

## Original Research

### Investigating the Relationship between Social Skills and Emotional Intelligence with the Psychological Well-Being of Operating Room Personnel

Milad Mahdavinia<sup>1\*</sup>

1. Master of General Psychology, Islamic Azad University Arsanjan Branch, Iran. **Orcid:** 0009-0000-4633-0679

**\*Corresponding Author: Milad Mahdavinia.** Master of General Psychology, Islamic Azad University Arsanjan Branch, Iran. **Email:** [Milad.Mahdavinia65@gmail.Com](mailto:Milad.Mahdavinia65@gmail.Com).

#### Abstract

**Background:** The purpose of this research is to investigate the relationship between social skills and emotional intelligence with the psychological well-being of operating room personnel.

**Method:** This research is applied and of a descriptive-correlation type. The statistical population of the study was made up of operating room personnel of Isfahan hospitals, 160 people were randomly selected as a sample using Morgan's table. A researcher-made questionnaire was used to collect data, and its reliability and validity were measured through Cronbach's alpha and confirmatory factor analysis, respectively. In order to analyze the data, descriptive statistics and inferential statistics were used.

**Results:** The research findings indicate that social skills have a direct, positive and significant effect on the psychological well-being of operating room personnel. Also, social skills have a direct, positive and significant effect on emotional intelligence. In addition, emotional intelligence has a direct, positive and significant effect on the psychological well-being of operating room personnel. In addition, the research findings show that social skills through emotional intelligence have an indirect, positive and significant effect on the psychological well-being of operating room personnel.

**Conclusion:** Since social skills increase the structuring of emotional intelligence in personnel and in this way, provide the basis for their psychological well-being; it requires more attention to overcome psychological problems.

**Keywords:** Social Skills, Emotional Intelligence, Psychological Well-being, Operating Room Personnel.

Submitted: 12 Sep 2024

Revised: 19 Oct 2024

Accepted: 11 Nov 2024

## Introduction

Medical and paramedical professions are one of the most stressful professions due to their relationship with human health and life, and this threatens the physical and mental health of the employees of these professions (1). Therefore, due to the presence of stressful factors in the hospital environment and its sensitive parts, including the operating room, the medical staff are more exposed to psychological problems than other people in the society (2). Therefore, it is very important to pay attention to the psychological well-being of these people. Psychological well-being has also been widely studied and conceptualized in different ways. Psychological well-being is the psychological quality of life that is defined as people's understanding of their own lives in terms of emotional behaviors and psychological functions and mental health dimensions (3) and includes two parts; the first part is a cognitive judgment about how people are progressing in their lives, while the second part includes the level of pleasant experiences (4). Psychological well-being can be defined as emotional and cognitive responses to the perception of personal characteristics and capabilities, sufficient progress, efficient and effective interaction with the world, a favorable relationship with society and positive progress over time. This state can also include components such as life satisfaction, energy and positive mood (5). If a person cannot find a meaning in his life, he feels empty and despairs of life, and boredom and fatigue from life covers his entire being. This feeling does not necessarily lead to mental illness, but it is a bad prognosis for suffering from these disorders (6). Satisfying desires, despite creating pleasure, does not always lead to well-being, but well-being includes striving for perfection and realizing one's real potentials, which may not always be accompanied by the feeling of pleasure (7). Social skills can be mentioned among these efforts.

Social skills are observable, definable and acquired behaviors that help a person to achieve positive results from performance in a situation and show behavior that is socially acceptable (8). In fact, social skills are learned adaptive behaviors that give people the ability to interact with different people, show positive

reactions and avoid behaviors that have negative consequences (9). A person who has social skills behaves with others in such a way that he can achieve his rights, needs, satisfaction and fulfill his duties in a normal way, without forgetting the satisfaction or duties of others and having free communication with others. (10). If there is no social skill in interpersonal relationships and social behavioral areas, it leads to the creation of many problems in the behavioral area; because in such conditions healthy communication will not be possible and health and social and personal life will be threatened and disrupted (11).

The other hand, numerous studies in different countries show that emotional intelligence gives a comprehensive picture of a person's skill to achieve psychological well-being (12). Emotional intelligence is considered as capabilities and skills that increase a person's ability to succeed in dealing with pressure and environmental conditions. In other words, emotional intelligence predicts success in life, which directly affects a person's mental health in life (13). Emotional intelligence is a skill that the possessor can control his moods through self-awareness, improve them through self-regulation, understand their impact through empathy, and through relationship management, behave in the right way that his mood and raise others (14). In addition to making it easier for a person to adapt to the physical environment, emotions also make it easier for him to adapt to the social environment (15). Emotional intelligence is one of the newest developments in the field of understanding the relationship between cognition and emotion. In fact, this concept includes a set of social skills and competences that can help people in facing daily requirements and environmental pressures, provide well-being and reduce deviant behaviors, and increase social adaptations (16). Therefore, in the current research, the relationship between the role of emotional intelligence and social skills with the psychological well-being of operating room personnel is investigated.

Rezakhani Moghaddam et al. (2023) investigated the relationship between dignity and social skills with psychological well-being

in the elderly. In the first step of hierarchical linear regression analysis, demographic variables were able to predict 33% of psychological well-being variance. All demographic variables, except education level and housing status, were significant predictors of psychological well-being ( $p < 0.05$ ). In the second and third steps, demographic variables along with social skills and social status were able to predict 45.5 and 52.8 percent of changes in psychological well-being, respectively. In general, social status was identified as the strongest predictor of psychological well-being ( $\beta=0.336$ ). According to the results of the study, dignity and social skills are changeable variables that can play an important role in improving psychological well-being in the elderly. Therefore, it is recommended that policymakers and employees of health-treatment centers pay special attention to improving their dignity and social skills in order to improve the psychological status of the elderly (17).

Hosseini et al. (2022) conducted a research entitled "Comparison and relationship between emotional intelligence and psychological well-being in military personnel who are athletes and non-athletes: development of a structural equation model". The results of this research showed that there is a significant difference between athletes and non-athletes in emotional intelligence and psychological well-being and their components, and that the athletes' employees were better than the non-athletes' employees in emotional intelligence and psychological well-being and their components. Also, the results showed a significant relationship between some dimensions of well-being and emotional intelligence among athletes and non-athletes, and psychological well-being was a good predictor for emotional intelligence and its components in athletes and non-athletes. Therefore, according to the obtained results, it is suggested that non-athletic employees should be encouraged to physical activity in order to improve their psychological characteristics (18).

Abedini Valamdehi and Ravanbakhsh (2021) predicted psychological well-being based on emotional intelligence and life satisfaction among primary school teachers in Zaveh city.

The findings showed that there is a significant relationship between emotional intelligence and life satisfaction with psychological well-being, and emotional intelligence and life satisfaction have a significant contribution in predicting psychological well-being, which explain 31% of the variance of psychological well-being in male teachers and 42% in female teachers. Also, the results showed that in male teachers, emotional intelligence with 0.23% had a significant and positive contribution to psychological well-being, but in female teachers, emotional intelligence with 22% and life satisfaction with 0.20% had almost the same ability to predict psychological well-being. The results of this research support the role of emotional intelligence in male teachers and emotional intelligence along with life satisfaction in female teachers as an important factor in predicting psychological well-being, which can be a good helper in providing practical suggestions in this field (19).

Abdelmohsen et al. (2021) in a research investigated the emotional intelligence and academic performance of medical students in Saudi Arabia and concluded that emotional intelligence has a positive and significant effect on the academic performance of students (20). Jamali et al. (2016) reported in their research that teaching social skills as an important component of life skills improves mental health (21).

### Method

The current research is applied and it is done with a descriptive method, of the type of correlation studies with structural equation modeling. The statistical population of the research consists of 270 operating room personnel of Isfahan hospitals, 160 of them were randomly selected as sample using Morgan's table. In order to collect research data, a researcher-made questionnaire in the 5-point Likert scale was used. In order to measure the reliability of the research tool, Cronbach's alpha method was used and the obtained coefficients are reported in Table 1.

The results show that the used tools have adequate reliability. In order to determine the validity of the tool in this research, confirmatory factor analysis was used and the results obtained are presented in Table 2.

As can be seen, the results of the fitness indices in the measurement models of the research tools show that:

The ratio of chi-square to the degree of freedom in all measurement models of the tools indicates the appropriate fit of the conceptual model of the tools with the data. The value of the RMSEA index is acceptable in all measurement models of the instruments in the standard range, and this indicates that the amount of error in all the measurement models of the instruments is acceptable. The values of CFI and GFI indices in all the measurement models of the tools are evaluated as favorable according to the acceptable criteria and it indicates that all the measurement models of the tools have a good fitness. Therefore, according to the results of the measurement models of the instruments, it can be stated that all the research instruments have a suitable fitness and acceptable validity.

In order to analyze the data in this research, Pearson's correlation coefficient and confirmatory path analysis were used using LISREL software.

## Results

The descriptive analysis of research variables is presented in Table 3:

In Table 4, the correlation analysis of research variables is presented.

The results of the correlation matrix analysis of research variables show that:

Social skills (0.664) and emotional intelligence (0.504) have a positive and significant relationship with the psychological well-being of operating room personnel at the level of 0.05. Social skills have a positive and significant relationship with emotional intelligence (0.361) at the level of 0.05.

Testing the hypotheses of research:

First hypothesis: social skills and emotional intelligence have a positive, direct and significant effect on the psychological well-being of operating room personnel.

Considering the results obtained from the analysis of structural equations, it can be stated: Social skills with path coefficient (0.25) and T-value (4.11) and emotional intelligence with path coefficient (0.32) and T-value (3.25) have a direct, positive and significant effect on the psychological well-being of room personnel. Actions are at the 0.05 level. Also, social skills

and emotional intelligence are able to explain 66% of the variance of psychological well-being. The amount of explained variance of the psychological well-being of the operating room personnel is significant at the 0.05 level according to the t value (7.57).

Second hypothesis: social skills have a positive, direct and significant effect on emotional intelligence.

As can be seen, according to the results obtained from the analysis of structural equations:

Social skills with path coefficient (0.39) and t-value (3.16) have a direct, positive and significant effect on emotional intelligence at the level of 0.05. Also, social skills are able to explain 79% of the variance of psychological well-being. The amount of explained variance of the psychological well-being of the operating room personnel is significant at the 0.05 level according to the t value (2.00).

The third hypothesis: social skills based on emotional intelligence have an indirect, positive and significant effect on the psychological well-being of operating room personnel.

Considering the results obtained from the analysis of structural equations, it can be stated: Social skills with an indirect coefficient based on emotional intelligence (0.141) and T value (2.19) have an indirect, positive and significant effect on the psychological well-being of operating room personnel at the level of 0.05.

Considering the results obtained from the analysis of structural equations, it can be stated: Social skills have a positive effect (0.25), a positive indirect effect (0.141) and a significant positive total effect (0.424) on the psychological well-being of operating room personnel at the level of 0.05.

According to the results obtained from the suitability indicators in the confirmatory path analysis model of the research:

The chi-square ratio on the degree of freedom indicates the appropriate fit of the conceptual model of the instruments with the data. The value of the RMSEA index is acceptable in the criterion range, and this indicates that the error value is acceptable.

The values of CFI, GFI, and AGFI indexes are evaluated favorably according to the considered criterion and indicate that they have

a good fitness. Therefore, according to the obtained results, it can be said that the structural model of the research has a suitable and acceptable fitness.

### Discussion

The purpose of this research is to investigate the relationship between social skills and emotional intelligence with the psychological well-being of operating room personnel. The results of the research are presented as follows: Social skills have a direct, positive and significant effect on the psychological well-being of operating room personnel. In fact, it can be said that one of the main characteristics of successful performance depends on the ability to use social skills tools for the psychological well-being of operating room personnel. The findings are consistent with the results of researches (17) and (21).

In the findings of the second hypothesis of the research, it can be seen that social skills have a direct, positive and significant effect on emotional intelligence. As stated, improving the ability of social skills helps to improve emotional intelligence in operating room personnel.

The findings of the third hypothesis test show that emotional intelligence has a direct, positive and significant effect on the psychological well-being of operating room personnel. The psychological well-being of operating room personnel is the result of improving emotional intelligence, and by creating suitable and valuable capabilities, we can expect to improve performance with the psychological well-being of operating room personnel. The results are consistent with the findings of (18).

Also, the findings of the research show that social skills through emotional intelligence have an indirect, positive and significant effect on the psychological well-being of operating room personnel. This means that social skills increase the structure of emotional intelligence in personnel and in this way, provide the basis for their psychological well-being.

### Conclusion

Psychological well-being includes both emotional and cognitive components; in such a way that people with a high sense of well-being mainly experience positive emotions and have a positive evaluation of the events around

them; while people with a low sense of well-being evaluate events and situations in their lives as unfavorable and experience more negative emotions. Today, the role of social skills in improving the psychological health of personnel cannot be ignored. Social skills, with more appropriate use of the required skills and abilities, can use better solutions in the psychological well-being of the operating room personnel and be effective in improving the productivity of the personnel.

Therefore, improving skills and capabilities in promoting social skills as one of the key factors in the effectiveness of the psychological well-being process of operating room personnel is effective and requires more attention to solve the problems and limitations prevailing on capabilities. Meanwhile, emotional intelligence provides the basis for improving psychological well-being through social skills by strengthening mental health, the ability to empathize with others, social compromise, emotional well-being, satisfaction with life and reducing interpersonal problems.

Among the limitations of the research, we can point out the delay of cooperation of some members of the statistical community in answering the questionnaire properly, as well as the difficult access to the members. In order to carry out future research, it is suggested to conduct a similar research in other cities and people working in hospitals and compare it with the results of the present research.

### Acknowledgment:

The author would like to thank the operating room staff of Isfahan hospitals for patiently helping us in conducting this research.

### Funding

None

### Authors Contributions

The author contributed to the data analysis. Drafting, revising and approving the article, responsible for all aspects of this work.

### Ethical Consideration

The research data and literature have not been copied from any works author upon reasonable request.

### References

1. Rana W, Mukhtar S, Mukhtar S. Mental health of medical workers in Pakistan during the pandemic COVID-19 outbreak. Asian journal of psychiatry. 2020 Jun;51:102080.



2. Umbetkulova S, Kanderzhanova A, Foster F, Stolyarova V, Cobb-Zygadlo D. Mental health changes in healthcare workers DURING COVID-19 pandemic: a systematic REVIEW of longitudinal studies. *Evaluation & the Health Professions*. 2023 May 4;01632787231165076.
3. Varzaneh H T. Investigating the Effectiveness of Self-Efficacy with Psychological Well-Being and Feelings of Loneliness among Divorced Women in Isfahan City. *Int J Med Invest* 2023; 12 (2) :121-134
4. Scharbert J, Humberg S, Kroencke L, Reiter T, Sakel S, Ter Horst J, Utesch K, Gosling SD, Harari G, Matz SC, Schoedel R. Psychological well-being in Europe after the outbreak of war in Ukraine. *Nature Communications*. 2024 Feb 20;15(1):1202.
5. Darband N A. Investigating The Relationship Between Love And Psychological Well-Being With Marital Satisfaction. *Int J Med Invest* 2021; 10 (4) :183-191
6. Van Dierendonck D, Lam H. Interventions to enhance eudaemonic psychological well-being: A meta-analytic review with Ryff's Scales of Psychological Well-being. *Applied Psychology: Health and Well-Being*. 2023 May;15(2):594-610.
7. Sulosaari V, Unal E, Cinar FI. The effectiveness of mindfulness-based interventions on the psychological well-being of nurses: A systematic review. *Applied Nursing Research*. 2022 Apr 1;64:151565.
8. Rahimi M. Effectiveness Of Personality Types And Social Skills And Relationship With Behavioral-Emotional Interaction Of Students. *Int J Med Invest* 2022; 11 (3) :73-88
9. Lee YA, Park HG, Cheon JE, Rice KG, Kim YH. Mediating role of social skills in the longitudinal relationship between intrapersonal perfectionism and psychological well-being of preadolescents. *Journal of School Psychology*. 2024 Feb 1;102:101257.
10. McNaughton S, Rosedale N, Zhu T, Siry J, Oldehaver J, Teng SL, Williamson R, Jesson R. Relationships between self-regulation, social skills and writing achievement in digital schools. *Reading and Writing*. 2022 May 1:1-9.
11. Soares EE, Bausback K, Beard CL, Higinbotham M, Bunge EL, Gengoux GW. Social skills training for autism spectrum disorder: A meta-analysis of in-person and technological interventions. *Journal of Technology in Behavioral Science*. 2021 Mar;6:166-80.
12. Persich MR, Smith R, Cloonan SA, Woods-Lubbert R, Strong M, Killgore WD. Emotional intelligence training as a protective factor for mental health during the COVID-19 pandemic. *Depression and Anxiety*. 2021 Oct;38(10):1018-25.
13. Saikia M, George LS, Unnikrishnan B, Nayak BS, Ravishankar N. Thirty years of emotional intelligence: A scoping review of emotional intelligence training programme among nurses. *International Journal of Mental Health Nursing*. 2024 Feb;33(1):37-51.
14. Soheilimehr S, Eshraghi B. A Study Of Life Skills Training To Improve The Emotional Intelligence Of Abused And Homeless Children In Tehran. *Int J Med Invest* 2022; 11 (4) :204-216
15. Dugué M, Sirost O, Dosseville F. A literature review of emotional intelligence and nursing education. *Nurse Education in Practice*. 2021 Jul 1;54:103124.
16. Quílez-Robres A, Usán P, Lozano-Blasco R, Salavera C. Emotional intelligence and academic performance: A systematic review and meta-analysis. *Thinking Skills and Creativity*. 2023 Jun 21:101355.
17. Rezakhani Moghaddam Hamed, Maliki Cholu Khalil, Behniafar Hamed, Rostami Ali, Babazadeh Toheed. The relationship between dignity and social skills with psychological well-being in the elderly. *health and hyginie*. 2023; 14 (4): 481-490
18. Hosseini Seyed Mojtabi, Zamani Mohammad Hossein, Behrad Nasab Mohsen, Sahibkaran Mohammad Ali, Fakher Mehdi. Comparison and relationship between emotional intelligence and psychological well-being in athletic and non-athletic military personnel: development of a structural equation model. *Movement and Behavioral Sciences*, 2022; 5 (1): 13-26.
19. Abedini VaLamdehi, Razieh, Ravanbakhsh Faezeh. Predicting psychological well-being based on emotional intelligence and life satisfaction among elementary school teachers in Zaveh city. *Teacher professional development*. 2021; 6 (2):21-35.

20. Abdelmohsen SR, Khired ZA, El-Ma'doul AS, Barakat AM, Kasemy ZA. Emotional Intelligence and Academic Performance Among Egyptian and Saudi Arabian Undergraduate Medical Students: A Cross Sectional Study.

21. Jamali S, Sabokdast S, Nia HS, Goudarzian AH, Beik S, Allen KA. The effect of life skills training on mental health of Iranian middle school students: A preliminary study. Iranian journal of psychiatry. 2016 Oct;11(4):269.

**Tables****Table 1.** Reliability coefficients of research tools

Variables	Cronbach's alpha coefficients
social skills	0.80
Psychological well-being	0.83
Emotional Intelligence	0.79

**Table 2.** Fitness indices of first-order confirmatory factor analysis of the research tool

Indicator	Criterion	social skills	Emotional Intelligence	Psychological well-being
chi-square	0.000	44.19	83.17	55.97
Degrees of freedom	-	30	57	45
Ratio	2 and less	1.57	1.45	1.11
RMSEA	0.05 and less	0.026	0.024	0.020
CFI	0.9 and more	0.90	0.91	0.92
GFI	0.9 and more	0.91	0.90	0.90

**Table 3.** Descriptive examination of the status of research variables

Variable	mean	standard deviation
social skills	3.03	0.701
Emotional Intelligence	3.00	0.369
Psychological well-being	5.31	0.561

**Table 4.** Correlation matrix of research variables

	social skills	Emotional Intelligence	Psychological well-being
social skills	-		
Emotional Intelligence	0.361	-	
Psychological well-being	0.644	0.504	-

**Table 5.** Direct path coefficients of social skills and emotional intelligence on psychological well-being of operating room personnel

independent variable	Dependent variable: psychological well-being			
	Standard path	T	R <sup>2</sup>	T
social skills	0.25	4.11	0.66	7.57
Emotional Intelligence	0.32	3.25		

**Table 6.** Direct path coefficients of social skills on emotional intelligence

independent variable	Dependent variable: emotional intelligence			
	Standard path	T	R <sup>2</sup>	T
social skills	0.39	3.16	0.79	2.00



**Table 7.** Coefficient of the indirect path of social skills on the psychological well-being of operating room personnel with the mediating role of emotional intelligence.

independent variable	Dependent variable: psychological well-being Mediating variable: emotional intelligence			
social skills	Standard path	T	R <sup>2</sup>	T
	0.141	2.19	0.66	7.57

**Table 8.** Direct, indirect and total coefficients of independent variables on emotional intelligence

independent variable	Dependent variable: psychological well-being		
	Standardized effects		
	Direct	indirect	Total
social skills	0.25	0.141	0.424
Emotional Intelligence	0.32	-	0.32

**Table 9.** Fitness indices of confirmatory path analysis

Indicator	Criterion	Estimate
Chi-square ratio	0.000	247.88
Degrees of freedom	-	146
Ratio	2 and less	1.59
RMSEA	0.05 and less	0.045
CFI	0.9 and more	0.91
GFI	0.9 and more	0.90
AFGI	0.9 and more	0.90