



Psychological Vulnerability and Professional Self-Concept in Clinical Nurses: A Cross-Sectional Study

Klinik Hemşirelerde Psikolojik Kırılganlık ve Mesleki
Benlik Kavramı: Kesitsel Bir Çalışma

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PSYCHOLOGICAL VULNERABILITY AND PROFESSIONAL SELF-CONCEPT IN CLINICAL NURSES: A CROSS-SECTIONAL STUDY

ABSTRACT

Aim: This study was carried out to determine the relationship between the psychological vulnerability levels of nurses working in the clinic and their professional self-concepts.

Methods: This cross-sectional was conducted with 276 nurses working in the clinics of a research and practice hospital. Research data were collected with an introductory information form, the Psychological Vulnerability Scale, and the Professional Self-Concepts Scale for Clinical Nurses.

Results: It was determined that the psychological vulnerability levels of the nurses working in the clinic affected their professional self-concepts and professional satisfaction levels negatively and significantly ($p < 0.05$).

Conclusions and Recommendations: The results showed that as the psychological vulnerability of the nurses increased, their professional self-concept and professional satisfaction decreased. It is recommended to develop strategies that increase the autonomy of nurses by determining their needs for success and environmental approval resources.

Keywords: Nurse, Professional Self, Psychological Vulnerability, Self.



KLİNİK HEMŞİRELERDE PSİKOLOJİK KIRILGANLIK VE MESLEKİ BENLİK KAVRAMI: KESİTSEL BİR ÇALIŞMA

ÖZ

Amaç: Bu çalışma, klinikte çalışan hemşirelerin psikolojik kırılabilirlik düzeyleri ile mesleki benlik kavramları arasındaki ilişkiyi belirlemek amacıyla yapılmıştır.

Yöntem: Kesitsel tipte olan araştırma, bir araştırma ve uygulama hastanesi kliniklerinde çalışan 276 hemşire ile gerçekleştirildi. Araştırma verileri, tanıtıcı bilgi formu, Psikolojik Kırılabilirlik Ölçeği ve Klinik Hemşireler için Profesyonel Benlik Kavramları Ölçeği ile toplandı.

Bulgular: Klinikte çalışan hemşirelerin psikolojik kırılabilirlik düzeyleri, profesyonel benlik düzeylerini ve mesleki memnuniyet düzeylerini negatif yönlü ve anlamlı olarak etkilediği belirlendi ($p<0,05$).

Sonuç ve Öneriler: Sonuçlar, hemşirelerin psikolojik kırılabilirlikleri arttıkça profesyonel benlik düzeylerinin ve mesleki memnuniyetlerinin azaldığını göstermiştir. Hemşirelerin başarı ve çevresel onay kaynaklarına olan ihtiyaçlarının belirlenerek otonomilerinin artırılmasını sağlayan stratejilerin geliştirilmesi önerilmektedir.

Anahtar Kelimeler: Benlik, Hemşire, Profesyonel Benlik, Psikolojik Kırılabilirlik.



INTRODUCTION

The nursing profession involves intervening with individuals who have problems and difficulties, face physical and mental burdens, and experience long-term stress. Psychological vulnerability is related to the ability of individuals to cope with the difficulties they encounter in environments such as pressure, stress, and uncertainty (Korkmaz & Gultekin, 2023). Sinclair and Wallston defined psychological vulnerability as “cognitive beliefs that indicate that individuals need sources of achievement and environmental validation for a sense of self-worth” (Sinclair & Wallston, 1999). Individuals form their own cognitive structures based on the reactions and behaviors of the people they interact with in the face of events (Eksi et al., 2019). These maladaptive cognitive reactions to interpersonal events can affect individuals’ coping behaviors, interpersonal relationships, and psychological and physical well-being (Nogueira et al., 2017). Cognitive beliefs that begin to form in early childhood can lead to the formation of unrealistic thoughts and make individuals more vulnerable to stress when faced with stressful situations that they

encounter in daily life (Eksi et al., 2019; Sherman et al., 2009). If adults receive appreciation and approval from those around them for the behaviors they exhibit and perceive themselves as competent, their self-esteem will strengthen and they will feel spiritually good. Nurses, in addition to their physical fatigue in the work environment, do not receive the expected appreciation and approval from patients, their superiors, and the institution they work for, experience high levels of occupational stress, and are prone to more psychological tension than other professions (Atilla Gok, 2015; Karaduman, 2021; Kumas et al., 2019; Luleci et al., 2019; Mazhari et al., 2022; Tajvar et al., 2015; Tran et al., 2019). This situation causes individuals to feel inadequate and unsuccessful, fail to fulfill the requirements of the profession, and fail to adapt to changes in the work environment (Capri et al., 2011; Ince & Sahin, 2015). In a study examining the relationship between job performance and psychological vulnerability, psychological vulnerability was found to negatively affect job performance (Polat and Abasli, 2019). In another study on intention to leave and psychological vulnerability, it was found that there is a positive relationship between intention to leave and psychological vulnerability (Tas et al., 2019).

It has been stated that a work environment where people feel pressured and their needs are not met has negative effects on the self-concept of individuals (Almeida et al., 2023). Self-concept is a person's subjective perception, judgment, or evaluation of himself/herself, encompassing all aspects of his/her physical, mental, moral, and social, and forms the basis for a person's professional self-concept (Kelly & Courts, 2007; Shang et al., 2017). Professional self-concept is defined as individuals seeing themselves as members of a discipline or profession, perceiving themselves as professionals, and being able to use their decision-making ability (Montazeralfaraj et al., 2018; Sabanciogullari & Dogan, 2017). Studies have shown that nurses' professional self-concept is affected by many factors, such as socio-demographic characteristics, personality traits, job satisfaction, professional autonomy, working conditions, and feelings of burnout (Bayer et al., 2021; Cerit et al., 2020; Cetinkaya et al., 2016; Goliroshan, 2021; Sabanciogullari & Dogan, 2017). Having a strong self-concept of nurses is important for both the nursing profession and workforce in the health sector (Sabanciogullari & Dogan, 2017). To implement a good and high-quality nursing intervention, it is thought that professional self-concept and psychological vulnerability levels of nurses are important in the creation of intervention studies to reduce work stress in nurses. Based on scientific information, it is predicted that there may be a relationship between nurses' psychological vulnerability levels and their professional self-concepts, and it is thought that determining this relationship will benefit the literature. At the same time, the fact that this study is the first to simultaneously evaluate the psychological vulnerability levels and professional self-concepts of clinical nurses and that the findings obtained from the study will guide intervention studies for nurses also emphasizes the importance of the study. The main research questions were as follows.

(1) What are the psychological vulnerability and professional self-concept levels of nurses working in clinics?

(2) Is there a significant relationship between the psychological vulnerability levels of nurses working in clinics and their professional self-concept?

METHODS

Study Design

A cross-sectional design was used for this study.

Participants

This study was conducted in the Health Research and Application Center Clinics of a university hospital between January and March 2023. The universe of the study consisted of 800 nurses working in their clinics. In the study, the sample was calculated on a single sample layout, using the sample calculation formula of the known universe ($n = N \cdot t^2 \cdot pq / d^2 (N-1) + t^2 \cdot pq$) (Sumbuloglu & Sumbuloglu, 2021). It was determined that at least 260 nurses should be recruited for sampling at a confidence level of 95%, with a tolerance ratio of not exceeding 0.05, with 80% power. Data in the study, 276 nurses were included in the sample.

Inclusion Criteria

The inclusion criteria were: (1) working as a nurse in the institution where the research was conducted, (2) more than 12 months of nursing experience, and (3) volunteering to participate in the study.

Data collection and measures

The data were obtained by using the “Descriptive Information Form,” “Psychological Vulnerability Scale (PVS),” and “Professional Self-Concepts Scale for Clinical Nurses (PSCI)” with the face-to-face interview method. The data were collected after all necessary permissions were obtained, and the applied forms took approximately 15 min.

Descriptive Information Form: There were 10 questions including nurses’ age, gender, marital status, education degree, working year, unit, working year in the unit, working hours, liking the unit, and receiving professional psychological support.

Psychological Vulnerability Scale (PVS): Developed by Sinclair and Wallston in 1999 and adapted into Turkish by Akin and Eker in 2011, the six-item 5-point Likert-type scale (“1=Not suitable for me”, “5=Fits me perfectly”) is one-dimensional (Sinclair & Wallston, 1999; Akin & Eker, 2011). Possible scores can be obtained on a scale ranging from 6 to 30. An increase in the scores obtained from the scale indicates an increase in the psychological vulnerability levels of adult individuals. Cronbach’s alpha was set at 0.75. In this study, Cronbach’s alpha was 0.71.

Professional Self-Concepts Scale for Clinical Nurses (PSCI): This scale, developed by Sabanciogullari et al., consists of three sub-dimensions and 36 questions (Sabanciogullari et al., 2011). The sub-dimensions of the scale are, respectively, “Professional Satisfaction,” which defines the professional satisfaction and satisfaction of nurses, “Professional Competence,” which defines the self-evaluation of nurses in terms of professional qualifications required to fulfill the nursing profession, and “Professional Attitude Skill.” The scale is applied on a 4-point Likert type (“1=strongly disagree”, “4=I strongly agree”). The score of the scale was obtained by summing all the items, and a minimum of 36 points and a maximum of 144 points were obtained from the scale. The increase in the scores obtained from the scale indicates that the professional self of nurses in the clinic improved positively. Cronbach alpha was stated as $\alpha=0.87$ (Akin & Eker, 2011). In this study, Cronbach’s alpha was 0.88.

Ethical Considerations

This study was conducted in accordance with the ethical principles of the Declaration of Helsinki. The study was approved by the Ethics Committee of Trakya University (TÜTF-GOBAEK 2022/424-decision number 24/14), and permission to conduct the study was obtained from the directorate of the hospital (No. E-79056779-600-418966).

Data Analyses

Statistical evaluation was performed using SPSS 21.0. In this study, the percentage, frequency, arithmetic mean, and standard deviation were used to evaluate nominal and ordinal variables. The assumption of normality of the numerical variables was examined using the Kolmogorov-Smirnov test of normality. Pearson’s correlation analysis was used to determine the relationship between the scales and sub-dimensions. The statistical significance of 0.05 was accepted.

RESULTS

A total of 276 study subjects were recruited, 85.9% in the 22-35 age group, 14.1% in the 36-50 age group, 73.6% (n=203) were female, 54% (n=149) were single, and 75.4% (n=208) were undergraduates. 48.2% (n=133) of the nurses work between 1 and 5 years and 38% (n=105) work in internal units. 64.1% (n=177) of the nurses have been working in the unit they have been in for 1-5 years, 47.1% (n=130) have worked for 45 hours or less, 81.9% (n=226) were satisfied with the unit they worked in, 3.3% (n=9) of the nurses participating in the study receive professional psychological support (Table 1).

Table 1. Personal and professional descriptive characteristics of nurses (n=276)

Characteristics		n	%
Age (min:22-max:50)	22-35 Age	237	85.9
	36 age and Above	39	14.1
Gender	Female	203	73.6
	Male	73	26.4
Marital Status	Single	149	54.0
	Married	127	46.0
Educational Degree	High School	36	13.0
	College/University	208	75.4
	Postgraduate	32	11.6
Employment Years	1-5 Years	133	48.2
	6-10 Years	83	30.1
	Over 10 Years	60	21.7
Employment Department	Intensive Care Clinics	87	31.5
	Surgery Clinics	58	21.0
	Internal Medicine Clinics	105	38.0
	Emergency Clinics	26	9.5

Years of Employment in the Unit	1 Year Under	60	21.8
	1-5 Years	177	64.1
	Over 5 Years	39	14.1
Working Hours	45 hours or Less	130	47.1
	46 hours or More	146	52.9
The status of Liking the Unit	Yes	226	81.9
	No	50	18.1
Receiving Professional Psychological Support	Yes	9	3.3
	No	267	96.7

Min: Minimum, **Max:** Maximum

Nurses' overall PVS total score average was 16.00 ± 4.60 , PSCI total score average was 114.36 ± 12.47 , professional satisfaction subscale mean score was 13.27 ± 3.43 , professional competence subscale mean score was 23.45 ± 3.20 , and professional attitude and skill subscale 77.63 ± 8.53 (Table 2).

Table 2. PVS, PSCI scale and subscales mean scores

Scales and Subscales	Mean \pm SD	Scale Min.-Max.
PVS Total	16.00 ± 4.60	6-30
PSCI Total	114.36 ± 12.47	36-144
Professional Satisfaction Subscale	13.27 ± 3.43	5-20
Professional Competence Subscale	23.45 ± 3.20	7-28
Professional Attitude and Skills Subscale	77.63 ± 8.53	24-96

Min: Minimum, **Max:** Maximum, **SD:** Standart deviation

Table 3 shows the relationship between nurses' psychological vulnerability levels and professional self-concept total and subscale mean scores. There was a weak and negative correlation between the psychological vulnerability levels of nurses and the total professional self-concept ($r = -0.121$) and the professional satisfaction subscale mean score ($r = -0.185$) ($p < 0.05$). There was no significant relationship between the nurses' PVS and their professional competence, professional attitude, and skill subscale score averages ($p > 0.05$).

Table 3. Pearson correlations between PVS and PSCI total and subscales

Scales and Subscales	1	2	3	4	5
	r	r	r	r	r
PVS total	1				
PSCI total	-0.121*	1			
Professional satisfaction subscale	-0.185**	0.547**	1		
Professional competence subscale	-0.054	0.763**	0.137**	1	
Professional attitude and skills subscale	-0.082	0.955**	0.345**	0.685**	1

r: Pearson correlations * $p < 0.05$ ** $p < 0.001$

DISCUSSION

This study contributes to the literature on the psychological vulnerability of nurses working in clinics and their professional self-concepts, and several important findings were obtained. The first important finding of our study was that the psychological vulnerability levels of the nurses working in the clinic were approximately moderate and their professional self-concept levels were above the moderate level. In addition to daily stressors in the nursing profession, work stress accompanying reasons such as long working hours, performance expectations, and taking care of others are common, and work stress may have direct and indirect effects on nurses' anxiety levels and may have an indirect effect on depression levels (Chen et al., 2020). It was observed that 86.7% of the nurses were exposed to psychologically violent behaviors in the workplace (Tambag et al., 2018), experienced high levels of burnout (Zhang, et al., 2021), and had a low level of job satisfaction (Yuksel Kacan et al., 2016). It has been stated that the higher the emotions experienced in the work environment, the higher the expected psychological vulnerability (Tas et al., 2019). At the same time, stressful life experiences can lead to an increase in cognitive patterns that make individuals more sensitive to stress, a decrease in psychological well-being, and an increase in psychological vulnerability (Ugur et al., 2021). While there are studies on concepts such as resilience, resilience, psychological violence, and psychological well-being in nurses in the literature, no study has determined the levels of psychological vulnerability. Since psychological vulnerability is related to the expectation of external approval and acceptance of individuals, the psychological vulnerability levels of individuals are affected by the attitudes and behaviors of all individuals who are in contact with the business environment (Tas et al., 2019). It is thought that the inadequacies of nurses in communicating with their colleagues and administrative managers in the work environment and the communication difficulties experienced by patients and their relatives who experience tension due to the disease support our study results. In addition, considering the working conditions of the nursing profession and the job satisfaction levels of the nurses in the studies, it can be said that the result obtained in our study is an expected result.

Everyday stressors can threaten how the individual sees himself, how he values himself, or in short, the valuable aspects of the self (Sherman et al., 2009). Self-esteem plays a role in the development of the professional self (Sabanciogullari & Dogan, 2017). In a study conducted in Turkey, it was stated that nurses had high self-esteem and a well-developed professional self-concept (Ozdemir et al., 2020). Bayer et al., (2021) stated that nurses' professional self-concepts were at a moderate level, and nurses' professional satisfaction, professional competence, and professional attitude and skill average scores were high. In our study, similar to the literature, it was found that professional self-concept means that nurses' scores were above the middle level. Professional self-concept defines an individual's perception of himself/herself as a member of the profession and his/her professional values, competencies, and perceptions of their roles. The fact that the professional self-concept scores of the nurses in our study were above the average level suggests that nurses see themselves as a part of their profession and have a positive perception of their professional values and roles.

Another important finding in the study was that there was a significant negative relationship between the psychological vulnerability levels of nurses and their professional self-concept and satisfaction levels. Individuals' levels of psychological vulnerability affect their self-esteem. In this context, individuals with a high level of psychological vulnerability have difficulty coping with stressors during stressful events, experience emotional difficulties, and the positive aspects of the self are damaged (Ulker & Aysaroglu, 2021). The fact that their thoughts and behaviors are not accepted by the individuals around them may lead to the fact that they cannot use their autonomy in the profession sufficiently, negatively affect their decision-making skills, and decrease their professional satisfaction. In this study, as the level of psychological vulnerability of nurses working in the clinic increased, the decrease in professional self-concept and professional satisfaction paralleled these results.

Limitations

The fact that the research sample was limited to only one university hospital prevented the generalizability of the data. At the same time, the fact that similar studies evaluating psychological vulnerability levels and professional self-concepts simultaneously in clinical nurses could not be found in the literature limited the in-depth discussion of the findings of the study. It is thought that using sociodemographic variables would be useful in future studies to obtain more comprehensive results.

CONCLUSION

In this study, it was concluded that the psychological vulnerability of the nurses working in the clinic was close to the medium level, the professional self-concepts were above the medium level, and as the psychological vulnerability of the nurses increased, their professional self-concept and professional satisfaction decreased. In line with these results, it is recommended to consider the challenging working conditions of the nursing profession, the psychological reactions of nurses in stressful environments, and the physiological and psychological disorders that occur over time. To support nurses' job satisfaction and professional self-concept, administrators should develop strategies to increase nurses' autonomy by identifying their achievement needs and sources of environmental approval.

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Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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