The Effectiveness of ACT based Psycho-Education Program on Social Media Disorder

Research Article

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ABSTRACT

In this research, the effect of the psychoeducation program based on the ACT on the social media disorder/addiction of the individuals is examined. A sample of the study 2017-2018 Academic year In the province of Ağrı province, education was determined by voluntary assignment among volunteer individuals. The Social Media Disorder scale was used to identify the participants and after the interview with the participants with the highest score, the participants were voluntarily assigned to the research groups by lottery method (experiment n = 14, control n = 14). The split-plot pattern was used in the study 2x3 (experimental / control groups X pre-test / post-test / follow-up test). The Social Media Disability Scale (adapted by the prosecutor, Savcı, Ercengiz and Aysan (2017) developed by van den Eijnden, Lemmens and Valkenburg (2016) as a means of collecting data in the survey was used for the Social Media Disability Questionnaire and the Personal Information Form developed by the researcher (PIF) was applied. According to the findings obtained from the research; The intervention * time effect was determined to be significant in Social Media Disorder. Bonferroni compatible multiple comparison tests and variance analysis were used to determine the source of variation between groups in social disorder. According to the findings ACT-oriented social disorder of individuals psychoeducation programs / significant decreases in addiction on the form and it was determined that this decline continued in the monitoring test. Findings obtained within the scope of the research were discussed and suggested.

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Psychoeducation, Acceptance and Commitment Therapy, Social Media Disorder

Introduction

Since social media has been conceptually expressed, it has been the subject of many researchers. The use of social media is increasingly taking place in the lifes of individuals (Vannucci, Flannery and Ohannessian, 2017). In addition to being a new form of communication, social media is composed of various parts, such as social network sites, content communities and the virtual world (Kaplan and Haenlein, 2010). These sites provide unlimited opportunities for individuals to interact, socialize, and share (Correa, Bachmann and Hinsley, 2013, Fisher and Barak, 2001). It is thought that it makes social media more attractive because of

the unlimited opportunities that individuals have presented in socializing and giving to individuals. It is stated that social media was used by 2,7 billion people in 2017 (Savcı, Ercengiz and Aysan, 2017). Considering the general population of the world, it can be said that the social media usage rate is high. According to the report of Digital in 2017 Global Overview, 60% of Turkey's population is active user of social media. Again according to the report of Digital in 2017 Global Overview, social media users in Turkey are given 3 hours per day for social media platforms. Griffiths and Szabo, (2013) indicate that individual addictions are online activities accessed via the internet. Social media platforms are at the forefront of online activities via the Internet. As a matter of fact, according to Google Play data, social media applications are among the top free most popular applications (https://play.google.com/store/apps/collection/topselling_free?hl=tr).

In DSM V, while internet addiction is assessed in the category of temporary disorders, social disorder is not included in these addiction categories. Indeed, when individuals' addictions are not internet, they are online activities that are accessed via the internet (Griffiths and Szabo, 2013), social media addiction can also be considered in this category. In addition, literature review shows that social media addiction can be assessed in other addiction categories (van den Eijnden, Lemmens and Valkenburg, 2016).

Marlatt, Baer, Donovan and Kivlahan, (1988) are described addictive behavior patterns as an example of recurrent habits that are related to physical, personal, and social problems. Addiction can be defined as having a strong desire for the object, losing control of the objection from time to time, and ultimately insisting on the acquisition of the addiction object (Shaffer, Hall and Bilt, 2000).

There are many psychological counseling approaches to the treatment of addictive behavior patterns that constitute a major problem area of the modern world. The third-generation cognitive-behavioral approach, Acceptance and Comminment Therapy, is a new generation of treatment approaches that adopt specific approaches to the treatment of addictive behavioral patterns.

Acceptance and Comminment Therapy is based on the pragmatic philosophy of functional contextuality (Biglan and Hayes, 1996; Hayes, 1993), which is a special kind of contextualism, with certainty, scope and depth as the target (Hayes, 1993). It is based on the Relational Framework Theory, which is the underlying cognition and language theory underlying the ACT (Hayes, Barnes-Holmes and Roche, 2001).

According to the ACT approach, it is said that verbal processes are usually cognitively and intellectually placed. The main problem for many individuals is cognitive processes (Hayes, Stroshal and Wilson, 2003). Nevertheless, the ACT model consciousness is approached in a technical way by taking the nature of such verbal action. In the ACT model, the verbal content is emphasized as a key element in verbal contextual behavioral approach (Hayes, Follette and Lindehan, 2004; Hayes, Luoma, Bond, Masuda and Lillis, 2006). The problem is not that the individual's thoughts are wrong, the problem is that the overuse of thought and verbal community as a mode of behavioral regulation is supported. In other words, psychological problems arise from the general lack of associative skills (eg in the case of mental retardation), but the main source of psychopathology is the way in which communication with the direct possibilities leads to change or insufficiency in terms of long-term consequences of comprehension and language. According to ACT approach, there are certain fundamental processes that influence the emergence of psychological rigidity is the main cause of psychopathology. These are; experiential avoidance, limited self-awareness, cognitive merger, the value of unawareness, conceptualized self-commitment and useless process (Hayes, 2004; Hayes, Luoma, Bond, Masuda and Lillis, 2006; Harris, 2009).

In the ACT approach, psychological intervention is described in terms of six normal psychological processes surrounding a single core concept (Hayes et al., 2006). The concept of psychological flexibility has been adopted as a core concept. In order to achieve psychological flexibility, it is necessary to focus on this

time, Being Accepted, Value Oriented Life, Cognitive Decomposition, Stable Behavior and Contextual Situations related to each other (Hayes et al., 2006).

Addiction is considered in two dimensions; they are addicted on a substance (alcohol, cigarette, etc.) and addicted on a behavior (Kahraman and Kurtoglu, 2009). Therefore the social disorder / addiction can be addressed in the category for addiction behavior. Cognitive-behavioral therapies gave positive results in addiction treatments (Nastally and Dixon, 2012). One of them is ACT that is a third generation behavioral-cognitive therapy (Hayes, 2004).

Studies show that ACT is very effective in the treatment of addictions (Gifford, Kohlenberg, Hayes, Pierson, Piasecki, Antonuccio and Palm, 2011; Bricker, Copeland, Mull, Zeng, Watson, Akioka and Heffner, 2017). Thus, the study was carried out with the support of the literature results.

After the evaluation of the information that given on the field, it can be said that social media addiction / impairment is a major problem of the science of psychology in the Turkey and World. It has been determined that studies on the literature of the field are generally related to internet addiction and especially social media addiction are related to relational screening models and there is a serious lack of literature on studies of experimental type related to social disorder / addiction. The study was carried out with the thought that it would accumulate important data about the filling of the existing literature gap and the treatment of addictions.

Method

Model of Research

Within the scope of the study, experimental and control groups and preliminary test, posttest and follow-up measurement 2x3 experimental design were used. The first factor is independent treatment groups (experiment and control) and other factors are repeated measures of various conditions of the dependent variable (pre-test, post-test and follow-up measurements) (Büyüköztürk, 2013). The experimental design is shown in Table 1 with pre-test, post-test and control groups. After applying Social Media Disorder (SMDQ) in the study, 10 session psycho-education programs prepared by the randomly assigned researcher for the experimental group. During the application, Participants in the control group were not subject to any intervention. One week after completion of the psycho-education, all participant Social Media Disorder Questionnaire (SMDQ) was re-administered as a final test. Finally, Social Media Disability Questionnaire (SMDQ) was reapplied 10 weeks later to study persistence.

Working Group

The study group consisted of 28 students (14 experiments and 14 control groups) studying in different high schools in Ağrı province in the academic year of 2017-2018. The average age of the individuals in the experimental and control groups is 16. There were 14 participants (8 women, 6 men) in the experimental group and 14 participants (6 women, 8 men) in the control group. Within the scope of the study, the selected institutional support and physical conditions (DeLucia-Waack, 2006), which should be included in the psychoeducational groups, were taken into consideration. For this purpose, interviews were made with the administration of the university and an advisory room with the necessary physical facilities was determined.

Data Collection Tools

Information Collection Form

The Personal Information Form (PIF) prepared by the researcher was used to obtain data on participants' personal variables. The information form is composed of a number of questions to determine the

factors that may affect the outcome of the research on gender, age, class level, whether or not participation in psychoeducation programs is earlier or later.

Social Media Disorder Scale (SMDS)

The Social Media Disorder Questionnaire, developed by Van den Eijnden, Lemmens and Valkenburg (2016), adapted by the Savcı, Ercengiz and Aysan (2017) is a Likert type measure consisting of 9 items and one dimension. This one-factor structure was tested using confirmatory factor analysis (CFA) on two separate samples. As a result of the analysis, the social media disorder model was seen to have good compliance values in each of the two samples (Sample 1: $\chi2 = 39.237$; df = 27; $\chi2 / df = 1.453$; RMSEA = .055; GFI = .95; AGFI = .91; CFI = .97; IFI = .97; TLI [NNFI] = .96; and Sample 2: $\chi2 = 50.725$; df = 26; $\chi2 / df = 1.951$; RMSEA = .072; GFI = .94; AGFI = .90; CFI = .94; IFI = .94; TLI [NNFI] = .92). The #SMDS's Cronbach alpha coefficients were determined to be .83, .86, and .86, and the three-week test-retest correlation to be .805. The scale has no reverse scoring, and high scores indicate an increased risk of social media disorder/addiction (Savci et al., 2017).

Collection of Data

Participants attended to this study, are from different high schools in the province of Agri in the academic year of 2017-2018. The 350 students in these departments have applied the Social Media Disability Questionnaire (SMDQ) and the Personal Information Form (PIF) to determine the participants to be selected by the researcher for the experimental and control groups. In addition to this, the response form of the survey is given in addition to the scale form, and it is stated that the research made to the participant will be kept secret and used within the scope of scientific research before the application.

Factors affecting the internal and external validity of the study and taken measures

This study is an experimental design. Investıgatıon of results ın the context of research. degree of significance and generalization rate is indicates the degree of external validity (Arık, 1998). As a result of the information provided, attention has been given to its suitability to environmental conditions that In order to ensure external validity as specified by Maxwell (1992), the subject investigated within the generalized validity of one of the five dimensions.

In addition to this, the Measurement-Response Impact Effect specified by Bulduk, (2003) has been tried to be controlled in order to ensure the validity of the environment. For this purpose, attention has been given to establishing a certain period between the beginning of the sessions (1 week), end-tests and end of sessions (1 week) and pre-tests and follow-up measurements (3 months). In order to generalize the results obtained in the study more attention was given to group numbers. Follow-up measurements were made three months after the end of the psychoeducation sessions. Thus, it was tried to determine the effect level of the changes occurring within the scope of "Time-Treatment" context.

Study has been made to ensure the internal validity of the study. Internal validity: the changes set out in the dependent variable is the ratio to explain argument (Büyüköztürk, 2013). In studies to ensure the internal validity of the study, all participants in the experimental and control groups used the same measurement tools that used in all measurements under group supervision and avoided sharing information about what the scale was measuring.

Data Analysis Techniques

During the analysis of the data, in order to reach a decision regarding the scale to be used, attention has been given to homogeneity and normality distribution of variances with prerequisites for the application of parametric tests (Büyüköztrük, 2013). According to results of analysis, it was found that skewness and kurtosis of the scores of experimental and control groups from Social and Behaviora Disorders Scale were between -1 and+1 (F = .859) , p> .05). Homogeneity test results of experimental and control groups' pre-test mesures are

given. As a result of the analysis, it is determined that the difference between the mean scores of the pre-test measures in the Social Media Disorder Scale of the individuals in both groups (F = .454, p> .05) was not significant. These findings indicate that the data are homogeneous.

According to the results of the Mauchly Globalness Test, the Social Mediating Disorder Scale was determined to be W (2) = .135, p <.05 for repeated measures taken at different times. For this reason, the Greenhouse-Geisser Correction was performed and the F ratios (f-ratios) automatically calculated by SPSS were used.

Results

Table 1. Arithmetic Mean and Standard Deviation Values for Pre-test, Post-Test and Follow-up Test Scores of the Social Media Disorder of Experimental and Control Groups

Measurement	Groups	Pre-test		Post-test		Follow-up test	
		$\bar{x}$	ss	$\bar{x}$	ss	$\bar{x}$	ss
Social Media Disorder	Experimental group N=14	3.793	.660	2.166	.376	2.325	.381
	Control group N=14	4.015	.454	3.920	.480	3.815	.427

When the descriptive Table 1 for the scores of the Social Media Disability Questionnaire (SMDQ) pre-test and post-test follow-up test was evaluated, it was seen that the participants in the experimental group had an average pre-test score of 3.79, a final test score of 2.17 and a follow-up test score of 2.33. In the control group, mean pre-test score was 4.02, final test score average was 3.92 and mean follow-up score was 3.82.

Table 2. Results of Two Factor Analysis of Variance of Pre-test, Post-Test, and Follow-up Test Scores on the Social Media Disorder Questionnaire of the Experimental and Control Groups

Source	Squares Total	Sd	Squares Means	F	p
MEASUREMENT	946.714	1	946.714	1827.879	.000
MEASUREMENT * GROUP	29.762	1	29.762	57.463	**.000**
FAULTY MEASUREMENT	13.466	26	.518		

As shown in Table 2, participants in the experimental and control groups were found to have a significant group effect as a result of analysis of variance on the mean scores of the Social-Media-Disorder Scale pre-test, post-test and follow-up measures (F (1-26) 57.463; *p* <.001). Accordingly, it can be said that the difference between the scores obtained from the Social Media Disorder Scale is significant, without distinction between pre-test, post-test and follow-up measures of the experimental and control groups. The identification of the source of difference can be achieved by examining the averages of the measurements. For this purpose, descriptive statistics on pre-test and post-test and follow-up measurements are given. When Table 1 is examined, it is seen that the pre-test score average (= 3.79) of the Social Media Disability Questionnaire of the experimental group is critically different from the post-test average (= 2.17) and follow-up test score average (= 2.33). When the average score of the post-test and the follow-up test is taken into consideration, it can be said that the training applied in the experimental group is permanent.

Table 3. ANOVA Results for Repeated Measurements on Social Media Disorders According to Wilks Lamda Statistic

Effect	Wilk's λ	Sd	F	p	η^2
Time	0.675	1	2,89	0.94	.325
Time*Response	0.117	1	74,89	0.00	.892

When the analysis of variance given in Table 3 is examined, For the time of the Social Media Disorder, Wilks' λ = .675, F (2.22) = 2.89; p <.005 was found to be significant. Likewise, time intervention interaction factors were also found to be significant (Wilks' λ = .117, F (2.22) = 74.89; p <.001). Comparisons of the control group with the experimental group in the context of the results showed that the participants in the experimental group had significantly different rates of Social Media Disorder in the pre-test, post-test and follow-up test results.

Table 4. Binary Comparison (Bonnonni Compatible) Test Results On The The Pre-Test, Post-Test And Follow-Up Test Score Averages Of The Experimental And Control Groups' Social Media Disorder Outcome

Bonferronı Test Results							
		Experiment			Control		
		Pre-test Mean Difference	Post-test Mean Difference	Follow-up Mean Difference	Pre-test Mean Difference	Post-test Mean Difference	Follow-up Mean Difference
Experiment	Pre-test		1,627	1,468		,861*	.782*
	Post-test	-1,627		-,159			
	Follow- up	-1,468	,159			-,079	
Control	Pre-test					,095	,095
	Post-test				-,095		,000
	Follow- up				-,095	,000	

As a result of examining the results obtained from the bonferonni-compatible comparison test in Table 4, it was determined that the individuals in the experimental group had a significant difference between the mean of the pre-test scores (= 3.79) and (= 2.17) the final test scores (P <.01). Likewise, it was found that the difference between the mean of the pre-test score (= 3.79) and the mean of the follow-up test score (= 2.33) in the experimental group was also significant (p <.05). It was seen that the average of the final test scores (= 2.17) and the follow-up test scores (= 2.33) for the individuals in the experimental group were not significant at the mean level in favor of the follow-up measurement scores. In other words, for the experimental group, it was determined that the difference between two means (post-test-monitoring) averages was not significant (p> .05). In Table 4 it is seen that the values of the test group data from both the posttest and follow-up test measurements are lower than the average of the control group posttest and follow-up measurements, when the values for the simultaneous measurements of the experimental and control groups are taken as a whole. According to these values, it can be said that the level of Social Media Disorder was significantly lower than the level of Social Media Disorder of the control group after completion of the experimental process of the experimental group and within the 3 month monitoring process.

Conclusion and Discussion

It was determined that the experimental and control groups did not show any significant difference between the pre-test scores of the social disorder scale but the experimental group showed lower mean scores at the post-test and follow-up test scores. In addition, it was determined that there was no significant difference between pre-test, post-test and follow-up test in the social media impairment measures in the control group.

However, there was a significant difference between pre-test scores and post-test and follow-up test scores but no significant difference was found between post-test and follow-up test scores in the experimental group. For this reason, it can be said that the ACT-oriented psycho-education program applied to the experimental group reduces social media impairment scores and is a permanent effect of the psycho-education program.

Crosby and Twohig (2016) found that the addiction of the individuals in the pornography test group significantly decreased after the therapy sessions with the PPE-oriented group they applied to adolescents with pornographic content addiction. Again, Twohig and Crosby (2010) found that participants after a therapy session with a ACT-oriented group showed a significant decrease in internet addiction rates. It can be said that the work carried out so far supports the results of the literature.

Addiction is generally grouped into two categories. These are behavioral addiction and substance addiction (Karaman and Kurtoglu, 2009). When we look at the aetiology of addiction, it will be seen that both behavioral and substance-related addictions are very similar. Thus, at the approach of the ACT approach to addictions, it can be determined that there is no general separation of addiction on the substance and addiction on the behavior.

A number of studies have been carried out in the general addiction-oriented ACT-related sample and have achieved high success (Gifford, Kohlenberg, Hayes, Pierson, Piasecki, Antonuccio and Palm, 2011, Twohig and Crosby, 2010, Crosby and Twohig, Bricker, Mull, Kientz, Vilardaga, Mercer, Akioka, Heffner 2014; Bricker, Copeland, Mull, Zeng, Watson, Akioka and Heffner, 2017). One of the main reasons for the success of the interventions in the sample of addiction is the intervention methods that the ACT has formed around the main axis of self awareness of the individuals. The main axis of awareness of the intervention methods created from the ACT basic philosophy is based on focus on moment, reliance on the conceptual self, and ultimately on achieving psychological flexibility (Hayes and Strosahl, 2004; Harris, 2009).

When the studies conducted in the ACT-oriented addiction sample are examined, one of the notable concepts is the addiction on the conceptualized self. The conceptualized self is a rigid opinion of individuals about their own selves as a result of internal and external influences (Hayes and Gregg, 2001).

In studies conducted on OCD diagnosed individuals, it was determined that individuals developed their own behavioral patterns and a linear parallel decrease in conceptualized addictive behavioral models as a result of psychiatric counseling focused on ACT. Thus, it can be concluded that the conceptualized self is a predictor of addictive behavioral patterns. In this context, it can be concluded that the result of the research shows that the data obtained regarding the social media use disorder assessed in the behavioral addiction category give consistent results with the field text and that the intervention methods used to reduce the conceptualized self among the interventions themselves cause the participants to decrease the social media impairment measurement scores. When the studies conducted were examined, it was determined that the levels of awareness and moment-focused lifestyles of individuals who showed addictive behavior patterns were low as well as cognitive fusion levels (Kishita, Muto, Ohtsuki and Barnes-Holmes, 2014). In the study conducted, ACT-oriented interventions were used to raise awareness and time-to-live levels of the individual and to reduce addiction on cognitive integration and conceptualized self, taking into account the results of the field literature. Thus, it can be said that the meaningful differentiation between the scores of the post test and the follow-up scores is not influenced by the social disorder impairment pre-test scores of the individuals in the experimental and control groups, but the intervention methods used in the study, which stem from the basic philosophy of the Acceptance and Stability Therapy, are effective.

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