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The Effectiveness of Transtheoretical Model to Reduce Compulsive Internet Use of Senior High School Students

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Abstract: This research aims at examining the effectiveness of transtheoretical model to reduce compulsive internet use of Senior High School students. This research employed single subject design approach. The subject of this research is four students of X graders at St. Joseph Senior High School Malang which obtained high compulsive internet use score. This research utilized transtheoretical model counseling guidebook, compulsive internet use scale, observation and interview guidebook. The results of significant visual and score margin between pre-test and post-test indicate that transtheoretical model is effective to reduce compulsive internet use among Senior High School students.

Keywords: internet; compulsive internet use; transtheoretical model; senior high school

Abstrak: Penelitian ini bertujuan mengetahui keefektifan *transtheoretical model* untuk menurunkan *compulsive internet use* siswa Sekolah Menengah Atas (SMA). Penelitian ini menggunakan rancangan *single subject design*. Subjek penelitian terdiri dari empat siswa kelas X SMA Kolese Santo Yusup Malang yang memiliki skor *compulsive internet use* dalam kategori tinggi. Instrumen yang dipergunakan dalam penelitian ini adalah panduan pelaksanaan konseling *transtheoretical model*, skala *compulsive internet use*, pedoman observasi dan pedoman wawancara. Hasil penelitian yang dianalisis menggunakan analisis visual menunjukkan adanya perbedaan tingkat *compulsive internet use* siswa sebelum dan sesudah diberikan intervensi berupa konseling *transtheoretical model*.

Kata kunci: internet; *compulsive internet use*; *transtheoretical model*; SMA

Internet (interconnecting networks) is a computer network which is interconnected internationally by utilizing cable network or electromagnetic waves. Some services which are provided by internet are continuously developed and progressed such as browsing service, online games, pornographic content, music, and software downloading, e-mailing, chatting, and instant messaging (Van den Eijnden, Meerkerk, Vermulst, Spijkerman, & Engels, 2008). The developed various services on the internet are correlated with the increasing number of internet users. According to the results of Statistical Data Survey of Indonesian Internet Users in 2016 conducted by Indonesian Internet Service Provider Association (APJII) note that the number of internet users in Indonesia is 132.7 million or approximately 51.5% of the total population of Indonesia amounted to 256.2 million (APJII, 2016). This indicates that the presence of the internet as a medium of information and communication has been transformed into a necessity for the people of Indonesia.

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In addition to having a positive impact (Dewanti, Widada, & Triyono, 2016) the internet also has a negative impact. The most obvious negative impact of the internet that there is an attachment between people with computers and certain functions of the internet which can lead to dysfunction of psychological, social and professional (Davidson & Walley, 1985). Internet functions that can lead to such disorders include internet access activity on erotic sites, internet games, and online chatting. Spending too much time in accessing these sites can lead the internet users to become an addiction (Orford, 2005).

The Internet has played an important part in the process of life without exception for adolescents. A variety of services are provided to meet the objectives of the adolescents in accessing the internet. Popular service accessed by adolescents among others: sending or reading e-mail (92%), browsing randomly (84%), visiting entertainment websites (83%), instant messaging (74%), and searching for information and hobbies (69%) (Lenhart, Rainie, & Lewis, 2001). These results prove that the adolescents accessing the internet excessively and do not correspond to the needs for reasons of pleasure, it is known as compulsive internet use.

Compulsive internet use phenomenon has become a serious and urgent concern among adolescents. A study in Turkey found that 4.5% of the participants (96.4% of the sample was 16 years old, 3.6% was 17 years old and above) are diagnosed having an internet addiction (Cömert & Ögel, 2009). Adolescents are at high risk of experiencing negative effects of the Internet and are considered more vulnerable to problems in the use of the internet (Johansson & Götestam, 2004). Inability to control the desire of adolescents to be online is motivated by the assumption that the online activity on the internet will distract from the problems faced and the inability to regulate aspects of their life (Young, 2007).

One of the schools which are identified experiencing internet issue among the students is St. Joseph Senior High School Malang, East Java. The interview results from school counselor in St. Joseph Senior High School Malang indicated that: (1) there is a declining in students' concentration during learning activity; and (2) frequently students browsing, accessing social media (Path, Facebook, Blackberry Messenger, Instagram, and Line) and instant messaging. This condition will influence students' academic performance such as lower learning achievement, academic probation, and drop-out (Chou, Condron, & Belland, 2005). In addition, to affect the academic students, this issue also affects the development of students. Psychologists found that compulsive internet use behavioral effects can lead to social withdrawal, loneliness, and even depression, both mild or alarming. This is, of course, a serious problem that needs to be resolved by educators, because if it continues to be ignored it can hamper student development.

According to the observation, interview, and compulsive internet use scale data results which were conducted in St. Joseph Senior High School Malang in February 2017, it is noted that compulsive internet use is influenced by dysfunctional thought factors, cognition also behavioral issues among students. In school, school counselors take an essential role and possess proficient competency to deal with compulsive internet use among students. Individual counseling is believed as the most feasible and appropriate approach to reduce compulsive internet use among students. counseling is a relationship between a person acting as a helper and person who requires assistance to solve the certain issue, to define a goal, and then to go through a series of treatment in order to obtain the desired outcome (Cavanagh & Levitov, 2002). The desired outcome from the series of treatment can be defined as development and growth involving intra-interpersonal competence, personality development, and problem-solving which is specifically identified. Counseling is also defined as a professional occupation where the counselor will generate a thought employing his or her academic capacity (Radjah, 2016), and employing varied counseling approaches and skills which have been formulated by the experts to provide an assistance (Hariko, 2017).

Related to the occurred phenomena, transtheoretical model counseling is believed appropriate for the subject. The subject undergoes compulsive internet users who consistently do checking ritual and are conscious of the issue. Subject has attempted to fight his or her compulsiveness by conducting

self-talk regarding the obsession and has strived for withstanding from not doing the compulsiveness. However, the subject's attempt frequently failed since he or she felt powerless. Presumably, there is an internal factor within the subject that discourage the attempt. It is presumably due to the subject's willingness to be freed from the compulsive behavior or the subject does not have sufficient motivation to strive more. In addition, the subject might think that what he or she does is tolerable without considering the long-term impact. Therefore, the authors choose transtheoretical model to not only change subject's behavior but also to change subject's cognition and emotion regarding the disorder to further prevent the recurrence of compulsive behavior or counseling process which is terminated in the preliminary stage.

The reason for employing transtheoretical model counseling is because of its ability in solving addiction issue within the individual. The advantage of transtheoretical model counseling lies in the implementation process of counseling. It is conducted based on a strategy which is based on individual readiness stage in changing. Transtheoretical model theoretical basis regards individual's behavior changing as a unique process of each individual. Each individual is located in distinguished level and stage regarding his or her issues and the readiness. This is, further, correlated with individual motivation and readiness to change.

Transtheoretical model counseling consists of changing stages which represent an arrangement of attitude, intention, and behavior that are correlated with individual's readiness in encountering certain behavioral changing cycle (Prochaska, DiClemente, & Norcross, 1992). These stages are ideally occurred simultaneously. This stage ideally occurs sequentially, but in some cases, fixation may occur at a certain stage, which may be due to an obstacle that can stop the step of change or not pass one or more specific stages and immediately enter the other stages. If a person fails at a certain stage in completing his or her task, he or she may experience a setback to the early stages. A person can also go through these stages many times until he or she is finally able to change the behavior that is targeted permanently.

METHOD

This research employed single subject design research approach. This design was employed to evaluate individual's behavior, where each subject takes a control over him or herself (Alberto & Troutman, 2012). This design was chosen because: (1) this design provides an opportunity for the researchers to reveal the changing occurred during the intervention; (2) this design is supported by the results of observation until it obtained stable data; (3) this design is able to control internal validity threat. This design involves the application of implementation and intervention withdrawal to verify intervention effect on the subject's behavior by frequently comparing baseline data and data obtained during the intervention. This design was used to identify the effectiveness of transtheoretical model to reduce compulsive internet use among some subjects with identical behavior. ABA Design in this research is presented in Figure 1.

Figure 1 explains three conditions within this research, namely, baseline (A) which is an initial behavior condition before obtaining intervention, intervention (B) which is a condition where the intervention is given and progressing by way of transtheoretical model counseling to reduce students' compulsive internet use, baseline (A2) is a condition where intervention has completed.

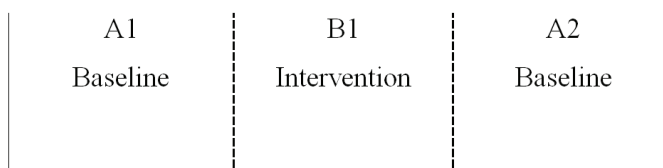


Figure 1 Basic Procedure of ABA Design (Alberto & Troutman, 2009)

The subjects of this research are four students of X graders at St. Joseph Senior High School Malang which obtained high compulsive internet use score. The determination of subject was based on the results of compulsive internet use scale completion and was supported by observation data as well as interview result with the candidate of subjects and school counselor. This research employed two instruments: (1) treatment materials and (2) data collection instrument. As for treatment materials, this research utilized transtheoretical model counseling guidebook which consists of six stages namely: (1) precontemplation; (2) contemplation; (3) preparation; (4) action; (5) maintenance; (6) termination. Meanwhile, data collection instrument of this research was compulsive internet use scale and observation guidebook.

Measurement instrument in the form of compulsive internet use scale was developed from six compulsive internet use criteria (Meerkerk, 2007). From the six indicators of compulsive internet use, then it was generated and developed 56 items of questions. The obtained items then were validated and finally, 35 items were considered valid to be utilized. Scale form of this research was referred from model suggested by Likert, a scale model which divides an area within one certain continuum with five options of the answer. It was employed to prevent the subjects in choosing a neutral option.

The data analysis in this research employed visual analysis. Visual analysis is a type of analysis which is based on data interpretation that is depicted in the graphic. Visual data analysis should take into account level and trend (Alberto & Troutman, 2012). Criteria used to identify the trend stability is 0.15%. Overlap criteria is a very effective intervention which is <10%, while effective intervention is between 10% and 25%. In addition, questionable intervention is between 25% and 50% and ineffective intervention is >50%.

RESULTS

Measurement conducted on students compulsive internet use was done through compulsive internet use scale. This measurement was done twice, before intervention (pre-test) and after intervention (post-test). The results of compulsive internet use scale completion is presented in Table 1. Besides employing compulsive internet use scale for measurement, the observation was also conducted. The results of observation are presented in Table 2.

DT Subject Analysis

Table 2 indicates that compulsive internet use of DT in baseline phase (A) is included in the high category, therefore it requires an intervention employing transtheoretical model counseling. For a detail results, compulsive internet use score of the subject during counseling is presented in Figure 2. Figure 2 indicates that tendency estimation of trend direction on baseline phase (A) increases, on intervention phase (B) decreases and on baseline phase decreases. The changing level of baseline phase (A) to intervention phase (B) and continuing to baseline phase (A¹) indicates a positive changing regarding compulsive internet use of DT counselee.

The changing of tendency direction and its effect on baseline phase (A) increases, on intervention phase (B) decreases and on baseline phase (A¹) decreases. It means that intervention employing transtheoretical model counseling positively influences on the targeted variable, compulsive internet use. compulsive internet use of the subject on baseline phase (A) is considered high. The changing of stability is seen in intervention phase (B) where subject's score of compulsive internet use decreased and further, on baseline phase (A¹), subject's compulsive internet use score is considered low. The changing level of compulsive internet use score of the subject DT was determined by calculating the margin between point data on the last session of baseline phase (A) and the initial session of intervention phase (B), and the margin between point data on the initial session of intervention phase (B) and baseline phase (A¹). The calculation result indicates that compulsive internet use of DT subject is undergoing a reduction.

Table 1 Compulsive Internet Use Scale Completion Results

Subject	Score		
	Before	After	Margin
DT	102	63	39
DV	106	58	48
DY	103	70	33
FD	102	64	38

Table 2 Compulsive Internet Use Measurement of Each Subject

Subject	Baseline Phase (A)				Intervention Phase (B)							Baseline Phase (A ¹)			
	Session				Session							Session			
	1	2	3	Mean	1	2	3	4	5	6	Mean	1	2	3	Mean
DT	58	58	59	58.33	55	50	45	42	37	34	43.83	29	24	21	24.66
DV	56	55	55	55.33	50	45	39	39	35	34	40.33	30	27	23	26.66
DY	58	60	60	59.33	57	56	52	48	45	41	49.83	33	31	28	30.66
FD	58	58	59	58.33	53	53	47	45	41	37	46	33	31	26	30

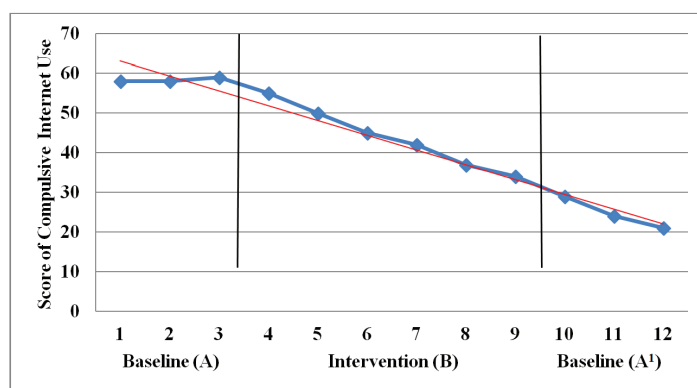


Figure 2 Compulsive Internet Use Graphic of DT Subject

Note:

- ◆ : Score of compulsive internet use
- : Trendline

Overlap data on baseline phase (A) shows that compulsive internet use level score of DT counselee obtained an upper limit amounted to 67.18, and the lower limit amounted to 49.48. Overlapping data percentage is 0%, it means that intervention employing transtheoretical model counseling is very effective (<10%) to reduce compulsive internet use of DT counselee.

DV Subject Analysis

Table 2 shows that compulsive internet use score of DV subject on baseline phase (A) is considered high and therefore, it requires an intervention employing transtheoretical model counseling. A detailed compulsive internet use score of the subject during counseling is presented in the following Figure 3. Figure 3 indicates the tendency estimation of trend direction on baseline phase (A) was horizontal, on intervention phase (B) and baseline phase (A¹) decreased. The changing level of baseline phase (A) to intervention phase (B) and continuing to baseline phase (A¹) indicates a positive changing regarding compulsive internet use of DV counselee. The changing of tendency

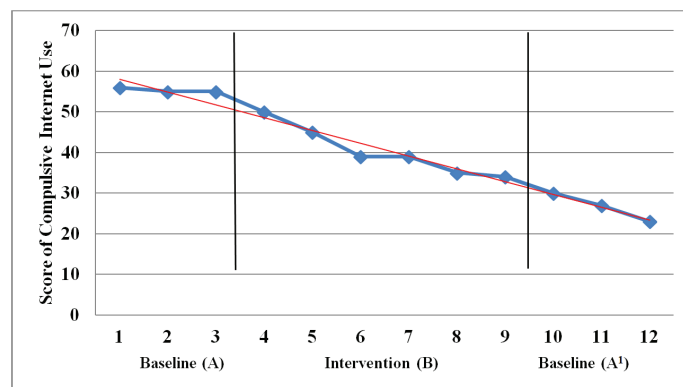


Figure 3 Compulsive Internet Use Graphic of DV Subject

Note:

- ◆ : Score of compulsive internet use
- : Trendline

direction and its effect on baseline phase (A) which was horizontal, and decreased on intervention phase (B) and baseline phase (A¹). It means that intervention employing transtheoretical model counseling positively influences on the targeted variable, compulsive internet use.

Compulsive internet use of the subject on baseline phase (A) is considered high. The changing of stability is seen in intervention phase (B) where subject's score of compulsive internet use decreased and further, on baseline phase (A¹), subject's compulsive internet use score is considered low. The changing level of compulsive internet use score of the subject DV was determined by calculating the margin between point data on the last session of baseline phase (A) and the initial session of intervention phase (B), and the margin between point data on the initial session of intervention phase (B) and baseline phase (A¹). The calculation result indicates that compulsive internet use of DV subject is undergoing a reduction.

Overlap data on baseline phase (A) shows that compulsive internet use level score of DV counselee obtained an upper limit amounted to 67.18, and the lower limit amounted to 49.48. Overlapping data percentage is 0%, it means that intervention employing transtheoretical model counseling is very effective (<10%) to reduce compulsive internet use of DV counselee.

DY Subject Analysis

Table 2 indicates that compulsive internet use of DY in baseline phase (A) is included in the high category, therefore it requires an intervention employing transtheoretical model counseling. For a detail results, compulsive internet use score of the subject during counseling is presented in Figure 4. Figure 4 indicates the tendency estimation of trend direction on baseline phase (A) increased, on intervention phase (B) and baseline phase (A¹) decreased. The changing level of baseline phase (A) to intervention phase (B) and continuing to baseline phase (A¹) indicates a positive changing regarding compulsive internet use of DY counselee. The changing of tendency direction and its effect on baseline phase (A) which was horizontal, and decreased on intervention phase (B) and baseline phase (A¹). It means that intervention employing transtheoretical model counseling positively influences on the targeted variable, compulsive internet use.

Compulsive internet use of the subject on baseline phase (A) is considered high. The changing of stability is seen in intervention phase (B) where subject's score of compulsive internet use decreased and further, on baseline phase (A¹), subject's compulsive internet use score is considered low. The changing level of compulsive internet use score of the subject DY was determined by calculating the margin between point data on the last session of baseline phase (A) and the initial session of

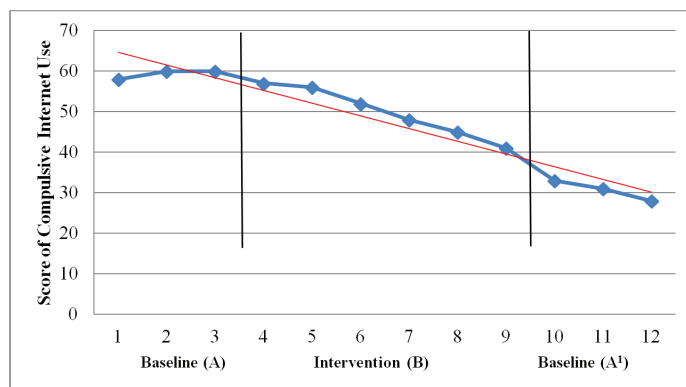


Figure 4 Compulsive Internet Use Graphic of DY Subject

Note:

- ◆ : Score of compulsive internet use
- : Trendline

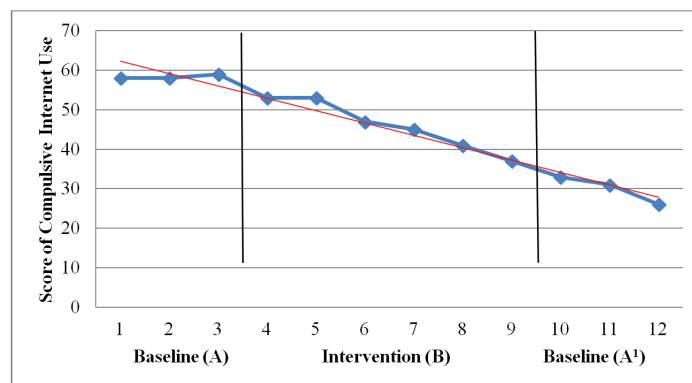


Figure 5 Compulsive Internet Use Graphic of FD Subject

Note:

- ◆ : Score of compulsive internet use
- : Trendline

intervention phase (B), and the margin between point data on the initial session of intervention phase (B) and baseline phase (A¹). The calculation result indicates that compulsive internet use of DY subject is undergoing a reduction.

Overlap data on baseline phase (A) shows that compulsive internet use level score of DV counselee obtained an upper limit amounted to 67.18, and the lower limit amounted to 49.48. Overlapping data percentage is 0%, it means that intervention employing transtheoretical model counseling is very effective (<10%) to reduce compulsive internet use of DY counselee.

FD Subject Analysis

Table 2 indicates that compulsive internet use of FD in baseline phase (A) is included in the high category, therefore it requires an intervention employing transtheoretical model counseling. For a detail results, compulsive internet use score of the subject during counseling is presented in Figure 5. Figure 5 indicates the tendency estimation of trend direction on baseline phase (A) increased, on intervention phase (B) and baseline phase (A¹) decreased. The changing level of baseline phase (A) to intervention phase (B) and continuing to baseline phase (A¹) indicates a positive changing regarding compulsive internet use of FD counselee. The changing of tendency direction and its effect

on baseline phase (A) was increased and decreased on intervention phase (B) and baseline phase (A¹). It means that intervention employing transtheoretical model counseling positively influences on the targeted variable, compulsive internet use.

Compulsive internet use of the subject on baseline phase (A) is considered high. The changing of stability is seen in intervention phase (B) where subject's score of compulsive internet use decreased and further, on baseline phase (A¹), subject's compulsive internet use score is considered low. The changing level of compulsive internet use score of the subject FD was determined by calculating the margin between point data on the last session of baseline phase (A) and the initial session of intervention phase (B), and the margin between point data on the initial session of intervention phase (B) and baseline phase (A¹). The calculation result indicates that compulsive internet use of FD subject is undergoing a reduction.

Overlap data on baseline phase (A) shows that compulsive internet use level score of FD counselee obtained an upper limit amounted to 67.18, and the lower limit amounted to 49.48. Overlapping data percentage is 0%. It means that intervention employing transtheoretical model counseling is very effective (<10%) to reduce compulsive internet use of FD counselee.

DISCUSSION

Transtheoretical Model to Reduce Compulsive Internet Use

The findings of this research indicate that compulsive internet use of the subjects were reduced significantly through the implementation of transtheoretical model counseling. The level of changing underwent by the subjects is diverse and intervention with transtheoretical model indicated therapeutic meaning in reducing compulsive internet use. Intervention with transtheoretical model underwent data variability and fluctuative score of compulsive internet use reduction. The reduction of compulsive internet use score of the four subjects is shown in the descriptive qualitative analysis of the observation and interview results. Descriptive analysis was conducted to describe therapeutic changing of the subjects during baseline phase before the intervention, intervention phase, and baseline phase after the intervention. According to the descriptive data obtained during the research, each subject studied underwent compulsive internet use reduction. This is further strengthened by visual analysis result on single subject design graphic. The visual analysis indicates that each subject studied underwent significant compulsive internet use reduction.

According to the previous research results, no research has been implemented specifically to test the compulsive internet use reduction through the application of transtheoretical model counseling intervention. However, previous studies demonstrate that transtheoretical model is effective to intervene the target behavior that has similar characteristics to the compulsive internet use. This proves that the transtheoretical model as an integrative biopsychosocial model for conceptualizing the deliberate process of behavior change is a comprehensive theory of change that can be implemented in various dimensions of behavior, nature, and population (Prochaska et al., 1992).

Transtheoretical model counseling based on interventions with a behavioral model of obesity management is effective to improve a person's ability to manage stress and improving diet (Johnson et al., 2008). Transtheoretical model counseling is also effective in increasing public understanding of the efforts to lower the risk of chronic diseases, such as cancer, type II diabetes, obesity, and cardiovascular disease (Nigg et al., 2011). Both studies analyzed that the misconduct occurred due to the lack of proper dimensional thinking of someone. Therefore, to form an effective new behavior, the cognitive aspect of a person that must be reconstructed. This is in accordance with the characteristics of transtheoretical model counseling, one of which focuses on cognitive aspects (Prochaska et al., 1992). Transtheoretical model counseling presents the conceptualization and measurement of changes in behavior, as well as facilitating a strategy that is individualized and adaptable.

One of the conducted studies also mentions that there is a significant reduction regarding alcohol, cigarettes, and illicit drugs consumption among secondary school students through the intervention of transtheoretical counseling model (Evers et al., 2012). Within the study, Internet-based transtheoretical model counseling intervention was given to 1590 students who were randomly selected from 20 secondary schools in the United States of America. The research subject was a student who possesses criteria in accordance with determined behavior target, students with alcohol, cigarettes, and illicit drugs consumption addiction. According to the findings, Internet-based transtheoretical model counseling model could be regarded as independent counseling practice or regarded as a part of intervention which provides a more intensive approach to reducing narcotics consumption addiction and so on.

Transtheoretical model counseling is proven effective in reducing violent behavior among young people from different cultural backgrounds (multicultural) (Willoughby & Perry, 2002). This strengthens the assumption that Transtheoretical model counseling is effective to intervene the targets in various aspects of behavior and can be applied to a varied population. These results are consistent with the characteristics of the study population in St. Joseph Senior High School Malang which were based on observations and interviews with the school counselor, it is known that the students in this school are from various ethnic backgrounds and social status.

According to the interview results with the research subjects, it was known that the subjects frequently interact with the internet every day, the average access is between four to seven hours a day. Each student frequently accesses the internet from handphone, smartphone, iPhone, tablet, blackberry or his or her personal laptop. The student access internet for varied activities such as playing online games, engaging in online communication (virtual communication on the internet), chatting, reading sports information, watching the video and listening to music. Recently, the adolescents access the internet to look for any information in order to develop their personal identity. (Louge, 2006).

The research subjects explained that they feel satisfied the moment they are actively engaging in the online activity. Vice versa, they will not feel pleased and unsatisfied the moment they could not access the internet. Adolescents who undergo internet addiction will surely feel satisfied when they have abundant time to access the internet (Stefanescu, Chele, Chirita, Chirita, & Ilinca, 2007). The increasing duration and repetition in accessing internet within adolescents become the main factors of the compulsive internet use issue among the subjects. The subjects will feel restless if they do not have an access to the internet. This condition is influenced by their obsessive thought which controls them. As it is known that obsessive thought becomes the major factor in compulsive behavior. Compulsive behavior is defined as a behavior with relapsing on certain behavior, in this case, is internet use. The individual which undergo compulsive internet use will feel restless, uneasy, uncomfortable and even emotionally unstable if they fail to have an access to the internet (withdrawal symptoms).

Furthermore, the research subjects explained that they have infrequent interaction with their family members since they choose to be secluded in their own room to access their favorite sites or engaging in online chatting with their friends. Even more, they frequently do chatting when they are in the middle of family or friends. If the individual is addicted to the internet, he or she will spend most of his or her time in using internet and as a result, it distracts the individual relationship with others (Essau, 2008). An individual who undergoes internet addiction will surely spend most of his or her time in accessing the internet, and thus it distracts the individual's role as a human being (Brenner, 1997).

Adolescents who undergo online games addiction possess bad academic performance (Lee, Yu, & Lin, 2007). Such condition is also occurred within subjects who have an academic issue. They do not aware that basically, their behavior in the uncontrollable accessing internet and out of necessity is a maladaptive behavior which in the future will harm them as an individual, particularly

their academic achievement. Excessive internet use will harm the individual in terms of physical and psychological, social relation, academic achievement, interpersonal relationship, and other life aspects (Young, 2007).

The high compulsive internet use behavior in senior high school is influenced by several major factors. The first factor is the development of communication technology such as handphone, smartphone, iPhone, tablet, blackberry which is correlated with the increasing intensity of internet use. The second factor is the availability of internet access such as Wi-Fi (wireless fidelity). The rapid development of internet demand which enables the availability of internet access in the home, school and the office is potentially misused by the individual (Greenfield, 1999). Such aforementioned explanations were also recognized by the research subjects DT, DV, and DY who confirmed that the Wi-Fi connection in their home provides accessible internet connection for playing online games or accessing their favorite sites in their home. The third factor is the accessibility of internet application. The last factor confirms the subject that internet use behavior is considered as something normal and usual. It is further affirmed by the subjects that consider internet as their 'best friend' which at the end they do not aware that the moment they access Google Map, Google Translate, Facebook, Instagram, and Twitter is a form of online activity.

Transtheoretical Model Counseling Implication in Guidance and Counseling Service

The findings of this research indicate that transtheoretical model counseling could be used as one of the alternative approaches for school counselor in providing responsive service to the students, particularly for students who undergo compulsive internet use with the high category. The school counselor is required to conduct need assessment initially to the students in order to understand students' condition and the reason behind the compulsive internet use underwent by students. Need assessment is imperative to be conducted (Wiersma, 1996) before school counselor takes a decision in conducting counseling process.

Transtheoretical model counseling is based on three important components namely, emotion, cognition, and behavior (Prochaska et al., 1992). Within emotion aspect, the student will be invited to understand him or herself by having self-talk. Through self-talk, the student will be able to identify and understand compulsive internet use that he or she undergoes. Students will also be invited to analyze his or her thoughts and feelings when he or she accesses internet. Further, the student will be invited to identify stimulus causing compulsive internet use within the student. Compulsive internet use identification was done by employing self-talk sheet.

Next, transtheoretical model counseling is a cognitive aspect. In a cognitive aspect, the student will be invited to comprehend obsessive thoughts which tends to direct the subject to respond to any stimulus that triggers the emergence of compulsive internet use. To identify student's cognitive aspect, then reframing is conducted. Reframing aims to restructure students' minds to have new thinking in encountering the compulsive internet use cause stimulus. Obsessive thoughts that emerged can be known from the reframing sheet that has been provided in the guidelines of research implementation.

The last aspect is behavior, as it becomes the target of this research is the compulsive internet use behavior among students. To help students overcome the compulsive internet use, it was done by directing students to perform positive behaviors the moment the obsessive thoughts to behave compulsively in using the internet appears. Students are directed to perform other activities that are more useful and can support their future.

Transtheoretical model trains students' independence to be able to make decisions in solving problems they are encountering. This is consistent with the principle of guidance and counseling as an individuation process that helps the student to become him and herself as a whole. The guidance and counseling principles are listed in Appendix of Ministry of Education and Culture no. 111 of 2014 on Guidance and Counseling on Basic Education and Secondary Education. According to the guidance and counseling principle, counselors should not intervene students in making decisions.

As discussed earlier, transtheoretical model counseling is an approach by using stages in explaining change or behavioral formation. The basic assumption of this model is that basically, individuals cannot change behavior in a short time, particularly on behavior that becomes a daily habit (Prochaska & Velicer, 1997). School counselors are advised to explore information regarding the students to find out the cause of the problem. Thus, the school counselor can understand which transtheoretical model stage of the students (pre-contemplation, contemplation, preparation, action, maintenance). This is very important because in accordance with the uniqueness of the transtheoretical model, it does not require the implementation of all stages of counseling, but it should be adjusted to the actual condition of the counselee.

In an attempt to explore problems experienced by students, it does not close the possibility of collaboration between school counselor with students' parents, considering that the problem of students is a crucial thing to be addressed. The existence of synergic cooperation between parents and teachers will be able to accelerate the provision of assistance services to students with problems, considering the problems of students can arise in both school and home. This form of collaboration with parents can be a consultation service, which is expected to serve as an alternative in exploring more concrete information about the condition of the students.

The effectiveness of transtheoretical model counseling in reducing compulsive internet use can serve as a basis for expanding the use of transtheoretical model counseling to address issues arising from other behavioral, cognitive, or psychological aspects. Transtheoretical model counseling can also be used as a guide to combining with other counseling techniques. Thereby, it is enriching counselor instruments at school to improve counseling and guidance services. The results of this study contribute to the implementation of the counseling approach in Indonesia that transtheoretical model counseling has proven effective in Indonesia and can be used as additional science in comparing theories with real conditions in the counseling process, particularly transtheoretical model counseling to reduce compulsive internet use in high school students.

CONCLUSION

The findings of the study indicate that compulsive internet use is a problem faced by most high school students. One way to deal with compulsive internet use is through transtheoretical model counseling. The use of transtheoretical model counseling has proven to be effective in reducing compulsive internet use among students as the research subjects. The effectiveness of transtheoretical model counseling is supported by the decisions and attitudes taken by the counselee him or herself, which includes the willingness of the counselee to change, the intention to reduce the intensity of accessing the internet, the willingness to change negative thoughts, and the environment as a support system.

Suggestions related to the results that can be generated are: (1) school counselors are expected to implement transtheoretical model counseling as an alternative to reducing compulsive internet use among students by making adjustments according to subject conditions and school environment; (2) subsequent research is expected to use the control group and the experimental group of research because the research results using single-subject design cannot be generalized to the wider population; (3) further researcher needs to take into account the development of transtheoretical model counseling implementation guidebook.

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