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HEMŞİRELERİN SOSYAL ZEKA VE PSİKOLOJİK DAYANIKLILIK DÜZEYLERİNİN KARŞILAŞTIRILMASI VE FARKLI DEĞİŞKENLERLE İLİŞKİSİNİN İNCELENMESİ

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Öz

Hastalar, hastaların aileleri ve diğer sağlık profesyonelleri ile devamlı iletişim içerisinde bulunan hemşireler, yeterli düzeyde olmayan psikolojik dayanıklılık ve sosyal zeka riskiyle karşı karşıyadır. Bu iki kavram hizmet içi eğitimler aracılığıyla desteklenebilir. Araştırma, hemşirelerin sosyal zeka ve psikolojik dayanıklılık düzeylerini karşılaştırmak ve farklı değişkenlerle ilişkisini incelemek amacıyla gerçekleştirilmiştir. Çalışmamız tanımlayıcı ve ilişki arayan bir şekilde yürütülmüştür. Mart 2020 - Ekim 2020 tarihleri arasında belirli hastanelerde yapılmıştır. Veri toplamak için Sosyodemografik Veri Formu, Yetişkinler İçin Psikolojik Dayanıklılık Ölçeği (RSA) ve Tromso Sosyal Zeka Ölçeği (TSIS) kullanılmıştır. Çalışma sonucuna göre, katılımcıların TSIS toplam puan ortalaması 75,58±9,90 olduğu bulunmuştur. Ortalama RSA toplam puanı 123.62±19.01 olduğu hesaplanmıştır. RSA ve alt boyutları ile TSIS ve alt boyutları arasında anlamlı pozitif korelasyon olduğu bulunmuştur ($p<0.05$). Bu çalışmada, katılımcıların psikolojik dayanıklılık ve sosyal zeka düzeylerinin orta seviyenin üstünde olduğu saptanmıştır. Ayrıca psikolojik dayanıklılık ile sosyal zeka düzeylerinin arasında bir ilişki olduğu ortaya konulmuştur. Veri toplama süreci planlandığında Covid 19 pandemi dönemi değildi. Veri toplama Covid 19 pandemi döneminde toplandığı için Covid 19 pandemi dönemiyle ilgili bilgileri de içermektedir. Hemşirelerin Covid 19 pandemi dönemindeki sosyal zekaları ve psikolojik dayanıklılıkları hakkında bilgi sağlar.

Anahtar Kelimeler: Hemşirelik, Psikolojik Dayanıklılık, Sosyal Zeka.

COMPARISON OF SOCIAL INTELLIGENCE AND PSYCHOLOGICAL RESILIENCE LEVELS OF NURSES AND EXAMINATION OF THE RELATIONSHIP WITH DIFFERENT VARIABLES

Abstract

Nurses, who are in constant communication with patients, their families, and other healthcare professionals, are at risk of inadequate psychological resilience and social intelligence. These two concepts can be supported through in-service training. The study was conducted to compare the social intelligence and psychological resilience levels of nurses and to examine their relationship with different variables. Our study was conducted in a descriptive and correlational manner. It was conducted in certain hospitals between March 2020 and October 2020. The Sociodemographic Data Form, Resilience Scale for Adults (RSA) and Tromso Social Intelligence Scale (TSIS) were used to collect data. According to the study results, the total TSIS score average of the participants was found to be 75.58±9.90. The average RSA total score was calculated as 123.62±19.01. A significant positive correlation was found between RSA and its sub-dimensions and TSIS and its sub-dimensions ($p<0.05$). In this study, it was determined that the psychological resilience and social intelligence levels of the participants were above the moderate level. It has also been shown that there is a relationship between psychological resilience and social intelligence levels. When the data collection process was planned, it was not during the Covid 19 pandemic period. Since the data collection was collected during the Covid 19 pandemic period, it also includes information about the Covid 19 pandemic period. It provides information about the social intelligence and psychological resilience of nurses during the Covid 19 pandemic period.

Keywords: Nursing, Psychological Resilience, Social Intelligence**.**

Sorumlu Yazar: Adile BOZKURT TONGUÇ

1. INTRODUCTION

Social intelligence is one of the sub-dimensions of intelligence. It is described as the capacity to comprehend individuals and exhibit appropriate behavior (1). This concept is vital in many areas of life for human beings as social beings. It affects both the success of the individual and the people (s)he serves in business life. While individuals with high social intelligence levels work effectively and efficiently, individuals with low social intelligence have difficulty in interpersonal relations and communication (2).

When the characteristics of people with strong social intelligence levels are examined, it is understood that nurses who spend time and communicate with patients are expected to have these characteristics (3, 4). Social intelligence is of great importance in fulfilling nurses' care-related roles and responsibilities. Thanks to the strong social intelligence, it can be easier to cope with possible problems, stress, and burnout situations (5). Another concept necessary for the ability to cope with these negative factors and manage the condition is psychological resilience (6). In a research, social intelligence refers to the ability of individuals to communicate effectively in social environments, develop empathy, exhibit behaviors that comply with social norms, and interact with others (33).

The level of resistance shown in stressful situations is defined as psychological resilience (7). In the literature, studies on healthcare professionals emphasize that it is important to have a high level of psychological resilience (8).

Health professionals who offer health care and practices should always be individuals who are open to development, know the needs of society well, can use and transfer their knowledge and skills, and have problem-solving skills. Social intelligence and psychological resilience concepts should be found at a high level in individuals who practice health care for many such reasons (9).

A study conducted with nurses concluded that social intelligence has a moderating effect on burnout and emotional labor (10). The concept of social intelligence and the concept of psychological resilience are concepts that need to be developed for nurses because these concepts are related to the development of individuals in terms of caregiving, self-actualization, development of skills and many other aspects.

When the studies conducted in Turkey are examined, studies comparing social intelligence and psychological resilience are seen. However, these studies were not conducted with nurses (1, 6). In a study comparing the levels of self-esteem, social intelligence and psychological resilience in healthcare professionals, A positive relationship between social intelligence and psychological resilience has been reported (6). This study, which also involved nurses, highlights the potential connection between these two concepts in nursing professionals (6). Given this, examining the levels of psychological resilience and social intelligence in nurses is crucial. Consequently, this study aimed to compare the levels of social intelligence and psychological resilience in nurses, investigate the relationship between these two factors, and evaluate them in relation to sociodemographic characteristics.

2. MATERIAL AND METHODS

2.1. Type of the research

This research was conducted as a descriptive and correlational study in order to investigate the connection between social intelligence and psychological resilience levels in nurses and various variables and to compare these levels.

2.2. Population and sample of the research

The research population consisted of 1663 nurses in specific hospitals between March 2020 and October 2020. 313 nurses came out with the sample formula of the known universe (11). 336 nurses were included in the study.

2.3. Data collection tools

Sociodemographic data form

The data form prepared by the researchers consists of 6 questions asking nurses' personal and environmental characteristics such as age, marital status, gender, educational status, working environment (unit), and working time.

Tromso social intelligence scale (TSIS)

The validity and reliability studies of the Turkish version of the Tromso Social Intelligence Scale (TSIS), developed by Silvera, Martinussen, and Dahl, were conducted to ensure the scale's appropriateness for use in the Turkish population (12) in 2001 were conducted by Doğan and Çetin (13) in 2009. As a result of the study conducted on 719 students, the internal consistency coefficient was found to be 0.83, and the test-retest reliability coefficient was 0.80, and the test-halving coefficient was 0.75. Tromso Social Intelligence Scale consists of 21 elements in total, consisting of Social Information Process, Social Skills, and Social Awareness, and measures social intelligence in three different areas with a 5-point Likert-type answer key. As a result of the internal consistency, test-retest, and test-half measurements, their coefficients were found to be 0.68, 0.77, and 0.76 for Social Information Process, 0.81, 0.84, and 0.83 for Social Skill, and 0.95, 0.67, and 0.71 for Social Awareness, respectively (13). In this study, on the other hand, internal consistency coefficients were 0.81 for Social Awareness, 0.83 for Social Competence, and 0.86 for Social Information Processing.

Psychological resilience scale for adults (RSA)

A total of six-dimensional resilience scales were developed by Friborg et al. (14). The scale consists of a total of 33 elements. It measures "structural style" and "future perception" with 4 elements each, "family harmony," "self-perception," and "social competence" with 6 elements each, and "social resources" with 7 elements. In order to determine the reliability of the scale, the internal consistency values of the structural equation model were calculated, and Self Perception was defined as 0.80, Future Perception as 0.75, Social Competence as 0.82, Family Cohesion as 0.86, Social Resources as 0.84, and Structural Style as 0.76 (15). The Turkish adaptation of this scale was made by Basım and Çetin in 2011 (16). In this study, the internal reliability indices for the sub-dimensions of the scale ranged from 0.70 to 0.81, while the test-retest reliability results were found to vary between 0.72 and 0.81.

In this article, the independent variables are demographic factors while the dependent variables are social intelligence and psychological resilience levels.

2.4. Data collection

The data for the research were gathered by the researcher through in-person interviews at selected hospitals between March 2020 and October 2020. Due to the epidemic in some of the data collection time, social distance and mask rules were observed. The nurses were interviewed in accordance with the rules, or the forms were applied to the nurses in the specified hospitals via Google Forms. They were filled in an average of 10 minutes.

2.5. Evaluation of the data

IBM SPSS Statistics 25 program was used to evaluate the statistical analysis of the findings. In the evaluation of numerical data, kurtosis and skewness, percentage, number, standard deviation, mean, one-way ANOVA, t-test, and Bonferroni Post Hoc test were used.

2.6. Ethical principles of the research

An ethics committee decision was taken to conduct this research. Written consent was acquired from the hospitals where the research was conducted. Consent was obtained for the scales used in the research. The number of ethics committee permission is B.30.2.ATA.0.01.00/525. After all permissions were obtained, work started based on the Declaration of Helsinki.

3. RESULTS

This study was conducted to compare the levels of psychological resilience and social intelligence in nurses and to explore their relationship with various variables. The findings from the study are presented in this section.

Table 1. Distribution of Nurses' Sociodemographic Characteristics (n=336)

Characteristics	n	%
Age		
18-28	196	58.3
29-39	90	26.8
40 and over	50	14.9
Gender		
Female	273	81.3
Male	63	18.8
Marital status		
Married	178	53.0
Single	158	47.0
Educational status		
High School	29	8.6
Associate Degree	65	19.3
Bachelor's Degree	193	57.4
Postgraduate	49	14.6
Working unit		
Service	96	28.6
Operating Room	69	20.5
Intensive care	91	27.1
Emergency	32	9.5
Other	48	14.3
Working time (years)		
0-5 years	171	50.9
6-10 years	69	20.5
11-15 years	47	14.0
16 years or more	49	14.6
Total	336	100

The distribution of sociodemographic characteristics of nurses as shown in Table 1, It was found that 58.3% of the nurses were between the ages of 18-28, 81.3% were women, 53% were married, 57.4% held a bachelor's degree, and 28.6% worked in the service units, and 50.9% had 0-5 years of working experience in nursing.

Table 2. The Relationship Between Sociodemographic Characteristics and TSIS and RSA

Characteristics	Tromso Social Intelligence Scale (TSIS) Total	Psychological Resilience Scale for Adults (RSA) Total
Age	**Mean±SD**	**Mean±SD**
18-28 (a)	75.36±9.55	123.37±18.87
29-39 (b)	77.34±10.63	127.21±19.88
40 and over (c)	73.28±9.49	118.12±16.72
F	2.859	3.779
p	**0.059**	**0.024* b>c**
Gender		
Female(a)	76.18±9.90	124.45±19.38
Male(b)	73.00±9.52	120.00±16.95
t	2.313	1.680
p	**0.021* a>b**	**0.094**
Marital status		
Married(a)	75.89±9.69	124.25±18.30
Single(b)	75.23±10.15	122.91±19.80
t	0.609	0.646
p	0.543	0.519
Educational status		
High school(a)	74.34±10.05	123.62±18.90
Associate Degree (b)	74.63±9.18	117.66±20.03
Bachelor's Degree (c)	75.63±10.06	124.73±18.35
Postgraduate (d)	77.39±10.11	127.14±19.12
F	0.896	2.959
p	0.444	0.032* d>b
Working environment (unit)		
Service(a)	76.39±9.19	124.72±18.02
Operating room (b)	74.30±11.86	122.96±19.33
Intensive care (c)	76.02±8.50	123.10±19.62
Emergency (d)	77.50±9.14	123.06±17.21
Other (e)	73.71±10.96	123.71±21.00
F	1.224	0.124
p	0.300	0.974
Working time (years)		
0-5 years(a)	76.84±9.35	124.75±18.66
6-10 years (b)	75.75±10.85	122.58±18.47
11-15 years (c)	73.15±9.39	120.57±21.40
16 years or more (d)	73.31±10.32	124.04±18.71
F	2.776	0.678
p	0.041* a>c,d	0.566

*p<0.05 **p<0.01 F: One-Way Analysis of Variance (ANOVA) t: Student's t-test

The distribution of TSIS and RSA scores is given in Table 2. TSIS scores range from 46 to 105, and the average score is 75.58±9.90. RSA scores range from 53 to 165, and the average score is 123.62±19.01. Individuals aged 29-39 were found to have higher psychological resilience than those over 40. Women were found to have higher social intelligence levels than men. Postgraduate education was found to have higher psychological resilience than those who graduated from associate degree . Those who worked for 0-5 years were found to have higher social intelligence levels than those who worked for 11-15 years and 16 years and above.

Table 3. The Relationship Between RSA and its Sub-Dimensions and TSIS and its Sub-Dimensions

Correlation		RSA	Perception of the Self	Perception of the Future	Structural Style	Social Competence	Family Harmony	Social Resources
TSIS	r	0.435**	0.390**	0.339**	0.271**	0.334**	0.335**	0.320**
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Social Information Process	r	0.174**	0.205**	0.147**	0.108*	0.065	0.091	0.177**
	r	0.001	0.000	0.007	0.048	0.233	0.096	0.001
Social Skills	p	0.467**	0.377**	0.345**	0.298**	0.455**	0.354**	0.309**
	r	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Social Awareness	r	0.329**	0.285**	0.261**	0.199**	0.236**	0.297**	0.225**
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*p<0.05”**p0.01”r: Pearson Correlation Coefficient

As presented in Table 3, a significant difference was found in terms of age, gender, study unit, and duration of study with respect to the TSIS total score and its sub-dimensions. Table 3 also reveals a statistically significant difference for RSA and its sub-dimensions in relation to age, gender, and educational status ($p<0.05$). Furthermore, Table 4 shows a positive and significant correlation between the TSIS and its sub-dimensions and the RSA and its sub-dimensions ($p<0.01$), except for the relationship between social information processing-social competence and family adjustment.

4. DISCUSSION

This section discusses the findings from the study conducted to compare the levels of social intelligence and psychological resilience in nurses, as well as to explore their relationship with various variables, in the context of the relevant literature. As a result of the TSIS total score of the nurses participating in the study, it is seen that their social intelligence levels are above the medium level. In a survey conducted with nursing students, the social intelligence level was found to be above the medium level. The result of the relevant survey supports our study (17). The result of a study conducted with nursing students during the covid 19 pandemic was above the average score, supporting our stud (18). According to the results of the above study, in which nurses and health workers were evaluated in terms of TSIS total score, the results of our study are in line with the literature.

According to the RSA total score of the nurses included in the study, the level of psychological resilience was found to be above the medium level. In a study conducted with nurses working in China, the psychological resilience level of nurses was found to be at a medium level (19). High levels of psychological resilience were found during the Covid-19 pandemic (20). It is believed that the reason for this is the results of our study differ from these results is due to the cultural characteristics of different countries, the psychological effect of the pandemic period on people, and the difference in the patient group being cared for.

It can be said that social skill scores were higher in the middle age group in our study ($p<0.05$, Table 3). We can explain the high level of social skills at the age of 29-39 compared to the age of 18-28, with the first adulthood, one of Eric Ericson's psychosocial developmental stages. Individuals in the 20-30 age group are caught between feelings of intimacy and isolation. We can conclude that the social skill levels of the nurses aged 18-28 included in the study were low due to the high sense of isolation (21). A study revealed that no significant difference was observed between age and social intelligence, along with its sub-dimensions (22). Our study does not show similarities with these results. This difference is believed to stem from the fact that the studies were carried out with various healthcare professionals in different regions.

In a research, it was reported that men have higher psychological resilience than women. However, the small number of male participants in this study may be a source of this result (34). In our study, no difference was found between the genders; this situation can be considered as a possible reason for reaching a different result from the previous study. It can be said that RSA and social competence scores were higher in the middle age group in our study (p<0.05, Table 3). It was found in a study that there was a significant difference between the age factor and psychological resilience, so it supports our study (23). A study conducted in New Zealand concluded that the age factor did not affect psychological resilience (24). It can be thought that different results were obtained since they were performed in different regions.

It can be said that social awareness and TSIS scores were higher in women in our study (p<0.05, Table 3). In another study, it was reported that women had a higher level of social intelligence than men (25). The results of this study support our findings. It is thought that the different results obtained from our study may be due to age, working environment, and psychosocial changes.

In our study, it can be said that RSA, future perception, and social competence scores are higher in those with higher education (p<0.05, Table 3.). It is an expected result that as the level of education increases, psychological resilience and its sub-dimensions increase. However, it is thought that the higher psychological resilience of high school graduates compared to associate degree graduates is due to many reasons such as lack of opportunities, the inadequacy of economic situation, early marriage, inability to attend school, and starting a job at an early age. In a research, it was stated that the psychological resilience of nurses is determined by education, workload management and social support (35). A study found that there was a significant difference between educational status and psychological resilience (23). The results of this study support our findings. Many studies have determined that education is an important factor in determining psychological resilience (26, 27, 28). There are also different findings from our study in the literature (24, 29). A research has revealed that the social intelligence levels of graduate students have a significant impact on their academic performance, and that this relationship may vary depending on different variables such as demographic characteristics, university type, and faculty (33). When the studies are examined, it is generally thought that many cultural differences affect the study results.

According to the educational status variable, undergraduate and graduate participants scored higher in the social competence sub-dimension than the associate degree participants (p<0.05, Table 3). In a study conducted with psychiatric nurses, it was reported that psychological resilience varied significantly with the level of education (30). Similarly, a study conducted during the Covid-19 pandemic found a significant relationship between nurses' psychological resilience and their educational background (31). The results of the present study, conducted during the Covid-19 pandemic, support these findings.

In this study, it was determined that the participants in the emergency department got higher scores from the social awareness sub-dimension compared to the other participants (outpatient clinic, blood collection unit, etc.) according to the nurses' working environment (p<0.05, Table 3). Since emergency room nurses are exposed to these situations to make faster decisions and use time more effectively, their awareness is expected to be high. Therefore, it is thought that their social awareness level is high. In one study, no significant difference was found in this regard (22). It is thought that the reason for the different results is the different number of participants and the place of study.

When the relationship between the two scales and their sub-dimensions upon examination, it was found that a positive and significant relationship exists between RSA and its sub-dimensions Self-perception, Future perception, Structural style, Social resources and TSIS, Social information process, Social skills, Social awareness. It has been established that a positive and significant relationship exists between RSA sub-dimensions Social competence and Family harmony and TSIS,

Social skills, and Social awareness. Social intelligence is an important predictor of personal and professional success (32). Generally, positive and significant relationships were a statistically significant positive relationship was found between social intelligence, its sub-dimensions, and psychological resilience sub-dimensions. In this research, which supports our study, a positive relationship was generally found between the two scales. According to a study conducted with nursing students, ıt was determined that a statistically significant positive correlation exists between social intelligence and psychological resilience (17). In a study in which healthcare professionals participated, it was found that social intelligence, self-esteem, and psychological resilience had a positive and significant relationship (6). The result of this study supports our study. Studies on these two concepts in nurses are rare in the literature. For this reason, increasing the number of studies is necessary for nurses to provide more benefit to themselves, their healthcare teammates, and their patients. Social intelligence and resilience levels can be increased to higher levels by accessing more data and increasing the effectiveness and frequency of interventions. Nurses, who communicate directly with patients and encounter certain problems almost every day, must have high levels of social intelligence and psychological resilience. For this reason, training and practices should be carried out to develop social intelligence and psychological resilience levels after researching them first.

5. CONCLUSION AND RECOMMENDATIONS

This study found that nurses' levels of social intelligence and psychological resilience were above average, with a significant positive correlation between the two. Social intelligence is vital for nurses as it not only supports their personal growth but also enhances their interactions with patients and colleagues. Given the frequent communication nurses have with patients, a high level of social intelligence is crucial for effective care, treatment, and fostering positive patient outcomes.

In addition, psychological resilience is essential for nurses to effectively manage the challenges and crises they encounter. A strong level of resilience enables them to cope with the negative effects of health-related issues, patient concerns, and stressors, minimizing their impact. To further develop these competencies, it is recommended to organize regular seminars, conferences, and training sessions aimed at enhancing both social intelligence and psychological resilience.

The contributions of this study to nursing practice contribute to the development of educational programs to strengthen nurses' social intelligence and psychological resilience skills. It is recommended that supportive environments be created in health institutions and psychological support services be provided to increase nurses' psychological resilience. The implementation of practical methods such as seminars and group work to develop social intelligence skills can help nurses be more successful in interpersonal relationships. Regular evaluation of nurses' professional competencies is important in terms of determining areas of development. Since the collection of this study data coincides with the covid period, it can shed light on the evaluation of psychological resilience and social intelligence levels in periods that affect society such as this period. It contributes to the literature for future studies.

Limitations

The differing results from some previous studies may be attributed to the data being collected during the Covid-19 pandemic, a period that may have influenced the nurses' responses. Given this context, a more comprehensive analysis of nurses' social intelligence and psychological resilience is needed. Although this study was not initially designed with the pandemic in mind, the data collection during this period provides valuable insights into how the Covid-19 crisis impacted these qualities in nurses.

Among the limitations of this study, the sample size and diversity were limited to certain hospitals, which limits the generalizability of the results. In addition, due to the use of a cross-sectional design, the change in nurses' social intelligence and psychological resilience levels over time could not be examined. The study was conducted during the Covid-19 pandemic, which may reflect the impact of this situation on nurses' psychological resilience and social intelligence levels. These limitations may limit the applicability of the study results to a wide audience.

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