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The Relationship Between Internet Addiction and Mental Health Conditions

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Abstract

Internet addiction is a relatively new phenomenon which can have similar impacts as substance dependence on one's cognitive and behavioral functioning. This type of addiction is a growing problem, and is constantly being researched to try to address what causes this addiction, who is affected by it, and how it can be treated. By understanding these issues, it will be easier to put an end to internet addiction and the negative consequences that may result from it. It has been found that internet addiction can have serious impacts on one's mental health and may cause conditions such as depression, anxiety, and low self-esteem. This paper will discuss some of the recent literature regarding internet addiction, and the research that has been previously conducted on it. The discussion of the previous research will include the results and conclusions which have been made in regards to the impacts which internet addiction can have on one's mental health.

1. Overview

While the internet can be a helpful tool for researching and connecting with others around the world, it may also be detrimental to one's mental health if it is used too frequently. When one's use of the internet becomes overwhelming, it may be a sign of internet addiction. According to a study by Orsal, Orsal, Unsal, and Ozalp (2013), internet addiction can be characterized by "an uncontrol-

lable desire for excessive use of the internet, devaluation of time spent without connecting to the internet, intense nervousness and aggression in the case of deprivation and progressive deterioration of social and family life" (p. 445). This study as well as other similar studies have shown that internet addiction is associated with anxiety disorders, personality disorders, bipolar disorder, social phobia, attention deficit hyperactivity disorder, and depression in young adults, as well as many other psychological disorders (Orsal et al., 2013). Internet addiction can affect people's social and cognitive functioning and significantly interfere with their everyday life. The selected research has illustrated the presence of a relationship between internet addiction and a variety of psychological and social disorders. Orsal et al. (2013) focus specifically on depression in relation to internet addiction among university students, and hypothesize that a positive correlation is present between depression and internet addiction among this population. Other studies, such as one by Ko, Yen, Yen, Chen, and Chen (2012), hypothesize the coexistence of several psychiatric disorders and internet addiction, including ADHD, depression, hostility, personality disorders, and social anxiety disorder. Younes et al. (2016) also looks at internet addiction among university students, and its relationship in regards to insomnia, anxiety, depression, stress, and self-esteem using unique scales to measure each of these disorders. While all of these studies explore internet addiction and its related problems in a different way, the hypotheses are

similar. Overall, the hypothesis posed within the selected research is that a relationship exists between having an internet addiction and having a variety of mental illnesses or disorders.

In order to measure internet addiction as well as certain mental illnesses, there are several tests and scales that can be used. The most widely used test for internet addiction is called the Young Internet Addiction Test, often abbreviated YIAT or simply IAT, first developed by Dr. Kimberly Young in 1996 (Faraci, Craparo, Messina, & Severino, 2013). The newest version that Young has published consists of 20 items in the form of a Likert scale. This IAT measures for factors such as excessive use of the internet, its importance to the participant, and the influences that use of the internet can have on one's work or social life. The higher the score, the more likely the participant is to be classified as internet dependent or addicted. Studies have shown that when one is determined to have an internet addiction, there is often a coexistence with other psychological problems that is also present (Younes et al., 2016). For common psychological problems such as insomnia, depression, anxiety, and low self-esteem, there are unique scales that can be used to measure the presence of these disorders in one's life. Internet addiction is a problem across several populations, and the disorders and illnesses that may coexist as a result of this addiction only intensify the problem.

One scale that is widely used in identifying certain disorders is the Depression Anxiety Stress Scales (DASS) as described by Younes et al. (2016) in their study. Similar to the IAT, the DASS is in the format of a Likert scale with 21 items to be measured, and it is considered to be a "reliable and valid measure of depression, anxiety, and tension/stress in clinical and non-clinical populations of adults" (Younes et al., 2016, p. 4). This research has shown that a significant relationship is present between having a potential internet addiction and suffering from anxiety, depression, or stress. In addition to the DASS, the Rosenberg Self Esteem Scale (RSES) is a scale that was also used in the study by Younes et al. (2016), which is commonly used to measure one's self-esteem. A correlation was also found between scoring as having a potential internet addiction on the IAT and scoring on the RSES as having low self-esteem. All of these scales are important measures of not only the presence of these disorders or addictions in one's life, but their significance in one's life and how greatly it impacts the individual's daily functioning and relationships. Several studies have also validated these findings, such as the study by Ko et al. (2012) which describes the relationship between internet addiction and major depressive disorder, social anxiety, aggressive behavior, and other psychiatric disorders in more detail. Ko et al. (2012) found that in adult cases of internet addiction, 7% of these cases had dysthymic disorder and 15% had social anxiety disorder. A variety of disorders were found to be associated with adults who have an internet addiction, yet the causality of this relationship is not fully explained.

Several studies have undoubtedly proven that there is a relationship between internet addiction and mental health conditions. What has not been proven, however, is the nature of the relationship between the two. There has not been a significant amount of research done to prove the causality of this relationship completely, and it is unclear whether internet addiction causes mental illness or having a mental illness makes one more prone to internet addiction. This ambiguity about the direction of the causal influence could be a potential threat to the internal validity of the study due to the fact that the uncertainty decreases the level of confidence that one variable causes another. A recent study by Taymur et al. (2016) attempts to explain the relationship between internet addiction and psychopathology, and concluded that the greater the severity of an internet addiction, the greater the increase in symptoms associated with anxiety and depression. This finding could suggest that the mental illness or dysfunctional behav-

iors were the cause of the development of an internet addiction, and that as the addiction progressed, these symptoms worsened. On the other hand, this finding could also suggest that as the internet addiction developed, the symptoms of mental illness arose as a result of the forming addictive behaviors. Since these studies focus more on internet addiction itself, it may be easier for the researchers to hypothesize that internet addiction is the cause of the various mental illnesses and dysfunctional behaviors that are under study. It is difficult for either possibility to fully explain the causality of the relationship because the research that is being done is only occurring at one point in time; there is no way to know for certain which came first unless further investigations are made.

Since the internet was first developed a few decades ago, its usage "has grown exponentially worldwide to more than 2.5 billion active users" which does not make it surprising that internet addiction is such a widely studied phenomenon (Younes et al., 2016, p. 2). With the constant development of technology and inventions in relation to the internet, such as social media, internet addiction is also constantly changing as a result. This rapid advancement may be why it is challenging to determine exactly what the causes and effects of internet addiction are within one's life. An interesting idea that could be researched is whether or not the recent development of the internet and internet addiction is related to the increase in the diagnoses of mental illnesses. According to research by Stolzer (2016), there has been a significant increase in the United States in recent years of being diagnosed as mentally ill throughout the lifespan. It is more common now than ever for physicians to ask questions regarding a patient's mental health, and to prescribe medicine or other treatments when there are any abnormal feelings or behaviors present related to one's mental health. This ideology could be related to internet addiction as well; perhaps the idea of an internet addiction in the first place only exists due to this significant increase in diagnoses regarding men-

tal health in recent years. With greater knowledge and research increasing in the psychological and scientific fields, there are more disorders that are going to be clearly defined and separated. When it comes to the mental health conditions that are found to be related to internet addiction, it is possible that many of the participants may not actually have an illness such as depression or anxiety. However, the tests that are being used to measure these illnesses may be so precise that they are defining more people as having these illnesses than the actual incidence of prevalence. This is to say that these participants may be expressing a few of the symptoms associated with these illnesses, but cannot be properly diagnosed as having the illness itself.

The aforementioned concepts are some of the reasons why the topic of internet addiction in relation to mental illness should be investigated further. There are still unexplored areas of this topic, such as the causality of the relationship between the two variables. This ambiguity regarding the causality is partly due to the fact that the internet is still a relatively new invention, and that there hasn't been as much research done on internet addiction as other types of addictions that have existed throughout history. However, with the increasing popularity of the internet and social media especially, it is important to find out the consequences that the internet can have on individuals, particularly younger generations (Younes et al., 2016). While the internet is becoming more accessible with devices such as smart phones and tablets, internet addiction is an increasing problem with these advances in technology. This technological growth is why it is so valuable to study phenomenon such as internet addiction because it will likely grow into a greater problem over time, and as researchers are better able to understand its causes, then it can be more easily prevented. If in fact internet addiction is a cause of mental health conditions, inhibiting internet addiction will help decrease the prevalence of these problems as well. Investigating specifically the causes and effects of

internet addiction will be useful in understanding more about the relationship between this addiction and a variety of psychological and social problems that may exist. As the internet steadily increases in both popularity and accessibility, researching the negative effects that it may have is important for the general public to understand since the internet is a tool used across various populations.

2. Defining the Variables

While internet addiction does not have a universal definition, there are certain characteristics that can be classified as overuse of the internet. According to research by Dalbudak et al. (2013) a loss of control over one's internet usage can have a negative impact on daily functioning, relationships, and emotional stability. This loss of control can be a sign of internet addiction, which Dalbudak et al. (2013) defines as "an individual's inability to control his or her use of the Internet, having negative consequences (e.g. failing in school and having decreased productivity) and resulting in marked distress and/or functional impairment" (p. 272). Other research, such as Jelenchick, Becker, and Moreno (2012), defines internet addiction by the symptoms related to it, stating that it is "characterized by frequent, uncontrolled, and harmful use of the Internet... [including] preoccupation, withdrawal, loss of control and functional impairment" (p. 296). Similarly, Younes et al. (2016) describes the aspects that are associated with both excessive internet use and internet addiction. Younes et al. (2016) defines excessive internet use as "internet use [that] has become excessive, uncontrolled, and time-consuming to the point of timelessness and severely disrupting people's lives" and internet addiction as being characterized by "a maladaptive pattern of internet use leading to clinically significant impairment or distress" (p. 2). Though these researchers each interpreted internet addiction in a slightly different manner, there are clear similarities between all of the listed definitions. The most obvious similarity

is the characteristic of causing significant impairment and/or emotional distress, as any addiction would have on one's life. Overall, each definition describes internet addiction as being characterized by a combination of excessive internet use, as well as substantial emotional distress or lack of functioning as a result of this overuse.

There are a variety of mental illnesses that exist, and they are each characterized by a unique set of symptoms. According to the National Alliance on Mental Illness (NAMI), "a mental illness is a condition that affects a person's thinking, feeling, or mood" and these conditions "may affect someone's ability to relate to others and function each day" (Mental Health Conditions, n.d.). Depression and anxiety, the mental illnesses most commonly associated with internet addiction, are each defined by their own diagnostic criteria. For depression, the NAMI explains that in order to be diagnosed with depression, "a person must have experienced a major depressive episode that has lasted longer than two weeks" including symptoms such as loss of appetite or interest in activities, change in appetite or weight, fatigue, feelings of low self-worth, difficulty concentrating, and suicidal thoughts or intentions (Depression, n.d.). For anxiety, the NAMI describes all anxiety disorders as having "persistent, excessive fear or worry in situations that are not threatening" in common (Anxiety Disorders, n.d.). These disorders involve a combination of emotional and physical symptoms. Some of the emotional symptoms of anxiety are feelings of apprehension or dread, feeling tense and jumpy, and being restless or irritable. The physical symptoms can include pounding heart, shortness of breath, upset stomach, sweating, headaches, fatigue, and insomnia. Much of the research regarding unhealthy or excessive internet usage focuses on social anxiety as being most closely associated with internet addiction. According to the NAMI, social anxiety disorder in particular causes "intense fear, often driven by irrational worries about social humiliation" (Anxiety Disorders, n.d.). Evidently, mental

illness can have a significant and negative impact on one's life and can be characterized by several symptoms which relate to one's daily functioning and behaviors.

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.), often abbreviated as DSM-5, is a widely referenced guide when diagnosing and classifying any mental health condition, published by the American Psychiatric Association in 2013. There are specific criteria which are outlined in a section of the DSM-5 regarding addictive disorders and how they are defined, some of which are closely related to internet addiction. For example, two of the criteria found in the DSM-5 for addictive disorders are "impaired control" and "social impairment" (American Psychiatric Association, 2013, p. 483). Impaired control refers to spending a significant amount of time using the substance which one is addicted to, in which "all of the individual's daily activities revolve around the substance" (American Psychiatric Association, 2013, p. 483). This criterion is similar to the previously stated definitions regarding internet addiction, which characterize internet addiction by excessive, time-consuming, and uncontrolled use. Social impairment due to recurring use of the substance can "result in a failure to fulfill major role obligations at work, school, or home" and lead to "social or interpersonal problems caused or exacerbated by the effects of the substance" (American Psychiatric Association, 2013, p. 483). This criterion is almost exactly the same as the definition given by Dalbudak et al. (2013) regarding internet addiction, in which he defines it as "an individual's inability to control his or her use of the Internet, having negative consequences (e.g. failing in school and having decreased productivity) and resulting in marked distress and/or functional impairment" (p. 272). It is clear that there are distinct similarities between the DSM-5's overall criteria for addictive disorders and the characteristics that are widely associated with internet addiction. Even though the internet is not exactly a concrete sub-

stance, it can be treated like one in regards to the impact it can have on one's social, cognitive, and behavioral functioning when used in excess.

3. Further Research

One of the greatest flaws in the research that has been conducted on internet addiction as a mental health condition is that the variables were only observed at a single point in time. The tests which were conducted to measure the variables occurred only once, instead of being repeated at another point in time to compare the results from each assessment. By conducting longitudinal studies, it would be easier to determine the association between internet addiction and mental health conditions and see how the variables relate to one another. Within a longitudinal study, it would also be valuable to evaluate extraneous variables that may have an impact on either internet addiction or mental health. For example, asking the participant about any major life changes or current stressors could be useful in determining whether or not these factors have any impact on his or her mental health or internet usage. Researching in depth about participants' environments may help in explaining the causes of either of the variables.

In the research that has been done on internet addiction, there is not a significant amount of information involving the demographics of those who suffer from this addiction. It would be useful to gather more participant information while studying internet addiction to understand how it affects various populations due to race, socioeconomic status, age, disability, and gender. Certain groups may be more likely to experience excessive or unhealthy internet usage or to suffer from mental illnesses such as anxiety and depression. For example, studies such as the research done by Orsal et al. (2013) focus specifically on evaluating internet addiction and mental health conditions among university students, which explains how these variables relate to one another

and how they affect this specific population. More research similar to Orsal et al. (2013) would be useful in determining how these variables affect people of a variety of populations in order to understand the prevalence of these issues within each population. Since the internet is a tool used across all populations, it is important to understand where internet addiction is most prevalent and debilitating.

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