Education and Science

Vol 45 (2020) No 201 109-123

Effectiveness of the Whole School-Based Program for Equipping High School Counselors with Strategies of Coping with Cyberbullying and Cyberbullying Awareness *

Yunus Altundağ [1], Tuncay Ayas [2]

Abstract

Cyberbullying means violence via information tools. This issue is regarded as an important risk threatening young people as information tools have been increasingly becoming popular recently. School counselors play a key role in briefing and awareness efforts on cyberbullying within the school system. This study aims to examine the effectiveness of the program for equipping high school counselors with coping strategies with cyberbullying and cyberbullying awareness which was prepared on the basis of the whole-school approach. The study was conducted in the quasi-experimental design. 24 school counselors (12 each in experimental and control groups) participated in the study group. Pretest, posttest and follow-up test were performed. The four-session, whole school-based psychoeducational program was applied to the school counselors in the experimental group. No procedures were followed in the control group. Cyberbullying Awareness Scale for Teachers (CAST) and Scale of Coping Strategies with Cyberbullying for Teachers (SCSCT) were utilized as data collection instruments. Results of the posttest performed after the experimental procedure show a significant difference in favor of the experimental group for both scales and the effect size was high. Results of the follow-up test performed two months later indicate that the levels achieved from the scores of CAST and SCSCT were preserved. The effectiveness of the program for coping with cyberbullying and increasing cyberbullying awareness which was prepared for school counselors in terms of cyberbullying awareness and strategies of coping with cyberbullying was discussed within the scope of relevant literature.

Keywords

Cyberbullying awareness
Coping with cyberbullying
School counselor
Whole-school approach
Cyberbullying

Article Info

Received: 12.08.2018
Accepted: 08.28.2019
Online Published: 01.15.2020

DOI: 10.15390/EB.2020.8350

* This article is derived from Yunus Altundağ's PhD dissertation entitled "Effectiveness of whole-school-based program for bringing cyberbullying awareness and coping strategies with cyberbullying to high school counselors", conducted under the supervision of Tuncay Ayas.

[1] Bolu Abant İzzet Baysal University, Faculty of Education, Department of Psychological Counseling and Guidance, Turkey, yunusaltundag14@hotmail.com

[2] Sakarya University, Faculty of Education, Department of Psychological Counseling and Guidance, Turkey, tayas@sakarya.edu.tr

Introduction

It is known that information and communication tools have countless benefits in an environment where they are developing at a stunning speed. These technological tools can cause severe issues if misused. One of these issues is cyberbullying. Concept of cyberbullying which is recognized as bullying in the virtual environment has attracted researchers' attention with the information tools becoming popular. Several studies have been carried out on this concept particularly in the last decade. While some researchers accept the concept as a type or continuation of traditional bullying (Kowalski, Giumetti, Schroeder, & Lattanner, 2014; Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010), it is observed to be differing from certain aspects. It is accepted to be differing for several reasons such as occurring in the virtual environment, the possibility of occurrence at every moment of the day, imbalance of strength in traditional bullying being complex in cyberbullying and failure to predict potential audience (Campbell, Slee, Spears, Butler, & Kift, 2013; Park, Na, & Kim, 2014; Smith, 2013). It is also stated that cyberbullying can be regarded as a continuation of traditional bullying (Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014) or observed together with traditional bullying (Hinduja & Patchin, 2014; Låftman, Modin, & Östberg, 2013). While there are studies showing that number of traditional bullying victims is higher than cyber victims (Olweus, 2012; Olweus & Limber, 2018), some studies found one-third of young people went through cyber victimization (Cassidy, Faucher, & Jackson, 2013; Hinduja & Patchin, 2018).

There are research findings on how cyber victimization is related to several negativities. It is seen that cyber victimization is associated with various negative issues such as depressive symptoms (Gámez Guadix, Gini, & Calvete, 2015), anxiety problems (Sontag, Clemans, Graber, & Lyndon, 2011), psychosomatic problems (Beckman, Hagquist, & Hellström, 2012), low self-esteem and negative perception of self (Didden et al., 2009), alcohol or drug abuse (Vieno, Gini, & Santinello, 2011), self-harm (Schneider, O'donnell, Stueve, & Coulter, 2012), and even suicide attempt (Van Geel, Vedder, & Tanilon, 2014). Furthermore, some studies show that cyber victimization is related to negative emotions such as emotional fear, worry, sorrow, guilt, loneliness and helplessness (Gualdo, Hunter, Durkin, Arnaiz, & Maquilón, 2015; Ortega, Elipe, Mora Merchán et al., 2012). Some other studies, however, state that not all cyber victims are affected in the same way or at the same degree (Dredge, Gleeson, & De la Piedad Garcia, 2014; Ortega, Elipe, & Monks, 2012). The reason is arguably the type of cyberbullying experienced by cyber victims (Ortega, Elipe, Mora Merchán et al., 2012). It should be also considered that negative effects of cyberbullying can be long-termed (Hutson, Kelly, & Militello, 2018).

Creating a cyberbullying awareness is recognized as the starting point of prevention of and intervention with cyberbullying (Ayas & Horzum, 2011; Horzum & Ayas, 2013; Hutson et al., 2018; Peker, 2014; Slovak & Singer, 2011). Cyberbullying awareness means that an individual is knowledgeable and vigilant of threats in the virtual environment (Altundağ & Ayas, 2018; Aydın, 2016). The prerequisite for an individual's awareness of a given matter is argued to be the fact the individual has the required knowledge on the matter. Cyberbullying awareness can be in question for students who are direct addressees of bullying as well as teachers, psychological counselors, school administrators, school personnel or parents. Especially teachers, school administrators or other school personnel play a key role in protecting students from incidents such as cyberbullying (Eden, Heiman, & Olenik Shemesh, 2013; Hayashibara, 2017; Hinduja & Patchin, 2011, 2014; Horzum & Ayas, 2013). Whereas significant part of teachers accept cyberbullying as a serious problem (Hayashibara, 2017; Yılmaz, 2010), others can think that parents are responsible because they are not sufficiently informed of cyberbullying (Hayashibara, 2017; Stauffer, Heath, Coyne, & Ferrin, 2012) and cyberbullying occurs outside the school most of the time (Stauffer et al., 2012). Nevertheless, outcomes of cyberbullying may affect student's academic achievement as well as his/her school life (Kowalski & Limber, 2013).

Coping with cyberbullying is another concept addressed in this study. What is meant with coping is of two aspect: preventive and intervening. The preventive aspect refers to taking certain precautions against possible risks in coping with cyberbullying (Perren et al., 2012). Taking measures in consideration that individuals who have been through traditional bullying, which is thought to be in close relation, might resort to cyberbullying too can be somehow regarded as a preventive measure. The intervening aspect is the body of strategies that can be used at the moment of cyberbullying or afterwards. These strategies include technological coping (Juvonen & Gross, 2008), peer support (Jacobs, Goossens, Dehue, Völlink, & Lechner, 2015) and adult support (Hinduja & Patchin, 2014; Mesch, 2018). These strategies are considered important instruments in coping with cyberbullying. Adult support refers to receiving support from parents, teachers or a trusted adult. Cyber victims might not want to consult adults with the concern of restriction of technological devices or means (Mishna et al., 2010). On the other hand, low parental supervision is regarded as being associated both with cyberbullying and cyber victimization (Buelga, Iranzo, Cava, & Torralba, 2015; Low & Espelage, 2013). Another important source in adult support is teachers or other school personnel (Hinduja & Patchin, 2011; Horzum & Ayas, 2013). Teachers need to see cyberbullying as an important problem and have a high level of awareness accordingly in the first place (Eden et al., 2013; Hinduja & Patchin, 2014). It is observed in the studies that teachers do not know how to intervene although they recognize cyberbullying as an important issue (Hayashibara, 2017; Huang & Chou, 2013). This makes training in cyberbullying for teachers a requirement.

A remarkable part of studies carried out in the fight against cyberbullying includes school-based studies (Hutson et al., 2018). Teachers, administrators, other school personnel and parents in addition to students need to be educated to protect students as the target group of cyberbullying from it and cope with possible cyberbullying incidents. The theoretical approach in which all these components affecting the student are included in the intervention process is Olweus' (1994) whole-school approach. There are three levels (individual, classroom and school) in the whole-school approach (Olweus, 1994). Individual level refers to what individual can do against bullying while classroom level is about instructive posters, leaflets or trainings to be provided by teachers to prevent bullying inside classroom. Creating a bullying-preventing classroom climate is also recognized in the latter. School level refers to a broader process which cover all students, teachers, administrators, parents and other school personnel such as developing and implementing school policies against bullying and creating a bullying-preventing school climate. Olweus added another level which he defined as social level to his program later (Olweus, 1997). This level is about making the whole society aware through all kinds of mass media, non-governmental organizations and private or public agencies. Even though the whole-school approach is basically recognized as an effective approach used in the fight against traditional bullying (Chan & Wong, 2015; Wong, Cheng, Ngan, & Ma, 2011), its use is also recommended in coping with cyberbullying (Chan & Wong, 2015; Cross et al., 2016; Pearce, Cross, Monks, Waters, & Falconer, 2011).

Turkey is seen to be quite limited coping with cyberbullying and awareness study. In the study conducted by Aydın (2016), an experimental study was conducted in order to raise awareness of cyber bullying to secondary school students. The applied program is mostly psychoeducation program which includes content such as privacy and security settings of Facebook, safe use of information tools, recognition of cyber bullying and appropriate reaction. Another study conducted for secondary school students is a four-session intervention program based on reality therapy (Tanrıkulu, Kınay, & Arıcak, 2015). It was observed that the intervention program with experimental-control group and pre-post tests increased the cyberbullying sensitivity of the students. Cyberbully in Turkey extortion related programs when examined in general seems to be directed directly to students living in the cyber victimization or cyberbullying behavior (Özbay, 2017; Peker, 2013; Tanrıkulu, 2013; Yüksel, 2018). However, no program has been found for school guidance teachers who have an important role in supporting cyberbullying students and raising awareness of cyberbullying. Therefore, it is different from other programs due to direct guidance teacher.

The whole-school approach of Olweus (1994) was taken as basis in this study as well. Addressing the school counselors, this study considered the levels other than social level. Accordingly, the study aimed to examine the effectiveness of the psychoeducational program based on the whole-school approach on increasing school counselors' awareness levels of cyberbullying and their strategies of coping with cyberbullying.

Method

Research Design

The quasi-experimental design was used in the study. The study also utilized 3x2 (split-plot) mixed design in which pretest, posttest and follow-up test were performed on the experimental and control groups. Time-related changing effect of the experimental procedure was investigated with the pretest, posttest and follow-up test. Also including the experimental and control groups in the procedure, mutual effect of time and group was examined. Mutual effect test is recognized as a strong research design as it is a method used for determining whether the measurements performed at different times have changed according to procedural groups (Büyüköztürk, 2014; Kinnear & Gray, 1999).

There are basically two hypotheses in the study. The first hypothesis is that there is a significiant difference in favor of the experimental group compared to the pre-test scores of the post-test scores of the CAST and the SCSCT for the psychoeducation program applied to the guidence teacher. The second hypothesis is that this difference should continue in the follow-up measurements carried out two months later. Therefore, in the study, pre, post and follow-up measurements were done with experimental and control groups.

Study Group

The purposive sampling method was used to create the study group. It was intended that all school counselors working in all public secondary education institutions in Bolu would be reached and included in the study. At the time of study, 30 school counselors were working actively. It was attempted to create experimental and control groups of 15 members each by the scores obtained in Cyberbullying Awareness Scale for Teachers (CAST) and Scale of Coping Strategies with Cyberbullying for Teachers (SCSCT), but three participants in the experimental group could not participate in the study for various reasons. In the formation of the experimental and control groups, 24 participants were divided into two by randomly. The t-test was performed between the experimental and control groups. It was found that there was no significant difference between the two groups in terms of both the CAST and SCSCT's the mean score. Therefore, each of the experimental and control groups was formed with 12 school counselors. The experimental group consisted of eight female and four male participants, while the control group included seven females and five males. Besides, T-test was performed to test whether the experimental and control groups had similar CAST and SCSCT scores before the program. The t-test results are given in Table 1.

Table 1. T-test Results of Experimental and Control Groups' CAST and SCSCT Pretest Scores

Variable	Group	N	$\bar{X}$	Sd	df	t	p
CAST	Experimental	12	57,66	3,05	22	-,09	,92
	Control	12	57,83	5,00			
SCSCT-Area of Knowing	Experimental	12	72,08	4,64	22	-,65	,52
	Control	12	73,16	3,41			
SCSCT-Area of Practice	Experimental	12	74,41	8,34	22	,62	,54
	Control	12	72,58	5,85			

As seen in Table 1, no significant difference was found between the experimental and control groups by their CAST and SCSCT pretest scores (p>.05). It could be argued that the groups had obtained similar scores concerning the cyberbullying awareness and strategies of coping with cyberbullying before the psychoeducational program.

Psychoeducational Program

Since the final objective of the psychoeducational program prepared for school counselors is cyberbullying experienced by students, this was taken into account when deciding the program content. Cyberbullying, by its nature, is practiced in the virtual environment. Forms of cyberbullying can vary as digital games, social networks and communication tools change rapidly as well. Thus, focus group interviews were carried out with four student groups consisting of 8-10 participants each to find out about the latest forms of cyberbullying and take adolescent opinions on cyberbullying. Ages of the students varied between 14 and 16. The data obtained in the focus group interviews were subjected to a content analysis. Much as our study is aimed at school counselors, the objective is eventually the intervention with cyberbullying events experienced by students. Hence, focus group interviews were performed to be able to see the current status of the latest forms of cyberbullying among adolescents more closely (Altundağ, 2018). Also considering the cyberbullying literature, basic structure of the psychoeducational program was formed. Because whole-school approach of Dan Olweus who is regarded as the pioneer of bullying studies was taken as the theoretical basis of the program, all components concerning student and school were taken into account (Olweus, 1994). These components include student, parents, teacher, administrator and other school personnel and the program was planned accordingly. Olweus (1994, 1997) states that coping with bullying on one's own may not be enough all the time. He therefore argues that the whole-school approach which includes all components in the school will be more effective in the fight against bullying. In this study based on this theoretical foundation, a whole school-based program was created. As it was anticipated that school counselors could assume an efficient role in implementing the whole-school approach at school, this anticipation was considered both when creating the program content and executing the program. The psychoeducation program was conducted in September, the vocational training period of the guidance teacher. The program was carried out intensively in two weeks. The sessions consisted of 120 minutes on average. The didactic method was more preferred in the program. Sessions were held based on the interaction of the participants' experiences. During the sessions, as well as content presentation, case discussion and scenario animation techniques were utilized. In addition, materials such as videos, posters and brochures were used to increase the effect of education. Sessions were held at the Bolu Guidance and Research Center. Content of the psychoeducational program is presented as a summary below:

Session 1: The session involved conceptual basics of cyberbullying, its similarities and differences compared to traditional bullying, its effects on victims, its outcomes and information on legal aspects. It also addressed technical and psychological coping strategies that can be effective in coping with cyberbullying.

Session 2: An important aspect in the prevention of and coping with cyberbullying is technical coping strategies. Accordingly, the session involved rather technical information such as principles of conscious and controlled usage of information tools and parental supervision settings of operating systems.

Session 3: Platforms where cyberbullying is most observed are social networks. Information on conscious and controlled usage of social networks and privacy and security settings were provided in this session. The session also involved information especially on privacy and security settings of Facebook which has the highest number of users and where cyberbullying incidents are observed more frequently.

Session 4: The last session of this program based on the whole-school approach provided school counselors with different educational modules and contents. If educations on cyberbullying are not

designed in accordance with the target group's condition, they might have an incentive impact. Indeed, it could be risky to explain the techniques used by cyberbullies to students. Therefore, usage of modules prepared individually for students, teachers and parents were explained in this session. Posters and leaflets prepared for creating awareness were also discussed in this session. Ending this session marked completion of the psychoeducational program.

Procedure

The participant school counselors were subjected to CAST and SCSCT about two weeks before the implementation of the psychoeducational program. According to the results, the school counselors were randomly divided into groups by the criterion of having similar scores from both scales. The groups were defined to be experimental and control groups. Three participants were excluded from the control group because three participants of the experimental group could not participate in the study. The pretest data obtained from the experimental and control groups were analyzed again, and no significant difference was found between the groups by the scores of both scales. The four-session, whole school-based program for equipping school counselors with strategies of coping with cyberbullying and increasing their cyberbullying awareness were applied to the experimental group school teachers. No procedures were followed in the control group. Both experimental and control groups were subjected to a posttest following the program. Two months after the posttest, the groups were subjected to a follow-up test to test the retention of the program.

Data Collection Instruments

Cyberbullying Awareness Scale for Teachers (CAST): Developed for determining teachers' awareness level of cyberbullying, the scale is composed of 14 items with 3 of them being reverse-coded (Ayas & Horzum, 2011). Cronbach's alpha internal consistency coefficient of the one-factor scale was calculated to be ,82. The factor analysis showed that 44% of the total variance is explained and factor loads vary between ,46 and ,78. One can obtain a score between 14 and 70 in the scale. Higher scores mean higher awareness of cyberbullying.

Scale of Coping Strategies with Cyberbullying for Teachers (SCSCT): The scale was developed to identify the strategies used by teachers in coping with cyberbullying among their students (Altundağ & Ayas, 2018). However, these are indirectly identified because they are coping strategies used by teachers regarding the cyberbullying incidents that occur among students. Therefore, the scale is composed of two areas: area of "knowing" and area of "practice". It is aimed with the statements in the area of knowing to identify individual's perception of strategy knowledge and in the area of knowing to identify individual's perception of practicing that strategy. The scale is composed of 18 items and three factors. Whereas factor loads in the area of knowing vary between ,40 and ,74, 41,52% of the total variance is explained. In the area of practice, factor loads vary between ,40 and ,82 and 54,03% of the total variance is explained Confirmatory Factor Analyses (CFA) were performed for both areas. The fit indexes achieved in the CFA were found to be $\chi 2$=225,13, df=132, p=,00; RMSEA, 0,046; $\chi 2$/df=1,71; NFI=,81; CFI=,91; GFI=,93; RMR=,045; and SRMR=,056 for the area of knowing. The fit indexes were calculated to be $\chi 2$=302,95, df=130, p=,000; RMSEA, 0,064; $\chi 2$/df=2,34; NFI=,87; CFI=,92; GFI=,91; RMR=,078; and SRMR=,06 for the area of practice. Cronbach's Alpha internal consistency coefficients were found to be ,70 for the area of knowing and ,87 for the area of practice.

Data Analysis

SPSS 20.0 software package was utilized in the analysis of quantitative data collected from the school counselors. T-test and multi-factor ANOVA techniques for repeated measures, which are parametric tests, were used. First of all, normality and homogeneity assumption tests were conducted for using these these parametric techniques. These tests concluded that the distribution was normal and the variances were homogenous. It was therefore decided to use these parametric techniques.

Assumption tests were performed because the intention was to use parametric tests in the analysis of the data collected in the study. Since a two-factor variance analysis would be performed for repeated measures, normality and variance homogeneity tests were carried out (Field, 2013; Çokluk, Şekercioğlu, & Büyüköztürk, 2016). Recommended for testing the normality assumption in small samples, Shapiro-Wilk test was performed. The results of the normality test are shown in Table 2.

Table 2. Shapiro-Wilk Normality Test Results of the Participants in the Experimental and Control Groups

	Veriable	Groups	Shapiro-Wilk Statistics	n	p
Pre-test	CAST	Experimental	,88	12	,09
		Control	,96	12	,76
	SCSCT-Area of Knowing	Experimental	,94	12	,51
		Control	,90	12	,18
	SCSCT-Area of Practice	Experimental	,91	12	,24
		Control	,97	12	,92
Post-test	CAST	Experimental	,90	12	,15
		Control	,94	12	,50
	SCSCT-Area of Knowing	Experimental	,95	12	,58
		Control	,95	12	,68
	SCSCT-Area of Practice	Experimental	,97	12	,90
		Control	,85	12	,06
Follow up-test	CAST	Experimental	,93	12	,32
		Control	,87	12	,38
	SCSCT-Area of Knowing	Experimental	,94	12	,44
		Control	,87	12	,07
	SCSCT-Area of Practice	Experimental	,96	12	,83
		Control	,91	12	,45

It was found that the scores obtained in the CAST and SCSCT pretests, posttests and follow-up tests were normally distributed both in the experimental and control groups ($p > .05$) in Table 2. Furthermore, according to the results of Levene's test performed for variance homogeneity, the variances were found to be distributed homogeneously ($p > .05$). Therefore, t-test and two-factor variance analysis for repeated measures were carried out.

Results

Arithmetic mean and standard deviation values concerning school counselors' CAST and SCSCT pretest, posttest and follow-up test scores are summarized in Table 3.

Table 3. Arithmetic Mean and Standard Deviation Values Concerning School Counselors' CAST and SCSCT Pretest, Posttest and Follow-up Test Scores

			Pretest		Posttest		Follow-up test	
	Groups	**N**	$\overline{X}$	**Sd**	$\overline{X}$	**Sd**	$\overline{X}$	**Sd**
CAST	Experimental	12	57,66	3,05	61,75	3,98	62,58	3,42
	Control	12	57,83	5,00	57,08	3,72	57,66	2,96
SCSCT-Area of Knowing	Experimental	12	72,08	4,64	82,67	3,36	83,83	3,12
	Control	12	73,16	3,40	73,08	2,31	73,41	3,28
SCSCT-Area of Practice	Experimental	12	74,41	8,33	82,08	4,18	83,08	3,91
	Control	12	72,58	5,85	72,08	6,05	72,50	6,31

A variance analysis for repeated measures was performed to investigate the psychoeducational program's effect on school counselors' scores for the cyberbullying awareness and strategies of coping with cyberbullying. ANOVA results concerning the CAST pretest, posttest and follow-up test scores are shown in Table 4.

Table 4. ANOVA Results Concerning School Counselors' CAST Pretest, Posttest and Follow-up Test Scores

Source	**Sum of Squares**	**Sd**	**Mean of Squares**	**F**	**p**	**Partial Eta Squared**
Intergroup	918,94	24				
Group (Experimental/Control)	177,34	1	177,38	5,27	,03	,19
Error	740,97	23	33,68			
Intragroup	360,00	26				
Measurement (pretest-posttest-follow up test)	71,36	1	63,17	8,26	,007	,27
Group*Measurement	98,53	1	87,22	11,40	,001	,34
Error	190,11	24	8,64			

Regarding the arithmetic means of CAST pretest, posttest and follow-up test in Table 3 and ANOVA results in Table 4, the group effect seems to be significant. In other words, one can say that the effect of intervention was significant [F (1-23) = 5,27; p < ,05, n2= ,19]. It is also seen that the basic measurement effect was significant [F(1-24) = 8,26; p < ,05, n2= ,27]. Furthermore, given group and measurement variables (group*measurement) recognized as the mutual effect in the study, the difference was significant and the effect size was high [F(1-24) = 11,40; p < ,05, n2= ,34]. If the eta squared value which is used to calculate effect size in repeated measures is 0,01 or 0,06 or 0,14 and above, it is considered low, moderate and high, respectively (Kilmen, 2015; Miles & Shevlin, 2001). In the light of the results regarding the CAST, the psychoeducational program to which the school counselors were subjected was effective and this effect continued two months later.

Two-factor ANOVA for repeated measures was performed to investigate the whole school-based psychoeducational program's effect on school counselor's perceptions of strategies of coping with cyberbullying. ANOVA results concerning SCSCT-Area of Knowing and -Area of Practice are given in Table 5 and Table 6, successively.

Table 5. ANOVA Results Concerning School Counselors' Pretest, Posttest and Follow-up Test SCSCT-Area of Knowing Scores

Source	Sum of Squares	Sd	Mean of Squares	F	p	Partial Eta Squared
Intergroup	1151,54	24				
Group (Experimental/Control)	715,68	1	715,68	36,12	,00	,62
Error	435,86	23	19,81			
Intragroup	1345,33	26				
Measurement (pretest-posttest-follow up test)	513,00	1	387,11	33,30	,00	,60
Group*Measurement	493,44	1	372,36	32,03	,00	,59
Error	338,89	24	15,40			

According to Table 4, the group effect [F (1-23) = 36,12; p < ,05, n2= ,62] and measurement effect [F(1-24) = 33,30; p < ,05, n2= ,60] were significant and had a high effect size in the SCSCT-Area of Knowing. It was also observed that the mutual effect of group and measurement was significant [F(1-24) = 32,03; p < ,05, n2= ,59] and had a high effect size (Kilmen, 2015; Miles & Shevlin, 2001).

Table 6. ANOVA Results Concerning School Counselors' Pretest, Posttest and Follow-up Test SCSCT-Area of Practice Scores

Source	Sum of Squares	Sd	Mean of Squares	F	p	Partial Eta Squared
Intergroup	2601,21	24				
Group (Experimental/Control)	1005,01	1	1005,14	13,85	,001	,39
Error	1596,19	23	72,55			
Intragroup	1290,67	26				
Measurement (pretest-posttest-follow up test)	254,08	1	241,14	7,46	,011	,25
Group*Measurement	287,19	1	272,57	8,43	,007	,28
Error	749,39	24	23,18			

According to ANOVA results for repeated measures concerning SCSCT-Area of Practice in Table 6, the group effect [F (1-23) = 13,85; p < ,05, n2= ,39] and measurement effect [F(1-24) = 7,46; p < ,05, n2= ,25] were significant and had high effect size. It was also found that the mutual effect of group and measurement was significant [F(1-24) = 8,43; p < ,05, n2= ,28] and had a high effect size (Kilmen, 2015; Miles & Shevlin, 2001). Considering the arithmetic means of SCSCT pretest, posttest and follow-up test measurements in Table 3 and ANOVA results in Table 5 and 6 together, it can be argued that the whole school-based psychoeducational program was effective in enhancing school counselors' perceptions of strategies of coping with cyberbullying.

Conclusion and Discussion

It was seen in this study that the psychoeducational program which is based on the whole-school approach and has a predominantly educative aspect had a positive impact on school counselors' cyberbullying awareness levels and strategies of coping with cyberbullying. In experimental designs with experimental-control groups, the researcher cannot decide only by looking at the group-related (experimental-control) or time-related (pretest, posttest and follow-up test) measurement results. It is also recommended to investigate the mutual effect of group and time (Büyüköztürk, 2014; Çokluk et al., 2016). When examining the mutual effect of group and time in this study, it is seen that there was a significant change in school counselors' cyberbullying awareness scores and in both of the areas of knowing and areas regarding the strategies of coping with cyberbullying. This change was also found to be retentive according to the scores obtained in both of the scales in the follow-up test carried out two months later.

A part of the Turkish educational system, school counselors are professionals who produce protective services against possible risks which students might encounter. Cyberbullying as a new form of bullying has been one of those risks recently. It is recognized among the duties of school counselors to carry out briefing and awareness efforts as in many other risks that pose threat for students (Diamanduros, Downs, & Jenkins, 2008; Horzum & Ayas, 2013). School counselors who play a key role in the fight against cyberbullying and the awareness efforts aiming both students and other school personnel also need to be equipped in this matter. A study showed that the school counselors had higher level of cyberbullying awareness than other branch teachers (Horzum & Ayas, 2013). In another study, the information technologies teachers, school counselors and other branch teachers were separated into three groups. It was found that the information technologies teachers had higher levels of cyberbullying awareness than the school counselors and other branch teachers and the school counselors than the other branch teachers (Sezer, Yilmaz, & Karaoglan Yilmaz, 2015). Given that information technologies teachers are more informed of technical specifications of Internet, social networks or mobile devices and the possible risks, this result is understood even further. This study included briefing on cyberbullying as well as Windows parental control systems, operating systems' security settings and the privacy and security settings of Facebook as a network where cyberbullying is often observed. It can be therefore argued that the briefing-weighted program was effective in the increased level of cyberbullying awareness in the study. It is known that briefing is an effective method for coping with cyberbullying and creating an awareness of cyberbullying (Aydın, 2016; Hinduja & Patchin, 2014, 2018). In a study performed by Akbulut (2014) with preservice information technologies teachers, a video-based education, which provided information on risks and ways of protection related to cyberbullying as well as cases, increased the cyberbullying awareness, too.

It is seen that great part of studies on cyberbullying awareness and coping with cyberbullying focus on students. No study addressing that school psychologists or counselors need to be educated in the fight against cyberbullying was observed in the literature. Nevertheless, 17 different programs were examined in a recent study which reviewed cyberbullying intervention studies (Hutson et al., 2018). Remarkable characteristics of the effective programs are that they are preventive, informative, educative and based on the whole-school approach which includes parents in the process, too. The fact that the content and implementation of this whole school-based program involved educations for students, parents and school personnel might have affected the school counselors' perceived self-efficacy of coping with cyberbullying positively. In the studies on teachers' cyberbullying perceptions, great part of the teachers accept cyberbullying as a problem and report that they do not have sufficient strategies about how to intervene with cyberbullying (Eden et al., 2013; Huang & Chou, 2013). In this sense, this program aiming to provide social skills such as empathy education as well as psychological and technological coping strategies that are effective in coping with cyberbullying will be an important source for school counselors. Considering the need for studies that will create cyberbullying awareness

among all teachers primarily including school counselors, this program will arguably contribute to meeting this need. Hence, the Ministry of National Education can provide school counselors and other teachers with this program under an in-service training.

The fact that the study was performed with the school counselors working at the secondary education institutions in Bolu and the sample could not be created fully randomly is the greatest limitation to the study. Another limitation is the lack of pilot study of the psychoeducation program. The effectiveness of the program was evaluated only through the quantitative data that were obtained from the answers given by the school counselors to the posttest and follow-up test. Collection of qualitative data would have been more functional in evaluating the effectiveness of the program. In addition, follow-up measurements are considered as another limitation of the study after a short period of two months after the post test. Implementing this program on teachers as well as school administrators and other school personnel and testing its effectiveness accordingly could render the outcomes of the program stronger. In addition to this, informatics tools can be used to increase cyberbully awareness. Applications on smartphones, which are currently the most widely used tools, may be preferred. The impact of carefully crafted smartphone applications on cyberbully awareness can be investigated for both teachers and students. Comparative studies can be investigate to measure the effect of the educational content smartphone applications on increasing cyberbullying awareness.

References

Akbulut, Y. (2014). Effect of case–based video support on cyberbullying awareness. *Australian Educational Computing*, *29*(1), 1-12.

Altundağ, Y. (2018). *Lise rehber öğretmenlerine yönelik tüm okul yaklaşımına dayalı sanal zorba farkındalığı ve sanal zorbalıkla başaçıkma stratejilerini kazandırma programının etkililiği* (Unpublished doctoral dissertation). Sakarya University, Institute of Educational Sciences, Sakarya.

Altundağ, Y., & Ayas, T. (2018). Öğretmenler için sanal zorbalıkla başa çıkma stratejileri ölçeği: Geçerlilik ve güvenilirlik çalışması. *Anadolu Psikiyatri Dergisi*, *19*, 84-92.

Ayas, T., & Horzum, M. B. (2011). Öğretmenlerin sanal zorbalık algılarının çeşitli değişkenlere göre incelenmesi. *International Online Journal of Educational Sciences, 3*(2), 619-640.

Aydın, F. (2016). *Sanal zorbalık eğitiminin 6. sınıf öğrencilerinin sanal zorbalık farkındalığına etkisi* (Unpublished master's thesis). Sakarya University, Institute of Educational Sciences, Sakarya.

Beckman, L., Hagquist, C., & Hellström, L. (2012). Does the association with psychosomatic health problems differ between cyberbullying and traditional bullying? *Emotional and Behavioural Difficulties*, *17*(3-4), 421-434.

Buelga, S., Iranzo, B., Cava, M. J., & Torralba, E. (2015). Cyberbullying aggressor adolescent's psychosocial profile. *International Journal of Social Psychology*, *30*(2), 382-406.

Büyüköztürk, Ş. (2014). *Deneysel desenler: Öntest sontest kontrol gruplu desen ve veri analizi* (4th ed.). Ankara: Pegem Akademi.

Campbell, M. A., Slee, P. T., Spears, B., Butler, D., & Kift, S. (2013). Do cyberbullies suffer too? Cyberbullies' perceptions of the harm they cause to others and to their own mental health. *School Psychology International*, *34*(6), 613-629.

Cassidy, W., Faucher, C., & Jackson, M. (2013). Cyberbullying among youth: A comprehensive review of current international research and its implications and application to policy and practice. *School Psychology International*, *34*(6), 575-612.

Chan, H. C. O., & Wong, D. S. (2015). Traditional school bullying and cyberbullying in Chinese societies: Prevalence and a review of the whole-school intervention approach. *Aggression and Violent Behavior*, *23*, 98-108.

Cross, D., Shaw, T., Hadwen, K., Cardoso, P., Slee, P., Roberts, C., ... & Barnes, A. (2016). Longitudinal impact of the cyber friendly schools program on adolescents' cyberbullying behavior. *Aggressive Behavior*, *42*(2), 166-180.

Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2016). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları*. Ankara: Pegem Akademi.

Diamanduros, T., Downs, E., & Jenkins, S. J. (2008). The role of school psychologists in the assessment, prevention, and intervention of cyberbullying. *Psychology in the Schools*, *45*(8), 693-704.

Didden, R., Scholte, R. H., Korzilius, H., De Moor, J. M., Vermeulen, A., O'Reilly, M., ... & Lancioni, G. E. (2009). Cyberbullying among students with intellectual and developmental disability in special education settings. *Developmental Neurorehabilitation*, *12*(3), 146-151.

Dredge, R., Gleeson, J., & De la Piedad Garcia, X. (2014). Cyberbullying in social networking sites: An adolescent victim's perspective. *Computers in Human Behavior*, *36*, 13-20.

Eden, S., Heiman, T., & Olenik Shemesh, D. (2013). Teachers' perceptions, beliefs and concerns about cyberbullying. *British Journal of Educational Technology*, *44*(6), 1036-1052.

Field, A. (2013). *Discovering Statistics Using IBM SPSS statistics*. Sage: California

Gámez Guadix, M., Gini, G., & Calvete, E. (2015). Stability of cyberbullying victimization among adolescents: Prevalence and association with bully–victim status and psychosocial adjustment. *Computers in Human Behavior*, *53*, 140-148.

Gualdo, A. M. G., Hunter, S. C., Durkin, K., Arnaiz, P., & Maquilón, J. J. (2015). The emotional impact of cyberbullying: Differences in perceptions and experiences as a function of role. *Computers & Education*, *82*, 228-235.

Hayashibara, K. N. E. (2017). *Teachers' perceptions of cyberbullying* (Unpublished doctoral dissertation). University of Southern California, USA.

Hinduja, S., & Patchin, J. W. (2011). Cyberbullying: A review of the legal issues facing educators. *Preventing School Failure: Alternative Education for Children and Youth*, *55*(2), 71-78.

Hinduja, S., & Patchin, J. W. (2014). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*. USA: Corwin Press.

Hinduja, S., & Patchin, J. W. (2018). *Cyberbullying: Identification, prevention, & response*. Retrived from https://cyberbullying.org/Cyberbullying-Identification-Prevention-Response-2018.pdf

Horzum, M. B., & Ayas, T. (2013). Rehber öğretmenlerin sanal zorbalık farkındalık düzeyinin çeşitli değişkenlere göre incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *28*(3), 195-205.

Huang, Y. Y., & Chou, C. (2013). Revisiting cyberbullying: Perspectives from Taiwanese teachers. *Computers & Education*, *63*, 227-239.

Hutson, E., Kelly, S., & Militello, L. K. (2018). Systematic review of cyberbullying interventions for youth and parents with implications for evidence-based practice. *Worldviews on Evidence-Based Nursing*, *15*(1), 72-79.

Jacobs, N. C., Goossens, L., Dehue, F., Völlink, T., & Lechner, L. (2015). Dutch cyberbullying victims' experiences, perceptions, attitudes and motivations related to (coping with) cyberbullying: Focus group interviews. *Societies*, *5*(1), 43-64.

Juvonen, J., & Gross, E. F. (2008). Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health*, *78*(9), 496-505.

Kilmen, S. (2015). *Eğitim araştırmacıları için SPSS: Uygulamalı istatistik*. Ankara: Edge Akademi Yayıncılık.

Kinnear, P. R., & Gray, C. D. (1999). *SPSS for Windows made simple*. UK: Taylor & Francis.

Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, *140*(4), 1073-1137.

Kowalski, R. M., ve Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *Journal of Adolescent Health*, *53*(1), 13-20.

Låftman, S. B., Modin, B., & Östberg, V. (2013). Cyberbullying and subjective health: A large scale study of students in Stockholm, Sweden. *Children and Youth Services Review*, *35*(1), 112-119.

Low, S., & Espelage, D. (2013). Differentiating cyber bullying perpetration from non-physical bullying: Commonalities across race, individual, and family predictors. *Psychology of Violence*, *3*(1), 39-52.

Mesch, G. S. (2018). Parent–child connections on social networking sites and cyberbullying. *Youth & Society*, *50*(8), 1145-1162.

Miles, J., & Shevlin, M. (2001). *Applying regression and correlation: A guide for students and researchers*. California: Sage.

Mishna, F., Cook, C., Gadalla, T., Daciuk, J., & Solomon, S. (2010). Cyber bullying behaviors among middle and high school students. *American Journal of Orthopsychiatry*, *80*(3), 362-374.

Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health*, *55*(5), 602-611.

Olweus, D. (1994). Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, *35*(7), 1171-1190.

Olweus, D. (1997). Bully/victim problems in school: Facts and intervention. *European Journal of Psychology of Education*, *12*(4), 495-510.

Olweus, D. (2012). Cyberbullying: An overrated phenomenon? *European Journal of Developmental Psychology*, *9*(5), 520-538.

Olweus, D., & Limber, S. P. (2018). Some problems with cyberbullying research. *Current Opinion in Psychology*, *19*, 139-143.

Ortega R, Elipe P., & Monks C. (2012). The emotional responses of victims of cyberbullying: Worry and indifference. *British Journal of Educational Psychology Monograph Series II, 9*, 139-153.

Ortega, R., Elipe, P., Mora Merchán, J. A., Genta, M. L., Brighi, A., Guarini, A., ... & Tippett, N. (2012). The emotional impact of bullying and cyberbullying on victims: A European cross-national study. *Aggressive Behavior*, *38*(5), 342-356.

Özbay, A. (2017). *Sanal zorbalığa maruz kalan ergenlerin çözüm odaklı kısa süreli terapi yönelimli psikoeğitim programının psikolojik belirtiler ve sanal mağduriyete etkisi* (Unpublished doctoral dissertation). Sakarya University, Institute of Educational Sciences, Sakarya.

Park, S., Na, E. Y., & Kim, E. M. (2014). The relationship between online activities, netiquette and cyberbullying. *Children and Youth Services Review*, *42*, 74-81.

Pearce, N., Cross, D., Monks, H., Waters, S., & Falconer, S. (2011). Current evidence of best practice in whole-school bullying intervention and its potential to inform cyberbullying interventions. *Journal of Psychologists and Counsellors in Schools*, *21*(1), 1-21.

Peker, A. (2013). *İnsani değerler yönelimli psikoeğitim programının problemli internet kullanımı ve siber zorbalık üzerindeki etkisi* (Unpublished doctoral dissertation). Sakarya University, Institute of Educational Sciences, Sakarya.

Peker, A. (2014). Ergenlerin siber zorbalıkla başa çıkma davranışlarının cinsiyet ve sınıf düzeyi açısından incelenmesi. *Online Journal of Technology Addiction & Cyberbullying*, *1*(1), 1-15.

Perren, S., Corcoran, L., Cowie, H., Dehue, F., Garcia, D., Mc Guckin, C., … & Völlink, T. (2012). Tackling cyberbullying: Review of empirical evidence regarding successful responses by students, parents and schools. *International Journal of Conflict and Violence*, *6*, 283-293.

Schneider, S. K., O'donnell, L., Stueve, A., & Coulter, R. W. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, *102*(1), 171-177.

Sezer, B., Yilmaz, R., & Karaoglan Yilmaz, F. G. (2015). Cyber bullying and teachers' awareness. *Internet Research*, *25*(4), 674-687.

Slovak, K., & Singer, J. B. (2011). School social workers' perceptions of cyberbullying. *Children & Schools*, *33*(1), 5-16.

Smith, P. K. (2013). Cyberbullyingy ciberagresión. In A. Ovejero, P. K. Smith, & S. Yubero (Eds.), *El Acoso Escolar Y Su Prevención: Perspectivas Internacionales* (pp. 173-190). Madrid: Biblioteca Nueva.

Sontag, L. M., Clemans, K. H., Graber, J. A., & Lyndon, S. T. (2011). Traditional and cyber aggressors and victims: A comparison of psychosocial characteristics. *Journal of Youth and Adolescence*, *40*(4), 392-404.

Stauffer, S., Heath, M. A., Coyne, S. M., & Ferrin, S. (2012). High school teachers' perceptions of cyberbullying prevention and intervention strategies. *Psychology in the Schools*, *49*(4), 352-367.

Tanrıkulu, T., Kınay, H., & Arıcak, O. T. (2015). Sensibility development program against cyberbullying. *New Media & Society*, *17*(5), 708-719.

Tanrıkulu, T. (2013). *Siber zorbalıkla ilgili değişkenlerin incelenmesi ve gerçeklik terapisi yönelimli bir müdahale programının siber zorbaca davranışlar üzerindeki etkisi* (Unpublished doctoral dissertation). Sakarya University, Institute of Educational Sciences, Sakarya

Van Geel, M., Vedder, P., & Tanilon, J. (2014). Relationship between peer victimization, cyberbullying, and suicide in children and adolescents: A meta-analysis. *JAMA Pediatrics*, *168*(5), 435-442.

Vieno, A., Gini, G., & Santinello, M. (2011). Different forms of bullying and their association to smoking and drinking behavior in Italian adolescents. *Journal of School Health*, *81*(7), 393-399.

Wong, D. S., Cheng, C. H., Ngan, R. M., & Ma, S. K. (2011). Program effectiveness of a restorative whole-school approach for tackling school bullying in Hong Kong. *International Journal of Offender Therapy and Comparative Criminology*, *55*(6), 846-862.

Yılmaz, H. (2010). An examination of preservice teachers' perceptions about cyberbullying. *Eurasia Journal of Mathematics, Science & Technology Education*, *6*(4), 263-270.

Yüksel, K. (2018). *Bilişsel davranışçı temelli siber zorbalık önleme programının etkisi* (Unpublished master's thesis). Gaziantep University, Institute of Educational Sciences, Gaziantep.