Chronic Diseases Journal

DOI: 10.22122/cdj.v9i1.587 Published by Vesnu Publications

A single-center cross-sectional study on the relationship between mental health, communication skills, and maladaptive schemas with nurses' job motivation

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Original Article

Abstract

BACKGROUND: Human resources are considered as the most important capital in health care system of the country. This study was conducted to investigate the relationship between mental health, communication skills, and maladaptive schemas with nurses' job motivation.

METHODS: In a cross-sectional study, during October 2018 to January 2019, 120 active nurses in Alborz Hospital, Karaj, Iran, were selected by available sampling method. The data were collected using General Health Questionnaire (GHQ), Interpersonal Communication Skills Test, Young's Early Maladaptive Schema Questionnaire (YEMSQ), and Employee Motivation Questionnaire and were analyzed using Pearson correlation and multivariable regression tests in the software environment of SPSS.

RESULTS: The results of simultaneous regression showed that the message receiving sequence indices (β = -2.32), emotional control (β = -1.98), listening (β = -1.97), insight into relationship (β = 1.06), relationship with decisiveness (β = -1.45), and communicational skills (β = -7.45) were predictors of job motivation (P < 0.010). Also, the components of failure (β = -0.19) and anxiety/insomnia (β = -0.20) were predictors of job motivation (P < 0.010). There was a significant positive relationship between sacrifice schemas, harsh criteria, and desirability with job motivation (P < 0.050). In addition, there was a significant negative relationship between failure schemas and job motivation (P < 0.050), but other variables were not able to predict job motivation (P < 0.050).

CONCLUSION: The findings of this study indicate that there is a relationship between psychological indices and job motivation in nurses. These findings can have clinical applications in the planning of major programs in the field of health and treatment.

KEYWORDS: Nurses; Job Satisfaction; Motivation; Communication

Date of submission: 11 Mar. 2020, ***Date of acceptance:*** 13 Sep. 2020

Citation: Baghbanzadeh A, Sobhi A. **A single-center cross-sectional study on the relationship between mental health, communication skills, and maladaptive schemas with nurses' job motivation.** Chron Dis J 2021; 9(1): 22-9.

Introduction

Human resource is considered to be the most important capital of each organization. Creating motivation and job satisfaction and reducing the job burnout of employees is an important index in medical settings.[1]

Nurses are one of the health care administrators who can provide the most effective treatment to patients. Hence, nurses are considered as the key components of the health system in each country.[1] Increasing satisfaction and reducing job burnout can help the process of providing high-quality care services.[2] Also, reduced job satisfaction is one of the effective factors in leaving a job position in nurses.[3]

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Studies show that job satisfaction can be influenced by several psychological components and is, in fact, a multi-dimensional component.[4] One of the important indices in predicting nurses' job performance is job motivation.[5] Job motivation is defined as the amount of energy, occupational attachment and professional effectiveness, attention to human resource abilities, optimal performance, and positive experiences in work. From an organizational point of view, motivation is an internal factor that changes behavior, progression, and organizational goals.

On the other hand, mental health is a state of health in which a person knows his/her abilities and can cope with the pressures of life, be more productive for the community, and be able to make decisions and collective participation. Accordingly, mental health is the basis of well-being for both individuals and society.[6]

Interpersonal interactions are the main components of social life. In fact, our communication skills express our ability and confidence and increase our value and respect for others. In this regard, effective communication skills are one of the most important psychological and interpersonal indices in nurses.[7] Also, one of the factors affecting motivation or job burnout is the quality of interpersonal interactions.[8] The quality of interpersonal communication in nurses is associated with improvement in performance and adaptation to therapeutic environments.[5]

On the other hand, early maladaptive schemas (EMSs) do not lead to specific mental disorders, but increase individual vulnerability to mental disorders. Young believes that some of the schemas, especially those that are formed mainly are as a result of bad experiences of childhood.[9] Based on Beck's early description of psychopathology, each psychiatric disorder is associated with very general schemas and patterns of habitual thinking that characterizes the type of vulnerability associated with that disorder. Besides, Schema-Focused Model of Occupational Stress states that people with EMSs experience the highest level of job stress, which can reduce job satisfaction in these individuals.[10]

Since nurses are key members of the health care group at different levels of prevention and treatment, this profession has a high position in order to respond to the numerous challenges facing the health system. Vitality through creating positive emotions in the staff increases their success, and people with positive emotions tend to be more likely to be present in new situations and more effectively and successfully engage in professional activities and in managing challenges. In addition, because mental health of working people has a direct effect on their quality of work, attention to their mental health aspects is also important and can improve the quality and productivity of their job. Accordingly, the present study was conducted to investigate the relationship between mental health, communication skills, and maladaptive schemas with nurses' job motivation.

Materials and Methods

This study was a cross-sectional study. For this purpose, during October 2018 to January 2019, one hundred and twenty nurses (health care, nursing, physical therapy, management, laboratory, midwifery) who were active in Alborz Hospital, Karaj, Iran, were estimated based on the Morgan table and were selected by available sampling method. After obtaining inclusion criteria and informed consent, they entered into the research process. Inclusion criteria were: 1) employment as a nurse in the form of permanent employment or contractual employment, 2) residence in the Karaj City and the suburbs with a deviation of thirty square kilometers from the center, and 3) obtaining informed consent. Also, the exclusion criterion

was the diagnosis of any acute psychiatric disorder. Data were collected using General Health Questionnaire (GHQ), Queendom's Interpersonal Communication Skills Test, Young's Early Maladaptive Schema Questionnaire (YEMSQ), and Jones' Employee Motivation Questionnaire. Pearson correlation and multivariable regression tests were used to analyze the data in the software environment of the SPSS (version 21, IBM Corporation, Armonk, NY, USA). All stages of the study were based on the latest version of the Declaration of Helsinki.

Research tools

GHQ: This questionnaire was developed by Goldberg in 1972 and quickly became the most useful tool for measuring non-psychiatric issues. Among the available versions of this tool, the 28-item version is more popular than other versions due to the number of relevant questions and psychometric properties. The 28-question form of this questionnaire was created in 1989 by Goldberg and Hillier and has 28 items and 4 subscales. This questionnaire is scored in the form of 4-point Likert scale. Finally, a general and semi-circular score of four subscales of physical symptoms, anxiety and insomnia, social dysfunction, and depression is presented. Previous studies suggest that the validity and reliability of this tool is acceptable.[11]

Interpersonal Communication Skills Test: Queendom's Communication Skills Questionnaire is a 34-item questionnaire which was designed to assess the amount of communication skills and includes five subscales of ability to perceive by comprehending verbal and nonverbal messages, emotional control, listening skills, insight into communication process, and communicational decisiveness. The scoring of this tool is in the form of 4-point Likert scale, and the five subscales evaluate the ability to receive and send messages, emotional control, listening skills, insight into the process of communication, and communicational decisiveness. Psychometric properties of this questionnaire have been reported to be desirable.

YEMSQ-Short Form: This questionnaire contains 75 items that was designed by Young and aimed at evaluating 16 areas of EMSs.[9] These areas are as emotional deprivation, emancipation, distrust, social isolation, defect/shame, failure, dependency, vulnerability, afoul, obey, sacrifice, inhibition, tough measure, deserved, continence, and maladaptive schemas. Each question is scored in the form of a six-point Likert scale. The results of the study by Phillips et al.[12] showed that this tool had desirable internal and re-test reliability, as well as a divergent and desirable co-authoritative validity. The calculated Cronbach's alpha coefficient in the present study was 0.94.

Employee Motivation Questionnaire: This questionnaire is designed to assess the job motivation index and has 20 items categorized in the Likert scale. To assess the reliability of this tool, Cronbach's alpha method was used, which was estimated as 0.85.

Results

To analyze the data, Pearson correlation test and multiple regression analysis were used. The parameters of the parametric tests were examined before the statistical test was selected. The results of Kolmogorov-Smirnov test showed that the distribution of the scores of the participants in the research in all four studied variables was normal ($P > 0.050$). Also, the linear relationship assumption between variables was obtained through the analysis of variance (ANOVA) and this assumption was confirmed ($P < 0.010$). We also used Durbin-Watson test to verify the independence of errors, and the magnitude of Durbin-Watson test statistic indicates the independence of the errors.

In terms of demographic distribution of the

research participants, 30 participants (25.0%) were men and 90 people (75.0%) were women. Also, 86 participants (71.7%) were single and 34 participants (28.3%) were married. The average age of the participants was 38.55 years. In terms of education, 32 participants (26.7%) had Associate Degree, 76 participants (63.3%) had Bachelor of Science (BSc) Degree, and 12 (10.0%) had Master of Science (MSc) Degree.

The distribution of the scores of the participants in the research in terms of maladaptive schema index is presented in table 1.

Table 1. Distribution of scores of participants in the research in terms of maladaptive schema index and its components

Variable	Mean ± SD	Min	Max
Emotional deprivation	9.56 ± 4.53	5	25
Emancipation	9.84 ± 3.99	5	25
Distrust	8.61 ± 3.32	5	23
Social isolation	7.61 ± 3.18	5	20
Defect/shame	6.91 ± 2.70	5	18
Failure	7.14 ± 2.55	5	16
Dependency	6.85 ± 2.56	5	15
Vulnerability	7.89 ± 2.95	5	14
Afoul	8.16 ± 3.08	5	18
Obey	8.18 ± 3.62	5	22
Sacrifice	12.79 ± 5.34	5	25
Inhibition	8.90 ± 3.54	5	21
Tough measure	12.42 ± 5.18	5	23
Deserved	12.58 ± 4.57	5	21
Continence	9.48 ± 3.39	5	21
Maladaptive schemas	134.92 ± 34.84	75	225

SD: Standard deviation

The distribution of the scores of the participants in the research on the mental health index is presented in table 2.

Table 2. Distribution of the scores of the participants in the research on the mental health index and its components

Variable	Mean ± SD	Min	Max
Physical symptoms	6.17 ± 3.44	0	17
Anxiety/insomnia	5.71 ± 4.11	0	17
Disruption of social function	9.06 ± 4.12	0	21
Symptoms of depression	3.87 ± 4.78	0	21
Total mental health score	24.81 ± 11.56	0	69

SD: Standard deviation

The distribution of the scores of the participants in the research on the job motivation index is presented in table 3.

Table 3. Distribution of the scores of the participants in the research on the job motivation index and its components

Variable	Mean ± SD	Min	Max
Basic needs of the individual	22.73 ± 6.21	4	28
The need for individual security	21.81 ± 6.16	4	28
The need for social affiliation	22.65 ± 6.27	4	28
Need to be respected in person	23.17 ± 6.46	4	28
Need to self-fulfillment	22.44 ± 6.36	4	28
Job motivation	112.80 ± 30.09	20	140

SD: Standard deviation

The distribution of the participants' scores on the communicational skills index is presented in table 4.

Table 4. Distribution of the scores of the participants in the research on the communicational skills index and its components

Variable	Mean ± SD	Min	Max
Message receiving sequence	28.68 ± 58.60	16	39
Emotional control	34.62 ± 5.51	10	34
Listening	17.25 ± 4.86	6	28
Insight into communication	14.87 ± 2.97	9	25
Communication with decisiveness	13.39 ± 3.51	5	23
Communicational skills	98.77 ± 18.89	46	114

SD: Standard deviation

Table 5 shows the results of Pearson correlation coefficients between EMSs and job motivation. As shown in table 5, there was a significant positive relationship between sacrifice, tough measure, and deserved schemas with job motivation ($P < 0.050$). Also, there was a significant negative relationship between failure and job motivation schemas ($P < 0.050$). However, there was not a significant relationship between the total score of maladaptive schemas and job motivation and its components ($P > 0.050$).

Table 5. Results of Pearson correlation coefficients between early maladaptive schemas (EMSs) and job motivation

Variable	Basic needs of the individual	The need for individual security	The need for social affiliation	Need to be respected in person	Need to self-fulfillment	Job motivation
Emotional deprivation	0.02	-0.01	0.08	0.09	0.01	0.04
Emancipation	0.04	0.03	0.03	0.06	0.03	0.04
Distrust	0.07	0.03	0.06	0.04	0.05	0.05
Social isolation	0.08	0.09	0.02	0.02	0.03	0.05
Defect/shame	-0.02	-0.03	-0.08	-0.09	-0.06	-0.06
Failure	-0.19*	-0.22*	-0.18*	-0.22*	-0.14	-0.20*
Dependency	-0.14	-0.15	-0.16	-0.20*	-0.11	-0.16
Vulnerability	-0.03	-0.01	0.02	-0.01	0.05	0.01
Afoul	-0.03	-0.02	-0.03	-0.05	0.03	-0.02
Obey	-0.08	-0.07	-0.17	-0.13	-0.09	-0.11
Sacrifice	0.22*	0.19*	0.23*	0.29**	0.13	0.22*
Inhibition	0.01	0.02	0.01	0.01	-0.02	0.01
Tough measure	0.19*	0.14	0.23*	0.23*	0.15	0.19*
Deserved	0.13	0.12	0.26**	0.23*	0.18	0.19*
Continence	0.01	-0.01	0.06	0.05	-0.01	0.02
Maladaptive schemas	0.06	0.04	0.08	0.08	0.05	0.06

*P < 0.050; **P < 0.010

The results of Pearson correlation coefficients between communicational skills and job motivation are presented in table 6.

As shown in table 6, there was a significant positive relationship between communicational skills and the components of the message receiving sequence, emotional control, listening, insight into communication, and the communication with job motivation. There was also a significant positive relationship between communicational skills and the components of the basic needs of the individual, the need for individual security, the need for social affiliation, the need for respect in the individual, and the need for self-fulfillment (P < 0.010 for all). The results of Pearson correlation coefficients between mental health and communicational skills are presented in table 7.

As shown in table 7, there was a significant negative relationship between job motivation and anxiety/insomnia components (P < 0.050). However, there was no significant relationship between mental health and components of physical symptoms, disruption in social function, and depression symptoms with job motivation.

Table 6. Pearson correlation coefficients between communicational skills and job motivation

Variable	Basic needs of the individual	The need for individual security	The need for social affiliation	Need to be respected in person	Need to self-fulfillment	Job motivation
Message receiving sequence	0.24**	0.22*	0.30**	0.32**	0.15	0.26**
Emotional control	0.31**	0.29**	0.31**	0.34**	0.23*	0.31**
Listening	0.27**	0.22*	0.32**	0.30**	0.20*	0.27**
Insight into communication	0.36**	0.34**	0.32**	0.33**	0.22*	0.33**
Communication with decisiveness	0.23*	0.20*	0.23**	0.27**	0.18	0.23*
Communicational skills	0.35**	0.31**	0.37**	0.39**	0.25**	0.35**

*P < 0.050; **P < 0.010

Table 7. Pearson correlation coefficients between mental health and job motivation

Variable	Basic needs of the individual	The need for individual security	The need for social affiliation	Need to be respected in person	Need to self-fulfillment	Job motivation
Physical symptoms	0.01	0.01	-0.08	-0.03	0.02	-0.02
Anxiety/insomnia	-0.15	0.18	0.20	-0.17	-0.18	-0.19
Disruption of social function	0.13	0.09	0.16	0.16	0.04	0.12
Symptoms of depression	-0.13	-0.18	-0.21	-0.17	-0.15	-0.17
Mental health	-0.06	-0.10	-0.12	-0.09	-0.10	-0.10

Besides, there was no significant relationship between total scores of mental health and job motivation (P > 0.050 for all). The results of the simultaneous regression analysis among the research variables are presented in table 8.

As shown in table 8, the results of simultaneous regression analysis showed that the standard coefficient for indices of message receiving sequence (β = 2.32), emotional control (β = -1.98), listening (β = -1.97), insight into the communication (β = -1.06), communication with decisiveness (β = -1.45), and communicational skills (β = 7.45) were significant and could predict job motivation with the significance level of 99%. In addition, the components of failure (β = -0.19) and anxiety/insomnia (β = -0.20) with 95% confidence interval (CI) could predict job motivation, but other variables were not able to predict job motivation (P > 0.050).

Discussion

The present study was conducted to investigate the relationship between mental health, communicational skills, and maladaptive schemas with nurses' job motivation. There was a positive significant relationship between communicational skills and components of message receiving sequence, emotional control, listening, insight into communication, and communication with decisiveness with job motivation. There was also a significant positive relationship between communicational skills and the components of the basic needs of the individual, the need for personal well-being, the need for social belongings, the need for respect in the individual, and the need for self-actualization. There was a significant relationship between the components of anxiety/insomnia from mental health indices and job motivation. Also, the components of message receiving sequence, emotional control, listening, insight into communication, communication with decisiveness, and communicational skills were predictors of job motivation.

Table 8. The results of simultaneous regression analysis of the relationship between job motivation and maladaptive schemas, mental health, and communicational skills

Predictive variables	Beta coefficient	SD	Beta coefficient	t	P
Message receiving sequence	-12.28	3.82	-2.32	-3.21	0.002
Emotional control	-10.82	3.82	-1.89	-2.83	0.006
Listening	-12.21	3.79	-1.97	-3.22	0.002
Insight into communication	-10.74	4.09	-1.06	-2.63	0.010
Communication with decisiveness	-12.39	4.01	-1.45	-3.09	0.003
Communicational skills	11.86	3.71	7.45	3.19	0.002
Failure	-2.19	1.13	-0.18	-1.94	0.050
Sacrifice	0.58	0.62	0.10	0.94	0.350
Tough measure	0.20	0.71	0.03	0.28	0.760
Deserved	0.47	0.80	0.07	0.58	0.560
Anxiety/insomnia	-1.49	0.63	-0.20	-2.36	0.020

SD: Standard deviation

Besides, the components of failure and anxiety/insomnia were predictors of job motivation. In addition, the findings showed that there was a significant positive relationship between sacrifice, tough measure, and deserved schemas with job motivation, and there was a significant negative relationship between failure schemas and job motivation. However, there was not a significant relationship between the total score of maladaptive schemas and job motivation and its components.

A part of the findings of this study showed that there was a significant relationship between the components of anxiety/insomnia from mental health indices with job motivation. Along with our findings, the results of Allan et al.[13] showed that stress and depression was a significant predictor of job satisfaction among employees, that is, those who reported job satisfaction had low levels of anxiety and stress. In this regard and in line with our findings, the results of the study by Kim and Jang[14] showed that the symptoms of psychosis, physicalization, depression, anxiety, and phobias were associated with low job satisfaction and higher job stress. In this regard, the results of the study by McVeigh et al.[15] showed that resilience could be a predictor of perceived stress and could explain job satisfaction.

Another part of the findings of this study showed that communicational skills which consisted of indices of the message receiving sequence, emotional control, listening, insight into communication, and communication with decisiveness were predictors of job motivation. In line with the findings of this study, the results of Mauno et al.[16] showed that enrichment of the family environment was associated with an increase in job satisfaction among nurses. Timilsina Bhandari et al.[17] in their study showed that supportive work environment and desirable interpersonal relationships were among the main factors in relation to job satisfaction in nurses. In addition, Sprangers et al.[18] showed that nurses' communicational skills were associated with higher quality of life and decreased verbal and physical aggression and depression. Findings of Lapena-Monux et al.[19] showed that the development of communicational skills of nurses in order to increase job satisfaction in them was necessary. In a two-way relationship, job satisfaction of nurses can affect the patient's perception of the treatment process.[20]

A part of our study findings regarding that there is a relationship between maladaptive schemas and job satisfaction is supported by the research background. The Schema-Focused Model of Occupational Stress states that people with EMSs experience the highest level of job stress, which can reduce their job satisfaction.[10] EMSs can predict high rates of job burnout, mental injuries, and absenteeism in the workplace among the treatment staff, including nurses.[10] The findings of this study, in line with the research background, reflect the role of nurses' mental health in their job satisfaction.

This study had some limitations in the implementation process. Due to the finite limitations of the sample size, generalization of the results is difficult. It is suggested that in future studies, along with the paper and pen tool, biological indices be used in the evaluation of psychological indices.

Conclusion

The findings of this study, in line with the research background, indicate that there is a relationship between psychological indices and job motivation in nurses. These findings can have clinical applications in planning of horizons for the advancement of health care system in the country. A further study on assessing the predictive role of demographic indices in job satisfaction could be a good perspective for future studies.

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

The authors are grateful to all the people who participated in this study and helped to facilitate the research process. The present article is the result of a dissertation approved at the Islamic Azad University, Zanjan Branch, Zanjan, Iran (Ethics Code: 13820705962048).

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