, it will mentally affect you. Nobody thinks about the psychological effects; they only think about the physical stuff." He continued:

They just told me . . . that when I recovered, I would play basketball again. I was pretty positive about it at first, but after a while, I started really missing it. That was a huge part of my life that's no longer there . . . I . . . didn't have something that could help me to get through.

He also felt that he was treated as less useful by other people. He said, "As soon as I got injured, it seemed that the coaches stopped caring about me. I was broken and they didn't need me anymore, so I basically felt I was completely alone; I had no hope!"

One of his major fears is about his future. He doesn't know what goal to pursue with his life now, since he can no longer be a professional basketball player. Eventually, Participant A figured out a solution—he could become a teacher and a basketball coach. He said: "It took me a long time to figure out that I wasn't the failure. I just took a different path."

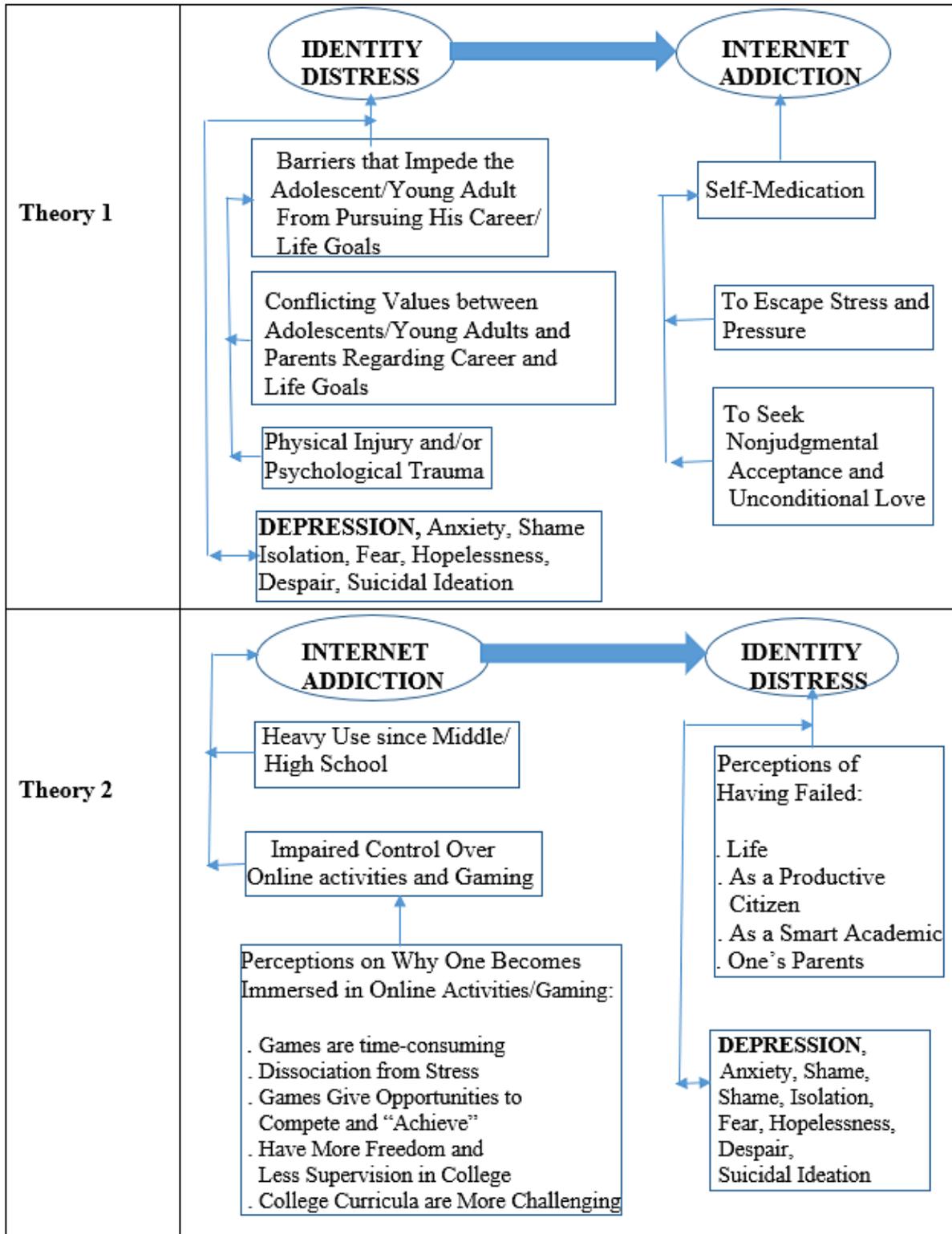
Incompatible choices between adolescents and parents.

Like Participant A, Participants B and C flunked out of their universities. Like Participant A, they enrolled a second time in other colleges, but dropped out again. Both participants believe that their parents set unrealistically high expectations for them with regard to academic performance, and that they prefer a different direction in their future professional goals than that set out by their parents.

Initially, Participant B began treatment at his parents' request; somewhat surprisingly, he himself now wanted to stay in treatment longer, even though he had completed all treatment requirements and was eligible to go home. He said: "I'll get more recovery before I go home. The support for my sobriety won't be there [home]." He stated that there was always tension while growing up that he had to meet a standard in order to be praised. He said:

So the games started to pick [up] around when I identified the pressure. . . . I usually got A's, sometimes B's. My parents would say, 'you can't get B's, you have to get A's, because I know you can get A's.' . . . When I got my B or C, my parents took my computer away.

Figure 1. Two Theories Explaining the Relationships among Identity Distress, Internet Addiction, and Depression



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During high school, drawing and art became dominant in his life. Although he is passionate about art, he said that his parents oppose his choice of it as a career, as it is too difficult to succeed in this field. "Putting more of myself into this [art] is not so accepted from them," he said. With regard to career choice, he said that his parents want him to make "money and [be] secure." He ended up choosing a major that he does not have any passion for.

Participant C said, "For . . . a lot of my life, I was the straight A student... I did sports, I did science club, once I started, rather, I felt a ton of expectations on me!" A phrase he remembers hearing a lot was "Don't do anything but your best!" and he constantly felt the expectation that he needed to perform. He said,

While they [parents] didn't intend it to be understood as 'only make straight A's,' I took it that way because I knew I was capable of acing all my classes. . . . I put a ton of pressure on myself to over perform . . . and when I didn't live up to expectations, I put a ton of shame on myself.

He continued, "Traumatic shame . . . This ties in to my low self-esteem, my self-worth, and when I'm not doing things as best as I can . . . I get really down on myself. It really affects me in my daily life."

Participant C was struggling with high school because "I wasn't at all interested in academic work." As a college freshman, he "stopped attending classes fully" during the first semester, because he "didn't care about" his education. He felt college classes were boring and "very stressful." Today, he said that he is one hundred percent sure that college is not for him and that he wants to focus on vocational skills training and become a welder.

Internet addiction. *To escape stress and pressure.*

Participant A would resort to gaming to escape from negative emotions such as depression, anxiety, loneliness, and helplessness. He said: "I dropped out of school, and I no longer play basketball which was my passion. I don't have any of these things that I wanted to have in my life. . . . [Those thoughts] made me feel really depressed. To escape from those thoughts, I would play video games."

Participant A stated, "It was the first time in my entire life that I wasn't able to work out or do anything that I wanted to do because I was a very active person. . . . I ended up shutting myself in the dorm room all the time, either watching movies on Netflix or playing video games." Prior to his injury, video gaming had never been a priority nor a problem for him although he did like gaming. He said:

Prior to the injury, gaming might get in the way of my social life, but it never got in the way of anything else such as responsibilities. I never considered it [gaming] as a priority, even if I was fully immersed in it. . . . I always wanted to do the more meaningful stuff.

Participant A said he started video games to fill the time when he didn't have much to do. At first, he felt it was okay, as it wasn't really cutting into his class time. But about a month after his injury, he started getting to the point of staying up all night playing video games and not going to class the next day, or going to basketball team events which he was supposed to attend even though he was injured. And three-quarters of the way through the semester, he had only 50% attendance in his classes. He dropped out of college that year. He said that he played online games for only about one and a half to two hours a day prior to his injury, but increased that to four hours a day after the injury initially, and eventually eight to 14 hours a day. He said, "I wasn't doing anything besides play video games." He described how he eventually developed tolerance to gaming:

It was that I wasn't getting the same thing out of it than before from the game. I needed more to feel good again. When I first started playing, I could play one and a half to two hours, and I would feel good. But it got to the point where if I didn't play nonstop, I would immediately feel miserable again!

Participant B does not regard his relationship with his parents as close. He didn't "talk to anybody about how I felt." Growing up, the most prevalent feeling he had was loneliness. He said, "I didn't talk to my parents about feelings. I think in my head, it wasn't safe to do so. I don't think it was acceptable. Even if I talk about feelings, the pressure is still there." Gaming to Participant B was like an escape. He said: "I didn't pay attention to gaming, like what was so attractive to me . . . I didn't pay attention to that; I was just having fun . . . Everything else fades away and I am having fun because I am playing a game."

Participant B's internet and gaming use increased when he first got to college. He would spend time on games and "tons of animated stuff and porn." He said, "That's what I did instead of studying, working out, socializing..." He started internet activities in middle school, but at the time was able to still manage well his school work and life, as his parents often reminded him not to spend too much time on internet activities and would take away certain privileges if his grades slipped. "When I went away to college, it got hard to manage," he said.

Participant C said that although he engaged in both video games and online pornography, he is more addicted to porn than video games. "Porn distracts me from the daily stressors of life, not video games," he said. He stated that his parents extremely oppose his porn use:

When I had access to porn . . . I consumed as much as I could. Eventually my parents always, always found out. There were monitoring tools on my laptop. I kept finding ways around it, and they kept finding out. And this repeated multiple times over the years. My relationship with my parents got pretty strained.

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Participant C talked about the function viewing pornography served to him: "Pornography is always available 24 hours a day; I can check my phone and get instant gratification of seeing a new image. It helps me avoid stress and depression. It keeps me busy; it keeps my mind occupied."

To seek nonjudgmental acceptance and unconditional love. For Participant C, his online activities include not only gaming and pornography but also interactions with an online community wherein people enact animated characters, a community that provides him acceptance and love. In the community, he can create a character and interact with other characters created by other members. He said, "The theme of the community is creating your own character that you can identify with. It's my character and it's sort of just a reflection of me." Community members not only meet online but also in person for gatherings, from which some "real" friendships can be developed. He identifies with this community dearly, saying: "It's a community where I don't have to be afraid of showing my full self, whereas, in various parts of the real world, sometimes you have to watch out for that, and you can't always be out and proud of who you are." He continued: "I don't know how to express my emotions to my parents or my therapist, and I didn't know how to express that finding porn and this online community was a big relief to me, to find a community with no expectations on me, where I can be myself no holds barred."

The second theory: Internet addiction precipitates identity distress, which subsequently brings about depression and other negative emotions. Five participants (Participants D, E, F, G, H) were under this second theory. The second theory suggests that adolescents indulge in online activity and gaming first, which subsequently affects their college education, leading to identity distress and depression as their addiction has now threatened their abilities to complete a college education, as they drift away from achieving their professional goals and life dreams. Unlike Participants B and C in the first theory group who opposed their parents' values with regard to who these young men are and what they want to become in life, the five participants in the second theory group had consistent orientations with their parents concerning their life goals. These adolescents and young adults want to pursue "success" as defined by their parents; they were eager to make their parents proud of them. Their stumbling into online addiction shattered their dreams. They are keenly aware of the fact that their online addiction has damaged, and will continue to damage, their academic performance in college and future commitment to fulfill their life goals, but they feel powerless to overturn their addiction.

The identity distress subsequently triggers depression, anxiety, fear, shame, despair, and hopelessness.

The nature of internet addiction. Of the five participants, three had been heavily involved with online activities and gaming since middle and high school. Although their online activities engagement did not cause them apparent trouble prior to college, these pursuits expanded after they entered college, perhaps because of lack of parental supervision and the gradual-development nature of addiction. Two participants had engaged in light online activities and gaming prior to college, and their excessive use and subsequent addiction only developed while in college. Regardless, all five participants had impaired control over their online activities and gaming, and they also continued to engage in the addictive behavior despite negative social consequences such as college academic failure and damaged family relationships.

Heavy use since middle and high school, worsened in college. Participant D's father introduced him to games during his early years, but his academic performance did not suffer until high school and later in college. He said, "I guess I had [a] pretty decent intuitive grasp on at least early education, because I did very well with very little effort, so I had plenty of time to do my homework and then spend the rest of [my] time playing games." In college, he would spend 13 hours gaming per day at worst. He said,

As I grew up and went through school, the work got harder . . . and my game playing also got more. So my grades started going down near the end of high school. . . . The first year of college I did okay, and then the second year I did very badly because I was spending all my time on the internet playing video games to the point that I wasn't doing homework anymore or sleeping properly.

Participant E considers himself a "video game addict" who has been addicted since elementary school. He started playing games at age five and has been doing video games his whole life. He perceived that his heavy exposure to online games may be related to his parents' pro-technology values and attitudes. He said, "They [parents] always thought that the time I spent in gaming would somehow translate into the usefulness of the future." Over the years, his gaming patterns have had ups and downs, but never reached a level that impeded his normal life. During high school, he had a part-time job and was an almost straight-A student. He never had issues with gaming until he went away to college.

Impaired control over online activities and gaming. The participants experienced powerlessness and self-loathing regarding their online addiction. Participant F said,

A lot of times in college I felt like I wanted to change myself but then I felt like I wasn't in control of my

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own body, and that was incredibly frustrating and made me really hate myself because I knew what I was doing was wrong, I knew that I needed to stop doing it, but I was so addicted . . . that I just kind of shut all those thoughts out with lies and apathy . . .

Participant G said:

I would wake up, and would start gaming. I'd do a warm-up game, then I'd play for it. Originally, I'd play for maybe three or four hours which I thought was fine, but at its worst, I was playing like 16-18 hours a day out of 24 hours . . .

Perceptions on why one becomes immersed in online activities and gaming: (1) Games are time-consuming.

Participant D said:

The thing about the multi-player games is . . . to play that game correctly, there can't be interruptions. That's what made a lot of people notice that this is a problem when people don't want to leave the game, because they have other human players wanting them to stay in order to play the game correctly.

Similarly, Participant G said: "Once the match starts, you have to stay there at the computer the entire time; if you walk away, you will abandon your team, you could lose the game; you cannot leave, you shouldn't even take your eyes off the screen the whole time."

(2) *Dissociation from stress.* Participants mentioned that gaming allows them to "zoom out" of stressful life situations, which is prevalent especially when a person transitions from high school to college, or from dependent to independent developmental stages. Participant D said: "It's the feelings around, like, pressure, the deadlines, and missing opportunities that triggers me to feel unhappy and want to escape [or] self-medicate with technology." Likewise, Participant G said:

What I liked about that was that once I started a game, my entire mind was in the screen, in the game and I had no opportunity to think about school or depression or anxiety.... The fact that I was constantly stimulated allowed me to forget about everything else.

Similarly, Participant E said:

I didn't learn any methods to cope with stress besides hiding. When I got stressed out as a kid, I ran into my computer . . . The same thing started happening in college when I started getting stressed out by papers or finals. All of this was just making me want to hide, so I just kept gaming.

(3) *Games give opportunities to compete and "achieve."*

Another reason is that those activities and games give participants opportunities to compete and thus to get a sense of "achievement," which they longed for—initially from academics, but they perceived that goal too far away to pursue now. Participant G said: "Because my mind was being [stimulated] . . . a lot of . . . mental calculations, that kept your

mind constantly moving and a lot of strategy when trying to make a decision . . . so it allowed me to feel competent in my, what I called, like, my skill." He continued,

As I started to play the game more, I started to get better at it and I started to really focus on my achievements in the game more than my achievements in school, and I thought. . . I'm really good at this game, I need to practice this game. I treated this game like a job.

Similarly, Participant F said he would play certain games if most of his friends played those games, solely because he then would have opportunities to compete with them. He said, ". . . because it helped boost my self-worth, because I would tell myself I was good at this thing."

(4) *Have more freedom and less supervision.* One other factor was that participants suddenly had a lot of freedom as they no longer had parental supervision after entering college. Participant F said, "I wasn't being supervised . . . there was no one to tell me to buckle down and study like my parents used to." This factor is exacerbated when the participants do not have self-discipline abilities.

Participant G said:

My first semester [in college] . . . I would say I struggled a little bit, because. . . a real challenge for me was having the freedom. I'd suddenly be in college and be able to do whatever I want with all my time. I struggled with time management and prioritizing school over socializing.

(5) *College curricula are more challenging.* The lack of self-discipline is worsened by the fact that college curricula are more challenging than those of high school, and the participants' commitment to academics often is further weakened when experiencing frustration while doing assignments and studying for exams. To make matters worse is the enticement of the appetitive nature of online activities and gaming that usually provide immediate gratification.

Participant D said:

I always realized that I shouldn't be doing this [gaming], but I did it anyways, because it was easier, it was more fun, it provided more short-term enjoyment than doing the work. And the work could always be done tomorrow, except it couldn't be.

Participant F said:

[Some of the classes] were very difficult . . . in my mind I knew that it was going to be harder . . . but . . . I still felt in my heart . . . that I could expend the amount of effort that I expended in high school and have it work in college; it was kind of like an ego thing, I'm smart, I can just read this textbook one time, I don't have to do practice problems. . . having that turn out to not be true was pretty damaging to my ego.

Participant G said:

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I was still on my computer every day when I was in high school . . . but it wasn't until college when . . . I started to do poorly in my academics, I started to lose this sense of pride that I had, as an A student; I used to be so good at school, and all of a sudden. . . I'm not smart enough, and I'm not disciplined enough . . . and it became easier for me to say, hey . . . do you want to play a game, yeah, let's play a game together . . .

Identity distress and depression. Participants overwhelmingly revealed that internet addiction is their major problem and that they feel depressed because they recognize that their internet addiction has impaired their daily functions and life development. They also pointed out that many clinicians to whom they were first referred for treatment erroneously considered that sequence oppositely, perceiving that depression was actually their major problem, and that depression caused their internet addiction. Participant E came to the insight that he is depressed because his gaming addiction has impeded him from living a productive and normal life. Similarly, Participant H said, "My therapist at that time thought that the gaming was a symptom of depression, rather than the depression being a symptom of the gaming. I don't think she was right."

Participant G was sent to a college counselor because of academic failure. He said, "I don't think there are too many people that do focus on stuff [internet addiction] like that. . . The technology stuff was the cause but what I was going to therapy for was depression."

Clinicians' emphasis on depression rather than internet addiction could also be related to a client's not sharing with clinicians the information regarding one's internet addictive behavior. Participant F would sometimes play games throughout an entire night and would end up being sleep deprived, making his studying aversion and procrastination even worse. He had the insight that his poor academic grades were related to his procrastination and online addiction, but, he said, "instead of improving my study habits, I started to feel a lot of depression and anxiety over the fact that I wasn't doing very well [in my academic performance]." He did not relay his heavy use of online activities or gaming to his therapist, who in turn, gave him a depression diagnosis. Meanwhile, his internet use became worse, he said, "as instead of stopping the internet in order to do better, I started using the internet and video games more and more and more, in order to avoid those feelings of anxiety and depression . . ."

Unlike some participants in the first theory group, the identity distress of the participants in the second theory group has more to do with their inability to stop their online addictive behaviors, to commit themselves to completing a

college education, and to fulfill their life goals and make their parents proud of them. Their identity distress and struggles result in enormous negative emotions, including shame, depression, anxiety, fear, and low self-esteem.

Perception of having failed life. Participant G said:

I was locked in these patterns that distracted me for too long, so I never got to do the work. And now it's making me depressed . . . for the fact that I knew that I wasn't working [to] the potential that I should be, that I could be doing.

He continued,

I was reaching to a point where I . . . flat out wasn't doing basically any work outside of going to classes, and usually falling asleep because I wasn't sleeping. . . I did run into depression . . . and also a lot of anxiety to the point where I wasn't suicidal but I also didn't have much will to live.

Likewise, Participant E said,

I am pretty sure my depression was about the addiction-related issues. The fact that I wasn't living my life, like depression came as a consequence of that and all the acting out I was doing.

His "acting out" behaviors included drinking, smoking marijuana, and watching pornography in addition to gaming. According to him, porn, alcohol, and cannabis were used to heighten the rewarding effects of internet gaming. He said,

Disappointment in myself, not taking care of myself, not eating well or sleeping well, not having a job or succeeding. I did nothing except play computer games . . . felt totally checked out of life, and didn't have a relationship or a girlfriend. All those things were very depressing, so that's where the depression came from.

Similarly, Participant D remembered a visit to his cousin, who is about the same age but succeeding in his endeavors, "when just despair and hopelessness really took over me." He said,

I don't like to say that it was because of my cousin's success. I mean in some way it was, but it was really more about the fact that I didn't see myself as [having made] any progress towards the things that I wanted. He had made progress on the things he always wanted in life . . . That was what made me feel that I really needed gaming again.

Perception of having failed as a productive citizen.

Participant H said,

As I became more and more hooked on this game and spending my time smoking [weed] and just gaming, I became very fearful of people finding out that I, this like perfect student, was wasting my time, doing unproductive things and so I would hide. I tried to hide my habits . . ."

Similarly, Participant D said:

I would get up in the morning, and they would all be in class for, you know, the morning to early to midafternoon. I would wake up, generally hide in my dorm room, and pretend I wasn't here until they got back from classes. I hid because that made it seem like I had, too, left to go to class.

Perception of having failed as a smart academic.

Participant F said:

Throughout childhood, I did well in school. I kind [of] equate my self-worth with academic achievement. . . . Academics just became, like, my identity. . . . If I'm not strong in academics, then . . . what am I? I'll be useless . . . I'm a failure . . . Right now, I'm working on self-worth; people suggested to me to treat myself like I would treat other people. People will treat other people a lot kinder than they treat themselves in terms of failure. So I have been working on that . . .

Perception of having failed one's parents.

Participant H said:

When I was growing up, I think I internalized this idea that I needed to prove myself to my parents. . . . I challenge that belief now and I know I don't have to do that, but I still feel like I need to, at the very least, I want to make my parents proud.

Similarly, Participant F said,

There's also the fact that I also want affirmation from other people . . . like I want my parents to be proud of me . . . A big part of that . . . because I want to be academically successful, I want my parents to be able to see me, to be proud . . . Pretty much anything I do, I should be doing well.

Depression, anxiety, shame, isolation, fear, hopelessness, despair, and suicidal ideation. Participant H talked about how he tried to isolate himself. He said,

I was planning on going back to school in the fall that year . . . and I ended up not going back to school . . . for a solid year, that was the worst of my depression, my gaming. I completely isolated myself in my room. I cut myself off entirely from all of my friends. . . I didn't leave the house for pretty much a year straight, except to maybe get some fast food late at night.

Participant H also talked about his sense of helplessness and hopelessness. He has worked at an entry-level job at a local grocery store for some years but longed to go back to college and pursue a professional career. He felt his internet addiction has blocked his dream. He said:

I enjoy the job very much, but it is not what I want to do forever, and so I've been saying these things for years now . . . I want to go back to school. . . . yet I never made a move. . . I've made no moves because all of my energy went towards the game instead.

Participant D talked about his hopelessness, self-hatred, and suicidal ideation. He said,

Prior to that . . . I felt like I probably was an addict, but I didn't know for sure. . . kind of still just a finger crossed, 'I really hope I am not an addict' sort of mind set. And it was when I realized that . . . [when] I get stressed I am used to hiding, it was to medicate the emotions, for checking the box that yes, I am an addict. I don't have any doubt about it anymore. . . and I also felt like exhausted. Everything I had at my personal disposal [I] have tried to overcome it, and I had failed. And I just didn't see any other way to overcome it.

He continued,

Each time was only to get more food so I could go back and keep gaming . . . that was when just despair and hopelessness really took over me. At that point every second I spent into gaming made me hate myself a little bit more. . . the fact that I hate myself causes me to game more, which makes me hate myself even more for that. I started to feel very unworthy as a person and started planning my suicide.

Discussion

While various factors that predict or associate with online game addiction have been suggested—such as social motivation or lower social self-efficacy (Blinka & Mikuska, 2014), relationship satisfaction (Lee & Kim, 2017), introversion (Kuss et al., 2013), narcissistic personality traits (Payam & Mirzaeidoostan, 2019), emotional bonds to avatars (Mancini, Imperato, & Sibilla, 2019), and sensation seeking (Bekir & Celik, 2019)—this study focuses on identity distress and depression as they were revealed from our in-depth interview approach. Although the relationship between internet addiction and depression has been well established (e.g., Fuchs, Riedl, Bock, Rumpold, & Sevecke, 2018; Morrison & Gore, 2010; Przepiorka, Blachnio & Cudo, 2019; van Rooij et al., 2010), it is not clear whether there is a causal relationship (Fuchs et al., 2018; Ko, Yen, Yen, Chen, & Chen, 2012), and what the in-depth, qualitative nature of the linkage is. Findings of this study show the possibility of a bi-directional relationship between depression and internet addiction, with the impact of identity distress; this provides a perspective explaining the nature and course of the internet addiction–depression relationships within the developmental contexts of male adolescents transitioning to young adulthood.

Although we had no preconceived hypothesis about the relationships between internet addiction and depression, our qualitative findings are consistent with recent quantitative studies (e.g., Chi et al., 2019; Lau et al., 2018; Gamez-Guadix, 2014; Sela, Zach, Amichay-Hamburger, Mishali, & Omer, 2020). For example, Lau et al. conducted a large, longitudinal study with two subsamples, comparing adolescents' baseline scores with their 12-month follow-up scores. The first

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subsample contained adolescents with no internet addiction at baseline; the second subsample included non-depressed adolescents at baseline. Lau and colleagues found that 11.5% of the first subsample acquired new incidence of internet addiction during the 12-month follow-up and adolescents' probable depression status at baseline significantly predicted new incidence of internet addiction. They also found that approximately 38.9% of the second subsample developed probable depression at the follow-up and adolescents' internet addiction status at baseline "significantly predicted new incidence of probable depression" (p.633).

The contribution of our qualitative study includes not only identifying bidirectional relationship between internet addiction and depression, but also providing scenarios that offer a perspective to understand the nature and course underpinning the relationship. Specifically, the narratives of the eight adolescents/young adults indicate: adolescents/young adults may experience identity crises because of physical injury or psychological trauma that jeopardize their abilities to pursue their dreams, as well as expectations from their parents that are irreconcilable with their own plans for themselves. Such identity struggles bring about depression, anxiety, and pain to the adolescents/young adults, leading them to resort to online activity and gaming to escape or cope. This finding is consistent with part of Sela and colleagues' (2020) findings. Sela et al. found that negative family environment (low family expressiveness and high family conflict) is associated with problematic internet use and time spent online among adolescents. They also suggested that one mediator between family environment and problematic internet use was depression. In other words, they suggest that a dysfunctional family environment (e.g., low family expression and high family conflict) leads to depression, which in turn, leads to problematic internet use.

On the other hand, our qualitative findings also show that many adolescents/young adults suffer identity conflicts and depression primarily after they develop online addiction. These adolescents/young adults share similar identity and life goals with their parents' expectations; however, their internet addiction problems impair their abilities to pursue their life goals. They subsequently suffer self-doubt, shame, powerlessness, depression, and pain, perceiving that they have failed society, their parents and themselves. This finding appears to be consistent with the internet addiction–positive youth development–depression model suggested by Chi and colleagues (2019). Chi et al. suggested that internet addiction can affect depression directly and indirectly. They reported that “positive youth development” mediates the association between internet addiction and depression, in that internet

addiction decreases an adolescent's “positive youth development,” which in turn, increases the adolescent's depression. In other words, internet addiction may affect a person's cognitive, emotional, and social competence—including their identity, self-actualization, and other psychological resources—which then leads to the increase of depression.

More importantly, our qualitative study discovers the significance of the role of identity distress in the bidirectional relationship. Both the “depression to internet addiction” relationship and the “internet addiction to depression” relationship involve the concept of identity distress, despite the nature of identity distress involved being somewhat different. Literature has pointed out that the establishment of an identity that can guide oneself and differentiate oneself from others is one major task in adolescent development (Erikson, 1956; Foelsch, Schlüter-Müller, Odom, Arena, Borzutzky & Schmeck, 2014). A healthy identity allows the growing adolescent and young adult to build life goals for himself or herself, develop satisfying interpersonal relationships, and maintain self-esteem. The process of developing “self-direction” and “self-definition” may be met with stumbling blocks because of various predispositions, vulnerabilities, and inadequate environmental supports. Some adolescents may subsequently experience negative emotions and manifest dysfunctional behaviors, such as anxiety, depression, poor impulse control, pain, and despair (Foelsch et al., 2014; Forthun & Montgomery, 2009). Some other adolescents may even form a negative or deviant self-identity, including a “user” identity (Forthun & Montgomery, 2009). Studies have emphasized the importance of integrating identity issues into assessment and treatment planning when working with adolescent clients, as adolescents who are diagnosed with clinical disorders tend to also suffer identity distress and difficulty (Wiley & Berman, 2013).

Conclusion

Scholars have advocated for more qualitative studies on the topic of internet addiction as currently most research in the area is quantitative. Our study is one of the few qualitative studies that offers an in-depth understanding of the factors of internet addiction, identity distress, and depression in the developmental process of an adolescent transitioning to young adulthood. Our results highlight the importance of identity distress and its role in the internet addiction–depression relationship. A person's identity distress may lead to depression and subsequently to internet addiction as self-medication; on the other hand, a person may be trapped into internet addiction, which subsequently leads to identity distress and depression. Although we specified a temporal

sequence among the three variables, the relationships are not necessarily causal relationships as potential rival variables have not been ruled out. This study has limitations. First, it is a qualitative study with eight participants, and it is important for the hypothesis generated by this study to be tested by future larger-scale quantitative studies. Second, the participants were all male adolescents and young adults who came from families of middle- or high-socio-economic status (SES), therefore the results are applicable only to those groups. Future studies that include female subjects and subjects of other SES backgrounds can enhance our understanding of the phenomenon of online addiction. Although our analyses treat depression as a result of identity distress, depression can also be part of the withdrawal symptoms of online addiction. The two theories posited conceptualize the three major variables using a linear sequence, but the relationships among these variables could also be circular. Although this study has limitations, its in-depth interview approach enables us to better understand the qualitative nature of online addiction.

To treat adolescents transitioning to young adults who exhibit internet addiction, clinicians must possess knowledge and skills related to age-specific development, mental health, and addiction. Many adolescents/young adults afflicted with online addiction are assessed as having depression as the root or major problem by clinicians who are trained to work with the general adolescent/young adult client population. These clinicians may possess rich knowledge and skills with regard to the areas of adolescent development and overall mental health, but insufficient knowledge and skills in the area of addiction. Some participants mentioned that their generalist therapists tended to emphasize only their depression, leaving their addiction problem untreated, and so ultimately, their overall treatment was not successful. In addition, some generalist therapists who are not equipped with addiction treatment knowledge and skills may offer iatrogenic therapy. For example, some participants were told that they can start playing games in moderation after receiving a certain period of counseling, or that they may increase their social connection via going to an internet café and making actual, in-person social interactions with other gamers instead of doing it through virtual interactions. Both strategies can be detrimental to addiction recovery. For some people with severe addiction, the key to recovery is total abstinence; “use in moderation” often leads to relapse (Dawson, Goldstein, & Grant, 2007; Harvard Medical School, 2009). Cue-induced relapse has often been observed (O’Brien, Childress, McLellan, & Ehrman, 1993; Sinha & Li, 2007; Wikler, 1973). Physically interacting with other gamers in an internet café may increase social connection, but it may also further reinforce a person’s addictive gaming behavior.

Acknowledgements

Support is acknowledged from University of Nevada Las Vegas Faculty Opportunity Award

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