The Influence of Personal and Workplace Resources on Novice Nurses' Job Satisfaction: a Cross-Sectional Analytic Study

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Abstract

Aims: The aim of this study was to determine the influence of personal and workplace resources on novice nurses' job satisfaction. **Design:** This was a correlational, descriptive, cross-sectional study. Methods: This study was conducted on 600 novice nurses of public hospitals in Guilan province, Iran, in during March and April 2018. Data were collected using a Demographic Information form, Workplace Incivility Scale (WIS), Workplace Bullying Scale (EAPA-T), positive affectivity scale, negative affectivity, promotional chances scale, and Job satisfaction Scale that were completed by novice nurses. **Results:** The results indicated that positive affectivity, negative affectivity, promotional chances, Satisfaction with the salary, and choosing the profession with interest made a significant contribution to the model that predicted nurse's job satisfaction. **Conclusion**: Nurses need support to be able to give the health care services appropriately specially the novice nurses who need support getting more confident and independent in their job. The workplace has an important role in increasing the job satisfaction. Since so many nurses are quitting and we're facing a lack of nursing services, it's important that we increase the rate of job satisfaction in nurses.

Keyword: Job Satisfaction, Nurse, Bullying, Incivility

Introduction

The health centers' main job is providing good health care and services for the patients (Hariri and et al., 2012). The majority of health care teams are nurses and so they have an important role providing high quality services resulting in the patients satisfaction (Khajehmahmood & Mahmoudirad, 2017; Mohamadzadeh and et al., 2012). In the last two decades the lack of nurses was a main health problem in a lot of countries (Cortese, 2012; McKechnie, 2016; Rudman and et al., 2014; Zhu and et al., 2015), while according to the statistics so many of the nurses are also quitting (Cortese, 2012; Adriaenssens and et al., 2015;Ramoo and et al., 2013) Which causes major damages in education systems and human resources in health care system(Zhu and et al., 2015).

Nursing profession is facing shortage of human resources due to the aging of the workforces and the increasing demand for health services. In Canada, shortage of nursing staff will reach 60,000 people by 2022, and in America will be up to one million people by 2030 (Juraschek and et al., 2012; Read & Laschinger, 2013) . Even though the number of quitting nurses differs but the worry of new comers quitting the job continues, because about 80 percent of novice nurses are working in hospital, but these novice nurses are quitting even

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more than the old ones (Kovner and et al., 2014; Kovner and et al, 2014).

This is while the new nurses face more difficulties at work which makes them quit the job. Liking your job is very important in human resources management. Job Satisfaction is one of the most fundamental concepts that has been important at all levels of Human resources management (Hassani and et al, 2017). Job Satisfaction is a collection of adaptive feelings about the job. This feeling will be achieved when the demands, needs and experiences that employees have with themselves when they enter the organization can be answered through work. So between employees' expectations and their satisfaction is balanced, and as a result, employees find a positive attitude to the job which causes the job satisfaction (Borhani and et al.,2017; Robbins & Judge, 2012).

Different things like lack of nurses, the increasing amount of work and the nurses not being involved enough in making important decisions has a bad effect on job satisfaction (Institute of Medicine, 2011). Job satisfaction has a key role on quitting the job and different resources show that it's connected with various organizational variables (Hayes and et al., 2006). Unfortunately, even though the importance of job satisfaction is clear, but the resources show that there's so little research on personal working sources as an estimation for nurses' job satisfaction (Pineau Stam and et al., 2015). The purpose of this study is looking for the effect of job sources and personal inspiration sources on new nurses' job satisfaction.

The Study

Aims

The aim of this study was to determine the influence of personal and workplace resources on novice nurses' job satisfaction.

Design

This was a correlational, descriptive, cross-sectional study.

Samples and Participants

Sample size was calculated based on Dupont formula and total number of nurses (n = 1000) as n = 600 (Dupont and et al., 1998). 60% of the novice nurses in each of the 26 centers were enrolled in the study using convenient quota sampling method. The inclusion criterion was working as a nurse for at least 1 month and at most 5 years. Nurses who were working in office positions and outpatient clinics were not included in the study.

Data collection

Data were collected during March and April 2018. After obtaining informed consent for participation in the research, the subjects were briefed on the study objectives, how to complete the questionnaires, the confidentiality of their data, and the anonymity of the questionnaires. The questionnaires were then distributed among the novice nurses to fill out. A pen was gifted to participants who responded as a token of appreciation for their participation in the study. Also, questionnaires that did not complete were excluded from the study.

Instruments

Seven instruments were used for data collection: a Demographic Information form, Workplace Incivility Scale (WIS), Workplace Bullying Scale (EAPA-T), positive affectivity scale, negative affectivity, promotional chances scale, and Job satisfaction Scale.

Demographics information contained: age, gender, marital status, educational level, work units, work shifts, work experience, satisfaction with the salary, interest in the nursing profession, other sources of income, and unity of the city of work and life.

In this study, workplace incivility was measured using the Workplace Incivility Scale (Cortina et al. 2001). The scale consists of seven items measured on a 5-point Likert scale ranging from 1 (never) to 5 (most of the time), such that higher scores indicate higher perceived workplace incivility by the nurses

To assess the workplace bullying, workplace bullying scale (EAPA-T) was used (Price, 2001). The workplace bullying scale contains 12 items in 4 domains, including control and manipulation of the work context, emotional abuse, professional discredit and role devaluation.

Responses were measured on 5-point Likert scale ranging from 1 (never) to 5 (most of the time). Higher scores indicate higher perceived workplace bullying by the nurses.

To assess the positive affectivity, positive affectivity scale was used (Price, 2001). The scale consists of 5 items measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), Higher scores indicate nurses' with high positive affectivity perceived ambiguous stimuli in a positive manner.

To assess the negative affectivity, negative affectivity scale was used (Price, 2001). The scale consists of 5 items measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), Higher scores indicate nurses' with high negative affectivity perceived ambiguous stimuli in a negative manner.

To assess the promotional chances, promotional chances scale was used (Price, 2001). The scale consists of 5 items measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), such that higher scores indicate higher perceived promotional chances by the nurses.

Job satisfaction was measured using the Job satisfaction Scale (Price, 2001). The scale consists of 6 items measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), such that higher scores indicate higher perceived Job satisfaction by the nurses.

To balance the mean scores of the questionnaires, the mean score of each questionnaire was divided into the number of the items in the questionnaire and the mean score of each questionnaire was ranged from 1 to 5.

Data analysis

Data were analyzed using SPSS, version 20. Descriptive statistics were used to describe participants' characteristics and descriptive data regarding the study sections. Kolmogorov-Smirinov test was employed to examine the normality of the distribution of scores. The result indicated that the data were not normally distributed; therefore, non-parametric statistics were used. Spearman's rho, Mann-Whitney and Kruskal-Wallis tests were used to analyses the data and the level of significance was set at 0.05 (2-tailed).

According to the results, variables with a p value of less than 0.1 were entered into the regression model; therefore, a backward stepwise multiple logistic regression was conducted to examine whether gender, satisfaction with the salary, working units, interest in the nursing profession, positive affectivity, negative affectivity, promotional chances, workplace bullying and workplace incivility could significantly predict the novice nurses' job satisfaction. The assumptions of the final regression model were checked, and there were no major violations.

Validity and reliability

All the six questionnaires were first translated to Farsi; then translated back to English, and consistency of the two English copies was examined. To obtain the content validity of the tools, after translation and re-translation, the final version was provided to a panel of 14 faculty members who worked in the nursing ethics and expert nurses. Qualitative content validity was conducted based on the opinions of the expert panel. Quantitative content validity was measured by calculating the Content Validity index (CVI) and Content Validity Ratio (CVR). The questionnaire's internal consistency was measured using Cornbrash's alpha and test-retest was done to measure the interclass correlation coefficient. For positive affectivity, negative affectivity, promotional chances, Workplace Incivility Scale, workplace bullying scale and Job satisfaction scale, Cornbrash's alpha was 0.92, 0.84, 0.73, 0.93, 0.94, and 0.88, respectively. It shows an acceptable reliability for this scale. The statistical significant level was set at p<0.05. A test-retest conducted for Positive affectivity Scale, Negative affectivity Scale, Promotional chances Scale, Workplace Incivility Scale, workplace bullying scale and Job satisfaction scale. 20 novice nurses completed the scales twice during a 2-week interval. The analysis showed a correlation coefficient of 0.90, 0.87, 0.88, 0.85, 0.85, and 0.90, respectively for the scales.

Results

The rate of valid response in this study was 91.8% (600 nurses from 653). The majority was female (94.2%), with a mean age of 25.42 ± 2.49 years (range: 21-38 years). About 70 % of the nurses worked in a hospital that located in that city where they lived. The majority (80 %) of the nurses chosen this profession with interest, and about 9%, along with the hospital's income, had other sources of income. The nurses' demographics and work-related characteristics are summarized in Table 1. The mean score of Job satisfaction was 3.51 ±

0.74, workplace incivility was 1.98 ± 0.86, and workplace bullying was 1.53 ± 0.67, promotional chances was 3.26 ± 0.57, negative affectivity was 2.47 ± 0.79, and positive affectivity was 3.42 ± 0.72.

Table 1- Relationship between nurses' demographics and work-related characteristics with job satisfaction.

	job satisfaction			
Variables	**%**	**Mean**	**SD**	**P**
Gender				0.023**
Male	5.8	3.19	0.87	
Female	94.2	3.5	0.73	
Marital status				0.062**
Married	41.2	3.56	0.77	
Single	58.8	3.47	0.71	
Education				0.310**
BSc	98.2	3.52	0.73	
MSc	1.8	3.15	0.99	
Interest in nursing profession				<0.001**
Yes	81.3	3.64	0.66	
No	18.7	2.92	0.78	
Satisfaction with the salary				<0.001**
Yes	24.3	3.84	0.63	
No	75.7	3.40	0.74	
Another source of incomes				0.185**
Yes	8.8	3.37	0.81	
No	91.2	3.52	0.73	
Unity of the city of work and life				0.632**
Yes	69	3.52	0.74	
No	31	3.48	0.73	
Work experience				0.103*
< 6 month	20.8	3.62	0.71	
6 month to < 1 year	12	3.55	0.69	
1 year to < 2 year	33	3.43	0.75	
2 year to < 5 year	34.2	3.51	0.76	
Working units				0.028*
Intensive care units	16.5	3.71	0.70	
Emergency units	29.2	3.47	0.73	
Internal units	40.7	3.45	0.76	
Surgery units	11.3	3.48	0.73	
Operating rooms	2.3	3.71	0.74	
Shift type				0.536*
Permanent morning	1.2	3.73	0.48	
Permanent evening	0.5	3.38	0.58	
Permanent night	1.3	3.56	1	
Rotating shift	97	3.51	0.74	

*: Kruskal-Wallis tests. **: Mann-Whitney. SD: standard deviation.
Statistically significant at p < 0.05.

The findings revealed a positive and significant correlation between promotional chances (r=0.476, p<0.001) and positive affectivity (r= 0.369, p< 0.001) with Job satisfaction. Also, the findings revealed a negative and significant correlation between negative affectivity (r=-0.268, p<0.001), workplace incivility (r= -0.275, p< 0.001) and workplace bullying (r= -0.247, p< 0.001) with Job satisfaction. No significant relationship was found between nurses' age with Job satisfaction (p= 0.544, r= -0.025).

According to the results of Mann-Whitney and Kruskal-Wallis analysis, statistically significant differences were found between nurses' gender (p= 0.025), satisfaction with the salary (p< 0.001), choosing the profession with interest (p< 0.001), work experience (p= 0.034) and marital status (p= 0.015) with job satisfaction. Also, no significant relationship was found between nurse's educational level (p= 0.269), working units (p= 0.465), shift type (p= 0.354), unity of the city of work and life (p= 0.116), other sources of income (p= 0.288) with job satisfaction.

The full model containing all predictors was statistically significant, χ^2 (5,600) = 184.95, indicating that the model was able to distinguish between those who satisfied and did not satisfy of their job. The total model explained between 26.5% (Cox and Snell R Square) and 38.9% (Nagelkerke R Square) of the variance in job satisfaction status and correctly classified 79% of cases. Only five of variables (satisfaction with the salary, interest in the nursing profession, positive affectivity, negative affectivity, and promotional chances) made a statistically significant contribution to the model (table 2).

Table 2- Logistic Regression Predicting Job Satisfaction

Predictors	β	SE	OR	95%CI	Wald Statistic	P
Promotional chances	1.59	0.22	4.92	[3.15, 7.70]	49.02	<0.001
Positive Affectivity	0.68	0.16	1.97	[1.44, 2.71]	17.94	<0.001
Negative Affectivity	-0.44	0.14	0.64	[0.48, 0.84]	9.76	0.002
Satisfaction With The Salary	-0.77	0.34	0.46	[0.23, 0.90]	5.09	0.024
Choosing The Profession With Interest	-1.31	0.25	0.26	[0.16, 0.44]	26.24	<0.001
Constant	-4.1	1.03	0.01	-	15.66	<0.001

CI = confidence interval for odds ratio (OR)

Discussion

Nurses need support to be able to give the health care services appropriately specially the newcomers who need support getting more confident and independent in their job. The workplace has an important role in increasing the job satisfaction. Since so many nurses are quitting and we're facing a lack of nursing services, it's important that we increase the rate of job satisfaction in nurses.

In this study, the rate of job satisfaction with novice nurses was reported higher than the mean scores of the instruments, which is consistent with most of the studies both in Iran and other countries (Pineau Stam and et al, 2015; Dupont & Plummer, 1998). Of course the compatibility of the younger employees can increase the amount of job satisfaction. This feeling will be achieved when the demands, needs and experiences that employees have with themselves when they enter the organization can be answered through work. Since novice nurses have minimum expectations they are more satisfied.

The present study showed that the promotional chance had a significant positive relationship with job satisfaction and also as one of the most important Predictors of job satisfaction were considered by novice nurses. The chance to upgrade a degree of professional mobility into the organization Gives employees and reduces job quit because employees are hoping to get into higher positions in the organization. The door Indeed, there is a chance that promotion will be a stimulant for the staff, and it will create a sense of satisfaction with nursing jobs at the time of health care (Price, 2001; Rubel & Kee, 2015). Also, if nurses work in their appropriate and relevant areas according to their age and gender, and responsibilities Management, they will probably have more job satisfaction (asghari and et al., 2010).

The results of this study showed that positive affectivity has a positive and significant relationship with job satisfaction, also negative affectivity has a positive and significant relationship with job satisfaction. These were as well as job satisfaction predictors for novice nurses. These findings are consistent with various models like The Price's Model and Brewer-Kovner Revision of Price's Model. Studies show that positive affectivity, affects people's desire to experience emotional activity Positive, and these people have a general feeling of being good, and a higher affective affirmation reflects this tendency. People have positive opinions about themselves and the world around them. Conversely, negative affectivity are experienced as emotional states unpleasantness is defined. Those with a higher negative affectivity, have stress, discomfort and discontent at all times and even in the absence of objective stressors. They also tend to focus more on their own negative aspects, others, and others In general, the world is around (Price, 2001; Bouckenooghe and et al., 2013). It can be said that for this reason nurses with different Affections, satisfaction rate Different jobs have been mentioned.

The results of this study showed that most novice nurses were not satisfied with their received salary from the hospital. Satisfaction with the salary had a positive and significant relationship with job satisfaction and also as one of the predictors of job satisfaction in novice nurses was introduced. In the study of Borhani et al., Nurses' job satisfaction was reported moderately and the nurses were most satisfied with their managers and colleagues, and were very dissatisfied with the pay and benefits (Borhani and et al., 2017). This result shows which nurses, in addition to being required to be supported by the manager and colleagues and have appropriate interpersonal communication with them, their financial needs should also be considered in order to ensure their job satisfaction. One of the things that bring this job satisfaction is the salary. If there's no satisfaction with salaries, then there's no satisfaction with the job. Not only the nurse's payment is not high enough but the paying gap between nurses and doctors in Iran can also really lower the job satisfaction.

In this study, most novice nurses also selected the nursing profession with interest. Choosing a nursing profession with interest, Had a positive and significant relationship with job satisfaction and also as a predictor of job satisfaction in novice nurses was introduced. According to this finding, a study by Admi and colleagues in Israel showed that most nursing students participating in the study had chosen this profession with interest (Admi and et al., 2018). Also, the study of Adib and colleagues in Iran showed that factors Such as entering university, the idea of continuing education, finding a job, inaccurate selection of discipline, serving people, choosing The discipline was played by others in the selection of this profession (Adib-Hajbaghery & Dianati, 2005). Being interested in choosing a nursing field is one of the factors affecting it. The choice of nursing discipline has been studied in various studies, but it is noteworthy that these studies by case or for a better understanding of a group of students who have entered the university at a particular time, and Nurses' job satisfaction studies were less studied. We can say that nurses who don't chose this career out of love and passion, can't stand the troubles that they have to go through and so they don't have that job satisfaction and they quit.

Limitation

First: responding to some of the scales' items were difficult for the nurses because of being concerned about their work security. The researchers tried to assure them about the anonymity of their responds. But this conflict might have affected their answers. Second: emotional responses could be affected by daily events and third: Novice nurses were selected using convenience random sampling; performing the study on a larger group might reach more generalizable findings.

Conclusion

Novice nurses in the field of nursing are the future of this career but they face too many difficulties at the beginning of their job in the hospital and that lowers their job satisfaction. With a good knowledge of the workplace and the person's personal traits we can make things better for our new generation of nurses.

Conflict of interests

No conflict of interest has been declared by the author(s).

Ethical considerations

This article is the result of a research project (a master's thesis in nursing) that was approved by the Ethics Committee (IR. GUMS.REC.1395.273). Participants were informed that involvement was completely voluntary and anonymous.

References

Adib-Hajbaghery, M., & Dianati, M. (2005). Undergraduate nursing students' compatibility with the nursing profession. *BMC Medical Education*, *5*(1), 25

Admi, H., Moshe-Eilon, Y., Sharon, D., & Mann, M. (2018). Nursing students' stress and satisfaction in clinical practice along different stages: A cross-sectional study. *Nurse education today*, *68*, 86-92.

Adriaenssens, J., De Gucht, V., & Maes, S. (2015). Causes and consequences of occupational stress in emergency nurses, a longitudinal study. *Journal of Nursing Management*, *23*(3), 346-358.

Asghari, E., KHALEGHDOUST, T., ASGARI, F., & KAZEMNEJAD, E. (2010). EFFECTIVE FACTORS ON NURSES'JOB SATISFACTION.

Borhani, F., Shoorideh, F. A., Gholi, M. A. P. H., & Maani, S. (2017). The Correlation between Ethical Climate and Job Satisfaction of the Nurses in Shahid Beheshti University of Medical Sciences. *Medical Ethics Journal*, *10*(38), 51-58.

Bouckenooghe, D., Raja, U., & Butt, A. N. (2013). Combined effects of positive and negative affectivity and job satisfaction on job performance and turnover intentions. *The Journal of psychology*, *147*(2), 105-123.

Cortese, C. G. (2012). Predictors of critical care nurses' intention to leave the unit, the hospital, and the nursing profession. *Open Journal of Nursing*, *2*(3A)), 311-326.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: incidence and impact. *Journal of occupational health psychology*, *6*(1), 64.

Dupont, W. D., & Plummer Jr, W. D. (1998). Power and sample size calculations for studies involving linear regression. *Controlled clinical trials*, *19*(6), 589-601.

Escartín, J., Monzani, L., Leong, F., & Rodríguez-Carballeira, Á. (2017). A reduced form of the Workplace Bullying Scale–the EAPA-TR: A useful instrument for daily diary and experience sampling studies. *Work & Stress*, *31*(1), 42-62.

Hariri, G. R., Yaghmaei, F., & Shakeri, N. (2012). Assessment of some factors related to leave in nurses and their demographic charater in educational hospitals of Shahid Behesthi University of Medical Sciences. *Journal of Health Promotion Management*, *1*(3), 17-27.

Hassani, M., Sedaqat, R., & Kazemzadehbeytali, M. (2017). Correlation between the Ethical climate, Job stress and Job Satisfaction in Nurses. *Medical Ethics Journal*, *11*(40), 63-71.

Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., ... & Stone, P. W. (2006). Nurse turnover: a literature review. *International journal of nursing studies*, *43*(2), 237-263.

Institute of Medicine (US). Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing. (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: National Academies Press.

Juraschek, S. P., Zhang, X., Ranganathan, V., & Lin, V. W. (2012). United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality*, *27*(3), 241-249.

Khajehmahmood, F., & Mahmoudirad, G. (2017). Survey Tendency to Leave Service and its Related some Factors Aamong Nurses in Zabol University Hospitals. *Journal of Clinical Nursing and Midwifery*, *6*(1), 73-83.

Kovner, C. T., Brewer, C. S., Fatehi, F., & Jun, J. (2014). What does nurse turnover rate mean and what is the rate?. *Policy, Politics, & Nursing Practice*, *15*(3-4), 64-71.

Kovner, C. T., Brewer, C. S., Fatehi, F., & Katigbak, C. (2014). Changing trends in newly licensed RNs. *AJN The American Journal of Nursing*, *114*(2), 26-34.

McKechnie, T. (2016). CALL FOR NURSES: The Multi-Dimensional Manifestation of Nursing Shortage on Patient Care. *QIHI Journal of Healthcare Improvement and Patient Safety*, (2).

Mohamadzadeh Nojehdehi, M., Rafii, F., Ashghali-Farahani, M., & Bahrani, N. (2014). Comparing nurses' intention to leave in hospitals of execute/non-execute organizational excellence model. *Iran Journal of Nursing*, *27*(88), 46-55..

Pineau Stam, L. M., Spence Laschinger, H. K., Regan, S., & Wong, C. A. (2015). The influence of personal and workplace resources on new graduate nurses' job satisfaction. *Journal of nursing management*, *23*(2), 190-199.

Price, J. L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of manpower*, *22*(7), 600-624.

Ramoo, V., Abdullah, K. L., & Piaw, C. Y. (2013). The relationship between job satisfaction and intention to leave current employment among registered nurses in a teaching hospital. *Journal of Clinical Nursing*, *22*(21-22), 3141-3152.

Read, E., & Laschinger, H. K. (2013). Correlates of new graduate nurses' experiences of workplace mistreatment. *Journal of Nursing Administration*, *43*(4), 221-228.

Robbins, S. P., & Judge, T. (2012). Essentials of organizational behavior.

Rudman, A., Gustavsson, P., & Hultell, D. (2014). A prospective study of nurses' intentions to leave the profession during their first five years of practice in Sweden. *International Journal of Nursing Studies*, *51*(4), 612-624.

Rubel, M. R. B., & Kee, D. M. H. (2015). Perceived fairness of performance appraisal, promotion opportunity and nurses turnover intention: The role of organizational commitment. *Asian Social Science*, *11*(9), 183.

Safavi, M., Taghinezhad, F., Aghaeinejad, A., Taghinezhad, Y., & Shiekhi, A. (2016). Predictors of organizational commitment among nurses. *Quarterly Journal of Nursing Management*, *4*(4), 37-44

Zhu, J., Rodgers, S., & Melia, K. M. (2015). Can Education Resolve Nursing Shortage in China?. *Athens J Health*, *2*, 177-190.