# The Effect of Solution-Focused Brief Counseling on Reducing Test Anxiety

Efecto de la Consejería Breve Enfocada a la Solución de la reduccion de la ansiedad hacia la evaluacion

Efeito do Aconselhamento Breve Focado na Solução na Redução da Ansiedade à avaliação

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# **Abstract**

Test anxiety is a very common phenomena observed in K-12 level of education all over the world. This can take a more complex and stressful form in countries using national exam in university entrance. Turkey is one of those countries. Since higher education is free for all of citizens, students have found themselves confronting a very competitive testing-culture. Therefore, the purpose of this study was to test the effectiveness of the solution-focused brief counseling approach on test anxiety of senior year high school students. An experimental study was conducted in an Anatolian high school in Bolu, Turkey in the academic year 2015-2016.

Sixteen students participated in the study, eight of them were in the experimental group, other eight were in the control group. The ages of the students varied between 16 and 18 years; the average age of the experimental group was 17, while it was 16.87 in the control group. Six of the participants were male, whereas ten were female. Because the data set was not normally distributed and the number of participants was less than 30, nonparametric tests were preferred for data analysis. Mann Whitney-U and Wilcoxon Signed Rank tests, which are nonparametric techniques, were utilized in data processing. The results revealed that the four-session individual psychological counseling based on solution-focused brief approach was effective in mitigating

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students' test anxiety. These findings were found to be consistent with the related literature.

*Keywords*: Solution-Focused Brief approach, psychological counseling, test anxiety, adolescent, high school student, university entrance exam.

# Resumen

La ansiedad ante la evaluación es un fenómeno frecuente que se observa en los grados educativos K-12. Esto puede tornarse más complejo y estresante en países que utilizan los exámenes nacionales para el ingreso a la universidad. Turquía es uno de esos países. Debido a que la educación secundaria es gratuita para todos los ciudadanos, los estudiantes se enfrentan a una cultura de evaluación muy competitiva. Consecuentemente, el propósito de este estudio consistió en evaluar la efectividad de una intervención conforme al Modelo de Consejería Breve Enfocada en la Solución, realizada con estudiantes Senior de secundaria, en la reducción de la ansiedad ante la evaluación. El estudio se realizó en un colegio de bachillerato Anatolí en Bolu/Turquía en el año académico 2015-2016. Participaron dieciséis estudiantes, 8 en el grupo experimental y 8 en el grupo control. La edad de los participantes variaba entre 16 y 18 años; la edad promedio en el grupo experimental fue 17, y 16.87 en el grupo control. Seis de los participantes eran hombres y 10 eran mujeres. Debido a que los datos no se distribuyeron normalmente, y el número de participantes era menor a 30, en el análisis se utilizaron tests no paramétricos: Mann Whitney, y prueba de rangos con signo de Wilcoxon. Los resultados sugieren que cuatro sesiones de intervención conforme al modelo de Consejería Breve Enfocada en la Solución son efectivas para mitigar la ansiedad ante la evaluación. Estos hallazgos son consistentes con la literatura disponible.

Palabras clave: modelo de Consejería Breve Enfocada en la solución, ansiedad ante la evaluación, adolescentes, estudiante de secundaria, examen de ingreso a la universidad.

# Resumo

A ansiedade ante a avaliação é um fenômeno frequente que se observa nos graus educativos K- 12. Isto pode tornar-se mais complexo e estressante em países que utilizam os exames nacionais para o ingresso à universidade. A Turquia é um desses países. Devido a que a educação secundária é gratuita para todos os cidadãos, os estudantes enfrentam-se a uma cultura de avaliação muito competitiva. Consequentemente, o propósito deste estudo consistiu em avaliar a efetividade de uma intervenção conforme ao Modelo de Aconselhamento Breve Focado na Solução, realizada com estudantes Sénior de secundária, na redução da ansiedade ante a avaliação. O estudo se realizou em uma escola de secundária Anatolí em Bolu, Turquia, no ano acadêmico 2015-2016. Participaram dezesseis estudantes, 8 no grupo experimental e 8 no grupo controle. A idade dos participantes variava entre 16 e 18 anos; a idade média no grupo experimental foi 17, e 16.87 no grupo controle. Seis dos participantes foram homens e 10 foram mulheres. Devido a que os dados não se distribuíram normalmente, e o número de participantes era menor a 30, na análise se utilizaram testes não paramétricos: Mann Whitney e prova de rangos com signo de Wilcoxon. Os resultados sugerem que quatro sessões de intervenção conforme ao modelo de Aconselhamento Breve Focado na Solução são efetivas para mitigar a ansiedade ante a avaliação. Estes resultados são consistentes com a literatura disponível.

Palavras-chave: modelo de Aconselhamento Breve Focado na solução, ansiedade ante a avaliação, adolescentes, estudante de secundária, exame de ingresso à universidade

## Introduction

Several national examinations have been performed to select and place students in Turkey for years. These examinations, held by the Measurement, Selection and Placement Center (Ölçme, Seçme ve Yerleştirme Merkezi, MSPC/ÖSYM), which has

a corporate structure, cover a very wide range of examinations for enrolling in military high schools for specialty exams in medicine at medical schools, as well as district governorship exams. Even though all exams are important for the candidates who are taking them, the most crucial ones are the university entrance exams, called Transition Examination to Higher Education (Yükseköğretime Geçiş Sinavi) (ETHE/YGS) and the Undergraduate Placement Exam (Lisans Yerleştirme Sınavı) (UPE/LYS) which can have an influence on the daily routines of the country. The first-stage exam, ETHE/YGS, is taken by approximately two million candidates (SSPC/ÖSYM, 2015). About half of them are the senior-year high school students, while the other half are graduated students. The majority of the candidates taking the exam go through a long studying period so that they can enroll in the universities and departments they have set sight on. Yet, a part of those candidates cannot succeed due to several reasons. Since quotas are limited, universities admit students who achieve a certain score and rank. Moreover, they have to take the examinations of many institutions and agencies, as well as the central exams such as the Public Personnel Selection Exam (Kamu Personeli Seçme Sınavı) (PPSE/KPSS), the Academic Personnel and Postgraduate Exam (Akademik Personel ve lisansüstü Eğitim Sınavı) (APPE/ALES), and the Foreign Language Exam (Yabancı Dil Sınavı) (FLE/ YDS), after the completion of university education.

Central exams held before or after the university education can be misjudged for analysing beyond their actual purposes. Unrealistic considerations such as the achievement of schools or teachers or the family success may be asserted for the outcome of the exams (Erözkan, Doğan & Adıgüzel, 2017; Kumandaş & Kutlu, 2014). These kinds of exams are defined as "high risk exams" (Kumandaş & Kutlu, 2010; Meier, 2002). High risk exams generally include the exams by which a diploma or an important certification will be earned or an individual will transit to a higher level of educational institution (Resnick, 2002). For such exams, students are raced due to unrealistic expectations of students and parents (Looney, 2011). This may prevent them from showing their real performance.

Why do some candidates fail although they have sufficiently participated in exam preparation activities? There may be several answers to this question. Yet, one of the most prominent reasons is primarily test anxiety (Yıldırım & Ergene, 2003). This negative emotion experienced by candidates may hinder the real performance (DordiNejad et al., 2011; Koçkar, Kılıç & Şener, 2002; Yıldırım & Ergene, 2003). The early scientific studies on test anxiety had not been conducted until 1950s, and it has been a subject which started to be a research subject since 1990 (Birjandi & Alemi, 2010). Anxiety is divided into two groups: Trait anxiety and state anxiety (Spielberger, 1972). While state anxiety is when individuals regard what they are going through as stressing under certain circumstances, trait anxiety is a type of anxiety in which individuals thinks they are under threat all the time and regard almost all surroundings and stimuli as stressing. Trait anxiety is not experienced be everyone, it has varying severities or durations depending on the individual's personality (Spielberger & Vagg, 1995). Test anxiety is accepted as a special type of anxiety, generally experienced during a test or an examination. It is known that there are basically two dimensions of test anxiety: Affectivity and concern. Test anxiety expressed in the concept of affectivity covers somatic symptoms such as physiological and sensory shake, stomach bloating, sweating, and nausea. Test anxiety due to concern refers to the unrealistic thoughts and internal monologs about an exam (Öner, 1990; Akın, Demirci & Arslan, 2012).

All psychological counseling and guidance services should be functional, especially in reducing test anxiety at schools if they are run on a professional basis. On the other hand, group activities or methods based on solution-focused brief approach have been preferred to traditional personal counseling in recent years (Meier & Davis, 2007). It is recommended for the psychological counseling services in which the number of students is much higher than the number of experts in Turkey that methods based on solution-focused brief approach should be utilized (Meydan, 2013). Certain studies show that practices based on the solution-focused brief approach have healing effects on the mental health of children and adolescents (Franklin, Streeter, Kim & Tripodi, 2007; Franklin, Moore & Hopson, 2008; İşlek, 2006; Selekman, 2010). It was also proved in a meta-analysis study performed in China that procedures based on solution-focused brief approach (SFBA) proved to be effective in diminishing mental problems such as anxiety and depression (Kim et al., 2015). A group program based on SFBA aiming to reduce bullying at schools was found to be effective in reducing the levels of school bullying (Kvarme, Aabø & Sæteren, 2013). Group studies based on SFBA have been conducted in Turkey, too. It has been found in those studies that interventions based on SFBA have been effective in controlling the students' test anxiety (İşlek, 2006; Sarıcı-Bulut, 2010), in diminishing student burnout (İlbay, 2014), in reducing risk taking behaviors (Uysal, 2014), and in diminishing peer bullying among high school students (Citemel, 2014).

SFBA was developed by Steve de Shazer and Insoo Kim Berg, who are co-founders of brief family therapy in the 1970s (Lipchik, 2002; Quick, 2008). Developing its basic concepts and perspective on the human nature in such a brief time, SFBA offers an environment where solutions are mentioned rather than the problems of psychological counseling approach. It is argued that trying to understand the causes of problems may not always be a part of the solution. As a future-and-objective-directed approach, in psychological counseling based on SFBA, the past is visited only for accessing the times when one has been successful (de Shazer & Dolan, 2012). Those past achievements are utilized as a motivating instrument to get rid of or overcome

the current hardship. Therefore, techniques and skills which have been useful in the past and will possibly be useful are entered into the client's zone of awareness (Gençdoğan, 2014; Selekman, 2008). SFBA is basically formulated in three ways: These include (i) "if it is not broken, do not fix it"; (ii) "if something works, continue with it"; (iii) "if something does not work, do something else" (Meydan, 2013; Sklare, 2010). These strategies aim at enabling clients to use their sources actively and efficiently. Exceptions are considered an important instrument in this approach. The therapist tries to identify the existence of any moment or period in the past when no problem has been experienced (Siyez & Tan, 2014). The therapist tries to reveal strong and useful strategies of the client by asking "What happened at that time so that no problem occurred?"

Today, factors such as expectations of families as well as children and adolescents and time limitation are effective in the preference of solution-focused brief approaches. According to Selekman (2008), the family expectation generally has to do with getting efficient results for their children in short time. Thus, they prefer to solve their problems in a brief time. On the other hand, adolescents may become uncomfortable with the way in which traditional approaches try to understand the individual in a detailed way (MacDonald, 2007). They may respond to psychological counseling in which solutions and strengths are rather mentioned in SFBA because they otherwise feel criticized and questioned. Another factor is time limitation. The fact that the number of experts is limited, but the number of students is much higher can encourage counselors to use brief approaches especially in Turkey (Meydan, 2013).

Students take several exams and receive several assessments during their academic life, they also take the university entrance exam qualified as high risk exams. This examination may become very worrisome for some students. This study aims to test the effectiveness of personal psychologi-

cal counseling based on solution-focused brief approach (SFBA) on the test anxiety experienced by senior-year high school students who are studying for the university entrance exam.

## Method

## **Study Group**

Th participants group of the study was composed of 16 senior-year high school students at an Anatolian high school in Bolu in the academic year 2015-2016. For the sampling method, purposeful sampling technique was used. Both the experimental and the control group consisted of eight students. Two of the participants were male, six of them were female in the experimental group, mean age was 17. Four male and four female participants constituted the control group with an average age of 16.87.

### **Procedure**

The working plan of guidance and psychological counseling was taken in consideration for the study at the school. The Revised Test Anxiety Scale (Akın, Demirci, & Arslan, 2012) was administered to 150 senior-year high school students who were about to take the university entrance exam. The score obtained from the scale varied between 20 and 80. Forty students who scored 45 and higher in the scale were basically informed about test anxiety and personal psychological counseling based on solution-focused brief approach. Moreover, the students who volunteered at the school were told that there would be personal psychological counseling about how to cope with test anxiety. A week was granted for application, and ten students volunteered to participate in the study at the end. Yet, two of them changed their minds. The study was conducted with the remaining eight students. The control group was formed by eight students who had been selected randomly among the remaining 32. The control group had similar levels of test anxiety scores as the experimental group. No intervention was taken on the control group. All the students in the experimental group took a four-session individual counseling based on solution-focused brief approach. The sessions were performed once a week, while no procedure was followed for the control group. The following is the process of how the sessions were performed:

Session 1: In Session 1, student's basic details, such as feelings and thoughts about the exam and the standing of house and family life, were learned. This session took about 60 to 70 minutes; it was the session during which the most important data on the client's standing regarding text anxiety were collected. The exceptional moments when the client did not experience the issues he/she regarded as problems were identified. Since even the smallest changes are important in the solution-focused brief approach, through scaling questions it was tested whether there was a change in the test anxiety felt by the client between the pre-counseling period and the first session. Using the miracle question technique, the moments when test anxiety was not experienced were identified by asking questions like how the moments when test anxiety was not felt occurred and how this situation could be noticed. In addition, the objectives planned to be introduced to students at the end of counseling were concreted and identified. Session ended with homework and rating questions.

Session 2: At the beginning, the previous session was summarized in general. The therapist tried to determine whether there was only progress by asking scaling questions. Even though there was a little change, for example for half a point, the case was emphasized and the therapist tried to enhance the client's motivation. If there was any decline in the score, a future-oriented goal-setting process was commenced by asking "What can you do to increase your score (by half a point or a point at least)?" The therapist tried to motivate the progress stated by the client with responses like those of an amigo (i.e. "it's great to hear that", "such good result, etc.") Homework was assigned to them to record moments when the client took an exam but did not experience test anxiety. In general, positive improvement and progresses in the session were emphasized and summarized to put an end to the session.

Session 3: The previous session was briefly reviewed and the session was commenced with the evaluation of the past week's homework. Through rating questions, the therapist tried to determine whether there was any progress. The progresses were studied in depth by asking: "What did you do to change your score in this rating scale". At this point, emphasizing that tangible behaviors explained by the client was an important step of the change, the therapist gave the client amigo responses for that achievement. In general, positive improvement and progresses in the session were emphasized and summarized to put an end to the session. The therapist also reminded the client of the fact that the next session would be the last one.

Session 4: The session was commenced by reviewing the previous session. Progresses were evaluated with the rating scale. The improvements were also emphasized. The level achieved by the client in the desired behaviors was tested. It was generally observed that there was progress and that the necessary awareness was created. The session was ended by taking client's opinions and approval about the termination of sessions.

Before initiating the study, the Mann Whitney-U test was conducted to assess whether the experimental and control groups were similar in terms of test anxiety scores. The results of the analysis are given in Table 1.

As a result of the Mann Whitney-U test, no significant difference was found between the scores of the test anxiety scale subdimensions and the total test anxiety scores (U=23.5, p>.05) of the groups in terms of tension (U=31, p>.05), bodily symp-

Table 1. *U-test results regarding experimental/control groups'*pretest scores of test anxiety and its subdimensions

	Group	n	Mean Rank	Mean Total	U	P
Tension	Experimental	8	8.63	69.00	31	.959
	Control	8	8.38	67.00		
Bodily Symp- toms	Experimental	8	8.50	68.00	32	1.00
	Control	8	8.50	68.00		
Worries	Experimental	8	7.31	58.50	22.5	.328
	Control	8	9.69	77.50		
Test-irre- levant Thinking	Experimental	8	6.88	55.00	19	.195
	Control	8	10.13	81.00		
Total	Experimental	8	7.44	59.50	23.5	.382
	Control	8	9.56	76.50		

toms (U=32, p>.05), worries (U=22.5, p>.05) and test-irrelevant thinking (U=19, p>.05). This result shows that the participants in the experimental and control groups were similar in terms of test anxiety scores at the beginning.

#### **Data Collection Instruments**

Revised Test Anxiety Scale: The original form was developed in the USA, Egyptian variants (Benson & El-Zahhar, 1994) were adapted into Turkish culture by Akın, Demirci and Arslan (2012). The scale is composed of 20 items and 4 dimensions. The subdimensions are tension (5 items; for example, "I feel really tense during the test"), bodily symptoms (5 items; for example, "I feel my mouth goes dry during the test"), worries (6 items; for example, "I find myself thinking what I will do when I fail during the test"), test-irrelevant thinking (4 items; for example, "I think about being in another place during the test"). A series of statistical analyses were conducted within the scope of adaptation studies. The results of the linguistic equivalence study showed that the correlations among the items in the scale's Turkish and original form varied between .52 and .91. It was also found in the study on the high school sample that the four-dimension model showed good fit in the confirmatory factor analysis ( $x^2=332.20$ , sd=160, RMSEA=.056, CFI=.92, IFI=.92, GFI=.91, and SRMR=.051). The internal consistency reliability coefficients were found to be .78 for the tension subscale, .77 for the bodily symptoms subscale, .71 for the worries subscale, .80 for the test-irrelevant thinking, and .88 for the whole scale. The test-retest coefficients obtained after applying the scale three weeks later were found to be .75, .64, .74, and .70, respectively, and .65 for the whole scale. It was seen that scale's item-total correlation coefficients varied between 37 and 58 The calculated indices were  $x^2/df = 2.50$ , AGFI=.89, GFI=.93, CFI=.95 and RMSEA=.074 in this study. Besides, the internal consistency reliability coefficients were found to be .74 for the tension subscale, .76 for the bodily symptoms subscale, .73 for the worries subscale, .79 for the test-irrelevant thinking. These measures show that SFBA is a reliable and usable instrument in the Turkish culture.

#### Results

The Mann Whitney-U test for unrelated samples and the Wilcoxon Matched-Pair test, which are among non-parametric techniques, were utilized in the analysis of the experimental and control groups data. Where the number of the sample group is under 30 and the normality assumptions cannot be met, it is recommended to resort to non-parametric techniques (Büyüköztürk, 2002). Since there were only 16 participants in the study group (eight in the experimental group and eight in the control group) and the distribution was not normal, non-parametric analyses were utilized.

The Wilcoxon Signed Rank test was used to test whether the solution-focused brief individual counseling approach practiced in the experimental group produced any differences in the students test anxiety scores. The results of the analysis are given in Table 2.

Table 2. The results of the Wilcoxon signed rank test regarding experimental group's pretest and posttest scores of test anxiety scale subdimensions and total text anxiety scale

Total Test Anxiety and its Subdimensions	Posttest- Pretest	n	Mean Rank	Mean Total	Z	p
Tension Post-	Negative Rank	8	4.50	36.00	2.52	.012
test - Tension Pretest	Positive Rank	0	.00	.00		
	Equal	0				
Bodily Symptoms	Negative Rank	8	4.50	36.00	2.52	.012
Posttest - Bo- dily Symp-	Positive Rank	0	.00	.00		
toms Pretest	Equal	0				
Worries Post-	Negative Rank	7	5.00	35.00	2.38	.017
test - Worries Pretest	Positive Rank	1	1.00	1.00		
	Equal	0				
Test-irrele- vant Thin-	Negative Rank	7	4.00	28.00	2.38	.017
king Posttest - Test-irre- levant Thin-	Positive Rank	0	.00	.00		
king Pretest	Equal	1				
	Negative Rank	8	4.50	36.00	2.52	.012
Total Posttest - Total Pretest	Positive Rank	0	.00	.00		
	Equal	0				
p<.05	Lquai					

p<.05

As a result of the Wilcoxon Signed Rank test applied to the experimental group for the period before and after the individual counseling based on the solution-focused brief approach, significant differences were found between the pretest and posttest results. As it can be seen in Table 3, in consideration of the mean rank and all subdimensions of the test anxiety scale and the total test anxiety scores (z=2.52, p<.05), tension (z=2.52, p<.05), bodily symptoms (z=2.52, p<.05), worries (z=2.52, p<.05), and test-irrelevant thinking (z=2.52, p<.05), it is seen that this difference is in favor of a negative rank, that is, the pretest scores. Since lower scores mean lower levels of test anxiety in the revised test anxiety scale, decreasing scores of total test anxiety scale and its subdimensions in the posttest data indicate that the study produced a significant difference between the pretest and the posttest.

The Mann Whitney-U test was run to see whether the personal counseling based on solution-focused brief approach generated any significant difference between control group and experimental group posttest scores. The results of the statistical analysis are given in Table 3.

Table 3. *U-test results regarding experimental/control groups'*posttest scores of test anxiety and its subdimensions

	Group	n	Mean Rank	Mean Total	U	p
Tension	Experimental	8	4.81	38.50	2.50	.002
	Control	8	12.19	97.50		
Bodily Symptoms	Experimental	8	4.94	39.50	3.50	.002
	Control	8	12.06	96.50		
Worries	Experimental	8	4.50	36.00	.00	.001
	Control	8	12.50	100.00		
Test-irre-	Experimental	8	4.75	38.00	2.00	.001
levant Thinking	Control	8	12.25	98.00		
Total	Experimental	8	4.50	36.00	.00	.001
	Control	8	12.50	100.00		

p<.05

As a result of the Mann Whitney-U test, a significant difference was found between scores of the test anxiety scale subdimensions and the total test anxiety scores (U=.00, p<.05) of the groups

in terms of tension (U=2.50, p<.05), bodily symptoms (U=3.50, p<.05), worries (U=.00, p<.05) and test-irrelevant thinking (U=2.00, p<.05). As for the mean rank in the result, it was established that there was a decrease in the test anxiety scores of the students who participated in the psychological counseling based on solution-focused brief approach compared to the students who did not. It is also seen that the personal psychological counseling was effective in alleviating the test anxiety experienced by the senior-year high school students.

#### Discussion

In this study, the effectiveness of the psychological counseling based on solution-focused brief approach in alleviating the test anxiety experienced by the senior-year high school students was the research subject. A significant difference was found between the experimental and control group in terms of the scores of the tension, bodily symptoms, worries, and test-irrelevant thinking subdimensions of the test anxiety scale and the total test anxiety scores. This result was assumed as an evidence indicating that psychological counseling based on SBFA has an impact on reducing test anxiety.

There are no studies found in the literature, which research the effect of individual counseling based on SBFA on the test anxiety experienced by children or adolescents. In this sense, this study can be regarded as an original one. Yet, there is evidence that personal psychological counseling based on SBFA is highly effective in mitigating mental problems such as anxiety and depression (Franklin, Streeter, Kim & Tripodi, 2007; Franklin, Moore & Hopson, 2008; Kim et al., 2015; Reddy, Thirumoorthy, Vijayalakshmi & Hamza, 2015; Selekman, 2010). It is also seen that it is effective in school problems such as drop-out or truancy (Lovarco & Csiernik, 2015). In addition, there are experiment-oriented group studies based on SBFA. For example, in the six-session group study based on SBFA by Ateş (2016), it reduced students' burnout

levels. In the study by İşlek (2006), it was found that the SBFA -based group study had an effect on alleviating the text anxiety experienced by students preparing themselves for the university entrance exam. It was also found in a similar study that the SBFA -based group approach was effective on reducing text anxiety levels of students who were attending the second grade of the elementary school (Sarıcı-Bulut, 2010). In general, it is thought that the natural brief, practical and useful aspects of SBFA -based interventions may have an influence on controlling the test anxiety intensively experienced by adolescents.

Annually, there are a lot of national wide central exams taking place in Turkey. These exams may be attributed to different associations other than their actual purposes. Especially for the exams that are held once a year such as the university entrance exam, students and teachers as well as parents attach excessive meanings to the exams; giving the impression that there is no alternative for students, something that can put much stress on them. Indeed, it was seen in a study conducted with university students that the fact they could take an alternative exam decreased significantly their level of test anxiety (Aşcı, Işlak & Güler, 2015). Moreover, there are research results considering that test anxiety may hinder academic achievement (Tugan, 2015). Test anxiety, which originates from the meanings attributed to the exams by individuals, can be controlled when support is received and effective strategies are used (Kaya, 2015; Yeo, Goh & Liem, 2015; Zolfaghari, Noghabi, Fathi & Hadipour, 2015). Guidance services and psychological counselors who provide support have the competency to reduce and control test anxiety at the schools in Turkey. SBFA -based psychological counseling which is quite practical and functional comes forward as a suitable method for the intervention in test anxiety. Due to reasons such as insufficient number of experts and a higher number of students, attention by psychological counselors at schools using the SBFA in their services for test

anxiety will prove useful for students experiencing this particular anxiety.

A follow up study to track the permanent effect of the intervention could not be performed because the students who participated in this study took the university entrance exam and graduate from school afterward. This is an important limitation of the study. Another limitation is that the study cannot be generalized to other schools because it was performed in an Anatolian gymnasium type state high school. To this end, research studies conducted in different types of schools and along with a monitoring study may contribute to the better understanding of the subject. In addition, it may be functional to deliver in-service training to psychological and school counselors so that the SBFA -based psychological counseling skills, whose validity has been proved both in this and other studies can be taught and improved.

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