

Evaluation of nursing students' self-control in Turkey

Aslihan Ozturk Eyimaya, Ezgi Arslan Ozdemir, Ayfer Tezel, Veli Duyan

Abstract

Objective: To evaluate the self-control of nursing students.

Methods: The descriptive cross-sectional study was conducted from April to October, 2017, at the Nursing Department of Ankara University, Ankara, Turkey, and comprised nursing students of either gender aged >18 years. Data was collected using a personal information form and the self-control scale, and was subsequently analysed.

Results: Of the 488 subjects, 411(84%) were females and 77(16%) were males. The overall mean age was 20.91±09 years. Mean self-control score was 22.5±19.51. Female students with regular attendance and without negative life experiences had significantly high self-control ($p<0.05$). Age, class, place of residence, academic grade-point average, smoking habit, economic status and family type showed no significant differences ($p>0.05$).

Conclusion: Gender, absence from school, and negative life experiences significantly affected self-control of the nursing students.

Keywords: Self-control, Nursing, Nursing students. (JPMA 70: 1013; 2020) DOI: <https://doi.org/10.5455/JPMA.38216>

Introduction

Self-control is the control of one's emotions, thoughts and behaviours.¹ It can also be defined as the ability to block and invalidate contradictory ambitions, wishes, desires, impulses and behaviours which are involuntary and predominant.^{1,2} Self-control helps people to think or change behaviour patterns.³ Even though everyone has a different self-control capacity, high or low self-control can shape individuals' lives differently.⁴ Studies in Dunedin and Dublin reported that individuals with high self-control have healthier lives,^{5,6} and that individuals with high self-control live longer, feel less stress in their life, and are more successful in combating stress.⁶ Individuals with high self-control are less affected by others' directions because they have sufficient skills for organisation and planning, problem-solving and managing problems.² It is also known that individuals with high self-control have strong interpersonal relations and greater academic success.¹ High self-control is an important personal characteristic. Emotional problems, insufficient self-control, low academic success, an inclination towards crime and violence, negative life experiences, alcohol, substance and cigarette abuse, and overeating are related to low self-control.^{2,5-8} Also, literature shows that anger and aggressive behaviours are related to low self-control.⁹⁻¹¹ In order to prevent aggressive behaviours, low self-control is an important area for evaluation.¹²

By evaluating the self-control level and working on emotional shortcomings, individuals can live more successful and satisfying lives.^{2,6} Individuals who cannot cope with their emotions fail to perform self-care.¹² Nurses take care of patients' care needs, but they should also adopt self-care behaviours. Since nurses often encounter distress, anger, hatred and aggression, they should show empathy, altruism and patience.³ They solve other people's problems in a very stressful, complex and quickly-changing environment.¹³ Also, because nursing is a profession requiring quick and important decisions, nurses must consider several options at the same time and decide quickly. Therefore they should have high levels of self-control.

High self-control contributes to the use of effective coping methods, to the control of negative emotional states, and to the elimination of negative emotions. All of these protect both the nurses and the patients.¹⁴ Nurses with high self-control apply decisions, methods or strategies, and strive to fulfill their goals. Nurses prevent harm to patients and work for the promotion of their health. Therefore, nurses with high self-control can concentrate on goals and work effectively. High self-control helps the nurses to analyse the complex data of patients, decide on approaches to patients' problems, and evaluate those problems and find the best solutions. Thus, nurses with high self-control are able to foresee individual, family and public health problems, and can devise solutions. Also, nurses can understand changes and interpret them and can form problem-solving strategies. Nurses with high self-control provide services

.....
Ankara University, Ankara, Turkey.

Correspondence: Aslihan Ozturk Eyimaya. Email: as_ztrk@hotmail.com

that protect and improve public health and quality of life. In literature, self-control is accepted as the determinant of professional performance for all professions and it is found that professionals with high self-control perform better than those with low self-control.¹⁵ Evaluating self-control can provide a reference for relevant interventions for raising the self-control levels of nursing students who are future healthcare professionals. Therefore, the quality of professional development, personal growth, nursing practices, and public health can be enhanced. The current study was planned to evaluate the self-control of nursing students.

Subjects and Methods

The descriptive cross-sectional study was conducted from April to October, 2017, at the Nursing Department of Ankara University, Ankara, Turkey, and comprised nursing students of either gender aged >18 years.

After getting approval from the university's Health Sciences Faculty as well as the rthics committee, the sample size was calculated using the Sample Size Formula with known population.¹⁶ After getting ethics consent from the subjects, data was collected using a personal information form (PIF) and the self-control scale (SCS). It was collected by the researchers in the classroom, and it took about 15 minutes for the students to fill in the PIF and the SCS.

The PIF was generated in line with literature.^{1,4,8,12} It included questions about age, gender, class, grade-point average (GPA), place of longest residence, smoking cigarette, economic status, family type, absence from school, and negative life experiences.^{1,4,8,12}

The SCS is 36-item scale and explores behaviours regarding self-control and the tendency to use the skill in the face of daily problems. Originally, the SCS had one dimension, but in the adapted study done in 2012,⁴ three subscales were determined 'experiential, revisionary and restorative. The total score ranges from -33 to +33 for the subscales of experiential and restorative self-control, and from -42 to +42 for the revisionary subscale. The total score for the entire scale, thus, ranges between -108 and +108. Reverse-coding is used for items 4, 6, 8, 9, 14, 16, 18, 19, 21, 29 and 35. The answers for each item are "It suits me perfectly" (+3); "it suits me mostly"(+2); "it suits me a little"(+1); "it doesn't suit me much"(-1); "mostly it doesn't suit me"(-2); and "it doesn't suit me at all"(-3). Higher scores indicate higher self-control. The Cronbach's alpha value of internal consistency was 0.84 for experiential self-control, 0.73 for restorative self-control, and 0.76 for revisionary self-control, while the entire scale has a

Cronbach's alpha value of 0.81.⁴ In the current study, the Cronbach alpha internal consistency values were calculated as 0.61 for experiential, 0.71 for revisionary, 0.67 for restorative, and 0.71 for the entire scale.

Data was evaluated with descriptive statistics, including frequencies, percentages, standard deviations (SDs) and arithmetic means. Also used were t-test, analysis of variance (ANOVA), and Pearson correlation analysis. Level of significance was set at p<0.05.

Results

Of the 837 students approached, 488(58%) completed the study. Of them, 411(84%) were females and 77(16%) were males. The overall mean age was 20.91±09 years.

The overall mean SCS score was 22.5±19.51 (Table-1). There was a significant association between self-control and gender (p<0.05). Also, women had higher scores than men (p<0.05). Further, the score was significantly high in

Table-1: Average scores for sub-dimensions of the self-control scale (N=488).

Subscales	X SD
Experiential Self-Control	-5.23±9.78
Revisionary Self-Control	18.17±10.54
Restorative Self-Control	9.64±9.73
Total	22.5±19.51

SD: Standard deviation.
X±SD: Mean ± Standard Deviation

those who attended school regularly (p<0.05). Finally, a significant association was found between negative life experiences and self-control scores (p<0.05) (Table-2).

Discussion

The study planned to evaluate the self-control level of nursing students. The findings could help to create education programmes in order to improve the self-control of nurses.

Garcia De Lucio et al.¹⁷ stated that relationships with patients and patients' relatives can be a cause of anxiety for nurses and because of that nurses should have strong self-control. Also, it was determined that educational programmes can successfully raise the self-control levels of the nurses. Health professionals often encounter situations of distress, anger, even aggression and hate. Because of this, the development of self-control is an important component of the nursing and healthcare profession.¹⁸ The literature emphasises that in order to control aggressive behaviours and to increase happiness, self-control is necessary.^{19,20} Tangey et al.²¹ determined that participants with low self-control have negative

Table-2: Effects of descriptive characteristics of nursing students on self-control (N=488).

Descriptive Characteristics	N (%)	Self-Control Scale X SD	Test and p value
Age			
18-19	106 (21.7)	23.50 ±18.36	F=0.869 p=0.457
20-21	209 (42.9)	23.18 ±20.66	
22-23	160 (32.8)	20.80 ±18.95	
24 and higher	13 (2.6)	27.53± 16.51	
Sex			
Women	411 (84.2)	23.36 ±20.09	t=2.04
Men	77 (15.8)	18.42 ±15.51	p=0.04 r=-0.092
Class			
Freshman	122 (25.0)	23.60 ±19.77	F=0.355 p=0.786
Sophomore	99 (20.3)	21.39 ±20.80	
Junior	110 (22.5)	23.42 ±18.83	
Senior	157 (32.2)	22.58 ±19.51	
Place of longest residence			
Village/town	87 (17.8)	25.40 ±18.94	F=1.406 p=0.246
District	152 (31.1)	22.94 ±19.94	
City Center	249 (51.0)	21.38 ±19.40	
Grade-Point Average			
0.00-2.49	314 (64.3)	21.38 ±18.62	t=-1.82
2.50-4.00	174 (35.7)	24.75 ±20.89	p=0.068
Smoking			
Yes	60 (12.3)	18.83 ±15.56	t=-1.59
No	428 (87.7)	23.11 ±19.96	p=0.11
Economic Status			
Low	30 (6.1)	20.26± 17.83	F=0.384 p=0.682
Moderate	440 (90.2)	22.63± 19.74	
High	18 (3.7)	25.27 ±16.79	
Family Type			
Nuclear	397 (81.1)	22.92± 19.54	F=0.604 p=0.728
Extended	79 (16.2)	21.17 ±18.25	
Fragmented	13 (2.7)	20.84± 26.23	
Absence From School			
Always	22 (4.5)	23.59±16.63	F=5.613 p=0.001 r=0.152
Occasionally	259 (53.1)	19.33±19.04	
Rarely	197 (40.4)	26.32±19.45	
Never	10 (2.0)	31.00±24.92	
Negative Life Experience			
Yes	220(45.1)	20.48 ±21.10	t=-2.16
No	268(54.9)	24.31 ±17.95	p=0.03 r=0.098

SD: Standard deviation.

X±SD:Mean ± Standard Deviation

behaviours, like substance and alcohol abuse, eating disorders, pregnancy out of wedlock, violent and criminal acts, and unsuccessful school and work life. Gottfredson and Hirschi¹¹ argued that crime is a result of low self-control and it leads to deviation from normal behaviours. According to them, people with low self-control show impulsivity and egocentric behaviours like a tendency to take risks, low tolerance and choosing physical solutions

over rational ones. Gavriel-Fried et al.²⁰ found that self-control is directly related to physical aggression and indirectly related to hostility and anger. The literature also emphasises that there is a positive correlation between positive thinking, happiness and optimism.²² Pratt and Cullen²³ stated that people with low self-control have behavioural problems. Healthcare provision should include consistent behaviour, positive thinking, being happy and optimistic, and avoidance of aggression. High self-control is an important part of the nursing profession and nursing care.

The average total score of the students in our study was 22.5±19.51. Can and Öztürk²⁴ reported an average score of 29.77±25.05. Similar to our findings, Goff²⁵ found an average total score of 23.02±21.38 among nursing students. Abaan and Altintoprak²⁶ found that nurses had low personal control. The nursing profession is a challenging one and it requires a wide set of skills and talents. Because of this, it is important for nursing students to have high levels of self-control and to be able to manage negative emotions and impulses.²⁷

Successful self-control starts with managing one's own behaviour. First of all, experiential self-control occurs automatically and unconsciously to balance the physiological functions of the individual. Revisionary self-control is not automatic; it is conscious and helps to protect against destructive habits and to adjust to new situations. Lastly, restorative self-control is not automatic, but consciously restorative.²⁸ Experiential self-control covers the behaviours of the individual towards joyful activities, such as music, art and sports.⁴ Experiential self-control motivates the individual to be open to new experiences and pleasant activities, like listening to music or going to the movies, etc.²⁹ In the current study, the average experiential self-control score was -5.23±9.78. Can and Öztürk²⁴ found an average of -1.53±10.34 among students of music teaching. Since the nursing students' scores were lower than those of the music students, it can be said that nursing students also had less interest in activities related to music, arts and sports. The reason could be the intense theoretical and practical education and difficult working conditions of nurses. Revisionary self-control is the will for the actualisation of challenging behaviours and habits, like starting a diet, saving money, quitting cigarettes, etc.^{24,29} In our research, the average total revisionary self-control score was 18.17±10.54, while Can and Öztürk²⁴ reported 21.07±12.69. Revisionary self-control, overcoming difficult situations, may be lower among nursing students because they must be able to overcome difficult situations. Restorative self-control can be defined as the

skill of managing negative emotions like anxiety, stress and worry.²⁹ Restorative self-control consists of controllable behaviours affecting an individual's emotions, pain and cognition, and these behaviours reorganise setbacks and help to balance the life of the individual.⁴ In the current research, the average restorative self-control score was 9.64 ± 9.73 , while Can and Öztürk²⁴ reported 10.46 ± 10.69 among music students. Restorative self-control, used for negative emotional states like stress, was higher among nursing students, which is an expected result since the nursing profession deals with stressful situations.

The current study found that female students had significantly higher self-control than male students. In one study,⁸ the scores of female students were significantly higher than those of male counterparts. Literature also shows that women have significantly higher self-control than men in different age groups.^{20,30,31} This can be explained by personal temperament caused by different socialisation methods, and neurological development. It can also be explained by traditional women's roles and identity in Turkey, and the fact that the nursing profession is still associated with motherhood, sisterhood, mercy and helpfulness. Moreover, in Turkey, women's and men's identity is associated with patriarchy and these roles and identities are socially accepted to have different aspects.

In the current study, students without absences from school had higher total scores for self-control. It can be said that academic success is related to school attendance. But the correlation between GPA and self-control was not significant, while students with high academic success had higher self-control scores. Literature also states that people with higher self-control have greater academic success.^{8,21,25}

Students with negative life experiences had significantly lower self-control than the rest in the current study. This could be because negative life experiences lead to negative behaviours. It is thought that negative life experiences may weaken the self-control skills of students. Some other studies have also found that students with negative life experiences have lower self-control.^{8,32} Tercanli Metin et al.³² stated that there was a negative correlation between the two. It is a fact that positive life experiences are important for preventing behavioural problems.

People with low self-control have higher chances of indulging in substance and alcohol abuse.¹¹ In our research, there was no significant correlation between smoking cigarettes and self-control, but students who

smoked cigarettes had lower scores than the students who did not smoke. Daly et al.⁶ found a correlation between smoking and low self-control.

We found that age, class, place of longest residence, GPA, economic status and family type had no effect on the self-control level of students. Kaygusuz et al.⁸ reported similar findings. These results could be explained by the homogeneity of our sample for age and class. Since this is the first study evaluating nursing students in Turkey, some descriptive characteristics have not been discussed that are part of literature where different samples, including different races, ethnicities and cultures, have different relationships with scores for self-control.²⁵

To improve the self-control of nursing students, the need to raise awareness, and to develop cognitive functions through relevant programmes for nursing should be reorganised. Further studies evaluating the self-control of nursing students with larger sample size are recommended.

Conclusion

Gender, absence from school, and negative life experiences were found to be significant for nursing students' self-control. The evaluation of nursing students' self-control can help strengthen it and help them achieve a healthier, more successful, and more satisfying life.

Disclaimer: The text was presented as an oral presentation at the Fifth International 16th National Nursing Congress held on November 5-8, 2017, in Ankara, Turkey.

Conflict of Interest: None.

Source of Funding: None.

References

1. Nebioglu M, Konuk N, Akbaba S, Eroglu Y. The investigation of validity and reliability of the Turkish version of the brief self-control scale. *Klinik Psikofarmakoloji Bülteni*. 2012; 22:340-51.
2. Baumeister RF, Vohs KD, Tice DM. The strength model of self-control. *Curr Dir Psychol Sci*. 2007; 16:351-5.
3. Schmidt KH. Self-control demands and job strain in nursing and care: the moderating role of boundary conditions. *J Nurs Care*. 2015; 4: 2-6.
4. Duyan V, Gül den C, Gelbal S. Öz-denetimölçegi: Güvenirlilikvegeçerlilikçalışması. *Toplum ve Sosyal Hizmet*. 2012; 23:1-3.
5. Moffitt TE, Arseneault L, Belsky D, Dickson N, Hancox RJ, Harrington H, et al. A gradient of childhood self-control predicts health, wealth, and public safety. *Proc Natl Acad Sci U S A*. 2011; 108:2693-8.
6. Daly M, Baumeister RF, Delaney L, Maclachlan M. Self-control and its relation to emotions and psychobiology: evidence from a day reconstruction method study. *J Behav Med*. 2014; 37:81-93.
7. Fujita K. On conceptualizing self-control as more than the effortful inhibition of impulses. *Pers Soc Psychol Rev*. 2011; 15: 352-66.

8. Kaygusuz C, Duyan G, Oksal A, Duyan V. The effects of some socio-demographic and academic characteristics of university students on self-control. *Am Inter J Soc Sci*, 2015; 4: 162-8.
9. Ellis ML, Weiss B, Lochman JE. Executive functions in children: Associations with aggressive behavior and appraisal processing. *J Abnorm Child Psychol*. 2009; 37:945-56.
10. Restubog SLD, Garcia PRJM, Wang L, Cheng D. It's all about control: The role of self-control in buffering the effects of negative reciprocity beliefs and trait anger on workplace deviance. *J Res Pers*. 2010; 44: 655-60.
11. Gottfredson M, Hirschi T. General theory of crime. Palo Alto, CA: Stanford University Press, 1990.
12. Akgün Pehlivan S, Purutcuoglu E, Duyan G, Duyan V. The determination of self-control skill of tuberculosis patients according to some variables. *Soc Work Health Care*. 2015; 54:615-32.
13. McAllister M. Doing practice differently: solution focused nursing. *J Adv Nurs*. 2003; 41:528-35.
14. Garnefski N, Kraaij V, Spinhoven B. Negative life events, cognitive emotion regulation and emotional problems. *Pers Individ Differ*. 2001; 30: 1311-27.
15. Barrick MR, Mount MK. The Big five personality dimensions and job performance: A meta-analysis. *Pers Psychol*. 1991; 44:1-26.
16. Özdamar K. Modern bilimsel araştırma yöntemleri, (Modern scientific research methods). Turkey: Kaan Kitabevi, 2003.
17. García de Lucio L, García López FJ, Marín López MT, Mas Hesse B, Caamaño Vaz MD. Training programme in techniques of self-control and communication skills to improve nurses' relationships with relatives of seriously ill patients: a randomized controlled study. *J Adv Nurs*. 2000; 32: 425-31.
18. Cohen-Mansfield J. Stress in nursing home staff: A review and a theoretical model. *J Appl Gerontol*. 1995; 14: 444-466.
19. Ronen T, Seeman A. Subjective well-being of adolescents in boarding schools under threat of war. *J Trauma Stress*. 2007; 20: 1053-62.
20. Gavriel-Fried B, Ronen T, Agbaria Q, Orkibi H, Hamama L. Multiple facets of self-control in arab adolescents: parallel pathways to greater happiness and less physical aggression. *Youth Society*. 2018; 50:405-22.
21. Tangney JP, Baumeister RF, Boone A. High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *J Pers*. 2004; 72:271-324.
22. Orkibi H, Ronen T, Assoulin N. The subjective well-being of Israeli adolescents attending specialized school classes. *J Educ Psychol*. 2014; 106: 515-26.
23. Pratt TC, Cullen FT. The empirical status of Gottfredson and Hirschi's general theory of crime: A meta-analysis. [Online][Cited 2018 October 06]. Available from: URL: <http://criminology.2000>; 38: 931-64.
24. Can AA, Öztürk E. Müzik öğretmen adaylarının özdenetim düzeyle rinin bazı de giskenlere göre incelenmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi* 2018; 7:2025-38.
25. Goff AM. Stressors, academic performance, and learned resourcefulness in baccalaureate nursing students. *Int J Nurs Educ Scholarsh* 2011;8:1. doi: 10.2202/1548-923X.2114.
26. Abaan S, Altıntoprak A. Hemsirelerde problem çözme becerileri: özdeğerlendirmesoneuçlarının analizi. *Hemsirelik Yüksekokulu Dergisi*. 2005;12: 62-76.
27. [Online] [Cited 2018 October 02]. Available From: URL: http://nursing.jhu.edu/life-at-hopkins/career-services/documents/careerbinder/nursing_skills_emotional_com.pdf File Not Found/file Is Missing.
28. Rosenbaum M. Learned resourcefulness, stress, and self-regulation. In: Fisher S, Reason J, eds. *Handbook of life stress, cognition, and health*. Chichester, UK: John Wiley, 1988; pp-483-96.
29. Ulas AH, Epcacan C, Sökmen Y, Yasul AF. Siniföğretmeni adaylarının özdenetim beceri düzeyleri ile üstbilisfar kindalık düzeyleri arasındaki ilişki. *Dilve Edebiyat Eğitimi Dergisi*. 2015; 15: 134-48.
30. Dilmac B, Deniz M, Engin Deniz M. Üniversite öğrencilerinin öz-anlayışları ile de gertercihlerinin incelenmesi. *Degerler Eğitimi Dergisi*. 2009; 7:29-4.
31. Rosenbaum M, Ronen T, Abuelaish I, Orkibi H, Hamama L. Positivity ratio links self-control skills to physical aggression and happiness in young palestinians living in Gaza. *Young*. 2018;26: 78-95.
32. Tercanlı Metin G, Harma M, Gökçay G, Bahcivan Saydam R. Düşüksenyoekonomik düzeydeki ergenlerdeolumsuzyasamolaylar i, özdenetim becerisive problem davranışlar. *Türk Psikoloji Dergisi*.