The Effect of Assertiveness Training on Loneliness and Social Anxiety in Female Students with Nomophobia Disorder

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Abstract

This research aim was to investigating the effect of assertiveness training on loneliness and social anxiety in female students with nomophobia disorder. It was a semi-experimental method with pretest-posttest design and control group. The research population included all the third grade female high school students of Karaj. By random cluster sampling method, 30 students who scored this disorder above the cut-off point (60) were selected and randomly assigned to experimental and control groups. Both groups completed Social-Emotional Loneliness Scale for Adults, Social Phobia Inventory and Nomophobia Questionnaire, in pretest and posttest. The experimental group received the assertiveness training group program during eight, 90-min sessions, twice a week. Results of multivariate analysis of covariance showed significant differences between the mean scores of two groups, in terms of components of loneliness and of social anxiety. Accordingly, it is suggested psychologists and counselors to use the training program to reduce the loneliness and social anxiety of students.

Keywords: Anxiety, assertiveness, loneliness, nomophobia, students

Introduction

These days, mobile phones take place major part of communications. Some studies indicated that excessive social media addiction can result from mental problems such as anxiety, feeling of loneliness, and fear. According to studies, excessive and improper use of mobile phone can disturb people's moods and lead to seclusion, decreased interpersonal relationships and social interactions, aggression, and the feeling of loneliness (Pontes, et al., 2016). Jin & Park (2015) found that face-to-face interactions are related to low levels of loneliness, and mobile phone communication is related to the feeling of loneliness.

According to studies, assertiveness training is effective in increasing the students' decision making power, innovation, and mental health (Akbari Kelor, 2019). Fuspita, et al. (2018), Avşar & Alkaya (2017) claimed that assertiveness training can effectively decrease shyness and the feeling of loneliness in students, and increasing their interpersonal relationships. Pasha (2018)

indicated that assertiveness training can effectively increase the students' assertiveness. According to above statements, this research is aimed at investigating the effect of assertiveness training on the feeling of loneliness and social anxiety in female students with nomophobia.

Method

This research is a semi-experimental study with pretest-posttest design and control group. The population includes all the female high school students of Karaj in the first semester of the academic year 2018-2019. Sampling was done via random cluster sampling method (The samples were selected from Karaj, 2 districts, two schools from each district and 2 high school second grade classes from each school). Then, Nomphobia Questionnaire was distributed among the students of all classes (172 people), and 30 students who scored above the cut-off point of nomophobia disorder (60) were chosen, and assigned to two experimental and control groups (15 people each). The inclusion criteria included: getting an above cut-off score of nomophobia test, and the ability and willingness to participate in the sessions. The exclusion criterion was absence for more than two sessions. The research tools were Social and Emotional Loneliness Scale for Adults (SELSA-S), DiTomasso et al., (2004) with Cronbach's alpha coefficient of 0.79, 0.83, 0.81, at present study, Social Phobia Inventory, New self-rating (SPIN), Connor et al., (2000) with Cronbach's alpha coefficient of ۰٫۸۰, 0.82, 0.83 at present study, and Nomophobia Questionnaire (NMP-Q), Yildirim & Correia(2015), with Cronbach's alpha coefficient of 0.79 at present study.

Results

Table 1- The mean and standard deviation of the variables in pretest and posttest for each of the experimental and control groups. The assumption of normality of the data has been observed.

Variable	Components	Group	Experimental		Control		Kolmogorov-Smirnov	Significance	Levene	Significance
			Mean	SD	Mean	SD				
Loneliness	Romantic	Pretest	16.47	4.56	16.23	4.27	0.11	0.98	0.32	0.11
		Posttest	10.23	4.21	16.33	4.34	0.20	1.52	0.22	0.20
	Family	Pretest	17.80	4.44	18.16	4.89	0.17	0.18	0.67	0.17
		Posttest	11.45	4.67	18.45	4.78	۰٫12	0.13	0.71	0.12
	Social	Pretest	15.53	3.80	15.27	3.97	0.05	3.34	0.07	0.05
		Posttest	10.03	3.67	15.33	3.67	0.20	0.09	0.92	0.20
Social anxiety	Fear	Pretest	12.58	2.12	12.47	2.14	0.20	0.66	0.42	0.20
		Posttest	8.15	2.09	13.15	2.80	0.20	0.28	0.60	0.20

Avoidance	Pretest	13.73	2.83	14.70	2.78	0.20	0.04	0.82	0.20
	Posttest	7.78	2.51	14.78	2.42	0.20	0.01	0.91	0.20
Physical	Pretest	10.83	2.19	10.59	2.10	0.18	1.79	0.18	0.18
arousal	Posttest	5.75	2.11	11.77	2.41	0.20	1.90	0.17	0.20

The results of testing the assumption of regression slope homogeneity showed that the data support the assumption of homogeneity of regression slopes at the significance level of (P > 0.05). Also, according to the results of multivariate analysis of covariance in table 2, error type 2 is not possible and the researcher can use analysis of variance (ANOVA) test.

Table2. Multivariate analysis of covariance of the effect of group on the loneliness and social anxiety

Variable	Test	Value	F	DF	DF for error	Sig	Eta squared
Feeling of loneliness	Pillai's effect	0.84	15.90	3	21	0.001	0.84
	Wilks' Lambda	0.15	2.93	3	21	0.001	0.84
	Hotelling effect	5.61	2.93	3	21	0.001	0.84
	Roy's largest root	5.61	2.93	3	21	0.001	0.84
Social anxiety	Pillai's effect	0.48	4.87	3	21	0.001	0.48
	Wilks' Lambda	0.51	4.87	3	21	0.001	0.48
	Hotelling effect	0.92	4.87	3	21	0.001	0.48
	Roy's largest root	0.92	4.87	3	21	0.001	0.48

As seen in table 3, by controlling the effect of pretest, there is a significant difference between the mean posttest scores of romantic loneliness, family loneliness, and social loneliness (P < 0.001). Also, there is a significant difference between the mean posttest scores of fear, avoidance, and physiological arousal (P < 0.001).

Table3. The results of ANCOVA for the effect of assertiveness training on components of loneliness and social anxiety

Variable	Components	Source of change	Sum of squares	DF	Mean squares	Sig	F	Eta squared
Lonelin	Romantic	Pretest	890.77	1	890.77	0.001	173.34	0.79

ess		Group	328.04	1	328.04	0.001	126.34	0.76
	Family	Pretest	860.94	1	860.94	0.001	678.59	0.82
		Group	160.77	1	160.77	0.001	125.58	0.71
	Social	Pretest	901.02	1	901.02	0.001	678.23	0.81
		Group	162.12	1	162.11	0.001	153.43	0.78
Social anxiety	Fear	Pretest						
		Group	5678.30	1	5678.30	0.001	1516.98	0.95
			5534.13	1	5534.13	0.001	1132.45	0.92
	Avoidance	Pretest	4945.80	1	4945.80	0.001	987.89	0.97
		Group	4896.34	1	4896.34	0.001	875.63	0.94
	Physiological arousal	Pretest	1840.57	1	1840.57	0.001	293.49	0.96
		Group	1578.83	1	1578.83	0.001	245.79	0.89

Discussion and conclusion

Testing the first hypothesis showed that assertiveness training affects the components of loneliness in students with nomophobia. This finding is consistent with the results of the studies performed by Pasha (2018), and Avşar & Alkaya (2017). This finding can be explained by the fact that assertiveness training is significantly effective in increase of interpersonal interactions, and they enable people to effectively communicate with their surrounding environment adapting themselves to their society. This optimal adaptability creates a sense of self-worth and provides the ability to counter psychological stress; finally, it leads to decrease of the feeling of loneliness (Akbari Kelor, 2019).

Testing the second hypothesis showed that assertiveness training affects the components of social anxiety in female students with nomophobia disorder. This finding is consistent with the results of the studies performed by Pasha (2018), and Fuspita et al (2018). As education of other social skills, it is rooted in psychotherapy methods such as behavior therapy, and it helps people to have an appropriate reaction to unfavorable and critical conditions (Pasha, 2018). Regarding the training sessions hold in the present study, attending the assertiveness training sessions can

decrease the fear of negative evaluation and excessive sensitivity to others' opinions in students. Also, it enables them to express their ideas instead of avoidance.

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