

Correlates of Internet Addiction among Adolescents

Alfred D. Waldo

Philippine Mental Health Association, Baguio-Benguet Chapter, Baguio City 2600, Philippines
Email: waldogz_way@yahoo.com

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Abstract

Internet addiction is a broad concept. Despite inconclusive or inconsistent definition for this disorder, usage of the internet is growing rapidly each year especially among adolescents, making it imperative to look into factors that can be correlated to it. The study provided description on adolescent internet addiction and examined significant differences in terms of gender, type of school and online behaviors. Further, the relationship of adolescent internet addiction to spiritual intelligence, psychological wellbeing and social desirability was explored. Questionnaires were used in the data collection; findings suggest that adolescents are frequent online users and that there are significant differences in terms of gender, school type, and online behaviors; social desirability had a strong positive relationship with adolescent internet addiction.

Keywords

Adolescents, Internet Addiction, Spiritual Intelligence, Psychological Wellbeing, Social Desirability

1. Introduction

Internet addiction is a broad concept. To date, there is neither a conclusive nor a consistent definition for this disorder. Despite efforts made to reach one uniform definition, and inclusion in the Diagnostic and Statistical Manual 5 (DSM5), the authoritative guidebook for the diagnoses of psychiatric disorders by the American Psychiatric Association, difficulty establishing a coherent picture for this disorder is often encountered by researchers and clinicians (Block, 2008). Young (1996) defined internet addiction as an impulse-control disorder like pathological disorders that does not involve an intoxicant. Shapira (as cited in Bastani, 2008) stated that this may be another form of obsessive-compulsive disorder. Despite these inconsistencies, most researchers believe that the definition can be explained by online behaviors such excessive use to certain applications online, unregulated/pathological/problematic hours online (Frangos, Frangos, & Sotiropoulos, 2011).

In this study, as the researcher's target is to provide description of internet addiction among adolescents the term Adolescent Internet Addiction (AIA) was coined as it particularly describes the characteristics and online behaviors of adolescents. Online behaviors are described as the purpose of internet use and internet hours consumed by adolescents. Further, adolescents and high school students are used synonymously.

Previous studies perceived the internet as having an overall negative effect on their daily lives and a break in the individual's psychological wellbeing. These studies defined wellbeing in the concept of mental illness and distress such loneliness and depression (Whang, Lee, & Chang, 2003); current mental health treatments and behavioral difficulties (Mannell, Zuzanek, & Aronson, 2013); impulsivity, sensation and novelty-seeking, social isolation (Young & Roger, 1998) and sometimes enhanced levels of aggression (Chou, Condron, & Belland, 2005). Similarly, Oktuğ's (2010) study reported wellbeing as a state compromised such as failure to manage time, missed sleep, missed meals, and so on picturing similar patterns and norms of other addictions.

In this study, however, psychological wellbeing is defined in the concept of positive mental health. The definition of Carol Ryff's multi-dimensional construct of psychological wellbeing was used. According to Ryff the overall well-being is the interconnectedness of six distinct facets: (1) self-acceptance or feeling positive towards the self and accepting one's strengths as well as weaknesses; (2) positive relations with others or having close, warm, and supportive relationships and feeling connected to others; (3) personal growth entails openness to new experiences and a commitment to development and learning; (4) purpose in life involves feeling committed to valued goals and believing that life is meaningful and worthwhile; (5) environmental mastery entails feelings of personal competence and efficacy and confidence in one's ability to interact successfully with the environment; and (6) autonomy is a sense of self-determination and independence and a willingness to stand up for one's own ideas and beliefs despite external pressures (Negovan, 2010).

Meanwhile, another element of positive mental health is spiritual intelligence. Gardner presented this as the ninth intelligence (Sisk, 2008). Spiritual intelligence is one of the several types of intelligence that can be developed independently and contributes to psychological well being and overall healthy human development (Perez, 2012). According to studies (as cited in Azadeh, Fatemeh, & Rouhparvar, 2012), spiritual intelligence has a positive relationship with public health and stress reduction (Ali Mirzaei, 2008), better quality of life and life satisfaction, prospectiveness (Mirshamsi, 2009), high self-esteem (Hyde, 2004), mental health (Moalemi, Raqibi, Salari Dargi, 2010), happiness (Bagheri, 2010), hope to recovery and prospectiveness (Flannelly, 2001), the ability to overcome pain and agony (Madhujain and Trema, 2006), reduction of depression (Bahrami Dash-taki, Alizadeh, Ghobari Bonab, 2006), and a negative relationship with adolescent identity confusion (Javadzadeh Shashani, 2011).

Since well-developed spiritual intelligence could be associated with positive consequences for the individual, it will be useful and necessary to identify the variables that increase the probability of its reduction. Therefore, spiritual intelligence was included in this study as a variable with the assumption that its higher levels of AIA would decrease spiritual intelligence.

On the other hand, it is established that addicted individuals to substance abuse or other forms of addictions were found to have higher levels social desirability. Crowne & Marlowe (1983) defined social desirability as the tendency to give overly positive self-descriptions in an attempt to appear overly moral, honorable, and virtuous yet denying undesirable traits (e.g. sexual or drug-related behaviors). This response strategy is used to be accepted by social peers due to the consistent social norms and expectations (Fleming, 2012). Hence, in this study social desirability is used as a response trial to be associated with AIA in order to assess if adolescents deny internet related problems and online behaviors.

Erikson viewed adolescence as a pivotal period. He stated that the main psychosocial task for an adolescent is finding an optimal balance between self-knowledge and identity confusion (Mazalin & Moore, 2004). He also emphasized peer relations in the development of a social sense of self. According to him, adolescents' sense of psychological well-being is a feeling of being "at home" in one's body and a sense of knowing where one is going is achieved through identity achievement. Identity achievement reflects the epitome of adolescent mental health, adjustment, and self-esteem, and is a predictor of positive social and psychological outcomes, such as positive psychological well-being (Waterman, 2007 as cited in Mazalin & Moore, 2004).

Carl Jung was a pioneer in asserting that all human problems are spiritual. He believed that human beings are not only psychosexual and psychosocial but they are also psycho-spiritual. Jung stated that psychological problems are essentially spiritual or religious. He believed that psychoneurosis is the suffering of the soul which has not discovered its meaning leading to stagnation, or psychic sterility. Hence, he suggested that healing is not

possible without spiritual awakening or addressing issues related to spiritual distress (Itliong, 2006).

Both of these concepts served as the framework for understanding the present study. Traditionally, little is understood about the Filipino adolescence psychological wellbeing and spiritual intelligence. AIA is even more debated and its influence to the Filipino adolescent wellbeing and spiritual intelligence has not been fully examined. Thus, by associating these factors this study may narrow the gap, acknowledging the possibility that each factor can serve both positively and negatively dependently of the other. Therefore, the following objectives were determined:

1. The degree of Internet addiction, Spiritual intelligence, Psychological wellbeing, and Social desirability of adolescents.
2. The significant differences of Adolescent Internet Addiction in terms of gender, type of institution, and on-line behaviors.
3. The relationship of Adolescent Internet Addiction to Spiritual Intelligence, Psychological wellbeing and social desirability.

2. Methods and Procedures

2.1. Study Design and Population

The research is a quantitative study which utilized a correlational design. The study was conducted in Baguio City. Participants in this study were high-school students from various secondary schools (public and private schools) from freshmen to senior high school enrolled during 2013-2014 academic school year.

With the increase in computers and the universal application of the internet has brought great convenience, adolescents in Baguio City use the internet for academic and recreational purposes. In order to ascertain how much time respondents spent on-line, respondents were asked to provide a best estimate of the number of hours per day on online activities. It is important to note that these estimates were based upon the number of hours spent for pleasure/entertainment or personal interest (e.g., personal e-mail, scanning news groups, playing interactive games) and even academic or research/information seeking related purposes. **Table 1** presents a summary of the profile and online behaviors of the respondents by frequencies and percentages.

The study applied multi-stage sampling in the target recruitment. The researcher determined the sampling frame by obtaining the list of secondary schools from the department of education. The first stage in sampling was determining the school participants. 8 schools were selected to participate in the study in an equal ration (1:1) so 4 schools from the private and 4 public schools. Selected schools were contacted via telephone calls and personal visits to ask permission from the school administrators for the participation of their students in the study. Some schools declined to participate in the study prompting the researcher to reselect other school participants. The researcher obtained the number of enrollees in the 8 schools who agreed to participate in the study. A total of 5417 freshmen to senior high school students were obtained. The second stage of sampling was

Table 1. Profile and online behaviors of the respondents.

Variables		Response frequencies	Percentage
Gender	Male	525	49.6
	Female	534	50.4
Type of Institution	Private Schools	383	36.2
	Public Schools	676	63.8
Most common use of Internet	Research/academics	331	31.3
	Social networking/chatting	289	27.3
	Online gaming/gambling	313	29.6
Hours of internet use per day	Surfing/other purposes	126	11.9
	1 - 2 hrs.	475	44.9
	3 - 4 hrs.	294	27.8
	5 - 6 hrs.	170	16.1
	7+ hrs.	120	11.3

determining the sample size of the study. The sample size was determined using the 2006 Researchers Advisors sample size table. Based on the table, the appropriate sample size for 5417 is 1176. By percentage allocation the sample size distributed to each school participants. The third stage in sampling was determining the student participants. Cluster sampling was employed in the selection of student participants. For each year level, depending on the type of institution, there are 2 to 4 classroom per year level. In each classroom student population would range from 30 - 60 students. By randomly selecting the section representative of each year level, all students meeting the inclusion criteria was invited to participate in the study.

2.2. Measures and Data Collection

Young's Internet Addiction Test (IAT). This was adapted to evaluate the respondents' level of internet addiction. It consists of 20 questions wherein each item is scored using a five-point Likert scale. It covers the degree to which internet use affect daily routine, social life, productivity, sleeping pattern, and feeling. The instrument has exhibited good psychometric properties in previous researches. The reliability for this questionnaire is 0.899 in Cronbach's alpha the higher the score the greater the level of internet addiction (Pui, 2006).

The Spiritual Intelligence Self-Report Inventory (SISRI-24). This is a 24-item self report measure of spiritual intelligence widely used for academic, educational, or research purposes. The tool exhibits a reliability coefficient of $\alpha = .94$ by Cronbach's alpha. Item responses ranged on a 5-point Likert scale from 0 ("not at all true of me") to 4 ("completely true of me"), with higher responses representing higher levels of spiritual intelligence. A total spiritual intelligence score can be calculated by summing across all subscales (King & DeCicco, 2008).

Carol Ryff's Scales of Psychological Wellbeing (SPWB). The SPWB scales have been found to demonstrate good construct validity with other well-being measures in young adults, middle-aged adults (Abbott, Ploubidis, Huppert, Kuh, Wadsworth, & Croudace, 2006). The tool has also been used in major studies and in addition has been cited in more than 400 studies. The response format for all items comprised six ordered categories labeled from "disagree strongly" to "agree strongly". Twenty PWB items were positively worded and 22 negatively worded. Prior to analysis, negatively worded items were reverse scored so that high values indicated well-being. The internal consistency coefficients were quite high between 0.86 and 0.93 and the test-retest reliability coefficients for a subsample of the participants over a six week period were also high 0.81 - 0.88 (Springer & Hauser, 2011).

Marlowe & Crowne's Social Desirability Scale. This is a 33-item self-report questionnaire, with True-False format for responding to the items. The MCSDS is intended to capture a person's "need for social approval", which is the extent to which a person seeks approval from others and avoids disapproval (Johnson & Fendrich, 2013) this tool is a public domain instrument, making it cost effective for users. Crowne and Marlowe's (1960) studies revealed an internal consistency coefficient of .88, and one month test-retest correlation of .89. Respondents who answer in the affirmative/negative to the socially desirable/undesirable questions have a higher need for social approval and are more likely to respond to research questions in a socially desirable manner (Tatman, Swogger, Love, & Cook, 2013).

As the tools were initially designed for use in the United States, some statements referenced cultural phenomena were not relevant to the Filipino culture. This was revealed after the Content Validation of the questionnaires. A panel of experts consisting of four professionals agreed to evaluate the content validity of the tool. Recommendations from panel of experts led to further revisions. The test questionnaires were pretested to 33 high school students with similar characteristics as the actual respondents. The reliability of the tools was determined using a 2 weeks test-retest method resulting to the following correlation coefficients of .83, .72, .74, and .70 for Internet Addiction Test, Spiritual Intelligence Self-Report Inventory, Scales of Psychological Wellbeing, and Social Desirability Scale respectively. All necessary modifications, deleted items, results of the reliability and validity were reported back to the panel of tests experts.

After receiving approval and obtaining consent from the school administrators the questionnaires were personally administered by the researcher. All questionnaires were distributed to willing participants at their respective classrooms at a predetermined time. The nature of the study was masked by not presenting the title of the study in the questionnaires. Teachers left the classrooms during the data gathering time. All ethical considerations were explained for those who participated in the study. On-site retrieval of the questionnaires was done after 45 minutes.

2.3. Treatment

The Statistical Package for Social Sciences (SPSS) version 21.0 was used. In presenting results for all analyses, the p -value of 0.05 was used as the decision rule wherein p -value below 0.05 indicates rejecting null hypothesis while p -value above 0.05 indicates acceptance of the null hypothesis.

3. Results

Over 7 weeks, period of data collection, out of the distributed 1176 questionnaires only 1059 (90.05% response rate) were deemed valid and complete which were subjected for analysis. Respondents had a mean age of 16.45.

Table 2 presents the descriptive statistics of the study. It can be noted that although adolescents have good psychological well-being and acceptable levels of spiritual intelligence, adolescents appear socially desirable at an average level and are frequent online users.

As seen in the **Table 3**, all the variables have significant differences on adolescent internet addiction. Males are found to be more addicted to the internet than females, and students from private schools are more addicted to the internet than those from public schools. Student's utilizing the internet mainly for surfing/other purposes are more addicted to the internet. At the same time, internet addiction increases as hours of internet use increases.

On the other hand, presented in **Table 4** is the relationship of all AIA with SQ, the dimensions of wellbeing

Table 2. The descriptive statistics and interpretation.

Variables	Mean	Interpretation	
Adolescent Internet Addiction	39.12	Frequent Online Users	
Spiritual Intelligence	39.44	Average SQ	
Psychological Wellbeing	Autonomy Dimension	3.61	Good
	Environmental Mastery	3.59	Good
	Personal Growth	4.08	Good
	Positive Relations	3.91	Good
	Purpose in Life	3.88	Good
	Self-Acceptance	3.72	Good
Social Desirability	17.68	Average	

Table 3. The difference of AIA in terms of gender, type of school, and online behaviors.

Variables	Mean	f/t statistic	ρ	
Gender	Male	40.004	2.350	0.019*
	Female	38.251		
Type of school	Private	41.674	5.175	0.000*
	Public	37.673		
Purpose	Research/Academics	35.323	16.508	0.000*
	Social Networking/Chatting	40.571		
	Gaming/Gambling	40.840		
Online Behaviors	Others/Surfing	41.492	37.247	0.000*
	1 - 3 hrs	35.697		
	3 - 5 hrs	39.364		
	5 - 7 hrs	42.865		
	7+ hrs	46.767		

Note: *Sig at $\alpha = .05$.

Table 4. The Pearson correlation of AIA, SQ, PWB and SDS.

Variables	Mean	r	p
Adolescent Internet Addiction	39.12	-	-
Spiritual Intelligence	39.44	.111**	.000
Psychological Wellbeing	Autonomy Dimension	3.61	0.32
	Environmental Mastery	3.59	-.022
	Personal Growth	4.08	-.022
	Positive Relations	3.91	.11
	Purpose in Life	3.88	-.046
	Self-Acceptance	3.72	-.017
Social Desirability	17.68	.065*	0.34

Note: *Sig = .05. **Sig = .01.

and social desirability. Although the dimensions environmental mastery, personal growth, purpose in life and self-acceptance did not reach standard significant levels they were consistently presenting to have inverse relationship with AIA. This only suggests that as addiction to internet increases these dimensions in wellbeing decreases. Meanwhile, the dimensions autonomy and positive relations have positive relationship with AIA but not significant. Also another significant finding is the positive relationship between spiritual intelligence and social desirability to AIA.

4. Discussions

4.1. Degree of AIA, Level of SQ, Degree of PWB, and SDS

Majority of adolescents are frequent online users. Indeed, Internet addiction is a global mental health problem (Chou & Hsiao, 2000). Epidemiological studies showed that the international prevalence rate of adolescent internet addiction ranged from 0.9% to 38% (Xu et al., 2012). Alarmingly, in this study 24.7% met the criteria for internet addiction. Erikson viewed that the main task for an adolescent is finding an optimal balance between self-knowledge and identity confusion. Thus, by guiding and teaching students on healthy coping strategies to life-related situations such as stress, sadness, and depression we may help them we may be able to help students explore possible alternatives in finding their identity and roles in productive ways. Nurses are crucial in the development of the identity of adolescents, therefore promoting healthy lifestyles, emphasizing proper coping on psychosocial issues, recognizing programs and existing services for adolescents in the prevention, management, and treatment of AIA must also come from the health sector.

The Spiritual intelligence of adolescents is average. This is because Filipino adolescent's link their spiritual intelligence to their spiritual experiences (Perez, 2012); Filipino adolescents may have imbibed a strong adherence to the social teachings of the bible (Austria, 2009); they cultivate an optimistic attitude that contributes to emotional balance and the capacity to survive (Wang, n.d); and have Filipinos ability to accept reality (including failure and defeat) in terms of God's will (Hetherington, 2011). Carl Jung emphasized the ability of humans to draw on spiritual resources in problem-solving and dealing with the issues of the concept of life and values. Perhaps this may contribute to the understanding that adolescents seek divine interventions in solving their problems.

In terms of the adolescence psychological well-being, Erickson stated that identity formation is a complex process and can be associated with different psychosocial outcomes depending upon the socio-cultural milieu. Therefore, cultural differences essentially accounts for the variations in some of the dimensions. In this study, adolescents have Good/maintained psychological well being with above 50% of the overall respondents on the six dimensions of psychological well being. With below 5% of the overall respondents some scored poor and slightly low in the six dimensions. As the six dimensions of psychological wellbeing works hand in hand in the development of adaptive human functioning and positive life experiences (Springer & Hauser, 2011). Our ultimate goal is to create a balance among the dimensions. Equally important to the prevention of ill-health is

building good health and wellbeing. Research suggests that high wellbeing has preventative effects on the development of mental health problems over time (Pudrovskaya, Springer, & Hauser, 2005). Perhaps enhancement programs may be designed specifically considering the areas in which the dimensions that are low and devoting time and resources may help students to thrive psychologically, physically, socially, and academically.

In terms of the degree on social desirability, evidence that social desirability is a personality trait is that it appears to be genuinely related to emotional stability and conscientiousness (Tatman, Swogger, Love, & Cook, 2013). In this study, adolescents have average social desirability. For the Filipino youth, these personality traits may be described as norms and values instilled by their parents and according to the expectations of society (Hetherington, 2011). Perhaps, this positively stated description was selected by the some adolescence in the sample as their description to self-presentation.

4.2. Difference of AIA in Terms of Gender, Type of School, and Online Behaviors

According to Pallanti, Bernardi and Quercioli (2006) the average age for students who are with internet addiction is 16.67 ± 1.85 (as cited in Qin, 2011). It means that, adolescent who are addicted to internet are within the age range of 14 years old to 18 years old which matches the age range used in this study. Following Erickson's identity development, Marcia developed identity statuses involving movement from less mature (diffusion, foreclosure) to more mature (moratorium, achievement) identity statuses over the adolescent age range. According to Marcia, 15 - 19-year-olds seek vehicle for exploration of the world which might characterize their lifestyles in preparation for adult life. In a study conducted by Hasanzadeh, Beydokhti, and Zadeh (2012) they have found out that at least 50% of participants remain diffused or foreclosed at the end of their secondary school studies. They were able to conclude that internet use facilitate and retard psychosocial development among high school students particularly at the moratorium stage (19 years old/early adolescents). Needless to say, the current study is thus still a salient one, the higher use of internet the higher diffusion of the identity of teens.

As expected, male adolescents were found to have higher levels of internet addiction as than their female counterpart. This provides support to the findings of Mazalin & Moore (2004), Chen & Fu (2009), Sato (2009), Beutel (2011), and Kennedy, Wellman, and Klement (2003) utilizing teenage population for the comparison on gender difference on internet addiction. In this study, adolescent male's use the internet as a social mean or as a ground for interpersonal relations. Most studies in this field usually indicate female that seek out close friendships and prefer anonymous communications (Young, 1996). This unexpected finding seems to support Chou, Condrón, and Belland (2005) finding that internet use is a substitute for real-life social interaction. Interventions, treatment programs, preventive strategies may be designed specifically considering the areas in which the two genders are different and similar.

Griffith's (1998) found significant associations of internet addiction with higher social status, ease of use, availability, and accessibility. Undeniably, adolescents from private school institutions have higher social status, have multimedia resources (latest and newest gadgets such as i-pad's, smart phones, tablets, etc. that have internet connection features), and may be proficient to various technical features of software applications, computers and networks as compared to those in public schools. Apart from this, some private schools have WiFi connections available in their campus grounds. Computer laboratories have access to internet. Therefore, it is no leap to predict that students from private schools are more vulnerable AIA than students from the public schools given the dispositions and social norms of private schools. Perhaps school administrators may look into this concern and re-examine school policies concerning internet connection use among campuses.

It is reductive that in problems encountered by adolescents overlap and interacts in complex ways. Abstaining from Net use is seldom an option (Young, 2004), as adolescents use this tool for their academic pursuits dependency was observed from different campuses. Adolescents prefer socializing online more than in person due to the faceless community of the internet (Razieh, Ghasempoor, Ajdari, & Sadeghigoghari, 2012), Sexual pursuits on the internet can carried out because it can easily be accessed, anonymous, and a medically safe way to satisfy one's biological drive and psychological needs (Chou, Condrón, & Belland, 2005), Particular activities online for reinforces satisfaction to the needs (Griffiths, 1998, 2000) are among the identified reasons for the online behaviors among adolescents. Furthermore, in terms of time consumption the study collaborates with previous findings (Young, 1996, 1998; Chen & Fu, 2009; Chou & Hsiao, 2000; Beutel, 2011; Frangos, Frangos, & Sotiropoulos, 2011) that the higher the consumption the higher the level of addiction. Clearly, remedial guidance is

necessary for the dependent adolescent. It might be helpful for parents set consistent rule on internet hours of use at home. In school settings, perhaps school rules and regulations on ethical and proper use of mobile phones, iPads, and technology in general with internet connection may be implemented. In order to understand AIA it is suggested that helping professionals, parents, concerned adults must also look into particular applications or use that the adolescents engage in and identify presenting problems with this use.

4.3. The Relationship of AIA to SQ, PWB, and SD

The strong positive correlation between internet addiction and social desirability may possibly be explained as a mechanism to avoid self-criticism. Denial enables adolescents to continue engaging in internet usage in spite of obvious negative consequences; it is also a way to protect themselves from seeing or feeling things that are unpleasant. Owing to denial, the impact of one's internet usage is seldom fully appreciated until the consequences become serious (Chang & Hung, 2008).

In studies of students indicating excessive use of internet and mental health (Kraut et al., 1998; Chou & Hsiao, 2000; Chen & Peng, 2008; Douglas et al., 2008; Ko et al., 2005, 2012; Eastin, 2005; Azadeh et al., 2012; Engelberg & Sjoberg, 2004) results indicated that the level of depression, stress, suicide intention, hyperactivity, fear, social fear, aggression, violence and antisocial behaviors occur more in addicted students. Chang & Hung (2008) stated that the internet is used by addicts as a medium for avoiding and dealing with these underlying problems. However, as claimed by Chang & Hung (2008) the mental health problems and psychological problems are the core issues in internet addiction use itself. It is still controversial, however, to propose this relationship between psychological well-being and internet addiction. The question then becomes "is the internet a delivery medium or is it a causal factor?" Given the discussions above, we can safely assume that by giving adolescents a purpose in life, a sense of direction, increasing their self acceptance and exposing them to an environment where they can adjust, master their skills, foster personal growth and adjustments we will be able to prevent internet addiction. Likewise, various activities that promote independence and provide group acceptance might be indicative of overcoming internet dependency/addiction among identified adolescents.

As we come to better understand internet addiction, we are less likely to consider it a single phenomenon but rather an intersection of multiple physical, psychological, technological and possibly spiritual phenomena. Although it is suggestive that SQ is not too far-fetched with AIA the relationship may represent a different condition along a spectrum of related disorders to psycho-spiritual maladjustment. Rahmani & Lavasani (2011) suggested that internet addicts have accepted the internet as a way to create spiritual change in them and similarly, adjustment in negative moods. It seems that this way, although harmful, is the shortest and most available way for them. Although this is suggestive it might be useful to draw upon it as an example, in order to seek other possible factors.

5. Recommendations

Awareness to the extent of this problem should be pursued to a wide range of audiences. In line with previous findings, besides proper diagnosing and treatment effective management and prevention is necessary. School administrators may perhaps add information services to the "student guidebook" instead of just placing rules and regulations. As there is no space for remedial guidance and preventive actions in the "student guidebook" wellness programs, extracurricular activities, and volunteer works stating the objectives of such programs and how it can benefit the youth and their well-being may be included. Lastly, future research may employ different methods of inquiry particularly on a causal perspective and pursue the study to a wider scale of population and different target groups.

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