

Head Nurses ' Job Demands and Resources and its Relationship with Their Work Engagement at Mansoura University Hospitals

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Abstract:

Hospitals are challenged to achieve consistently superior patient outcomes while facing mounting financial constraints. Work engagement contributes to a variety of benefits for employees and the organizations for which they work. Engaged health care professionals are energized, dedicated, and motivated to persevere and complete their work. The Job Demands-Resources (JDR) model is a conceptual framework used to explain employee engagement in the workplace. The importance of work engagement has been widely recognized at an individual and an organizational level. It is important to gain a deeper understanding into the aspects of the role that enable head nurses to feel engaged. The aim of the present study is to determine relationships between head nurses' job demands and resources with their work engagement. A descriptive correlation design was used in carrying out this study. All head nurses (n=179) who were working in all general units at four Mansoura University Hospitals namely; Main University Hospital, Emergency Hospital, Pediatric Hospital, and Specialized Medical Hospital were included in the study. Three tools were used for data collection, namely; Job Demands Scale, Job Resources Scale, and Work Engagement Scale. A major finding of the present study was a statistically significant correlation between head nurses' job demands-resources components and their work engagement. It was concluded that job resources play a significant role in the work engagement of head nurses and four components of job resources namely; performance feedback, growth opportunities, organizational support and job control were predictors of work engagement. It is recommended that to promote head nurses' work engagement, it is necessary to acknowledge job demands and resources because they play an important role in their work engagement.

1. Introduction

Hospitals are challenged to achieve consistently superior patient outcomes while facing mounting financial constraints. A key to success of high-performing organizations is an engaged workforce that proactively resolves performance problems. Engaged health care professionals are energized, dedicated, and motivated to persevere and complete their work. They enjoy challenges, exhibit mental resilience, and are engaged in their work⁽¹⁾. Engagement has been defined as a persistent, pervasive and positive affective motivational state of fulfillment in professionals⁽²⁾. Engagement is a predictor of employee proactive behaviors, employee loyalty and performance, and financial returns. Further, engagement contributes to a variety of benefits for employees and the organizations for which they work⁽³⁾.

Work engagement is a positive, satisfying, emotional state at work. It is characterized by vigor, dedication, and absorption⁽⁴⁾. Work-related vigor is exemplified by high energy levels, mental resilience, motivation, and perseverance. Dedication is characterized by a sense of meaning, passion, inspiration, pride, and challenge relating to one's work. Absorption involves full concentration and being deeply engrossed in work and it is characterized by the quick passage of time and a reluctance to detach oneself from work^(5,6). A valuable model for understanding the antecedents of work engagement is the Job Demands-Resources (JDR) model. Work engagement is a key element in the JDR model's motivational process that is defined as a positive, fulfilling, work-related state of mind⁽⁷⁾.

An important area in which to study engagement and its antecedents is in the healthcare profession. The health care profession is also an interesting setting in which to study engagement, personal strengths, and organizational resources because of the challenging nature of the work. Nurse Managers face a variety of demands in their job. Such challenges necessitate a combination of organizational resources and personal strength. For these reasons, a valuable model for understanding the antecedents of work engagement is the Job Demands-Resources model that assumes every occupation has specific work characteristics associated with well-being⁽²⁾.

Job Demands-Resources model assumes that job demands mainly affect the energy-demanding process, while job resources primarily play a role in the motivational process influencing both engagement and health. The JDR model assumes that work engagement has a mediating effect on the relationship between job resources and organizational commitment, as well as better performance and positive outcomes for the individual⁽⁸⁾. This model attempts to explain how resources can be used to enhance engagement and how the interplay between various resources affects engagement. Job Demands-Resources (JDR) model categorized work characteristics into two broad categories; namely job demands and job resources^(9,10).

Job demands refer to those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological effort, and that are therefore associated with certain physiological and/or psychological costs (work pressure, role overload and emotional demands). While, Job resources refer to those physical, psychological, social or organizational aspects of the job that may be functional in achieving work goals, reducing job demands and stimulating personal growth and development⁽²⁾. Resources may be located at the level of the organization (salary, career opportunities, job security), interpersonal and social relations (supervisor support, coworker support and team climate), the organization of work (role clarity and participation in decision making), and the level of the task (performance feedback, skill variety, task significance, task identity and autonomy)⁽¹¹⁾.

Head nurse is a nurse who can plan, organize, deliver, and evaluate nursing and interdisciplinary care to a targeted group of patients and manage the human and material resources needed to deliver that care. She is not only a manager but -by necessity- she is a leader who coaches, directs, and encourages her staff, besides being a valuable role model⁽¹²⁾. Managers must be engaged in their own work to create these stimulating work environments and fostering nurses' engagement. These mean that they are expected to create motivating work environments for nurses and also are considered an important driver of staff nurses' work engagement⁽¹⁾.

The concept of work engagement has received increased research attention in the past five years, represents such a shift in focus in the area of work functioning⁽¹³⁾. The nature of work has become less physical, and more mentally and emotionally demanding due to increasing automation, globalization and consequences such as increased pressure work, competition, work pace, and job instability⁽¹⁴⁾. Accordingly to increase work engagement will lead to positive organizational outcomes. Therefore hold that increased work engagement should be a common goal for various parties, areas and levels within health care settings; not only for health and safety personnel, human resource staff and managers, but also for employees and their unions⁽⁸⁾.

In the fact that today's health care organizations expect their health care professional to show initiative, to be proactive, to take responsibility for their own development of achievement behaviors at work, as well as to perform at high levels. In order to satisfy these organizational expectations, it is of great importance for health care professional to be absorbed, dedicated and energetic in their work⁽²⁾. Thus, one important argument for the added value of the concept of work engagement is its crucial role in developing the organization's human capital and employee well-being and health⁽¹⁵⁾.

Significant of the study

The importance of work engagement has been gain a deeper understanding into the aspects of the role that enable head nurses to feel engaged. In order to feel engaged in one's work it is imperative that head nurses are provided with the appropriate job resources to perform their tasks effectively and to cope with the demands of the role. Essentially, head nurses who are highly engaged in their work roles are more likely to have a greater attachment to their organization and a lower tendency to leave their organization. In Mansoura University Hospitals, it was observed that head nurses' absenteeism and turnover is the emergency problem in hospital. These two problems have a direct effect on organizational outcomes and may also be disruptive at more serious problems related to the quality of the call experience for the public. The JD-R model is a cornerstone of the present study for providing a theoretical and operational platform for examining head nurses' work engagement. The JD-R model specifies how head nurses well-being can be produced from two distinct and overarching sets of working conditions, which are defined in the form of job demands and job resources.

2. Research hypothesis

1. Job demands are correlated with work engagement
2. Job resources are correlated with work engagement

3. Aim of the study

The aim of the present study is to determine relationships between head nurses job demands and resources with their work engagement

4. Subjects and Methods

Design

A descriptive correlation design was used in carrying out this study.

Setting

The study was conducted in the general units at four Mansoura University hospitals namely; Main University Hospital, Emergency Hospital, Pediatric Hospital and Specialized Medical Hospital. These hospitals provide a wide spectrum of health services at Delta Region.

Subjects

All head nurses working in all general units at Main University Hospital (n=66), Emergency Hospital (n=59), Pediatric Hospital (n=20), and Specialized Medical Hospital (n=34) who fulfill the criteria of having a minimum of one year experience as a first-line nurse managers and available at time of data collection included in the study, to express their opinion about job demands and resources and its effects on their work engagement.

Tools of data collection

Three tools were used for data collection, namely; Job Demands Scale, Job Resources Scale, and Work Engagement Scale.

I. Job Demands Scale. It was developed by the researchers based on literature review. This questionnaire divided into two parts:-

The first part: It was used to identifying demographic characteristics of the head nurses as, hospital, department, age, educational qualifications, and years of experience.

The second part: It includes 32 items related to the head nurses' job demands items at their workplace. It was defined the head nurses' job demands that refer to physical, psychological, social and organizational aspects of the job that require an effort by the employee **Bakker et al.**,⁽¹⁶⁾. These items was grouped under four categories namely; time pressure and workload (9 items) that developed by **Janssen**,⁽¹⁷⁾, role conflict (5 items) **Behfar et al.**,⁽¹⁹⁾, role ambiguity (7 items) developed by **Tang et al.**⁽¹⁸⁾, and job insecurity questionnaire (11 items) developed by **De Witte**,⁽²⁰⁾. Accordingly, each response was assigned a score from along a 5-point scale, varying from 1 (strongly agree) and 5 (strongly disagree).

II. Job Resources Scale. It was to define the head nurses' job resources that facilitate the attainment of work goals, stimulate personal growth or reduce job demands **Bakker et al.**,⁽¹⁶⁾. It included six job resources subscales namely; autonomy (4 items), organizational support (8 items), performance feedback (6items), growth opportunities (3 items), supervisor support (3 items), and job control (10 items). Each response was assigned a score from along a 5-point scale, varying from 1 (strongly agree) and 5 (strongly disagree).

III. Work Engagement Scale. It was developed by **Schaufeli et al.**,⁽²¹⁾ and is aimed at measuring the participants' work engagement. The instrument consists of 17 items categorized under three dimension: *vigor* includes (6 items), that refers to "high levels of energy and resilience, the willingness to invest effort, not being easily fatigued, and persistence in the face of difficulties". *Dedication* includes (5 items) that refers to "deriving a sense of significance from one's work, feeling enthusiastic and proud about one's job, and feeling inspired and challenged by it. Finally, *absorption* includes (6 items) that refers to being totally and happily immersed in one's work and having difficulties detaching oneself from it so that time passes quickly and one forgets everything else that is around. Items were scored on a five-point, Likert-type scale from strongly disagree (5) to strongly agree (1).

Methods of Data Collection

1. A permission to conduct the study was obtained from the director of Mansoura University Hospitals.
2. All head nurses interviewed for explaining the purposes and procedures of the study, and they have the right to withdrawal from the study any time during the study. Oral consent to participate was assumed by attendance of filling questionnaire sheet.
3. Tools of data collection were translated into Arabic and were tested for its content validity and relevance by a jury consisted of 3 academic staff in Nursing Administration Department at Mansoura, and 9 head nurses from different inpatient units at Mansoura University Hospitals. The necessary modifications were performed.
4. The internal consistency reliability for the Work Engagement Scale was assessed by using coefficient alpha and it was 0.90.
5. A pilot study was conducted on 15 of head nurses working at Main Mansoura University Hospitals in order to ascertain its clarity and feasibility.
6. The questionnaire was distributed to the head nurses to answer the questions. Each sheet took 10-15 minutes to be answered. Data collected in two months starting August 2012.

Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 15. Data summarized using mean and standard deviation for numerical variables. This maximum score depends on the number of items of each topic. Multiple regression analysis was used to investigate whether job demands and job resources would predict work engagement. In order to test the

hypotheses, standard linear regression analyses were conducted. The r-test was used for correlation analysis between quantitative variables like job demands-resources and work engagement. The threshold of significance was fixed at the $p < 0.05$ level.

5. Results

Table 1: Demographic characteristics of the study head nurses

Demographic characteristic	Study head nurses (n=179)	
	No	%
Hospital		
-University	66	36.9 %
-Emergency	59	33.0 %
-Pediatric	20	11.2 %
- Specialized Medical	34	19.0 %
Age (in years)		
< 25	16	8.94 %
25- 30	122	68.16 %
□ 30	41	22.90 %
Mean±S.D 32.223+5.378		
Qualification		
B.Sc degree	146	81.6 %
Diploma degree technical	25	14.0 %
	8	4.4%
Years of experience		
<10	89	49.72 %
10-	78	43.58%
□ 20	12	6.70 %
Marital status		
Married	161	89.9%
Single	18	10.1%

In **Table 1** depicts about one third of the study subjects working in emergency hospital and 68.16% of head nurses were in the age group ranged from 25 to 30 years old. Almost all head nurses in the study (81.6%) held a bachelor nursing program and 4.4% has technical institute. As for years of experience, (49.72%) of head nurses in the study hospitals had 10 to less than 20 years of experience, and (6.70%) had more than 20 years of experience. About half of the head nurses were married.

Table 2: Descriptive statistics of job demands and resources as perceived by head nurses.

Job demands	Max.score	Head nurses (n=179)	
		Mean ± S.D	% *
Workload	45	34.530±4.576	76.73
Role conflict	25	17.139±3.751	68.55
Role ambiguity	35	25.413±4.871	72.60
Job insecurity	55	32.273±6.733	58.67
Total head nurse' job demands	160	109.357±12.978	68.34
Autonomy	20	14.419±2.718	72.05
Organizational support	40	23.078±7.954	57.69
Performance feedback	30	23.402±3.935	78.00
Growth opportunities	15	11.687±2.123	77.91
Supervisor support	35	25.284±5.171	72.24
Job control	50	37.352±9.250	74.70
Total head nurse' Job Resources	190	135.223±22.475	71.17

* Percentages are calculated relative to maximum score.

Table 2 shows descriptive statistics of job demands as perceived by head nurses. The total head nurse' job demands mean score was 109.357 representing 68.34% of maximum score. The item of head nurses' workload had the highest mean score 76.73% of maximum. While the least level of head nurses' job insecurity was 58.67% of maximum score. This table also presents descriptive statistics of job resources as perceived by head nurses. The overall level head nurse' job resources was 135.223 mean score representing 71.17% of maximum score. The performance feedback, growth opportunities, and job control had the highest level of job resources components maximum score. While the least level of head nurses organizational support was 57.69% of the maximum score

Table 3: Descriptive statistics of work engagement as perceived by head nurses.

Work engagement components	Max.score	Head nurses (n=179)	
		Mean + S.D	% *
Vigor	30	23.379±3.338	77.93
Dedication	25	19.860±3.484	79.44
Absorption	30	21.698±3.696	72.32
Total head nurse' work engagement	85	64.938±9.059	76.39

* Percentages are calculated relative to maximum score.

Table 3 shows descriptive statistics of work engagement as perceived by head nurses. The overall mean score of work engagement among head nurses was 64.938 representing 76.39% of maximum score. The highest mean score was observed 19.860 for head nurses' dedication representing 79.44% of maximum score. The least level of head nurses' absorption was 72.32% of maximum score. The highest mean score was observed for vigor items 23.379 representing 77.93% of maximum score.

Table 4: Relationship between head nurses' job demands and work engagement in the selected settings

Job demands	Vigor	Dedication	Absorption	Total work engagement
Workload	.264** .000	.155* .038	.227** .002	.250** .001
Role conflict	.056 .458	.095 .205	.174* .020	.128 .088
Role ambiguity	.213** .004	.195** .009	.118 .116	.202** .007
Job insecurity	.032 .670	-.086 .255	.039 .604	-.005 .945
Total job demands	.206** .006	.111 .138	.195** .009	.198** .008

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

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

Table 4 shows relationship between head nurses' job demands and work engagement in the selected settings. The results in this table revealed that there were significant correlations between all components of job demands and work engagement as perceived by head nurses in the selected settings ($r = .198, p < 0.001$). The table also shows that role conflict and job insecurity were not significantly correlated with work engagement. Most of the job demands components were also significantly correlated with vigor and dedication as a component of work engagement except role conflict and job insecurity that were not significantly correlated.

Table 5: Relationship between head nurses' job resources and work engagement in the selected settings

Job resources	Vigor	Dedication	Absorption	Total work engagement
Autonomy	.170* .023	.072 .338	.110 .141	.135 .071
Organizational support	.185* .013	.125 .095	.144 .055	.175* .019

Performance feedback	.389** .000	.388** .000	.307** .000	.418** .000
Growth opportunities	.373** .000	.493** .000	.528** .000	.543** .000
Supervisor support	.511** .000	.540** .000	.414** .000	.565** .000
Job control	.264** .000	.337** .000	.257** .001	.332** .000
Total Job Resources	.416** .000	.430** .000	.369** .000	.469** .000

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

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

Table 5 presents relationship between head nurses' job resources and work engagement in the selected settings. The results in this table revealed that these were a significant correlation between total components of job resources and work engagement ($r = .469$, $p < 0.001$). Moreover the results revealed that there is a significant correlation between all job resources with dedication and Absorption except autonomy and organizational support which not proved to be significantly correlated statistically.

6. Discussion

In modern organizations, especially in the health care service sector, need employees who are engaged with their work. They are more pro-active, take more initiatives and feel more responsible for delivering quality outcomes. It is management's role to encourage and co-ordinate employees in order to deliver quality service^(9,22). Work engagement is relevant for outcomes such as low turnover intention, high organizational commitment, positive affect at work, and employee performance⁽²³⁾. In the light of the relevance of these outcomes for organizations and individuals alike, it is worth to identify factors that increase work engagement⁽⁸⁾. The present study confirms the job demand-resource model's hypothesis that job resources are of greater importance to work engagement than job demands. That means head nurses' will be more engaged in their work if the necessary job resources, are provided⁽²⁴⁾.

The results of the present study revealed that head nurses job demands and resources were positively correlated with their work engagement. This is consistent with the results of **Nerstad et al.**,⁽¹⁵⁾ who study the effect of the job demands-resources model (JD-R model) on work engagement and indicated a positive association between engagement and job demands and resources. This is the same view of **Hu et al.**,⁽²⁵⁾ who concluded effects of job demands and job resources not only with respect to negative work-related outcomes as burnout, but also with respect to positive work-related outcomes as work engagement. And **Warshawsky et al.**,⁽¹⁾ concluded job resources and job demands affect the development of work engagement in employees. Therefore, **Chung & Angeline**,⁽²⁶⁾ used the job demand-resource model to explain work engagement.

Job demands are physical, social, or organizational aspects of a job that require sustained physical or psychological effort leading to adverse physical or psychological outcomes⁽¹⁾. Job demands can further be grouped into quantitative and qualitative job demands. Quantitative job demands include time pressure and work overload. While qualitative demands include emotional demands, role ambiguity, role conflict and an unfavorable physical work environment⁽²⁷⁾. Job demands as part of the de-energizing process have proven to be the strongest predictors of exhaustion and cynicism dimensions of burnout⁽²⁸⁾.

Findings of the present study revealed that a high significant correlation between head nurses' job demands and their work engagement. This is agree with **Bakker et al.**,⁽¹⁴⁾ who found a negative relationship between work engagement and job demands. This is the same line of **Inoue et al.**,⁽²⁴⁾ who mentioned if job demands increase with a lack of job resources; it will have a negative effect on the work engagement levels of employees. When job resources are lacking, employees might find it difficult to cope with high job demands. This might result in disengagement, as employees will tend to defend themselves against the absence of resources. This is the same view of **Chung & Angeline**,⁽²⁶⁾ who indicated when job demands are high and job resources are at the same time low, employees are likely to be exhausted and disengaged at the same time. Therefore, **Inoue, et al.**,⁽²⁴⁾ suggested that job demands are of secondary importance in predicting work engagement, with job resources serving as the more important and direct factor effect on work engagement.

In the present study head nurses considered workload and role ambiguity with their work engagement (both vigor and dedication). This may be explain as when these job demands are high, head nurses would experience exhaustion rather than disengagement. This is supported by **Warshawsky et al.**,⁽¹⁾ who found job demands may reduce the effects of job resources that foster work engagement. This is the same view of **de Naeyer**,⁽²⁹⁾ who concluded work pressure, and role ambiguity were more like job resources than as job demands within innovative organizations rules. As well as **Hu et al.**,⁽²⁵⁾ found that job demands were negatively associated with

work engagement. In the fact high job demands were positively related to each work engagement scale. While **Kinnunen et al.**,⁽³⁰⁾ indicted a long working hours have been linked to high work engagement. And **Halbesleben**,⁽³¹⁾ found job demands have been related to work engagement more often negatively than positively.

Furthermore, **Schnorpfel et al.**,⁽³²⁾ found disengagement is caused by job characteristics which including job demands and a lack of resources, such as excessive workload, physical work conditions, adverse co-worker behavior, lack of social support, low pay, poor communication, poor training and boring jobs. Exhausted employees have a lack of mental and physical resources; this may lead to the depletion of energy as a state of exhaustion and health problems⁽³³⁾.

Again, the results of the present study showed a weak relationship between head nurses' role conflict as a job demands and absorption. However, moderated regression analysis showed that job demands as work, quantitative load and role ambiguity contribute to dedication as a component of work engagement. On the other word no significant relationships exist between the head nurses' job insecurity and three of the subscales of engagement. This is supported by prospective studies done by **Inoue et al.**,⁽²⁴⁾ who found time pressure was positively associated with absorption and dedication and indicated time demand predicted higher scores on absorption component of work engagement. Job demands can be seen as factors that inhibit recovery, whereas job resources facilitate recovery. In the motivational process, job resources are related to engagement and commitment to work⁽³⁰⁾.

Regarding head nurses' job resources and work engagement, findings of the present study revealed work engagement has been positively related to job resources, especially organizational and supervisor support, performance feedback, growth opportunities, and job control. This may be due to Job resources encourage personal investment in the work and success of the organization. In order for employees to experience high levels of enthusiasm, pride and challenge in their work to attain work goals, the organization must increase the level of organizational support, growth opportunities, social support and advancement opportunities. This is agreed with **Oliver**,⁽³⁴⁾ who found job resources are related to work engagement both concurrently and over time. Furthermore, they indicated there is evidence of a mediating role of work engagement between job resources and positive motivational outcomes as turnover intention, organizational commitment, personal initiative and work unit innovativeness.

Job resources play a vital role in promoting work engagement and organizational commitment because they foster employee growth, learning, and development, or they may play an extrinsic motivational role because they are instrumental in achieving work goals⁽³⁵⁾. As well as **Bakken & Torp**,⁽⁸⁾ assumed that the relationship between job resources and work engagement with health is stronger than the relationship with job demands. This is in line with results of study done by **Korunka et al.**,⁽³⁶⁾ who concluded job resources showed strong correlations with engagement.

Again findings of the present study revealed job control has been positively related with all work engagement subscales. This may be due to control is an organizational resource that is desired and serves as a means to obtain other valued resources. This is the same study results done by **Palmer et al.**,⁽⁵⁾ who concluded job control has been used to predict work engagement. Collectively, this can lead to less enthusiasm, energy, passion, and inspiration regarding the job. Constructive feedback not only helps employees do their work more effectively but also improves communication between supervisors and employees. When specific and accurate information is provided in a constructive way, both employees and supervisors can improve or change their performance⁽¹⁴⁾. Furthermore, job resources are located at an organizational level as salary, career opportunities, and job security, at an interpersonal and social relations level as supervisor and co-worker support, at the level of organization of work as role clarity and participation in decision making and at the level of tasks as skill variety, autonomy, performance feedback and task significance⁽²⁴⁾.

Generally, increasing job resources through participative management, increased social support, and team building should lead to more engagement with the job; and indirect effect on turnover intention and burnout. However **Shimazu et al.**,⁽⁶⁾ found work engagement is positively associated with job resources; that is, to those aspects of the job that have the capacity to reduce job demands, are functional in achieving work goals, and may stimulate personal growth, learning, and development. According to **Inoue et al.**,⁽²⁴⁾ found job resources increased subsequent levels of work engagement experienced by Finnish dentists. For these studies done by **Dikkers et al.**,⁽³⁷⁾, **Schaufeli et al.**,⁽³⁸⁾ who reported that higher level of job resources was prospectively associated with greater work engagement for sampled European employees and focused on special occupations

For instance, if more job resources are available, the more likely that employees feel engaged. The possible consequences of work engagement pertain to positive job-related attitudes, employee health, extra-role behaviors, and performance. Similarly another study done by **Dikkers et al.**,⁽³⁷⁾ to investigate a prospective association of job resources with work engagement and concluded that higher level of job resources at baseline was prospectively associated with greater work engagement. In the present study showed that no correlation

between head nurses' autonomy and work engagement. This is inconsistency with **Raja**,⁽³⁹⁾, **Halbesleben**,⁽³¹⁾ results that have shown positively significant association of wide range of job resources as autonomy and personal resources with work engagement.

Supervisors' feedback not only helps to work more effectively, but may also ensure better cooperation between employee and the immediate superior⁽²⁹⁾. Findings of the present study revealed a significant correlation between supervisor support and head nurses dedication. This may be due to head nurses could consider their relationship with their manager or supervisor as contributing positively to their career development if the manager provides support for career development and advancement, and working with them to develop their own career plans and training. This is the same view of **Li et al.**,⁽⁹⁾ who emphasized on feedback and support from supervisors and colleagues might affect engagement. This is the same view of **Warshawsky et al.**,⁽¹⁾ who suggests that giving nurse managers training in supportive behaviors would be useful and encouraging coworker support could be beneficial for employee self-efficacy.

Findings of the present study revealed a significant correlation between growth opportunities and head nurses work engagement. This may be due to employees become more absorbed in their work when they have high demands, especially if growth opportunities and organizational support are also high. This is agreed with **Rothmann**,⁽⁷⁾ who concluded that growth opportunities in the job best predicted employee engagement. Organizational support and growth opportunities in the job were strong predictors of employee engagement in the industry. Employees who are highly engaged in their work roles are not only focused on their efforts in pursuing role related goals, they are also emotionally and cognitively connected to the efforts needed to get there. In contrast, disengaged employees appears emotionally and cognitively withdrawn from work. Not only is engagement important at the individual level, through employee well-being, it is also positively associated with importance organizational outcomes.

7. Conclusion & Recommendations

This study confirms the JDR model's hypothesis that job resources are of greater importance to work engagement than job demands. Based on the results of this study, it can be concluded that job resources play a significant role in the work engagement of head nurses. Four types of job resources were moderate to strong predictors of work engagement namely performance feedback, growth opportunities, organizational support and job control in the job. Furthermore, the hypothesis that job demands as head nurses' workload and role ambiguity has a mediating effect on the relationship between certain work engagements subscales. The job resources are not only necessary to prevent against job demands and exhaustion but they also stimulate the employee to perform well.

Based on the findings of the present study, the following can be recommended:-

1. To promote head nurses' work engagement, it is necessary to acknowledge and reward good performance instead of exclusively correcting substandard performance.
2. Managers and employees should become aware of the causes, antecedents and consequences of job insecurity, both for the individual as well as for the organization
3. Improve head nurses' autonomy is needed to promote their work engagement
4. There is an urgent need for intervention studies to develop strategies for work engagement
5. Further, the relationship between supervisor support and head nurses' dedication suggests that giving nurse managers training in supportive behaviors would be useful.
6. Future research should consider organizational-level job demands and job resources, such as job insecurity, career opportunities, and supervisory coaching to provide more concrete evidence for a stronger effect of work engagement.

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