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Relationship between Job characteristics and Work Engagement among Nursing Staff

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Abstract: Background: To retain the nursing staff in health care organization is a big challenge. Health care organizations have to do a lot of effort to keep the nursing staff in the organization and avoid nursing shortages. Characteristics of job is an important concept to be considered by the hospital administration to improve the characteristics of work, facilitating and enhancing the work settings, motivating the employees make them happy, engaged in their work, improving their performance and reach high positive outcome. The present study aimed to investigate the relationship between job characteristics and work engagement among nursing staff in selected hospital in Cairo. Research Descriptive correlational design was used to examine the relationship between job characteristics and work engagement among nursing staff. A convenient sampling technique was used in the present study, study sample composed of 104 nursing staff teaching hospital in Cairo. Two scales were used the Job characteristics scale to measure the characteristics of the job and the work engagement scale to measure the levels of nurses' engagement in their work. The current study concluded that autonomy was correlated positively with absorption. Feedback is correlated positively with work engagement subscales i.e. vigor, dedication and absorption. Skill variety and task identity were correlated negatively with absorption; while task significance was not correlated with work engagement. It is recommended that hospital administrators use a system of rewarding and recognition for nurses because it has a vital effect in their job satisfaction and engagement in their work which will lead to reduction of turnover and burnout among nursing staff. Support from organization and supervisor would moderate the relationship between job characteristics and engagement at work. Other researches should be planned to identify the factors helping nursing staff to be engaged in their work.

Key words: Job Characteristics, Nursing Staff, Work Engagement

INTRODUCTION

Over the years, the patterns of work completely changed due to many factors as globalization and technological changes especially in health care field. Increasing intensity of doing work and its complexity may contribute to burnout or other manifestations that affect the employee's productivity [1]. Last decade, recruiting and retaining skilled nursing staff became an important issue to the health care organizations [2]. Support from management and health care organization moderate the relationship between job characteristics (JC) and work engagement[3]. Studies linked work engagement definitely with Job characteristics [1]. Job characteristics identify five core job features as following; skill variety, task identity, task significance, autonomy and feedback [4, 1].

Skill variety is the degree the employees have different knowledge, skills and abilities to do their work; it can be due to integration of new technology in the working environment that consequently needs a variety of capabilities of the nursing staff [5]. The second job feature is task identity which is specific duties that belong to all and considered as a piece of work with an observable outcome, it can be measured as small part from the whole product [6]. While task significance is defined as to what level this job has a considerable effect on the lives of others, it can be internal significance; how this task is significant to the organization or external significance; how the employees are proud to tell the others what they do and where they work [7]. As regard to autonomy it is the degree of freedom of the employee in arrangement the work and specifies the procedures to be used in performing the duties [5].

Autonomy is the abilities of the employees to work according to their knowledge, skills and decisions that should be within the range of practice of the organization, nursing career and rule [8]. Lastly, job feedback refers to how the employees get directions and clear information about their performance, feedback may be constructive or destructive and should occur frequently not only with annual evaluation [9].Feedback helps in identifying what employee did and what have to do [10]. Job characteristics play a crucial role in the workplace because if employees can identify their work, they will be fully engaged and do a lot of efforts in their work. Characteristics of jobs have introduced in most models of work engagement [1].

Work engagement is the opposite of burnout, and characterized by energy, involvement and effectiveness; all are related to the three dimensions of burnout [11].work engagement is a feeling of work satisfaction and happiness, and work-related psychological state characterized by vigor, dedication and absorption, Employees, who are engaged in their work can work more time, but cannot be considered as hard workers [12, 13]. Work engagement have three constituents: physical – the drives used to perform a job, emotional – putting one's heart in one's work and cognitive – being immersed in his performance [14]. An important aspect of being an engaged worker is satisfaction of social life, have hobbies, and have different activities and relations that gives sense of life [15].Work engagement is important because recent findings suggest that engagement employees practiced happiness, enjoyment, good physical and psychological wellbeing that spontaneously will improve their performance [16]. Vigor defined as a high level of energy and mental abilities, and the willing to put more

effort in work[12], dedication refers to involvement in the work, and the employee feels the work is important, finally, absorption is the concentration, engagement and liking for the work environment. Researchers continue to investigate methods to maximize work engagement due to strong relationships between work engagement and positive outcomes and also can improve work engagement of other staff in health care organization[17].

Engaged employees in the work will help them to be competent and effective [18]. To establish work engagement among nursing staff we have to consider characteristics of job[17]. Job traits may have a reflective effect on employees' well-being. On the negative side, traits such as high workload and emotional needs, can lead to exhaustion and affect health negatively, while, job resources such as social support, feedback on one's performance, and initiate motivation, leads to learning, vigor, dedication, autonomy and work engagement[12]. Engaged nurses love their jobs, and pleased to be part of the organization, more engagement leads to better staff performance and better financially-performing organizations have higher engagement [19]. Generally, highly engaged employees in their work lead to high quality of performance. If work place supports job characteristics it will be easy to understand the advancement and how these antecedents could be separately joined with individual and work related outcome [1]. Nurse's engagement is one measure by which hospitals can improve customer satisfaction and loyalty [20]. This study aimed to investigate relationship between job characteristics and work engagement among nursing staff.

Significance of study

Any health care organization believe that its employees should be fully engaged in their work, and today there is an increasing need for health care workers, particularly nurses[12]. Nursing profession is a very stressful and emotionally challenging career [21]. It is very important for the health care agency to keep their nursing staff engaged in their job [12]. To attract and keep the nursing staff fully engaged in the health care sitting, there is a need to focus, understand and work on the factors that affect the well-being of nurses and their work environment such as job characteristics and how this will maintain the nursing staff in their organization. Nursing staff facing also emotional challenges and a lot of stressors in health care setting like dealing with critically ill and dying patients, all these factors increase the nursing staff workload leading to high rate of absenteeism or turnover that affect negatively the quality of care in health care organization. Trying to solve these problems, to solve these problems, factors need to be investigated that can improve the work environment. Job characteristics may lead to attract the nursing staff to their work e.g. skills variety, autonomy and feedback. All these factors will help to retain nurses who consequently affect the financial and human resources.

MATERIAL AND METHODS

Aim:

Study aimed to examine the relationship between job characteristics and work engagement among nursing staff.

Research Question:

- What is the relationship between job characteristics and work engagement among nursing staff?

Design and setting:

Descriptive correlational design was used to collect data from a teaching hospital (one of the private teaching hospital in Cairo) which is multi-specialty, consisted of five floors with 140 beds; each floor contains 28 beds with different specialties as medical, surgical, orthopedic, urology or ophthalmology and specialized units such as; stroke unit open heart ICU, pediatric ICU, general ICU and emergency unit containing 100 beds.

Sample:

A convenient sampling technique was used in the present study. Study sample was composed of 104 nursing staff with different levels of education as bachelor, technical and diploma degrees in different positions in the hospital as head nurses, charge nurses and staff nurses; 8 head nurse, 18 in charge nurse and 78 staff nurse from different floors and some specialized units who accepted to participate in the study.

Instruments:

- Demographic characteristics sheet includes personal characteristics of the study sample such as: age, unit, gender, marital status, level of education and work position.
- Job characteristics scale: This scale was developed and validated by [22] to measure the characteristics of the job (core job characteristics) of nurses. The scale composed of 23 items categorized under 5 subscales as follows: Skill variety =5 items, task identity =4 items, task significance (importance) =4 items, autonomy =4 items and feedback =6 items. The scoring system for the questionnaire consisted of 5-point Likert scale with 5 being strongly agree and 1 being strongly disagree. In previous study [5], validity was examined by three experts of nursing administration. Reliability test was examined using Cronbach's Alpha Coefficient and it was 0.91.
- Work engagement scale: Work Engagement can be measured in a variety of methods. In the present study, the Utrecht Work Engagement Scale (UWES) developed by [23] was adopted to measure the levels of nurses' engagement in their work. The scale composed of 17 items which are grouped into 3 subscales as follows: - Vigor =6 items -Dedication = 5 items and Absorption =6 items. Scoring system was consisted of three point Likert scale agree=3, uncertain =2 and disagree = 1. Validity was examined by three experts of nursing administration. Reliability test was examined using Cronbach's Alpha Coefficient and it was 0.83. [13].

Pilot study:

The pilot study was carried out on (10%) of the study sample to assure the clarity and applicability of the questionnaire, and to assess the time needed to answer the

questionnaire. It was concluded that the time needed to fill the questionnaire was ranged between 25-30 minutes. Based on the pilot study analysis no modifications were needed in the questionnaires. Percent of pilot study was included in the total number of the study sample.

Ethical consideration:

Verbal explanation of the aim and the nature of the current study had been explained to the nursing staff that was included in the study sample. They were given an opportunity to accept or to refuse participation in the study and also can withdraw from the study at any time, and they were assured that their information will be under confidentially and used for the present study purpose only.

Procedure:

An official permission was obtained from the general director of the hospital after explaining the purpose and nature of the current study. The researcher explained the aim and significance of the study for all the nursing staff in their units and floors to obtain their acceptance to participate in the study also an individual oral consent was obtained from them. During data collection the researcher gave the questionnaire sheets individually to the participants in their units and floors then the researcher explained the questionnaire sheets and asked them to fill it. The time spent to fill the questionnaires ranged between 25 to 30 minutes after that all sheets were checked to be sure that all were completed. Data were collected in a period of two months July and august 2018.

Data Analysis:

Data were analyzed using descriptive statistics (number, percentages), mean and standard deviation and correlational matrix between job characteristics and work engagement subscales.

RESULTS

Table 1: Descriptive Statistics of Demographic Characteristics of Study Sample (n=104)

Variable	N	%	
Unit	Stroke unit	11	10.6
	Open Heart ICU	32	30.8
	Pediatric ICU	3	2.9
	General ICU	6	5.8
	Emergency unit	8	7.7
	Multispecialty sections	44	42.4
Gender	Male	48	46.2
	Female	56	53.8
Marital Status	Single	47	45.2
	Married	50	48.1
	Divorced	7	6.7

Table 1 indicated most of the study sample worked in multispecialty sections. More than half of sample was female, and about half of sample was married. Most of the participants their age ranged from 25 to less than 35 years old as it is clear in figure1. Figure 2 clarifying that the highest percent of sample with bachelor degree. Majority of the sample were staff nurses as it showed in figure 3.

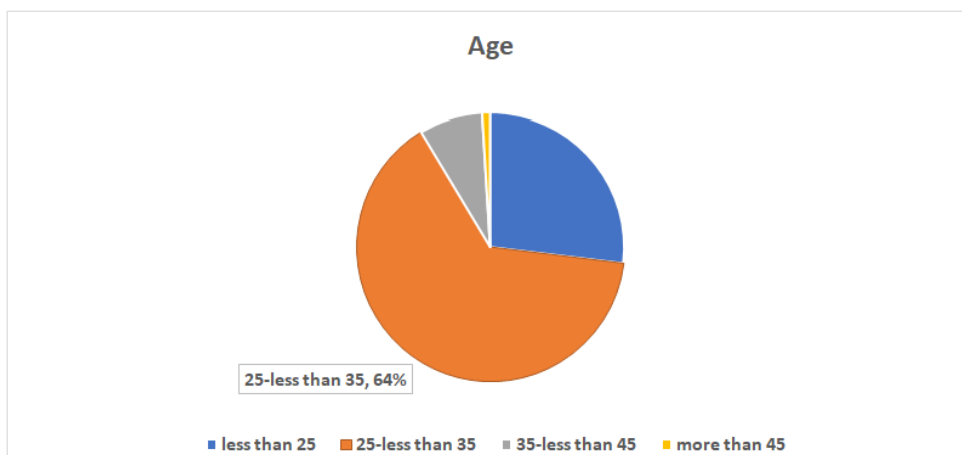


Figure 1: Percentage distribution of study sample regarding their age

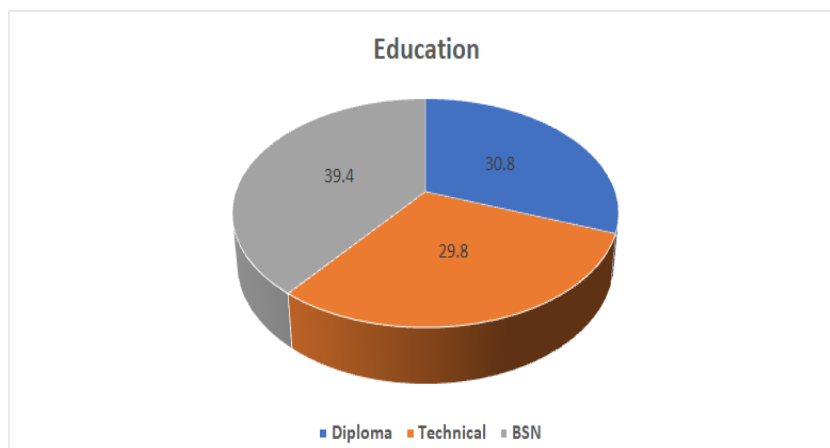


Figure2: Percentage distribution of study sample regarding their education



Figure 3:Percentage distribution of study sample regarding their position

Table 2: Mean and Standard Deviation of Job Characteristics Subscales and Work Engagement Subscales. (N=104)

Variable		Mean	SD
Job Characteristics	1.Skill Variety	3.74	.70
	2.Task Identity	3.34	.40
	3.Task Significance	3.19	.44
	4.Autonomy	3.38	.44
	5.Feedback	3.49	.52
Work Engagement	6.Vigor	2.46	.47
	7.Dedication	2.66	.39
	8.Absorption	2.32	.49

Table 2 indicated that in relation to job characteristics subscales, the highest mean score was for skill variety, followed by feedback, then autonomy, then task identity

while the last one was task significance. In relation to work engagement subscales it is clear that the highest mean score was for dedication then vigor and lastly for absorption.

Table 3: Correlation Matrix among Job Characteristics Subscales and Work Engagement Subscales (N=104)

Variable		1	2	3	4	5	6	7
Job Characteristics	1. Skill Variety	-						
	2. Task Identity	.236*	-					
	3. Task Significance	.260**	.021	-				
	4. Autonomy	.090	.017	.343**	-			
Work Engagement	5. Feedback	-.127	.069	.036	.226*	-		
	6. Vigor	-.162	-.155	.018	-.035	.232*	-	
	7. Dedication	-.077	-.064	.059	-.029	.211*	.499**	-
	8. Absorption	-.200*	-.301**	.012	.456**	.284**	.692**	.456**

*. Correlation is significant at the 0.05 level (2-tailed).

**.. Correlation is significant at the 0.01 level (2-tailed).

Table 3 indicated that autonomy was correlated positively with absorption. Feedback is correlated positively with work engagement subscales i.e. vigor, dedication and absorption. Skill variety and task identity were correlated negatively with absorption; while task significance was not correlated with work engagement.

DISCUSSION

This study aimed to examine the relationship between job characteristics and work engagement among nursing staff. Nurses work 24 hours per day, 7 days a week, and sometimes they had to take decisions related to supervisory responsibility under stress and limited time which need a recognition from higher management. When the nursing staff have a type of authority in their work it can lead to more motivation in work and engagement [12].

According to this study results, skill variety had the highest mean score among subscales of job characteristics. This result could indicated that the employees have enough chance and opportunity to do different tasks using a wide variety of different skills and talents, or might be because their job is complex and need more skills, followed by feedback subscale in the ranking, this could be because the nurse supervisors gave them continuous information and direction about their performance and not waiting until their annual evaluation which could be positively affect their performance. Positive feedback is important to motivate nurses in their work care setting [12]. Autonomy in the job came in the third ranking in the current study results. It might be due to the work setting which gave nurses a complete responsibility and enough authority to decide what actions they have to take to do their work independently which can improve the staff nurses morale and increase their self-esteem and self-actualization. This spontaneously will

improve nurse's outcomes and they will prefer to be in their organization.

The current study results were consistent with previous studies [5, 21] found characteristics of job as skill variety, autonomy and feedback would be motivating the workers to improve their performance and lead to positive outcome. Concerning the work engagement this research concluded dedication came number one in the rank, followed by vigor and finally absorption these results indicated that the employees proud of their work and their work inspiring them to update and grow their abilities to improve their performance and always they were enthusiastic about their job, they can continue to work for long time feels strong and vigorous and most of time they were proceed in their profession, even when thing do not go as expected. Consistently with the current results [4] mentioned that vigor, dedication and absorption has been intellectualized as a motivation of engagement.

The present study revealed that autonomy was correlated positively with absorption, Feedback is correlated positively with work engagement subscales, these could be explained as, when the nursing staff has an adequate portion of autonomy and freedom in their work setting it will help them to be more immersed in their work, carried away when they work, be happy when they work intensively and very difficult to be detached themselves from their work. Feedback is to tell the employees what they are doing continuously not waiting the annual evaluation report, aiming for improvement, progress, more motivated to perform in an acceptable manner. These results were consistent with previous studies [24,4,17,25] which concluded that job characteristics and work engagement were positively correlated to each other, beside that [21] found characteristics of job such as autonomy and feedback have motivating potential that lead to high positive outcome. Present study indicated skill variety and task identity were correlated negatively with absorption, while task significance was not correlated with work engagement. This result could be explained as, due to a wide variety of different skills and talents with large number of different tasks and nurses have to complete their tasks from start to finish, this might prevent nurses to be absorbed in their work environment. This in consisted with [4],indicated a positive relationship between the five characteristics of job and engagement in work. Also found job characteristics subscale significantly related to employees work engagement [25]. Employees can behave in different manners; they might perform little engagement in work not because they did not have positive job characteristics, but because lack of support of health care organization and their supervisors do not help them to do this [1].It seems that engaged nurses are more motivated to stay in hospitals and work more efficiently.

CONCLUSION

Based on the findings of the current study, it was concluded that the highest mean score was for skill variety, followed by feedback, then autonomy, then task identity while the last one was task significance. Also for work engagement, the highest mean score was for dedication then vigor and finally for absorption. Additionally, autonomy was correlated positively with absorption. Feedback is correlated positively

with work engagement subscales i.e. vigor, dedication and absorption. Skill variety and task identity were correlated negatively with absorption; while task significance was not correlated with work engagement.

RECOMMENDATIONS

Leaders in health care setting should investigate and analyze the characteristics of jobs to modify and improve the nursing staff performance through:-

- Identifying the capabilities of each nursing staff in different areas in the organization.
- Give the nursing staff enough amount of independency in their work environment.
- Provide the staff with continues feedback about their performance.
- Rotate the nursing staff within the health care setting to increase and improve their skill variety.
- Continues evaluation for work environment helping nursing staff to be fully engaged in their work.
- Support from organization and supervisor would moderate the relationship between job characteristics and engagement at work.
- Hospital administration should use a system of rewarding and recognition for nurses because it has a vital effect in their job satisfaction and engagement in their work which will lead to reduction of turnover and burnout among nursing staff.
- Other researches should be planned to identify the factors helping nursing staff to be engaged in their work.

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