Chapter 19

EFFECTIVENESS OF COPING WITH STRESS PROGRAM (CWSP) ON ANXIETY LEVELS: THE CASE OF SECONDARY SCHOOL STUDENTS Effects of CWSP on anxiety of students

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ABSTRACT

Children are in a different position to overcome anxiety and cope with stressors because they have less learning and experience about the ways of coping with stress. The study aims to (a) develop a group guidance program on enhancing the skills of coping with stress (CWSP) and (b) evaluate its effects on the anxiety levels of 5th grade students. Data were collected by State-Trait Anxiety Inventory for Children which was developed by Spielberger and Edwards (1973) and standardized by Özusta (1995) with a questionnaire. In order to determine the groups, the inventory was applied to whole 90 students in school and 24 students, who had high anxiety and volunteer, were selected and distributed randomly to the groups. CWSP was developed for six sessions, 40 minutes per session. This program consisted of structuring the group process, understanding the concept of stress, its resources, physiological symptoms and emotions, relaxation training and training of transforming knowledge and skills to daily life. Results showed that the anxiety levels of experimental group statistically decreased and this effect lasted for three months.

Keywords: coping with stress, anxiety, secondary school students, coping with stress program.

1. INTRODUCTION

Currently, there is an information overload about stress, its resources and management ways towards adults by media tools and self-help books. Competitive environment and weakened social ties (Kasser, 2002), unemployment (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Probst & Sears, 2009), the work load which trace people at home (Weiten, Hammer, & Dunn, 2012), issues about time management and search for meaning (Dolby, 2005; Emmons, 2003) increased distress. Weiten et al. (2012) indicated that APA shows in 2007 "for many of us, stress levels are high and are on the rise" (p. 71). Accordingly, stress of parents and significant adults such as teachers affect children (Conger & Donnellan, 2007; Jones, Eisenberg, Fabes, & MacKinnon, 2002). Children also confronts with stressors either at home, or in school. The most common ones are divorce or conflict between family members (Cummings, Vogel, Cummings, & El-Sheikh, 1989), frequent movements, disadvantaged neighbourhoods (Attar, Guerra, & Tolan, 1994), parental or peer pressure to success, long lasting illness, physical injuries and traumatization (Weiten et al., 2012). Specifically for Turkey (a) test anxiety, (b) the need to establish cumulative academic success; (c) less career planning studies; (d) increasing and changing expectations of parents in line with employers; (e) internal migration, conflicting values between peers may be added to previously mentioned stressors.

Adults may tend to believe that children don't experience stress or anxiety as seen in adults. This point of view is dangerous and may limit the adults' awareness to notice the needs. Children may present symptomatic feelings, attacks or acts when they feel unidentified or unhelped. However, children's ability to deal with stressors was proven to have positive effects on their psychosocial adjustment (Pincus & Friedman, 2004).

Actually, children are in a different position to overcome anxiety and cope with stressors because they have less learning and experience. Higher levels of social support and problem-solving skills moderated the relation between stressful life events and behavior Fatma Ebru Ikiz & Bedia Horoz

problems in elementary school children (Dubow & Tisak, 1989). They react to the current situation differently according to their age, intellectual and social capabilities (Band & Weisz, 1988). They may be vulnerable to addictions, may be aggressive or nervous, may be unsuccessful and may internalize or externalize these experiences when they don't feel social support from parents, teachers and peers (Ikiz & Savi Cakar, 2012).

School-based intervention for preventing and reducing children's stress-related symptoms (Berger, Pat-horenczyk, & Gelkopf, 2007), stress reduction applications as an educational program (Wall, 2005), trends for developing positive youth development by scholar programs (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002), mindfulness training (Napoli, Krech, & Holley, 2005; Wall, 2005) and examining common characteristics of successful prevention programs to reduce symptoms of psychopathology (aggression, depression, or anxiety) and factors commonly associated with an increased risk for later mental disorders (Garmezy, Masten, & Tellegen, 1984; Greenberg, Domitrovich, & Bumbarger, 2000) have been examined worldwide. A Meta analytic review on the effectiveness of stress management programs in schools done by Kraag, Zeegers, Kok, Hosman, and Abu-Saad (2006) corroborated that stress management or coping skills programs conducted in schools are effective in reducing stress symptoms and enhancing coping.

This study proposes a group guidance program for enhancing coping with stress and to investigate its effects on the anxiety levels of 5th grade students. The problem is stated as follows: Does Coping with Stress Program have significant effect on anxiety levels of fifth grades?

2. BACKGROUND

2.1. Anxiety

Anxiety is defined as an adjustment mechanism to cope with danger, as a basic humanitarian feeling and as a multi-dimensional state of feeling (Özusta, 1995), and as a way of life which is consciously felt and in which psychological changings such as sweating and growing pale following it and which arises from the conflict between what we want to do and the conditions, from the conflict between what we want to express and not to do it or from the conflict between a value group (Horney, 1995).

According to psycho-analitical approach, anxiety is a state of tension that motivates individuals to mobilize, do a job and to take part in activities. Anxiety arises from the conflict occurring from the control of existing psychic energy among the id, ego and superego. The function of anxiety is to stimulate the organism against a possible threat (Corey, 2005). The anxiety of reality is a fear felt against the threat from the external World and the level of anxiety is proportional to the degree of real threat. Neurotic anxiety is the fear felt as to the fact that instincs may take the individual under control and may cause him/her to be punished for what s/he did, and moral anxiety is the fear which the individual feels against his/her conscience (Corey, 2005).

Some individuals live in constant unhappiness and they generally become unhappy. Spielberger emphasizes that the individuals who think that their values are threatened and who consider the situations s/he experiences stressful feel anxious. He also stresses that this kind of anxiety stems from the person himself/herself and states that these people experience "trait anxiety". Situational anxiety is the other one, state anxiety, created by dangerous situations, and it is temporary and circumstantial which each individual generally experiences momentarily (Julian, 2011; Özusta, 1995).

Children cannot express the state of being anxious in general, fail to put their feelings into words and have difficulty in talking about their fears and problems. Therefore, the anxious children are generally tensed, ready to cry, being uneasy and have difficulty in gathering their thoughts. Physical complaints such as insomnia, fearful dreams and not being able to sleep alone accompanying this. Some children become introverted and do not join the peer groups in order to get rid of anxiety, mey exhibit such attitudes as sticking together, being dependent and shyness. In school children, the anxiety of not being approved by his/her peers and environment become prominent. The child may hesitate to say his/her opinions, may not want to attempt to do something without someone's help and support and has difficulty in starting a friendship. His/her participation in lessons may decrease with the fear that s/he may tell something wrong. S/He may not want to come to school due to the anxiety that s/he will not succeed in his/her courses. Confrontation with relationship problems such as having problems related to attending school and concentration, experiencing conflict with teachers, having anxieties about the school, and behaving aggressively in the relationships with the peers can be the symptoms for stress.

2.2. Stress

Psychological stress is defined through daily troubles, pressures, preventions, conflicts and changings that arise via stress-causing events (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Lazarus, 1991b; Lazarus & Folkman, 1984; Morris, 2002; Skinner, Edge, Altman, & Hayley, 2003; Westen, 1999; Woolfolk, 1998). Indeed, adjustment processes developed against the stress-causing situation and conditions reflect the reactions in the state of stress and they may be of physiological, emotional, behavioral and cognitive quality (Baum, Singer, & Baum, 1981; Lazarus, 1991a; Lazarus, 1991b).

The first factor playing a role in individual's being open to stress is the frequency of encountering with stress and is the quality of the confronted stress in terms of its duration and meaning. The second factor, on the other hand, is the individual's skill s/he acquired in his/her developmental period as to being able to cope with stress and s/he possesses in terms of personality. As a matter of fact, stress belongs to the person who bears it in his/her mind. The reaction for stress appears not depending on what is there in the environment but depending on how individual perceives what is happening and how s/he reacts to it (Weiten et al., 2012).

2.3. Symptoms of stress

According to Selye's (1977) theory of General Adjustment Syndrome, when an individual faces a source of stress, body shows the reaction of "fight or run away" because sempathic nerve system becomes active and the process of generating reaction for the new situation consists of three stages, including the stage of alarm, the stage of resistance and the stage of exhaustion (as cited in Weiten et al., 2012). Generally, the *physical symptoms* regarding stress are denoted as headache, irregular sleep, backaches, jaw spasm or teeth grinding, constipation, diearrhea, change in appetite, tiredness or loss of energy, increase in the accidents; *emotional symptoms* as anxiety, depression or immediate crying, rapid and continual change in mental state, nervousness, being tensed, decrease in self-confidence or feeling of lack of confidence, extreme sensitiveness or being easily offended, burst of rage aggression or enmity, feeling of exhaustion emotionally, regression, adoption, resistance or fear; *mental symptom* as lack of concentration, difficultyin making decision, dysmnesia, extremely dreaming, loss of sense of humor increase in mistakes, becoming weak in reasoning; and *social symptoms* as distrust, putting the blame for others, verbal offending and the conflicts in the interpersonal relationships (Braham, 1998).

A child's reaction to stress is not similar to others and may show difference according to age. Loss of appetite, stomac ache, staying away from activities, sadness, depression and complaining can be seen in the children of school age. Some children show their reactions directly, while some others suppress and some act out their feelings of stress by exhibiting abnormal behaviors (Longo, 2000).

2.4. The significance of coping with stress

The effect of stress should be kept at positive level to motivate the person. Thus we mention coping with stress. What an individual exhibits in the face of the compulsion and exhaustion of his/her physio-psychological sources is defined as the cognitive and behavioral efforts that are intended for adjusting and are continually changing (Aldwin, 2007; Baum et al., 1981; Lazarus, 1991a; Lazarus and Folkman, 1984). Many fields of educational process are largely affected from anxiety and stress, it will be useful to provide education about the techniques for coping with stress and managing anxiety to the students (Greenberg et al., 2000; Napoli et al., 2005; Skinner et al., 2003).

3. METHOD

3.1. Objectives

The purpose of this study is to (a) develop a group guidance program on enhancing coping with stress of fifth grade students and (b) investigate its effects on the anxiety levels of 5th grade students. Hypotheses are given below:

1. There will be a statistically significant decrease on the post-test anxiety levels of experimental group after the application of Coping with Stress Program.

2. There will be no statistically significant change on the post-test anxiety levels of control group after experiment process completed.

3. There will be no statistically significant change between post-test and following test anxiety levels of experimental group.

3.2. Design

Pre-test and post-test with a following test experimental model with experimental and control group was used. Research design is given on Table 1.

Group	Before Experiment	Experiment Process	After Experiment	Following Experiment after 3 Months	
	Pre-test		Post-test	Following	
Experimental	STAIC	Coping with Stress	STAIC	STAIC	
	Questionnaire	Program			
Control	STAIC	Watching films and book	STAIC	STAIC	
	Questionnaire	discussions			

Table 1. Research design.

3.3. Participants

Research was conducted in Izmir Bayraklı Talatpasa Secondary School at 2010-2011 education periods with 24 students. Participants were selected according to their accessibility and the school contact with the university. The counsellor of the school was one of the researchers in this study. In order to determine the groups, inventory applied to whole 90 students in school and 24 students (15 (62,5%) girls, 9 (37,5%) boys), who had high anxiety and volunteer, were selected and distributed randomly to the experimental group as 12 students and control group as 12 students regarding their similarities. The pre-test means of groups were assessed for normal distribution and no statistically significant difference was obtained.

According to sibling number, 2 of students (8,3%) indicate they are the only child, 16 of them (66,7%) indicate they have one sibling, 6 of them (25%) indicate they have more than one sibling. According to mother education level, 1 of them (4,2%) indicated as analphabetic, 13 of them (54,2%) indicate as primary school graduate, 10 of them (41.7%) indicated as high school graduate. According to father education level, 1 of them (4,2%) indicated as analphabetic, 8 of them (33,3%) indicate as primary school graduate, 3 of them (12,5%) indicate as secondary school graduate, 10 of them (41,7%) indicate as high school graduate, 2 of them (8,3%) indicate as university graduate. Students indicate that 20 of them (83,3%) take the advantage of school counselling service and 4 (16,7%) of them don't.

3.4. Data collection tools and data analysis

3.4.1. State-Trait Anxiety Inventory for Children (STAIC). The State-Trait Anxiety Inventory for Children (STAIC) distinguishes between a general proneness to anxious behavior rooted in the personality and anxiety as a fleeting emotional state, based on the same theory as the STAI. The instrument is designed to be used with upper elementary or junior high school aged children and consists of two twenty-item scales. It was adapted to Turkish population by Özusta (1995). Studies offer suitability for 9-13 years old age. Reliability studies indicate .82 Cronbach Alpha coefficient for S-Anxiety scale and .81 Cronbach Alpha coefficient for

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T-Anxiety scale. Test-retest reliability coefficient for whole group .60 for S-Anxiety scale and .65 for S-Anxiety scale.

3.4.2. Questionnaire. This form was established by researchers as five close ended questions, in order to obtain data about participants' gender, sibling number, education level of parents, and usage of school counselling service, perceptions about academic achievement levels. In order to see whether there was a statistically significant difference between the pre-test anxiety levels of groups before the application of the program or not, t-test was conducted. After the program was conducted to the experimental group and after the post-test and following test results obtained, the effects were analysed by oneway Anova.

3.5. Design of Coping with Stress Program (CWSP)

This program was established by the researchers especially for this study through one year before applications. The construction and objectives of the program were given below on Table 2.

Objectives		Activities	Sessions
n whole hysical and	1.1. Helping group members meet and introduce each other2. Establishing group process	Introduction activity, meeting play, establishing rules	Session 1
ss concept with whole its resources, physical	 3. Establishing rules with members 2.1. Understanding "stress" construct 2. Diffentiating stress evoking cases 	Using pictures and vignettes	Session 2
s,	3.1. Learning the resources of stress	Discussing and filling in the form about stress evoking or avoiding phrases	Session 3
1.Part: Introducing st dimensions (what it i emotional symptoms	4.1. Understanding physical symptoms of stress moment2. Understanding emotions and feeling of stress moment	Using pictures to differentiate physical and emotional physical symptoms, scanning written media, establishing bulletin and creating a catchphrase	Session 4
ing gies	5.1. Applying and teaching relaxation training2.Understanding and using coping skills	Relaxation training and applying other strategies	Session 5
2.Part: Learning coping strategies	6. Transfering obtained knowledge and coping skills to real life situations	Role playing, question and answer activity on vignettes	Session 6

Table 2. General structure and objectives of CWSP.

Activities and its order are all original because cognitive therapies, mindfulness research, positive psychology and preventive counselling approaches establishes our source of inspiration and we emphasize cooperative play, role playing, analysing pictures and newspapers, relaxation training, examining vignettes which are suitable for the cognitive and psychosocial developmental levels of fifth grade students.

3.6. Results

Pre-test, post-test and following test results of groups are given on Table 3. First and third hypothesis verified and Anova results are given on Table 4.

		Pret	test	Post	test	Following	
Groups	Ν	\overline{x}	Ss	\overline{x}	SS	\overline{x}	SS
Experimental	12	40.00	2.000	33.08	1.08	32.25	1.35
Control	12	40.16	2.85	37.75	1.60	40.08	2.10

Table 3. Pre-test, post-test and following test means and standart deviations of both groups.

Table 4. Pre-test, post-test and following test anxiety means significance of experimental group.

Source of Variance	Sum of Squares	sd	Means of Squares	F	р	Significant Difference
Among the subjects	20.22	11	1.83			
Measurement	434.38	2	217.19	83.911	.000*	Pre-test-Post-test
Mistake	56.94	22	2.58			Pre-test-permanence
Total	510.55	35	221.62			

*p<.01

According to Table 4, it was discovered that anxiety score means of the individuals taking part in the Program of Coping with Stress show difference at significant level and the effects of repetitive measurements factors (pre-test, post-test, following) present in the procedure on the anxiety were statistically meaningful $[F_{(1-22)}=83,911 \text{ p}<.05]$. It was observed that there was statistically no significant difference between the means of post-test anxiety level of the students in the subject group and the following test anxiety score means. This result reveals that the applied program reduces the anxiety score averages of students and this effect continues for three months, which puts emphasis on the permanence of program.

Second hypothesis verified and Anova results are given on Table 5. As it is seen in Table 5, according to Anova test results of the control group $[F_{(1-22)}=7,360 \text{ p}<.05]$, it was observed that there is a significant difference in the anxiety score means of the students in the control group after applying the Program of Coping with Stress. However, this difference occurred between the post-test and permanence. No statistically meaningful difference was observed between the pre-tests and post-tests. Decrease of anxiety in the process of post-test and its being at the level in the time of pre-retest in the process of following can be regarded as a natural fluctuation.

Source of Variance	Sum of Squares	sd	Means of Squares	F	р	Significant Difference
Among the	99.333	11	9.030			
Subjects						
Measurement	45.167	2	22.583	7.360	.004*	Post-test/following test
Mistake	67.500	22	3.068			C
Total	212.000	35				

Table 5. Anova results of the control group's anxiety pre-test, post-test and following test scores for repetitive measurements.

*p<.01

4. FUTURE RESEARCH DIRECTIONS

We experience stress since we are searching for the most effective ways to cope with stress and manage anxiety through 35 years worldwide. Current modern life and rapid technological innovations are inclined to create new stressors. However, it is proved that coping with stress programs or anxiety reduction studies, no matter what are their approaches, are effective. For undergraduate teacher and counselor education programs and for the counseling curriculum of schools, curriculum development study including stress management is suggested.

According to positive psychology and positive youth development movement, preventive studies in school counseling become crucial. Besides, school counselors need application studies. In-service trainings for educators and principals are suggested.

The effects of general and social media; environmental circumstances; increased modernization; shifting values and customs; and stereotypical thinking patterns about self in children may be valuable variables for future stress studies.

5. CONCLUSION/DISCUSSION

In present study, a coping with stress program was developed for 5th grade students to understand the concept of stress, its sources, physiological symptoms, relaxation training and training of transforming knowledge and skills to daily life. A statistically significant decrease was seen on their anxiety levels after the program experience. Also, there was no statistically significant difference between their post-test and the following test results indicating permanence. Moreover, there was no statistically significant difference between the pre-test and the post- test anxiety levels of the control group. These results are parallel with Sheehy and Horan (2000), and Iglesias et al. (2005). Besides, there are supporting findings in literature indicating the benefits of coping programs (Berger et al., 2007; Catalano et al., 2002; Garmezy et al., 1984; Greenberg et al., 2000; Heimberg et al., 1990; Kraag et al., 2006; Napoli et al., 2005; Wall, 2005). Consequently, results showed that Coping with Stress Program reduced the anxiety levels of secondary school students and this effect lasted three months. Aforementioned studies and the results of present research revealed that in schools children should be educated on managing stress and controlling their interpretations of relations and events in order to avoid anxiety. This study brings in a developmental educational counselling program and enriches the efforts for coping anxiety and stress.

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