# Relationship between Motivation and Job Involvement among Staff Nurses

Yomna El Metwali Bader Ibrahem,1 Rabab Mahmoud Hassan2, Dr. Galila Mohamed Abdel Ghaffar3

Nursing Administration, Faculty of Nursing - Ain Shams University

## **Abstract**

Background: Well motivated and involved workforce feels that organization value them and they are playing an essential role within their organization which significantly enhance both employees' as well as organizational performance. Aim: present study aimed to explore the relationship between motivation and job involvement among staff nurses. Design: A descriptive correlational study design was used. Setting: This study was carried out on 100 staff nurses working at Al Helal Hospital.Sample Type: The convenient sample included staff nurses a permanent contract, who have more than one year experience, and working full time. Tools of data collection: Motivational needs questionnaire sheet and job involvement scale. Results: 96% of staff nurses were highly needed for achievement. While 87% of staff nurses had high level of total motivational need. Also, 58% of staff nurses were highly involved in their work. There was statistically significant relation between staff nurses need for power and their age and years of experience. There was a statistical significant relation between total motivational needs and staff nurses' age, work unit, years of experience and qualification. There was statistically significant relation between total job involvement level and staff nurses' age, qualification, and years of experience. conclusion, there was a positive correlation between total motivational needs and total job involvement. **Recommendations**: Hospitals must establish policies for meet staff nurses' need for power, conducting periodic meeting and discussion between health care team members and manager must assigning employees specific or specialized tasks to enabling them to become expert.

**Key words:** Jobinvolvement, motivation, staff nurses

## Introduction

In today's rapidly changing corporate environment, organizations seek out to maximize the potential of their human resources to stay ahead of the fierce competition and survive in the middle of the quest. Well motivated and involved

workforce feel that organization value them and they are playing an essential role within their organization which significantly enhance both employees as well as organizational performance. Motivated and committed employees with high levels of job involvement are considered as an important asset to an organization to be more productive and less labour turnover (Sipho et al, 2014). Developing and retaining qualified staff nurses are the prevailing global challenges of nursing management. Of all healthcare workers, hospital nurses form the biggest group of careers who have close daily contact with patients and their relatives. Nurses directly influence the quality and safety of health care. However, they become vulnerable to work stress and decreased work motivation which includes a risk of poor work performance and quitting the job. To motivate nurses requires both upgraded knowledge and skills in performance management. Many studies indicated several individual and organizational background factors, that if considered together could be when studying nurses' motivation. In addition, recent studies have implied that different dimensions of work motivation should also be measured in order to have a better understanding of nurses' work behavior (Toode et al., 2015). The greatest challenge facing any organization is how to attract, train, motivate and retain the highly qualified and productive employees; who can provide competitive advantage to the organizations today and in future (Sipho, et al., 2014). A highly skilled motivated and involved person typically chooses carefully whether or not to work for a company. Usually the employees bring high level of competence and experience into the organization and expect something in return if they are to remain with the organization. They are therefore motivated by different things and based on their motivation they choose whether or not to give their best effort (Hancock, et al., 2013).

Motivation has internal and external factors that stimulate desire and energy in people to be continually interested and committed to a job, role or subject, or to make an effort to attain a goal. Motivation results from the interaction of both conscious and unconscious factors such as the intensity of desire or need, incentive or rewardvalue of

the goal, and expectations of the individual and his or her peers. These factors are the reasons one has for behaving a certain way (Sarpong, 2016).

The word "job" in the phrase "job involvement" refers to more than just your specific position. It can include the industry or profession in which your work, company, department, skills, training and your career plan. Getting more involved in your job means learning about other jobs that interact with yours and related jobs you might hold as you climb the ladder (Smith, 2009).

Job involvement is defined as the degree to which an employee is engaged in and enthusiastic about performing their work. Managers are typically well aware that efforts to promote job involvement among staff tend to pay off substantially since employees will be more likely to assist in furthering company'sobjectives(Sharma, al., 2012). Job involvement has been defined also as internalizing values of "goodness and importance of working" among people. It is a subjective condition that makes people devoted to their work. It is a desirable feature that makes people spend energy and do their best in their work and organizational roles. It causes workers to enjoy their work and reduces their fatigue. Job involvement not only increases the workers' job satisfaction, organizational commitment, organizational citizenship behavior, emotional attachment to the organization, voluntary actions beyond the job description, and participation in organizational decisions, but also reduces the desire to leave the job (Rahati, et al., 2015).

A highly skilled motivated and involved employee typically chooses carefully whether or not to work for a company. Usually the employees bring high level of competence and expertise into the organization and expect something in return if they are to remain with the organization. They are therefore motivated by different things and based on their motivation they

choose whether or not to give their best effort (Hancock, et al., 2013).

## Aim of the study:

This study aimed to explore the relationship between motivation and job involvement among staff nurses through:

- Identifying nurses' motivation needs.
- Measuring motivation level among staff nurses.
- Determining level of job involvement among staff nurses.
- Finding out the relationship between motivation and job involvement among staff nurses.

**Research Question :**Is there a relationship between motivation and job involvement among staff nurses?

## **Significance of the Study:**

Employees who are not involved and motivated in their work threat the organization success (*Chugtai*, 2008). By implementing culture of involvement, organization contact employees on all levels for attaining quality services, increased productivity and substantiated purpose. Nevertheless, the outcome obtained from work impact moral, motivation and quality of employee' life.

The researcher as a head nurse in the study setting .observed that some nurses have inadequate performance of their job, when the researcher asked them answered due to increase conflict between managers and staff nurses, lack of participation in decision making. Hospital not caring with their needs either personally or professionally . In an attempt to assess nurses needs and clarify ways to motivate them which had reflection

in their involvement to work. The present study was emerged conduct.

## 2. Methodology

**Design:** A descriptive correlation design was used.

**Setting:** The study was conducted at Al Helal General Hospital. This hospital is affiliated to Specialized Medical Centers at Cairo governorate. The hospital capacity is 280 beds.

**Subjects:** Convenient sample included staff nurses with permanent contract, who have more than one year experience, and working full time. Total number was (100).

#### **Tools of data collection:**

Two types of questionnaire sheets were used to collect data for this study:

## a) Motivational needs questionnaire sheet:

This tool aimed to assess motivational needs among staff nurses and measuring motivation level.

## Scoring system: according to Junker(2001),

Responses were measured on 5-point Likert scale ranging from "1= strongly disagree" to "5= strongly agree". The scores of items were summed-up and the total divided by number of the items. These scores were converted into a percent score. Also, calculation of the mean and standard deviation was done.

Staff nurses considered highly motivated if the total score is more than 75%, Moderate motivation level considered when the total score is ranged from 60% - 75%.

Low motivated when the total score is less than 60%.

## b) Job involvement scale:

It developed by **Kanungo** (1982), and adopted from **Zahran and Zahran** (2013). It aimed at measuring job involvement level among study subjects.

## **Scoring system:**

Responses were measured on 3-point Likert scale ranging from "1= rare" to "3= always". Negative statement had reverse scoring. The scores of items were summedup and the total divided by number of items. These scores were converted into a percent score. In addition, calculation of the mean and standard deviation was done. Nurses considered highly involved if total score is more than 75%. Moderate involved when total score is ranged from 50% - 75%.Low involved when total score is less than 50%.

## **Operational Design:**

The operational design for this study included three stages namely; preparatory stage, pilot study, and field work stage.

## **Preparatory Phase:**

The researcher reviewed current and past, local and international related literature using books, articles, periodicals, journals and internet to be updated with study variables, references, and studies.

Validity of the tools: Face and content validity for study tools were conducted by jury group consisted of seven experts specialized in nursing administration and psychiatric nursing and mental health. Two professors and one assistant professor from Cairo University, one professor from Zagazig University and one professor and two assistant professors in psychiatric nursing and mental health from Ain Shams University.

Jury opinions were elicited regarding the tools' format, layout, parts, and scoring system. Based on the jury recommendations corrections necessary modification was done.

## **Pilot Study:**

The pilot study was carried out after developing the study tools and before starting the actual data collection. It was carried out on 10 staff nurses which represented 10% of total study subjects and they were excluded from the main study sample. The aim of the pilot study was to confirm clarity, feasibility and applicability of the tool, in addition to estimate the time required for filling the sheet. The time needed for filling the sheet was ranged between 25-35 minutes. This stage took one month December 2014.

## **Tools reliability:**

Tools reliability were tested using Cronbach alpha coefficient. Test of reliability for the motivational needs questionnaire was (0.80) and the job involvement scale was (0.91).

#### **Ethical consideration:**

The study proposal was approved by Ethical Committee of the Faculty of Nursing, Ain Shams University. Official permission to conduct the study was secured. All participants gave their informed consent to participate in the study. They informed about the study aim and about their rights to refuse or withdraw from the study and any time. Confidentiality of the obtained information was ascertained. The study maneuvers not entail any harmful effects on participants.

## Statistical analysis:

Data entry was done using SPSS V17 computer software package. Quality control was done at the stages of coding and data entry. Statistical presentation and analysis of the present study was conducted, using

frequencies and percentages for qualitative variables, and mean and standard deviation (SD) for quantitative variables. Qualitative variables were compared using chi-square test. Student t-test "t" was used for comparison between two-independent quantitative variables and ANOVA (F) test was also used for comparisons between more than two groups' dependent quantitative variables. Pearson correlation co-efficient (r) was used for assessing the inter-relationship among quantitative variables. Statistical significance was considered at p value <0.05.

### **Results:**

**Table (1)**shows that, more than half (55%) of staff nurses had age ranged from 30 - 40 years. Majority of them were female, and more than two thirds (71%) of study subjects were married. Regarding nursing qualifications 83% of them had nursing diploma, while (2%) of them had bachelor degree.

**Figure(1)**shows that slightly less than three fifths of staff nurses had experience ranged between 10 to 20 years, while slightly more than one quarter (26%)of them had more than 20 years experience.

**Figure (2)** shows that majority (84%) of staff nurses were attended training courses.

**Table** (2) clarifies that, majority (96%) of staff nurses had high need level regarding achievement. meanwhile slightly less than one quarters (24%) of staff nurses had moderate level regarding need for power.

**Table (3)**reveals that, more than two thirds (68%) of staff nurses had high level of job involvement regarding performance compatible with self-concept. Meanwhile about one third of staff nurses (33%) had moderate job involvement level regarding work as a central life interest domain.

**Table** (4)shows that, there were a significant positive correlation between performance compatible with self-concept and all motivational needs. While, there was a significant positive correlation between need of power and all job involvement dimensions.

**Table (5)**describes that, there was a significant positive correlation between total motivation and total job involvement among staff nurses.

## Yomna El Metwali, Rabab Mahmoud, and Galila Mohamed

**Table (1):** Demographic characteristic of study subjects (n=100)

Demographic characteristics	No.	%			
Age (years)					
<30	26	26.00			
30-40	55	55.00			
>40	19	19.00			
Gender					
Male	10	10.00			
Female	90	90.00			
Marital status					
Single	29	29.00			
Married	71	71.00			
Work unit type					
Non critical	48	48.00			
Critical	52	52.00			
Nursing qualifications					
Nursing diploma	83	83.00			
High average diploma	15	15.00			
Bachelor degree	2	2.00			

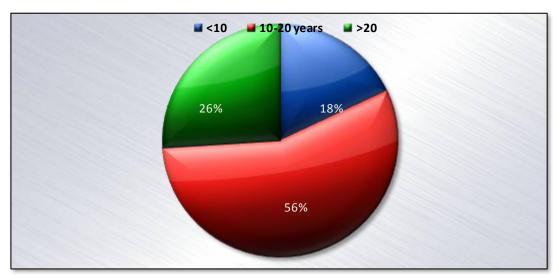


Figure (1): Distribution of staff nurses according years of experience



Figure (2): Distribution of staff nurses according to attendance of training courses

**Table (2):** Motivation needs level among staff nurses (n=100)

Motivational	Low < 60%			erate - 75%	High > 75%	
Needs	No.	%	No.	%	No.	%
For power	2	2.00	24	24.00	74	74.00
For Achievement	2	2.00	2	2.00	96	96.00
For Affiliation	1	1.00	21	21.00	78	78.00

**Table (3):** Job involvement level among staff nurses (n=100)

Domains of job involvement	<b>Low</b> <50%		<b>Moderate</b> 50% - 75%		<b>High</b> >75%	
	No.	%	No.	%	No.	%
Work as a central life interest	10	10.00	33	33.00	57	57.00
Active participation in the job	6	6.00	32	32.00	62	62.00
Performance compatible with self- concept	11	11.00	21	21.00	68	68.00
Performance as central to self-esteem	12	12.00	31	31.00	57	57.00

Table (4): Correlation between motivational needs and job involvement domains among staff nurses

Correlations					
	Motivational needs				
Job involvement domains	The need for power		The need for achievement	The need for affiliation	
Work as a central life	r	-0.283	0.165	0.001	
interest	P-value	0.046*	0.102	0.990	
Active participation in the job	r	-0.378	0.182	0.080	
	P-value	0.024*	0.071	0.430	
Performance as central	r	-0.352	0.200	0.372	
to self-esteem	P-value	0.033*	0.047*	0.024*	
Performance compatible with self-concept	r	-0.310	0.232	0.339	
	P-value	0.042*	0.020*	0.041*	

<sup>\*</sup> Statistical significant at p<0.05

**Table (5):** Correlation between motivation and total job involvement among staff nurses

Correlations				
	Total job involvement			
	r	P-value		
Total Motivation among staff nurses	0.372	0.02*		

<sup>\*</sup> Statistical significant at p<0.05

## **Discussion:**

Results of this study revealed that, the majority of study subjects were highly needed to achievement. This result may be due to staff nurses were seeking for improving their skills and striving for excellence and unique accomplishments. Also their lacking of immediate moral recognition when they producing a good effort in their work.

The finding was agreed with *Nayeri*, and *Jafarpour* (2014)Study on hospitals of Babol University, in Tehran. who reported that, the highest rank among the study sample was the need for achievement; this

achievement gave them the sense of accomplishment and feedback. While result disagreed with *Pang and Schultheiss* (2005) who carried out study about the priority of motivational aspect, they found that employees were in need for power than the two other aspects of motivational needs.

The present study demonstrated that, the staff nurses had the highly necessity for affiliation need. This result may be due to staff nurses wish to establish, maintain and restore close and friendly relationship. It also referred to culture of the Egyptian citizen are usually like social relationships and wishing to present a positive image acceptable by others. On this context this is may be due to those who seeking for affiliation are looking

forward for coordinating relationship and harmony with others. They are willing to obey the group and avoid expressing themselves.

This result is congruent with *Nayeri*, and *Jafarpour*(2014) who reported that, the need for affiliation was the second aspect in motivational needs. *Adib-Hajbaghery* and *Dianati* (2005) asserted that, nursing profession needs social, artistic, and seeking characteristics such as patience, closeness, social behavior, spirit of cooperation and helping others, sense of responsibility and love for others.

The need for power was the least motivational needs as reported by staff nurses. The present study findings indicated that, the reflection of power the nurses highly for competition and needed career development among who motivated by power derived pleasure which influencing the behavior, emotions and beliefs of other. Furthermore, staff nurses had trusted in themselves, and their ability to negotiate, make decision, take risk, support for manageable professional practice and workloads.

Correspondingly this finding is congruent with *Nayeri*, and *Jafarpour*(2014) who found that, need for power had an average score and took the third order of motivational needs. While in other side *Raeisi et al.*, (2012) found that, the majority of study sample needed for power as a motivation.

Regarding the total motivational needs, majority of current studied nurses had high level of motivational needs. Meanwhile, they were starved to motivational aspect within their present job. This result may be due to lack of competition, decision making, immediate feedback about work performance, and existence of conflict. **Barros and et al.**, (2015) asserted that, the role of competition among health care

providers as an instrument to improve efficiency in the use of health system resources. This study finding is congruent with *Kotter* (2015)who concluded that, unmotivated employees become terribly frustrated in their effort to succeed. They may feel stressed or even they tend to leave the organization. *Gebremedhin* (2015) asserted that, unmotivated employees are less productive, demonstrates unwanted behaviors like absenteeism, carelessness which lead to low productivity.

There were significant relationships between years of experience, age, work unit and total motivational needs. This result is expected due to newly graduate nurses are highly needed for satisfaction and motivation. They consist the young generation of the institution with great expectations of their career future.

This result is in agreement with *Singh* and *Tiwari* (2011) who found that, the majority of the study sample belonging to the 35-45 age group are highly motivated. Whereas, it is in contradicted with *Kontodimopoulos et al.*, (2009) who found that there was no relation between age and employees' motivation.

Regarding job involvement present study indicated that, more than two thirds of staff nurses had highest level of job involvement regarding performance compatible with self- concept. This result may be due to on job training programs to develop the performance of nurses which lead to increase job satisfaction and selfconcept. Furthermore, this dimension showed that, less than three quarters of staff nurses were highly involved regarding appreciation to their job despite lack of others' appreciation. This finding may be due to staff nurses had the feeling that they achieved the goals towards nursing care for patients and also they are believed that they served the whole society, but the society around them have a negative image towards them and didn't appreciate their job.

In agreements with the previous study finding *Youssef* (2011) found that, the majority of study sample always appreciated their job and its role in caring and curing people.

The previous study finding is congruent with Pandey (2015) who found that, staff nurses having high level of autonomy and self-actualization. In the same line Ofteda (2013) concluded that, selfdevelopment is the link between self-concept and motivation, so that self-development of the workers and motivation both are important for the subjects, while self-concept is a natural result. As it goes hand in hand with Maslow's definition of being the best that one can be. Likewise this finding is in accordance with Bahar and Nasar (2014) who found that, the majority of the study sample had self-realization in relation to their job.

The current study findings revealed that, more than three fifths of staff nurses had high level of job involvement regarding active participation in their job. This result may be attributed to staff nurses aware of the importance of adequate health-care, and their behavior acted directly towards satisfaction for their needs. This finding is congruent with Chi and Cheng (2009) who concluded that, highly involved employees, their jobs seem connected to their diverse identities, interests, and life goals, as well as the satisfaction that they can derive from performing their job duties effectively.

The present study findings showed that, more than half of staff nurses had high involvement regarding their work considered as a central life interest. This result may be attributed to the opportunity that work can afford them satisfaction to their important needs. Interpretation is that the psychological state of involvement with respect to an environment entity such as a job or family is

a perceived state of identification with that entity. In the same line, *Pretorius* (2004) concluded that, intrinsic satisfaction involves interest in the job itself, the nature of the work, and personal or professional growth and development, and depicts a personal orientation to work led to satisfaction.

The present study indicated that, there significant negative correlations between need for power and all job involvement domains. This may be due to expression of power is restricted to formal leadership roles, which are limited in an organization. As a consequence, not every power motivated employee can become a leader which may restrict feelings of identification with the organization. Need for power in culturally diverse settings can profit by recognizing that needs are equally important to motivate employees, to keep them responsible and to increase individual performance.

This result is in agreement with *Sipho et al.*, (2014) who found negative correlation between need for power and job involvement. While *Steinmetz et al.*, (2011) concluded that, there was significant positive correlation between need for power and total job involvement among South Korea and Germany people.

Furthermore, there were positive correlations between need for achievement and both performance compatible with self-concept and performance as central to self-esteem. This may be due to the majority of staff nurses are motivated by achievement, this is need nurses' satisfaction through their performance to accomplish challenging goals which leads to self-esteem.

This finding is agreed with *Ofteda* (2013) who concluded that, self-development is the link between self-realization and motivation, so that self-development of the employees and motivation both are important for the employees, while self-realization is a natural result. As it goes hand in hand with

Maslow's definition of being the best that one can be.

In sum, the current study results concluded that, there was significant positive correlation between total motivational needs and total job involvement. This result may be due to more than half of study subjects were obtained feeling of security from their job to continue this career and the majority of them were under the umbrella of daily routine and under work stress with the low resources which made them urgently needed more motivations.

This is finding is congruent with *Pandey (2015)* who found that, there was significant correlation between the job involvement and motivation. In the same line *Steinmetzet al.*, (2011) found that, significant relationships primarily between the motivational needs and job involvement.

### **Conclusion:**

The results of this study revealed that, majority of staff nurses were highly needed for achievement, while the need for power is the least one. Whereas, more than four fifths of staff nurses had high level of motivational needs. More than two thirds of staff nurses were highly involved regarding performance compatible with self- concept, while more than half of staff nurses were highly involved regarding work as a central life interest and performance as central to self-esteem. Additionally more than half of staff nurses had highly involvement level to their job. There was significant positive correlation between motivation and Job involvement among staff nurses. So this finding answer the research question.

### **Recommendations:**

Based on the main study findings, the following recommendations were deducted:

- Hospital must establish policies for meet the staff nurses' need for power.
- Nurse managers have to use job enrichment concept to provide staff nurses with more tasks to do as a part of their job, which match to their skills, knowledge and abilities.
- Hospital management should initiate recognition especially verbal type as gift cards, certificates put nurse name in honor board .this appreciation will reinforce them.

#### **References:**

- Adib-Hajbaghery, M. Dianati, M. (2005): Undergraduate nursing students' compatibility with the nursing profession. BMC Med Educ; 5: 25-30.
- Bahar, Y. Nasar, E. (2014): The effect of quality of work life on job involvement: Comparison study between United Nations Relief and Work Agency (UNRWA) Department of Education and Governmental ministry of Education. Study and research Arab Organizational for Administrative Development. League of Arab States.
- Barros, P.Brouwer, W. Thomson, S. Varkevisser, M. (2015): Competition among Health Care Providers: helpful or harmful. The European Journal of Health Economics, 17:229-233.
- Chi, S. Cheng, W. (2009): An Empirical Study of Employee Job Involvement and Personality Traits: The Case of Taiwan. Int. Journal of Economics and Management. 3(1): 22 36.
- Chughtai, A.(2008): Impact of Job involvement on In Job Performance and Organizational Citizenship Behavior. Journal of Behavioral and Applied Management. 9(4): 169-183.

- Gebremedhin, W.(2015): Employee Motivation and its impact on productivity in the case of National Alcohol and Liquor factor, Journal of Poverty, Investment and Development, 15, 163-167.
- Hancock, J., Allen, D., Bosco, F., McDaniel, K., & Pierce, C. (2013):Meta-Analytic Review of Employee Turnover as a Predictor of Firm Performance. Journal of Management, 573–603. http://dx.doi.org/10.1177/0149206311424 943
- Junker, K.(2001): Atool for motivating volunteers, Retrieved 2 October 2009, from http://www.ca.uky.edu/agcollege/4th/olds ite/gems/mopdf/Motivate.KJ.pdf
- Kanungo, R. (1982): Measurement of Job and Work, Journal of Applied Psychology, 67(3), 341-349.
- Kontodimopoulos, N. Paleologou, V. and Niakas D. (2009): Identifying important motivational factors for professionals in Greek hospitals. BMC Health Serv Res. 9:1-11.
- Kotter, J. Cohen, D(2015): Successful Organization change.1<sup>st</sup> edition. Harvard Business pp.180-185.
- Nayeri, N. and Jafarpour, H. (2014): Relationship between clinical competence and motivation needs of nurses based on the McClelland theory. Nurse Pract Today. 1(2): 86-92.
- Ofteda, J. (2013): Motivation and selfrealization. A study of newly graduated, newly hired engineers in the Norwegian oil industry.Copenhagen Business School. P 1-71. www.ices-study.org
- Pandey, D. (2015): An analysis of Relationship between motivation and job involvement of Nursing personnel.

- International Journal of Humanities, Arts, Medicien and Science.3(11):55-66
- Pang, J.S., and Schultheiss, O. C. (2005): Assessing implicit motives in U.S. college students: Effects of picture type and position, gender and ethnicity, and cross-cultural comparisons", Journal of Personality Assessment. 85,: 280-294.
- Pretorius, W.(2004): Organizational Factors influencing the transformation process of a financial institution, unpublished thesis. University of Pretoria: South Africa.
- Raeisi, M. Hadadi, N. Faraji, R. Salehian, M. (2012): McClelland's motivational needs: A case study of physical education teachers in West Azarbaijan. Pelagia Research Library.European Journal of Experimental Biology. (4): 1231-1234.
- Rahati, A., Arani, H., Hajbaghery, M. and Rostami, M. (2015): Job Involvement and Organizational Commitment of Employees of pre hospital Emergency Medical system. Journal of Nursing and Midwifery studies 4(4).
- Sarpong, L. (2016): Effect of Motivation on the performance of Employees of Ecobank Ghana limited. KnustBranch and Stadium Branch. Journal of Business Theory and Practice 4(1), 111-124.
- Sharma, J. P. &Bajpai, N. (2010):Organizational Commitment and its Impact on Job Satisfaction of Employees: A Comparative Study in Public and Private Sector in India. International Bulletin of Business Administration, 9, 7-19.
- Singh, S. and Tiwari, V. (2011): Relationship between motivation and job satisfaction of the white collar employees: A case study. Journal SMS.6 (2), 31-40.
- Sipho, M.Toga, R. Mjoli, T.(2014): Intrinsic Motivation and Job involvement on

- Employee Retention: case study-A selection of Eastern Cape Government Departments. Pakistan Journal of social sciences11(2):129-136.
- Smith G. P. (2009): Motivation in Human resources management and development handbook. (7<sup>th</sup> ed., pp.70-90). New York: AMACO.
- Steinmetz, H., Park, Y.-K., &Kabst, R. (2009): The relationship between needs, job involvement, and organizational commitment in South Korea and Germany. Journal of Managerial Psychology . pp,1-36.

- Toode, K. (2015): Nurses' work Motivation .Essence and Associations p.p 9 -73.
- Youssef, H. (2011): Relationship between personality trait and job involvement in emergency department Journal of psychological studies: 65-97.
- Zahran, M. and Zahran, S. (2013): the big five factors of personality and job involvement for sample of higher studies students who work in teaching. Journal of Counseling.Center of Counseling.Ain Shams University.P.p. 334-419.