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Effects of Media Use on Mental Health Among Adolescents and Emerging Adults



By Conner Jones

Abstract

Media, such as the use of the internet and watching television, allows for quick communication between people, but overexposure to such media is correlated with social anxiety and clinical depression (Becker, Alzahabi, & Hopwood, 2013; Dalbudak et al., 2013; Dittmar, 1994; McNaughton-Cassill, 2001). Media usage is pervasive in our society, especially among adolescents and college students (Dittmar, 1994; Rideout, Foehr, & Roberts, 2010; Romer, Bagdasarov, & More, 2013). Symptoms of these mental illnesses are correlated with all forms of media, and can be influenced by the content of the media as well (Madan, Mrug, & Wright, 2013). Excess use of such media among adolescents and college students correlates with this rising surge of mental illnesses. This literature review discusses (a) the correlation between overexposure to media and depression and anxiety, (b) the content of such media and its effects on behavior, and (c) preventative treatments to such illnesses due to media. Attention to the negative side effects

of excess use of media, and the application of preventative measures and therapies may reduce the amount of cases of clinical depression and social anxiety among adolescents and college students.

Keywords: media use, depression, anxiety, college students, adolescents

With the increasing rise in technological advances, human beings have found numerous new forms of communication, which have allowed them to express themselves in novel ways. These forms of expression in communication have grown more popular, thereby increasing further use of such media. Researchers interested in exploring the effects of media usage on behavior have recognized a correlation between overexposure to media and clinical depression and social anxiety (Becker et al., 2013; Dalbudak et al., 2013; Dittmar, 1994; McNaughton-Cassill, 2001). Among these forms of media, the internet and television are major contributors to this link between these mental illnesses and media usage (Becker et al., 2013; Dalbudak et al., 2013). Dittmar (1994) even suggests that if depression or depressive tendencies already exist, these tendencies give way for a perpetual cycle of continued television use, which in turn may cause further depression. Media usage can have detrimental effects with those who are more exposed to it (Anderson et al., 2003; Romer et al., 2013).

Amongst many studies, researchers have concluded that media usage tends to be quite frequent in adolescent and college student age groups (Dittmar, 1994; Rideout et al., 2010; Romer et al., 2013). Between adolescents and college

students, it has been supported that college students view on average more media than adolescents (Primack, Swanier, Georgiopoulos, Land, & Fine, 2009). Out of all potential forms, the internet is the most prominent type of media that is overused by these age groups. Correlated with these findings are the rates of depression and anxiety within these age groups. This correlation becomes even stronger when multiple forms of media are introduced at once to the individual (Becker et al., 2013). Technology and media have become commonplace among the younger populations, and this hold may be having detrimental effects on the population's mental health.

Not only can it be argued that media usage itself affects mental well-being, researchers have also considered the content of such media and its effects on adolescents and college students (Madan et al., 2013; McNaughton-Cassill, 2001; Ortiz, Silverman, Jaccard, & La Greca, 2011; Worth, Chambers, Nassau, Rakhra, & Sargent, 2008). Madan et al. (2013) stated that a majority of television shows and movies involve some form of violence. Such violence may be the harbinger of anxiety due to the portrayal of a dangerous world. Violence, when viewed through media, is correlated with higher levels of physiological arousal within the individual, which can lead to higher anxiety levels (Madan

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et al., 2013). Exposure to disaster stimuli in media is correlated with high state anxiety as well (Ortiz et al., 2011). Prolonged exposure to such stimuli could have adverse effects on health, as college students report higher anxiety in such situations.

The correlation between media use, such as television and internet, and clinical depression and social anxiety raises concerns, especially in regard to suicide. Suicide has become the ninth leading cause of death in the United States of America, killing just over 38,000 people a year (Hoyert & Xu, 2012). As clinical depression and social anxiety have a tendency to be comorbid with suicide, the question of how much media is viewed and the content thereof is now very pressing. Many people, especially adolescents and college students have become enthralled with these forms of media. With the elevated number of hours spent with these types of media, mental illnesses such as clinical depression and social anxiety have become more prevalent within these age groups (Dittmar, 1994; Park et al., 2013; Primack et al., 2009). In this literature review I will examine more closely (a) the correlation between media and clinical depression and social anxiety, (b) the violent and overall negative content of certain media and its effects on behavior, and (c) preventative solutions to mental illness

correlated with media. Many factors can have a hand in determining whether an individual has depression or anxiety, but if it can be limited by decreasing the influence of media then these studies would prove to be very useful in the near future.

Correlation Between Media and Depression and Anxiety

As formerly stated, studies have shown a correlation between media usage within adolescents and college students, and the increased prevalence of depression and anxiety among these groups (Dalbudak et al., 2013; Dittmar, 1994). As the development of depression and anxiety is a long-term process, studies have suggested that the most reliable experimental method would specify the need for carefully controlled samples measured over long periods of time (Primack et al., 2009; Romer et al., 2013). Primack et al. (2009) carried out a longitudinal study to observe the correlations of media use with rates of depressive symptoms among adolescents grades 7 through 12. Upon a seven-year follow up of the 4,142 participants, it was discovered that 7.4 percent of those individuals met the criteria for symptoms of depression. This discovery was based on nine items taken from the *Centers for Epidemiologic Studies—Depression Scale (CES-D)*, which is measured through a three point

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Likert scale, and was found to be internally consistent with a Cronbach α of 0.79 at the beginning of testing, and 0.81 at follow-up. These participants were carefully chosen and screened for any preexisting signs of depression to better isolate and record any development of depression within the individual. From this data alone, the adolescents who recorded more hours spent viewing media had significantly greater chances of developing depression. Had these participants not subjected themselves to an excess of media, the percentages of individuals met with depressive symptoms might have been lower.

This correlation between increased chances of depression with increased hours of media usage is troubling, given the reports of total hours of media viewed by both adolescents and college students. Adolescents in this particular study performed by Primack et al. (2009) were estimated to have been using around 8.5 hours of media per day. What might be even more concerning is that college undergraduates were found to have been using 70.6 hours on average of electronic media a week. The forms of media included in this study were diverse, allowing for educational sources to be measured, however most of the media devices were being used for recreation. This averages out to be about 10.1 hours per day for the average college undergraduate

(Becker et al., 2013). These higher rates of media usage among college students may be due to the separation of students from the home and some form of authority in the household. This separation from authority could lead to a reduced regulation of self-control and time management. Further, if 8.5 hours of media use per day by adolescents is correlated with a significant chance to develop symptoms of depression, the possibility for depression that can arise from an even greater use of media by college undergraduates must be taken into consideration.

Types of Media Used

A few studies have even discussed that the internet, television, and video games are the types of media that are of the greatest concern for developing such mental illnesses as depression and anxiety disorders (Becker et al., 2013; O'Hanessian, 2009). One study involving 795 Korean middle and high school students looked towards problematic internet usage as the possible catalyst for the development of clinical depression and social anxiety. The study defined problematic internet use as the "inability to control his/her use of the internet, which results in marked distress and/or functional impairment" (Park, Hong, Park, Ha, & Yoo, 2013). The study utilized the *Internet Addiction Proneness Scale for Youth--Short Form (KS-Scale)*, which is

comprised of a self-report of 20 questions founded on a 4-point Likert Scale. The KS-scale measures six sub-factors: disturbance of adaptive functioning, addictive automatic thought, withdrawal, virtual interpersonal relationship, deviant behavior, and tolerance. In conjunction with this scale, the researchers also used the *Beck Depression Inventory (BDI)*, *Reynolds Suicidal Ideation Questionnaire (SIQ)*, and *Child Bipolar Questionnaire*. All scales were found to have a positive correlation with each other with a p-value of less than 0.001. From these scales, the researchers found that 75 of the 795 students met criteria for problematic internet usage, of which there was a significant association with suicidal ideation and depression. The correlations between media and depression and other mental illnesses are not limited to the United States, but exist within other countries and cultures, as seen through the study performed in Korea (Park et al., 2013).

Other than internet usage, the total hours spent watching television may also be detrimental to mental health. Primack et al. (2009) reports that for every hour of television use by adolescents, the odds of developing depression for such adolescents rises significantly. It was measured that this trend began any time after 5 hours of television use, with 0-3 hours indicating a presence of

depression among more than 6 percent of the adolescents at follow-up. With the invention of services such as Netflix, television has become increasingly available to adolescents and young adults. According to Primack et al. (2009), this availability increases the likelihood of watching more television and putting oneself at risk for developing depression. They also hypothesized that this availability and use of television led the individual to be more exposed to advertisement and self-comparison with unattainable images, both being possible causes for a correlation with depressive symptoms.

Also to be considered, videogame playing is a form of media that has been positively associated with a rise in depression (Romer et al., 2013). In the study of Primack et al. (2009), 10 percent of participants developed depression when playing video games anywhere from 1-3 hours a day. Given the often violent nature of video games, they also pose the risk of predicting violent behavior among the adolescents and young adults that play them, thereby also possibly increasing anxiety among these groups (Anderson et al., 2003; Madan et al., 2014). Although video games induce addiction by intentionally placing the viewer in control of an alternate reality, it is important to note that even sources of media such as television and internet use, which may be

considered milder in nature, have also been correlated to addictive behavior (Sussman & Moran, 2013). All these forms of media have become more easily accessible, making it easier than before to widen the risk of the development of mental illness.

How Media is Used

Along with what types of media are viewed and used by these age groups, the question of how adolescents and college students use them has been raised as well. In one study, Becker et al. (2013) surveyed 318 college students and asked the students how many hours of media they used and how they viewed the media. When asking how this media was used, they focused on the possibility of students using multiple forms of media at once, or in other words, how often they multitasked with media. Although studies have found that in the last decade overall media use has increased by 20 percent among American youth, media multi-tasking has been found to have increased by over 119 percent in the last decade (Rideout et al., 2010). Surprisingly, this study by Becker et al. (2013) further found that multi-tasking with media was associated with higher amounts of anxiety and depression symptoms among students. This also poses a big risk for our society, since it has almost become a cultural challenge of intelligence and

skill to see who can best juggle two or three forms of media at once.

Gender Differences in Media Usage

As long as the possibilities of how media might include harmful side effects are being discussed, the question as to which gender it is affecting more should be addressed as well. According to Ohannessian (2009), in a study including 328 adolescents, boys were observed to have spent more time playing video games than girls. When focusing on internet usage, Dalbudak et al. (2013) found that male university students are at a higher risk for developing internet addiction. Past studies performed by Dittmar (1994) concluded that a preexisting condition of depression affected men and women differently in regards to media usage. On average, men watched more television than women, and depressed men watched even more television than was normal for non-depressed men. The hours viewed by depressed women actually exceeded hours viewed by depressed men. The question then arises if these gender differences in viewing media are causing one gender to be more susceptible to mental illness than the other gender. Preexisting conditions, such as depression, as well as the content of the media used factor into the further behavior and susceptibility of the individual.

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Media Content and its Effects on Behavior

Although media in general has been shown to have a correlation with signs of clinical depression and social anxiety disorders, the content of such media has also been found to have specific implications as well. Surprisingly enough, a certain study shed forth light on the idea that daily news reports can bring a certain amount of stress to the individual. University students with lower levels of optimism were found to have increased anxiety levels after viewing negative news reports (McNaughton-Cassill, 2001). If this happens with the news, it is possible that other content in media might also have adverse effects on the lives of adolescents and college students.

Disaster and Tragedy

More obvious forms of disaster and tragedy may instill anxiety and anxiety disorders within viewers. Participants in a certain study were asked to recall news stories from the attacks of September 11 and to remember how they felt at the time that the attacks occurred. When participants were measured for sign of distress, researchers determined that measured responses were significant predictors of PTSD symptoms (Collimore, McCabe, Carleton, & Asmundson, 2008). In another form of showing disaster, Ortiz et al. (2011) organized a study with children,

measuring anxiety levels after the viewing of disaster media cues. After viewing the video clip of a disaster, participants had statistically significant higher anxiety levels than those that were shown a neutral weather clip. As can be seen from these studies, disasters portrayed in the media can influence youths who consume such media. Unfortunately, disaster and tragedy are commonplace in media. Even more common than disaster is the direct showing of violence.

Violence is a basic instinct that comes with ensuring one's own survival. When a person is threatened with death or harm, he or she may turn to violence to protect him or herself. The purposeful invoking of these instinctual drives through vicarious violence exhibited from media may increase the anxiety that can be found inside the body and mind of the individual (Anderson et al., 2003; Collimore et al., 2008; Madan et al., 2013; McNaughton-Cassill, 2001; Ortiz et al., 2011). So how common is violence in the media? One study shows approximately 61 percent of television programs and 91 percent of films involve some sort of violence (Anderson et al., 2003; Worth et al., 2008). Not included among these percentages is the amount of violence that is portrayed in video games and other rising forms of media. Some might say that this could leave any viewer of media affected by the influence of violence within media.

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When confronted with such violence, the viewer can even react on a physiological level.

Physiological reactions that occur when an individual is confronted with violence or disaster media include a higher blood pressure and an elevated heart rate (Madan et al., 2013). These physiological symptoms are already some of the base symptomatology of anxiety. One such study looked to replicate these physiological reactions and to measure anxiety levels of college students when they viewed violent movie clips. Madan et al. (2013) used several clips from different films and showed them to 104 college students, while the other 105 watched non-violent clips. The researchers reported that those who viewed the violent clips had an increase in anxiety. Interestingly enough, those who had already experienced violence in real life had lower heart rate levels and blood pressure. This indicates that through prior exposure to violence, desensitization occurred within individuals, enabling them to not be as deeply affected by the violent movie clips.

Reversed Relationships

A possible argument is that these correlational relationships can be reversed in that the result could have been a catalyst for the observed behavior. For example, Dittmar (1994) suggests that college students may watch

more television because they are already depressed. He argues that depression leads to an individual separating him or herself from society, and uses television as a substitute for the absent social interaction. Having removed oneself from society, it may be possible that individuals watch television to live vicariously through the characters in the television programs. As the individual uses television as a coping mechanism for possible preexisting depression or anxiety, he or she may add even more to his or her problem, creating a sort of cyclical pattern in the development of a serious mental illness. Romer et al. (2013) suggests the possibility that media use is a reflection of depression, rather than a direct cause. Since the behavior of viewing media and depression and anxiety are so interrelated, this correlational relationship may be possible to treat in various ways.

Preventative Treatments to Media Related Mental Illness

Due to the many negative messages that can exist within the media, overexposure may lead some to believe that behaviors in media are accepted and normal (Anderson et al., 2003). Such acceptance could possibly lead to unacceptable behaviors and even a higher crime rate. Preventative measures should be taken to hinder such possible problems from arising in the future. Usage of media

may not always manifest itself in a negative light. In many ways, media has been suggested to be an invaluable resource to spread information and to educate the masses (Romer et al., 2013). From the research previously indicated, it can be seen that exposure to media may create issues within the individual; however, certain forms and messages in media may prove useful to the individual, given a limitation on time of exposure. Preventative measures may be useful in limiting the negative influences media can have on us, while allowing the positive influences to promote good behavior and mental health. When preventative measures fail, it may prove effective to use practical therapies.

Practical Therapies

It has been suggested that the humor portrayed in media may help remediate depression and anxiety (Primack et al., 2009). Laughter is a good form of therapy, as it has been known to reduce stress and symptoms of depression (Ko & Youn, 2011). If humor truly would help remedy depression, then it may be possible that certain uplifting content within media is beneficial. In other cases, it may be necessary to prescribe medication to treat the depression and anxiety before any other action is taken. This would put a halt on the "cyclical" nature mentioned by Dittmar (1994) between the use of media and depression, as primary

depression would not be as much of a catalyst for further media binging and depression onset.

Since media use has become a substitute for interacting within the social groups surrounding individuals (Dittmar, 1994), it might be productive to promote group therapy. Group therapy would provide individuals, who most likely prefer the same types of media, with a chance to branch out and create social connections. These individuals may also be able to help each other with addictions to media, as they know of the struggle personally. Additionally, adolescents and college students with these issues may be able to teach one another self-control methods, thereby increasing their odds of success. Interestingly enough, in a study performed by Hedman et al. (2013), individual cognitive therapy has proven more effective than group therapy in treating those with social anxiety disorders. In either case, therapy could be a possible solution in providing those with media-induced social disorders with opportunities to be more productive socially. The combination of medication and therapy may be the best overall option for treatment.

Due to the society we live in, the inevitability of coming into contact with some form of media may denote that these previous measures could mitigate negative effects

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to mental health. A limitation on exposure to media and certain contents portrayed in media may prove useful to combat the comorbidity of media use with clinical depression and social anxiety disorder. Since some forms of media could prove useful, the mental health of individuals could benefit from some content in media use, although limited exposure is still advised.

Conclusion

Media is something that surrounds us and pervades our life every day. Media has also become one of our greatest tools to express ourselves and to communicate ideas, but it may also help bring about mental degradation. Overexposure to media has been correlated with the development of clinical depression and social anxiety within adolescents and college students. Although preventative measures to control such exposure to media do exist, creating an addiction by viewing such media is very easily accomplished. Those who approach it carefully and with a good support system may be able to harness its true potential. While research exists about the correlation of media use with depression and anxiety, further study is always recommended, as there appear to be positive outcomes from the use of media. Further research might be able to indicate specifically what benefits we can receive from media, and how it might be better used in

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society. If media were better understood, the risk of adolescents and college students developing mental disorders might be significantly reduced. It may also be possible that other undiscovered factors surrounding media use have strong correlations with the development of clinical depression and social anxiety. Until then, controlled doses of media usage are advised.

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