

Teenager's Addiction to Smart Phones and Its Integrated Therapy Method

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Abstract. The fundamental cause of teenagers' addiction to smart phone is due to stress arising from family and school. Smartphone can cause many problems including musculoskeletal symptom which can develop due to staying in one position for a long time. Furthermore, staring at a small screen for an extended time can cause decreased eye sight, along with amblyopia. Smart phone addiction causes depression and anxiety which will lead to severe mental problems. This will lead to problems associated to one's social life and human network. Fundamental treatment of cognitive and emotional elements needed to become harmonized as a whole in order to increase the effectiveness of the treatment results. The therapy has been verified to cure the behavioral and emotional aspect related to depression, sense of control, and assimilation in school. From these integrated treatment approaches, this report compared the treatment's upsides and downsides and also, assessed the possibility the integrated treatment process. We can presume that this report provided the opportunity and support for the creation of a fundamental treatment method that can help teenagers live a healthy life by overcoming addiction to smart phones.

Keywords: smartphone; addiction; integrated therapy; depression

1 Introduction

Addiction is a highly comprehensive term defined as agreeing to, transferring of, or surrendering to. "Addiction can be divided into many categories: stimulation (excitement) addiction, calming addiction, addiction that satisfies psychological desires, and addiction that satisfies appetite in a special way" [1]. Addiction can develop in all age groups, starting from children to the elderly groups, and can be mainly categorized into alcohol, cigarettes, drugs, gambling, games, internet, and sex.

In September of 2014 in Korea, out of the total population of 4,903,000, 4,005,000 were smart phone users. Furthermore, in 2013, Korea was regarded as the country with the highest smart phone supply rate in the world.

Ministry of Gender Equality and Family implemented a research on the actual condition of media usage rate among teenagers and reported that the middle school students 86.2 percent, high school students 84.9 percent. This data reflects that most of the teenagers in the country are smart phone users [2]. Hence, we can presume that most of the teenagers own a smart phone and thus, are exposed to an environment that

entices them to overuse it. Looking at it from a general perspective, teenagers are not fully developed yet, and as their self-consciousness continue to grow, they are highly exposed to the risk of adverse effect more than any other age group [3].

The fundamental cause of teenagers' addiction to smart phone is due to stress arising from family and school [4]. When students are experiencing physical and mental stress from outer forces, they tend to look for a way to relieve stress they turn to internet surfing and games as means of escape in order to overcome problems they encounter from their social group of friends and overwhelming school work [5].

In the past, students used computers to cope with the latter obstacles [6]. However, the transportability, extendibility, and instantaneity that comes from smart phones puts students at a higher risk of addiction and has become a controversial issue in our society today [7]. Smart phone addiction has caused serious and harmful effects in teenagers' daily lives and it has become difficult to eliminate the root to this problem [5]. Existing treatment related to smart phone addiction is the Integrated Arts Therapy. Integrated Arts Therapy arose from Gestalt Therapy [8] and Fritz Perls Institute (FPI) that promotes encouragement of creativity. Petzold's Art Therapy was incorporated to art, music, dancing, movements, drama, and etc., and found that Therapy's perspective is not composed of one particular sense but it is the act of integrating the sense with creativity [9].

The existing integrated art therapy is found to help the treatment of smart phone addiction. The therapy has been verified to cure the behavioral and emotional aspect related to depression, sense of control, and assimilation in school [10]. However, overuse of smart phones causes high exposure to electromagnetic waves and in turn, generates other associated problems such as damage to brain cells [11], forward neck syndrome [12], carpal tunnel syndrome [13], decreased vision [14]. This research study involves smart phone addiction and its integrated treatment and the supporting hypothesis is as follows. First, we consider human as holistic and categorize the variables into three sub-theories: physical factor, emotional factor, and behavioral factor [5]. When the latter three factors are integrated, smart phone addiction can be effective.

2.1 Theory

2.1.1 Physical health problems related to smart addiction

Smart phone has become an essential device in our contemporary society [11]. However, when overused, it can cause many problems including musculoskeletal symptom which can develop due to staying in one position for a long time [15]. Furthermore, staring at a small screen for an extended time can cause decreased eye sight, along with amblyopia [14]. Sitting in a still position can cause muscular contraction which can lead to long-term muscle fatigue including neck pain [12].

The overuse of smart phones can also lead to bad living habits. This can become the catalyst in decreased range of motion in the joints, not to mention scoliosis. The initial shape of the neck is displayed as a "C" shape [12]. However, if you look down frequently, for instance, crossing the street while looking down at your smart phone, it

can generate pain in your shoulders and neck. The latter may neck to become a shape of a straight line [16].

At this point, herniation may cause pain from your neck down to your shoulder ending at your arms. This pain is referred to as “radiation pain.” The bad posture cause by overuse of smart phones may lead to your neck becoming a “C” shape and further, it tends to deliver great amount of stress to your muscles and joints [17]. Other homeostasis related problems can arise as well such as blockage in the local blood supply to your muscles including metabolite [16].

2.1.2 Mental health problems related to smart phone addiction

Smart phone addiction is known to cause mental problems such as decreased self-restraint ability, impulsive behaviors, and anxiety which can become critical barriers when carrying out healthy relationships, school activities, and mental well-being [18]. From a general perspective, as the smart phone addiction increases, the level of depression and anxiety increases as well [11]. Depression often plays as an index to display the overall health status of a person. When the level of addiction alleviates, one tends to lose self-control which decreases ones willingness and ability to socialize and network with others. As a result, one may begin to feel a sense of loneliness becoming more dependent on the smart phone, simultaneously increasing one’s level of anxiety especially when the smart phone is not present [19]. From looking at the above associated problems to smart phone addiction, we can conclude that the addicting creates negative effects to mental health [20].

Smart phone addiction causes depression and anxiety which will lead to severe mental problems [20]. This will lead to problems associated to one’s social life and human network. According to advance studies related to smart phone addiction, depression is the most probable health complication. Increased addiction to smart phones is associated with increased level of depression [21]. Yong Min Park’s research study concluded that smart phone addiction is highly related to obsessive-compulsive neurosis and other illnesses in the following order: depression, mental health disorders, anxiety, and social delusional disorder, antagonism, and phobia ().

There are also studies that show that smart phone addiction creates hostility and rage among users [22]. Further results show that middle school students’ mental health were not highly affected by smart phone usage compared to students of higher grade [18]. However, the higher grade students displayed mental health problems such as rage, compulsive characterizations, anxiety disorders, personality disorders, and delusional disorders [18].

2.2 Integrated Treatments of Smart Phone Addiction

2.2.1 Smart Phone Addiction and the Biblio Therapy

Biblio-therapy which is associated to smart phone addiction provides treatment through reading literature [23]. It helps to expand the subject’s range of thoughts.

Kimberly Young, Maressa Orzack, Dr. All Cooper, and other internet field related researchers claimed Cognitive Therapy as the most suggested type of treatment [24].

The Bibliotherapy process is implemented by reading book and finding new meanings from the literature based on the Identical Principle, Catharsis Principle, and Discernment Principle [25]. In addition, Michael Ende's novel, "Momo" which was used in the operation of "HORA" at the Seoul National Hospital aimed to cure teenagers' addiction to smart phones, is expected to show good results in treating the addiction. This Bibliotherapy is motivated by Michael Ende's motive of recovering the sense of time. The process involves subjects reading the literature. Subsequently, they engage in debates, role plays, and other creative activities to assess each other in order to find the defined sense of time [26]. This type of Bibliotherapy is expected to help the subjects' ability to find defined sense of time.

2.2.2 Smart Phone Addiction and the Literature Therapy

Recently, an integrated treatment to cure a smart phone addiction subject has been a rising issue. Compared to non-language related treatments, patients who are able to be treated through text treatments desire such treatments [5]. The integrated literature medical treatment mainly incorporates media's art treatment method to treat the patients. Taking these points into consideration, scholars of literature, education, and art suggested need for the development of this program. Moreover, when someone claims, "If I don't have a smart phone, I feel anxious," and that person is able to overcome this barrier through poem therapy by realizing one's current status and gaining the ability to treat their emotions, then the positive effects of the integrated therapy increases tremendously [27]. Moreover, if the patient is able to treat oneself through poems and music, the effects of this treatment will multiply. Literature medical treatment that can harmonize the aspects of both cognitive and emotional treatments, have the ability to treat addicted teenagers' cognitive and emotional illnesses. Thus, this treatment can become effective in treating teenage subjects' depression[28].

2.2.3 Smart Phone Addiction and Music Treatment

Musical treatment, a type of emotional treatment, can be divided into two categories. First, there is musical treatment that can help treat physical and cognitive problems. This treatment provides psychological security to those being treated for physical and cognitive problems. For example, music treatment that is customized to fit the need of the subject being treated with physical therapy can be highly effective [29].

Moreover, it is more effective if you have the subjects draw pictures of their childhood while listening to calm music. This can create a greater synergy effect through an integrated treatment [30]. Second, subjects can be treated with therapeutic song writing in order to decrease their addiction to smart phones. There is not a study on record that can treat smart phone addiction through music treatment [29]. However, impromptu musical performance displayed effectiveness in curing teenagers addicted to internet. Impromptu musical performance seems to decrease the

level of stress and increase the level of self-control among subjects. Other than these performances, song writing technique also serves to enhance emotional problems among subjects.

2.2.4 Integrated Treatment Process for Smart Phone Addiction

The integrated treatment process for smart phone addiction involves applying for examination of smart phone addiction. Subsequently, teenagers' addiction state is investigated and the appropriate treatment is implemented [5]. ① Initial Phase: Administrator and subjects make rapport formations and the administrator advises the type of treatment to the subject. ② Integration Phase: Subjects implement the integrated treatment method in order to overcome their illnesses such as depression, anxiety, and abnormality in their daily lives. Administrator provides data to the subjects and subjects are placed through integrated treatments such as physical, cognitive, and emotional providing feedback to the administrator afterwards. ③ Reorientation Phase: Administrators and subjects get together to find a method that prevent the subject from going back to their old conditions. At this point, the teenagers need to be placed in multiple programs to maintain a decreased level of stress and increased level of self-control [5].

3 Conclusion

This report provided methods for smart phone addicted teenagers to overcome the illness through the integrated treatment aspects. Teenagers in this report did not go through a systematic and effective treatment process; rather, their treatment approach was limited due to the teenagers' current physical symptoms and addiction conditions. Therefore, short-term effects of the treatment were demonstrated. However, the risk of the symptoms recurring was substantially high. This suggested that fundamental treatment of cognitive and emotional elements needed to become harmonized as a whole in order to increase the effectiveness of the treatment results. From these integrated treatment approaches, this report compared the treatment's upsides and downsides and also, assessed the possibility the integrated treatment process. We can presume that this report provided the opportunity and support for the creation of a fundamental treatment method that can help teenagers live a healthy life by overcoming addiction to smart phones.

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