

The effectiveness of Barlow's extra diagnostic treatment on emotional self-control of adolescents with nomophobia

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Introduction: Trans diagnostic treatments are third wave treatments that can be effective in emotional self-control and achieving mental health. The purpose of this study was to investigate the effectiveness of Barlow's extra diagnostic treatment on emotional self-control of 14-18-year-old adolescents with nomophobia.

Research method: The research design is semi-experimental with pre-test-post-test and follow-up with a control group. 32 adolescent girls were selected from among adolescents aged 14-18 years old in Isfahan city and then randomly replaced in two groups of 16 people, experimental and control. The experimental group received Barlow et al.'s met diagnostic therapy in the form of 12 90-minute sessions. The research tools of Nomophobia Questionnaire were developed by Azadmanesh et al. and emotional self-control. The data was analyzed by variance analysis with repeated measurements and SPSS version 23 software.

Findings: The results of the research showed at a significant level ($P < 0.01$) that Barlow's trans diagnostic treatment was effective on emotional self-control.

Conclusion: Therefore, it can be concluded that, along with other psychological treatments, Barlow's meta-diagnostic treatment can be used especially for the emotional self-control of adolescents with nomophobia, so that adolescents can reach self-control from another control.

Keywords: Adolescents, Barlow's overdiagnosis, Emotional self-control, Nomophobia

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Introduction:

Among the communication tools, access to mobile phones is easier. As a communication medium, mobile phone has grown rapidly compared to other mass media and its expansion mainly dates back to this last decade. Despite this short life, the cultural effects of mobile phones on personal and social relationships are so prominent and appreciable that they have provided new research fields for sociologists, psychologists and researchers, effects such as facilitating communication, reducing time barriers and A place in communication is the expansion of the information network and the possibility of always being available and quick exchange of information, the possibility of using the Internet at any time and accessing any information at any place (1).

The most basic and main purpose of using a mobile phone is the possibility of verbal and audio communication through this medium (2).

One of the disadvantages of mobile phones is mobile-phobia disorder. Nomophobia is considered a problematic use of mobile phones. Therefore, as a situational fear in the phobias subgroup, it is placed in the fifth diagnostic and statistical manual of mental disorders(3), which has caused the occurrence of depression, anxiety, loneliness and other disorders(4).

Nomophobia is probably associated with Internet addiction. Yang (5) defined Internet addiction as a pattern of pathological gambling and as an impulse control disorder. Internet addiction is associated with negative emotional, psychological and probable consequences(6) which affects the communication and interactions of teenagers, in the meantime, the emotional self-control of the teenager becomes variable and impaired and becomes the basis for other unevenness in his life path.

Emotional self-control in adolescents with nomophobia is another variable that was investigated in this research. That is, a person suffering from nomophobia does not need self-control and cannot manage his consumption. They get excited and use the mobile phone every time more than they intended, until in some cases they even ignore their instinctive needs such as eating. Therefore, it seems that people with nomophobia are not successful in regulating emotion and have problems in regulating emotion ((7; (8); (9)).

The importance of studying this skill is because this skill has various effects on different aspects of a person's life, interpersonal interactions, mental health and physical and physical health of a person, and it is one of the factors that is necessary in order to adapt to stressful life events. 11). Research shows that self-control is associated with positive emotions, better commitment (12), self-esteem (13), higher academic achievement (14), reduced aggression (15) and less school-related problems (16).

One of the psychological interventions that can target this special population is transdiagnostic intervention.

Barlow's transdiagnostic intervention teaches patients how to face their unpleasant emotions, experience them and respond to their emotions in more adaptive ways. Barlow's transdiagnostic treatment, while correcting the clients' emotional habits, aims to reduce the intensity and incidence of maladaptive emotional experience, and improve the client's functioning (18).

Considering the importance and necessity of investigating nomophobia among teenagers, the present study was aimed at the effectiveness of Barlow's approach on the emotional self-control of teenagers.

Research method:

The method of the current research was a semi-experimental with a control group with pre-test and post-test. Population, sampling method and sample size: The population of the study was 14-18-year-olds from Isfahan city. Sampling method has been available and the sample of this research included adolescent girls of the second year of high school in Isfahan. In this way, all the people participating in the research were in the age range of 14-18 years. A nomophobia questionnaire was administered to a number of girls, and among them, 32 people who had a nomophobia score higher than 35 were randomly assigned to two groups of 16 experimental and 16 control groups. The inclusion criteria are: having a desire to participate in the research, age range from 14 to 18 years, having nomophobia (phobia of not having a mobile phone) on the implementation of a nomophobia questionnaire to measure the disorder of not having a mobile phone phobia (19). And the exclusion criteria are: unwillingness to continue treatment, having lower than average nomophobia or severe nomophobia requiring the help of psychiatric treatments, taking psychotropic drugs as diagnosed by a psychologist, suffering from acute and chronic psychological disorders and being treated through Psychiatric treatments, failure to attend more than two training sessions and people participating in various types of psychological training simultaneously with the period between the baseline measurement and the post-intervention point (60 days after the baseline) were also excluded from the study. Measurement tools: Nomophobia questionnaire (screening): The nomophobia questionnaire is used to measure mobile phobia disorder, which consists of 14 questions. Azadmanesh, Ahadi and Manshai (19). A researcher-made emotional self-control questionnaire: Using sources in the field of emotional self-control, a set of questions was compiled and designed to measure emotional self-control. It has 20 questions that are scored using a five-point Likert scale (completely false to always true). It can be The maximum score is 100 and the minimum score is 20. The research method was that the participants were assigned to two experimental and control groups using a random counting list by an independent researcher. Before the intervention, all participants completed the informed consent form. The experimental group received 12 90-minute sessions of Barlow et al.'s transdiagnostic therapy (2011) on a weekly basis, the content of which is presented in Table 1. The control group did not receive treatment. The subjects of the two experimental and control groups were assessed with the emotional self-control questionnaire developed by the researcher in the pre-test, post-test and after three months of follow-up. For data analysis, the data was analyzed in the descriptive

part of the mean and standard deviation and in the inferential part of the analysis of variance with repeated measurements using SPSS software version 23.

Results:

According to the demographic results, in Barlow's transdiagnostic group, the mean and standard deviation of the age of adolescents with nomophobia was equal to 15.687 (1.35) and 15.812 (1.51) in the control group. In Barlow's transdiagnostic intervention group, most of the mothers of adolescents with nomophobia had diploma and sub-diploma education, equal to 7 people (43.8 percent), and in the control group, 7 people (43.8 percent) had bachelor's education. In Barlow's transdiagnostic intervention group, most of the fathers of adolescents with nomophobia had diploma or sub-diploma education, equal to 7 people (43.8 percent), and in the control group, 6 people (37.5 percent) had bachelor's education or higher.

Table (1) Results of variance analysis with repeated measurement of emotional self-control

Variable		source	sum of squares	DF	mean square	F	P	Eta squared	Test Power
emotional self-control	Intragroup	Time	443/688	1/340	331/160	1/50311	0/001	0/788	1/000
		Time×group	468/271	1/340	349/508	1/68117	0/001	0/797	1/000
		Interaction	119/375	4/1940	2/970				
	Intergroup	On Error(time)							
		Group error		376/042	1	376/042	4/712	0/038	0/136
			2394/250	30					

According to Table No. 1, it is observed for emotional self-control, in the intra-group effect section, the time factor and the interaction of time and group show that there is a significant difference in emotional self-control in terms of time and the interaction of time with the group (01 ($p < 0$) and Barlow's trans diagnostic intervention had a significant effect on improving the emotional self-control of adolescents with nomophobia, and these effects in the post-test and follow-up stage showed the success of the intervention. The results of this research are similar to those of Sherfi et al. (20), Mahdiun et al. (21), Pour Mohseni et al. (22), Soleimani (23), Sebastian et al. (24), and Zirak Besh et al., Sarfan et al. (26) and Nazari et al. (27) were consistent. Also, in the group effect section, there is a significant difference ($p < 0.01$) in the group factor.

Conclusion:

Research results show that these people use mobile phones more to suppress their anxiety and tensions. Therefore, they become dependent on the mobile phone and finally, they may experience more mobile phobia. And probably, openness to experience can lead teenagers to extensive use of smartphone apps, and these people find low flexibility in using mobile phones (28). Due to the desire to use the smartphone, these people become dependent and finally, nomophobia occurs in these people. Barlow's transdiagnostic intervention makes the adolescent have a better understanding of the interaction of thoughts, feelings and behaviors in creating inner emotional experiences. One of the important parts of transdiagnostic treatment was understanding the adaptive nature of emotions and increasing emotional awareness using mindfulness techniques (29).

Limitations of the research:

Lack of sufficient internal and external background to collect information on emotional self-control, emotional self-control, which were new and up-to-date. Care should be taken with other age groups of teenagers and also the sample of this research was limited to teenage girls in Isfahan city, so one should be cautious in generalizing this research to teenagers of other cities. Not having a suitable tool to measure the research variable of emotional self-control was the reason that we finally decided to make a tool after many studies.

Ethical considerations: 1- Obtaining the code of ethics from the ethics committee of Islamic Azad University. 2- Obtaining permission and an official introduction letter to attend the first and second grades of high school in Isfahan city. 3- Teenagers were assured about privacy and confidentiality of information. 4- Using the information obtained from the research only in line with the scientific goals of the research.

Conflict of interest:

The authors declare that there is no conflict of interest regarding the present research.

Application of the research:

from Barlow's transdiagnostic intervention in educational centers such as schools, which are active in relation to adolescents with nomophobia, in addition to academic training, to the teaching of emotional self-control skills in educational, therapeutic, counseling centers and hospitals that are related to They are working with teenagers suffering from nomophobia, besides drug interventions and rehabilitation, they use individual psychological interventions to improve the symptoms and consequences and roots of nomophobia in teenagers.

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