

The Effect of Self-Hypnosis on Exam Anxiety and Stress Among University Students

Melike DEMİR DOĞAN^{a,*}, BSc., MSc, PhD, Burak Çağrı AĞÇAY^b, BSc, Tuğba GÖKÇE^b, BSc

^a Assist. Prof., Gümüşhane University, Faculty of Health Sciences, Gümüşhane, Turkey

^b Gümüşhane University, Faculty of Health Sciences, Gümüşhane, Turkey

***Corresponding Author:** Melike DEMİR DOĞAN, Assistant Professor, Gümüşhane University, Faculty of Health Sciences, Gümüşhane, Turkey. Email: melekdm@gmail.com

Abstract

Objectives: The aim of this study was to determine the effect of self-hypnosis on stress and exam anxiety among university students. University students experience stress during their education life and the studies have reported that there is a higher prevalence of stress in students studying in the health-related branches than the general population. Several studies have shown that self-hypnosis reduces anxiety and stress.

Methods: The sample consisted of 33 students who agreed to participate in the study. The initial assessment was made five days before the exam. The students listened to a suggestion set once a day for five days. And then, they were re-evaluated in terms of stress and anxiety levels before taking the exam. The data of the study were collected by using a personal information form, Visual Analogue Scale (VAS) for stress scoring, and the Beck Anxiety Inventory.

Results: The average age of the students was 21.97 ± 0.91 (min 20, max 24). While 78.8% of the students reported that they had an anxious personality, 78.8% stated to have the exam stress. VAS stress scores of the students decreased after the self-hypnosis ($p < 0.0001$). Their mean score of Beck Anxiety Inventory was 35.18 ± 9.31 before the self-hypnosis, and their mean score was 28.12 ± 5.66 in final assessment. The anxiety levels of the students decreased after the self-hypnosis ($p < 0.0001$).

Conclusion: The present study showed that self-hypnosis decreased anxiety and stress levels. However, it is recommended to conduct further studies to determine the effect of self-hypnosis on anxiety and stress and use a larger sample in future studies in order to obtain certain evidences.

Keywords: Self-hypnosis, Exam Stress, Anxiety, Nursing Student

1. INTRODUCTION

Several physical and emotional problems including dissatisfaction with one's self, severe anxiety, and depression may be associated with stress.^{1,2} University students experience stress during their education life and the studies have reported that there is a higher prevalence of stress in students studying in the health-related branches than the general population.^{3,4}

One of the stressors is a lowered academic performance for university students.⁵ Anxiety commonly increases during exam time even in students without test anxiety.⁶ Developing during childhood, the exam anxiety increases its effect in future years. The studies have reported that exam anxiety is associated with increased negative, off-task self-dialogue which then

results in diminished cognitive performance.⁷ Nursing students suffer from stress in personal relationships, academic performances, and finance, which are the same as the all students' stress experience.⁸ Thus, increasing stress may result in decreased academic performance and so, exam anxiety may occur.

The word of hypnosis means sleep, but it is not sleep. It is a natural state which ensures a powerful mind training, deep relaxation, and accelerated learning opportunities.⁹ Generally, it is known as a method used by one person to hypnotise another, but people can do self-hypnosis, as well. A person can use self-hypnosis through a guide of hypnotic induction procedure.¹⁰ Self-hypnosis techniques allow people to become both self-sufficient and confident.¹¹ Self-hypnosis can be performed in

order to facilitate concentration and imagination with opened or closed eyes.¹² Previously prepared CDs can be also used as a guide in self-hypnosis. Generally, subliminal suggestions are involved in the CDs in order to reduce people's anxiety and stress.

Some studies have revealed that self-hypnosis is an effective approach for reducing insomnia¹², labour pain¹⁰, depression¹³, anxiety, and stress.^{14,15} These results are compatible with the present study, which was aimed to determine the effect of self-hypnosis on exam stress in nursing students at a university located in the Black Sea region of Turkey.

2. METHODS

2.1. Design and Sample of the Study

This non-randomised prospective observational study was conducted at a university located in the Black Sea region of Turkey between December 2014 and February 2015. The population of this study consisted of fourth-year students studying in the nursing department (n = 82). 34 students voluntarily participated in the study without using randomization. The inclusion criteria of the study were determined as follows; having exam stress and being willing to participate in the study. A student who suffered from the panic attack was not included in the study even though she was voluntary to participate in the study.

2.2. Research Instrument and Procedure

The initial assessment was conducted five days before the exam. In the initial assessment, a personal information form was filled and while stress levels of the students were determined using Visual Analogue Scale (VAS) for stress, their anxiety levels were determined using Beck Anxiety Inventory^{16,17}. Afterwards, the students were showed how to perform the self-hypnosis through an mp3, and we performed the first application with the student who participated in the study.

The students listened to an mp3 involving the suggestion 'you will relax more when you hear your name' once a day for five days. Whether or not the participant was listening to MP3 every day was asked by the researchers

The instructions given in the mp3 of self-hypnosis on the background with suitable voices were as follows: 'Are you ready? Now go to a place where you will feel very comfortable and none will disturb you. Sit on a chair with a

headrest. Close your eyes. Now, we are starting our journey. In a moment you will feel very slacked and relaxed. During the session, all kinds of noise you hear from the outside and the street, music sound and bus sound will make you relaxed twice than before. Any noise coming from inside, kitchen, apartment to your ear during the session will take you to a deeper looseness twice than before. Every word you hear during the session and the gaps between the words will lead you to a deeper, very deeper relaxation than before. With every breath you take, you will find yourself in a deeper relaxation than before. The relaxation you have experienced today will be very beneficial for you. You will have life joy, life power, and life energy. In a moment, I'll count from 1 to 10 for you. You will find yourself in each of the numbers I have held twice as deeper than before. When I say ten, you will be in such a deep looseness that your consciousness will be very clear, receptive and sensitive to anything I will say. Everything I say to you will be true. I'm starting to count. One slacken, two relax, three, four, five, six continue to slacken, seven, eight, nine and ten. You are very relaxed and slacken right now. Now close your eyes and take a deep sleep. In your dream you have a very nice evening and you are at the top of a ten stepped staircase descending to the beach. You see the sea. The sea is blue and clear. It relaxes you and slackens you. A slight breeze is on your face. You hear the rhythmic voice of the waves coming from the sea. You step down and every step you take slackens you. You are at the bottom. For the next 7 days from now, your love of life will increase and you will notice that every time you hear your name. On the time of returning, you can open your eyes when I count from one to three. When you open your eyes, you will feel better. One, go back to your room. Two, go back to your chair. Three, you can open your eyes. Welcome.'

In the same class in which the initial assessment was made; stress and anxiety levels of the students were evaluated 1 hour before the exam. One day before this evaluation, it was determined that the student listened to the MP3 for the last time.

Ethical Considerations

The required permission was obtained from the administration of the University located in the Black Sea region of Turkey. The students were informed about the study and their verbal consent was obtained.

2.3. Data Analysis

The descriptive statistics, means, median, frequencies, and percentages were used to analyse the socio demographic characteristics of the students. The comparisons were made using the t test for all the statistical analyses.

3. RESULTS

3.1. Socio-Demographic Characteristics of the Students

Table 1 shows socio-demographic characteristic of the students. Their average age was 21.97±0.91 (min 20, max 24). Only one student was male (3%). 81.8% of the students did not any health problem; however 18.2% had some problems (Irritable bowel syndrome, chronic urticaria, panic attack, anaemia, allergies, or hypotension). 78.8% of the students stated to have an anxious personality and 78.8% stated to have the exam stress.

Table1. Socio-demographic characteristics of the students (n=33)

	n	%
Gender		
Female	32	97.0
Male	1	3.0
Current residence place		
With family	3	9.1
In the dormitory	22	66.7
At home with my friends	8	24.2
Level of income		
Low	12	36.4
Moderate	19	57.6
High	2	6.1
Mother's education		
Illiterate	4	12.1
Literate	2	6.1
Primary school	23	69.7
Secondary school and High school	3	9.1
University	1	3.0
Mother's occupation	32	97.0
Housewife	1	3.0
Worker		
Father's education		
Illiterate	1	3.0
Primary school	17	51.5
Secondary school and High school	14	42.4
University	1	3.0
Father's occupation		
Retired	5	15.2
Worker	4	12.1
Farmer	7	21.2
Officer	4	12.1
Self-employed	13	39.4

3.2. Self-hypnosis and Stress

The mean score obtained by the students from VAS for stress was 5.27 ± 2.25 (min 1 - max 9) in the initial assessment and their mean score was 4.33±1.72 (min 1 - max 8) in final assessment. Their VAS stress score decreased after self-hypnosis (p <0.0001) (Table 2).

Table2. The effect of self-hypnosis on anxiety and stress

	$\bar{x} \pm sd$		p
	Pre-test	Post-test	
VAS for stress	5.27±2.25	4.33±1.72	<0.0001
Beck Anxiety Inventory	35.18±9.31	28.12±5.66	<0.0001

3.3. Self-hypnosis and Anxiety

The mean score obtained by the students from Beck Anxiety Inventory was 35.18±9.31 (min 23 - max 59) before the self-hypnosis and their anxiety mean score was 28.12±5.66 (min 21 - max 43) after the self-hypnosis. This decrease was statistically significant (p <0.0001) (Table 2).

4. DISCUSSION

University students face various stressors during their education life. The students studying in the undergraduate nursing programs stated high levels of stress and anxiety.¹⁸ In studies on self-hypnosis, it was reported that self-hypnosis decreased stress and anxiety. Thus, this study was planned to determine the effect of self-hypnosis on exam stress.

The present study revealed that self-hypnosis decreased the students' levels of exam stress. One of previous studies reported that self-hypnosis significantly reduced stress ratings during the exam period.¹⁴ A study reported that self-hypnosis improved the coping mechanisms for exam stress among medical students.¹⁹ A study in which a single-group multiple-baseline design was used, reported that it decreased stress levels among the participants.¹⁵ These studies showed similar results with the present study.

One of the studies, which were conducted on medical and dental students, showed that self-hypnosis protected them from stress-related immune decrements.²⁰ The study on the effect of self-hypnosis on anxiety, and depression reported that self-hypnosis decreased both.¹³ The present study also revealed that self-

hypnosis decreased anxiety levels before the exam. Further studies should be conducted for certain evidences.

As a result, as observed in studies, there is no certain evidences; however, it seems that self-hypnosis can be effective in managing anxiety and stress.

5. LIMITATIONS

The students were informed about the study and their verbal consent was obtained. In the study, control group was not used. Therefore, it is recommended to use the control group in future studies. The data consisted of students' written or verbal reports. Since the students studying in Gümüşhane University Faculty of Health Sciences Nursing department were included in the study, the results of the study may not be generalized to all nursing students in Turkey.

6. CONCLUSION

The present study showed that self-hypnosis decreased anxiety and stress levels. However, it is recommended to conduct further studies to determine the effect of self-hypnosis on anxiety and stress and use a larger sample in future studies in order to obtain certain evidences.

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