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Head nurses' Transformational Leadership, Collaboration and its Relation to Staff nurses'Work Engagement

Safaa Mohammed El-Demerdash and Ghada Abdelsalam Aldeeb

Assistant Professor, Nursing service Administration, Faculty of Nursing, Tanta University, Lecturer, Nursing Service Administration Faculty of Nursing, Monufia University, Egypt.
E-Mail: ghada_nadaa@yahoo.com

Abstract: Head nurses 'transformational leadership possess a vision that enhance collaborationfor empowering, inspiring and motivating staff nurses to engage in practice a collective purpose through working together to achieve the health care organization's goals and shared vision for future .
Aim: The aim of the present study is to explore the relation between head nurses' transformational leadership, collaboration and staff nurses' work engagement.
Method: Descriptive   design was used .The study was conducted at Sidi-salim Central hospital which affiliated to The Ministry of Health in Kafer- Ehiekh governorate. A convenience sample of 50 head nurses and 297 staff nurses from the above mentioned setting. The data of the study was collected by using (1) TransformationalLeadership Scale, (2) Collaborative Behavior Scale and (3) Utrecht Work Engagement.
Results: The results of this study showed thatsixty (60%) of head nurses perceived their selves high transformational leadership style. High percent (50% and 20%) of head nurses perceived their selves high and moderate level of collaboration relationship. More than half (50.8%) of staff nurses had high level of work engagement.There issignificant positive relation at P<0.05was found between head nurses` total transformational leadership style, individualized consideration, intellectual stimulation and their collaboration relationship (P=0.081,0.011, 0.087). Head nurses` total transformational leadership style, idealizedinfluence and intellectual stimulation had significant positive relation with staff nurses' vigor, dedication andtotal work engagement, absorption and total work engagement (P=0.098,0.062&0.007, 0.038& 0.038).
Conclusion: This study concluded that that sixty of head nurses at Sidi- Salim Central hospital perceived their selves high transformational leadership style. High percent of head nurses perceived themselves high and moderate level of collaboration. More than half of staff nurses had high level of work engagement.Significant positive relation was found between head nurses` total transformational leadership style, individualized consideration, intellectual stimulation and their collaboration relationship. Head nurses` total transformational leadership style, idealized influence and intellectual stimulation had significant positive relation with staff nurses' vigor, dedication and total work engagement, absorption and total work engagement.
Recommendition: According to this study results it was recommended that head nurses still need to further demonstration of transformational leadership behaviors to create attractive atmosphere, collaborative relation with staff nurses and team to promote engagement.

Keyword: Head nurses, transformational leadership, collaboration, staff nurses, work engagement.

INTRODUCTION

Nursing leadership has a major impact on the staff nurses' behavior to achieve health care organization goals. It is the process of interaction between leaders and staff nurse. Transformational leadership is one of the most important types of leadership that health care organization needs. Transformational leaders who setting new direction, inspiration, and behaviors for their health care organization [1].

A transformational leader is depicted as being a person of vision, creativity and inspiration who leads the change [2].Transformational leaders is futuristic; they seek to maximize individuals, groups, organizational development, and innovation. They raise the level of human conduct and ethical aspiration of both the leader and their subordinate, and thus it has transforming effect on both [3] .The head nurses who have this style act as role models for their staff nurses by gaining their trust and confidence. They seek new and nontraditional methods of working; raise staff nurses' morale, and engagement. Such head nurses encourage their

staff nurses to think beyond themselves and become high performers.Head nurses with transformational style motivatestaff nurses to think differently, seek new chances, and find new solutions to solve problems [4].

Transformational leadership is the interactive relationship in which the leaders and the followers help each other toelevatea higher level of morale value and motivation [3]. So, transformational leadership has motivational effect. This effectis evidenced when leaders are more concerned with change and development of their followers' personal and professional roles by portraying four behaviors [3]. First, idealized influence referred to a leader's ability to generate excitement and sharedvision and a sense of direction by acting as a role model who their staff seeks to imitate [3].

Second, intellectual stimulation represents the ability of the leader to ask questions and find new methods to solve problem, In addition promote followers to create and innovate solutions and explore new ideas through questioning assumptions, reframing problems, and look at old situations in new ways. Third, inspirational motivation

means leaders' ability to energize their subordinates to achieve work goals and shared vision for future, by providing them meaning and challenge to tasks that makes person feel valuable in the organization. Fourth, individualized consideration refers to the ability of a leader to treat each person uniquely, taken in consideration their particular needsto give personal interest byspending time with them to provide guidance, support, training and coaching or mentoring them appropriately [5].

Transformational leaders enhance collaboration, make up teams and actively involve others [6]. Collaboration is a continuous interaction and active process of participation between nurses that is generally directed towards achieving common goals [7-8]. Collaboration among nurses is the basic element in the delivery of high quality patient care and the creation of healthy work environments. Collaborating effectively is the responsibility and the competency that applies to all professional nurses including head nurses and their staff nurses [9].Good collaboration is motivated by training that promotes confidence and respect [8].

Collaboration between head nurses and his/her staff nurses is an open, communication which involve mutual respect, participation of power, information and resources, as well as interpersonal valuing .Collaborative head nurse facilitates staff nurses to control changes in the work environment which can lead to high quality of patient care and problem solving. True collaboration is an ultimate element in promoting the climate of a healthy work environment in a health care organization [10].

[11] asserted that leaders who demonstrates transformational style of influence often engaged the whole person in practice a common purpose by working together to achieve a vision of a preferred future 'Work engagement is a positive work-related state of mind and has three dimensions : vigor, dedication, and absorption. Vigor dimension refers to working with a high level of energy and mental resilience, a willingness to invest effort, and persistence. Dedication is defined as powerful participation in one's work with sense of value, enthusiasm, inspiration, pride and challenge. Absorption is complete concentration in one's work with immersion and engrossment. [12].

Significance of the study:

Head nurses' transformational leadership possess a vision that enhance collaboration for empowering, inspiring and motivating staff nurses to engage in practice a collective purpose through working together to achieve the work goals and vision for future . Nursing leaders at all levels including head nurses are expected to practice transformational leaders .They ask questions, listen, provide the necessary supplies and support, match staff nurses' interests and abilities to their job functions, and practice collaborative behavior so add meaning to the work of staff nurses, all of which result in high staff nurses' engagement. These kinds of leaders create attractive and safe working environment [10].

The head nurse have a pivotal leadership position within today'shealth care organization and serves to integrate the needs of nursing staff, patients,and the nursing profession itself, with the organizational mission and goals[13]. So,

understanding head nurses' transformational leadership and collaboration will lead to improvements in head nurse-staff nurse's relations and positively will influence staff nurses' work engagement[10].Because engaged nurses proactively widen their own thinking and seek to broaden their prospects by learning new skills and inspect new challenges. These nurses find their tasks interesting, energizing and happy in their jobs [14].

Aim of the Study:

The current study aimed to explore the relation between head nurses' transformational leadership, collaboration and staff nurses' work engagement.

Research question:

The current study aimed to answer the following research questions:

1. What are levels of head nurses' transformational leadership style?
2. What are levels of head nurses' collaboration relationship?
3. What are levels of staff nurses' work engagement?
4. Is there relation between head nurses' transformational leadership, collaboration and staff nurses' work engagement?

Subject and methods:

Design: Descriptive design was used
Setting: the study was conducted at Sidi-salim Central hospital which affiliated to The Ministry of Health in Kafer-Ehiekh governorate.

Subjects: The subject of this study included: A convenience sample of 50 head nurses and 297 staff nurses present at the time of data collection from the above mentioned setting.

Tool for data collection:

Three tools were used for data collection.

Tool I: **Modified transformational leadership scale by** [15] and [16] based on [17].It was used for the purpose of assessing head nurses' transformational leadership behavior. It composed of two parts:

Part one: The first part for data pertaining characteristics of the study subjects such as department, age, marital status and years of experience.

Part two : The second part consisted of 38 items are grouped into four subscales: idealized influence has 8 items, intellectual simulation has 11 items, inspirational motivation has 12 items and, individualized consideration 7 items.

Scoring system:

The subject's responses were on three points -Likert scale ranging from always (2) sometimes (1), and never (0). The maximum scores of these scale were 76, these scores were divided into three levels according to the following strength: high 75-100%, moderate 60-< 74% and, low <60%.

Tool II: **Modified the Collaborative Behavior Scale (CBS) by** [10], [18] Based on [19].The collaborative behavior scale's is utilized to determine the extent ofcollaboration behaviors which generally exist between

head nurses and their staff nurses. It contained 20 questions such as, we feel free to share ideas with one another, we support each other as team members, we share information openly with one another, and we are committed to the process of working together to meet our goals

Scoring system:

The subject's responses were on three points -Likert scale ranging from always (2) sometimes (1), and never (0).The higher the total score, the more collaborative the relationship. The maximum scores of these scale were 40, these scores were divided into three levels according to the following strength: high 75-100%, moderate 60-< 74% and, low <60%,

Tool III: Modified Utrecht Work Engagement (UWE) Scale by [20].It included the following two parts:

Part one: The first part for data pertaining characteristics of the study subjects such as department, age, marital status, qualification and years of experience.

Part two: This part was utilized to measure staff nurses' levels of workengagement. It contained 17 items covered three sub dimensions: Vigor (6 items), dedication (5 items) and absorption (6 items).

Scoring system:

The subject's responses were on three points Likert scale ranging from always (2) sometimes (1), and never (0). The maximum scores of these scale were 34, these scores were divided into three levels according to the following strength: high 75-100%, moderate 60-< 74% and, low <60%.

METHOD

REALTS

1. An official permission to carry out the study was obtained from responsible authorities of Sidi-Salim Central hospital.
2. The purpose of the study was explained and made clear to the general supervisor of study setting to get their co-operation and acceptance.
3. Three tools of this study were translated into Arabic language.
4. Pilot study was conducted on 10% head nurses and staff nurses (who were excluded from the study population), to identify the obstacles and problems that may be encountered in data collection.
5. Content validity of the tools were done by nine experts in the field of administration, a Cronbach's alpha coefficient test was used to measure reliability of tools, tool one was (.919   ), tool two was (.899) and tool three was (.935   ).
6. The questionnaires were distributed to head nurses (*n* = 50) and staff nurses (*n*=297). Each respondent took 35 minute to complete the questionnaire sheet.
7. The entire data collection period to complete the study was three months starting from April - June, 2014.
8. *Ethical consideration:* all participants interviewed for explaining the purposes and procedures of the study, and they have the right to withdrawal from the study at any time of the study.
9. *Statistical design:* The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 19. Descriptive measures, including frequency, percentage, arithmetic mean and standard deviation were presented.Monte-Carlo tests were applied to determine differences between variables. Significance was adopted at p<0.05 for interpretation ofresults for tests of significance.

Table (1): Distribution of study subjects according to department.

Department	Head nurses(N=50)		Staff nurses(N=297)	
	No	%	No.	%
Dialysis	-	-	27	9.1
Medical	5	10	25	8.4
Pediatrics	5	10	17	5.7
Operating room	1	2	17	5.7
NICU	6	12	22	7.4
Surgical	7	14	40	13.5
Obstetrics	3	6	23	7.7
Emergency	11	22	31	10.4
ICU	5	10	26	8.8
Outpatient	1	2	69	23.2
others	7	14	-	-

Table (1): Shows distribution of study subjects according to department.Regarding workingdepartment of head nurses 22% working in emergency, equal percent (14% & 10%) of them working in surgical, others and medical,pediatricsas well as ICU. Head nurses 12%, 6% and equal percent (2%) of them   working in NICU, obstetrics and operating room

as well as outpatient. While, the distribution of staff nurses to the department, the table shows that highest percent (23.2**%**23.2) of staff nurses working inoutpatient but lowest percent (7.4%) of them working in pediatrics and operating room.

Table (2): Subjects characteristics of head nurses and staff nurses.

Socio -demographic characteristics.	Head nurses (N= 50)		Staff nurses (N= 297)	
	No	%	No	%
Age				
30>	12	24	108	36.4
30- 40	37	74	90	30.3
>40	1	2	99	33.3
Mean ± SD	32.4± 4.09		35.1± 10.2	
Years of experience				
10>	21	42	93	31.3
10-15	23	46	51	17.2
>15	6	12	153	51.1
Mean ± SD	10.2 ± 3.6		16.1±10.3	
Qualifications				
diploma	0	0	254	85.5
technical	0	0	28	9.4
bachelor	50	100	15	5.1
Marital status				
married	46	92.0	243	81.8
single	1	2.0	15	5.1
widow	3	6.0	23	7.7
divorced	0	0	16	5.4

Table (2): Describes subjects' characteristics of head nurses and staff nurses. Concerning characteristics of head nurses, high percent (74) of head nurses were in age group30- 40 years with mean age 32.4± 4.09. More than forty (46% & 42%) of head nurses had 10-15 and 10> years of experience with mean years of experience10.2 ± 3.6. All head nurses had bachelor degree of nursing and majority (92.0%) of them was married. While, more than thirty (36.4%, 33.3% and 30.3%) of staff nurses were in age group 30>, >40 and 30 -40 years, with mean age 35.1± 10.2. 51% of them had >15 years of experience followed by 31.3% and 17.2% had 10> &10-15 years of experience, with mean years of experience16.1±10.3 .The majority (85.5% &81.8%) of staff nurses had diploma degree and they were married.

Table (3): Levels of head nurses' transformational leadership style

Dimensions of transformational leadership	Head nurses(N = 50)					
	High		Moderate		Low	
	No	%	No	%	No	%
1-Idealized influence	38	76	7	14	5	10
2-Intellectual simulation	29	58	9	18	12	24
3-Individualized consideration	29	58	11	22	10	20
4-Inspirational motivation	26	52	7	14	17	34
Total	30	60	12	24	8	16

Table (3): Clarifies levels of head nurses' transformational leadership style.From the table, it was observed thatsixty (60%) of head nurses perceived their selves high transformational leadership style.High percent(76%) of head nurses perceived their selves high inidealized influence domain.While, more than fifty (58%&52) of head nursesperceived their selves high in intellectual simulation, individualized consideration and inspirational motivation domain respectively.

Table (4): Levels of head nurse`s collaboration relationship.

level of head nurse`s collaboration	Head nurses (N = 50)	
	No	%
High	25	50
Moderate	10	20
Low	15	30

Table (4): Displays levels of head nurse`s collaboration relationship. The table reveals that high percent (50% and 20%) of head nurses perceived their selves high and moderate level of collaboration relationship .While few percent (30) of head nurses perceived their selves low level of collaboration relationship.

Table (5): Levels of staff nurse `s work engagement

Work engagement dimensions	Staff nurses (N = 297)					
	High		Moderate		Low	
	No	%	No	%	No	%
1-Vigor	161	54.22	38	12.79	98	32.99
2-Dedication	164	55.50	75	25.55	58	18.95
3-Absorption	153	51.53	46	15.48	98	32.99
Total	151	50.8	105	35.4	41	13.8

Table (5): Indicates levels of staff nurse `s work engagement. Result of present study shows that more than half (50.8%) of staff nurses had high level of work engagement. Specifically, over fifty (55.50%, 54.22% & 51.53%) of staff nurses had high level of dedication, vigor and absorption dimensions of work engagement respectively. According to the table,35% of them had moderate level of work engagement as represented by (25.55%,15.48% & 12.79%) respectively of staff nurses had moderate level of dedication, absorption and vigor dimensions of work engagement respectively. Only (13.8%) of staff nurses had low level of work engagement as represented by equalpercent (32.99%) and (18.95) of them had low level of dedication, vigor and absorption dimensions of work engagement respectively.

Table (6): Relation between head nurses` transformational leadership style, collaboration and staff nurses` work engagement.

Items	Vigor	Dedication	Absorption	Total Work engagement	Collaboration
	Monte-Carlo P	Monte-Carlo P	Monte-Carlo P	Monte-Carlo P	Monte-Carlo P
1-Total Transformational leadership style	0.098*	0.196 ns	0.200 ns	0.249 ns	0.081*
2-Idealized Influence	0.114 ns	0.038*	0.109 ns	0.062*	0.414 ns
3-Inspirational Motivation	0.475 ns	0.412 ns	0.473 ns	0.351 ns	0.572 ns
4-Individualized Consideration	0.453 ns	0.453 ns	0.137 ns	0.327 ns	0.011*
5-Intellectual Stimulation	0.350 ns	0.138 ns	0.038*	0.007*	0.087*
6-Collaboration	0.374 ns	0.286 ns	0.272 ns	0.289 ns	

*Significance: * P<0.05

Table (6): Presents relation between head nurses` transformational leadership style collaboration and staff nurses` work engagement. From the table, it was observed that, there were no significant relations between head nurses` transformational leadership style,collaboration and staff nurses` work engagement as wholeat $p \geq$ 0.05.Furtherthere were no significant relations between head nurses` collaboration and staff nurses` dimensions of work engagement at P<0.05.

Significant positive relation at P<0.05was found between head nurses` total transformational leadership style, individualized consideration, intellectual stimulation and their collaboration (P=0.081, 0.011, 0.087).Head nurses` total transformational leadership style had significant positive relation with staff nurses'vigor dimension ofwork engagement (P=0.098). Head nurses` idealized influenceshowed significant positive relation with staff nurses' total work engagement and dedication dimension of work engagement (P=0.062, 0.038). Also, their intellectual stimulation showed significant positive relation with staff nurses' total work engagement and absorption dimension of work engagement (P=0.007, 0.038).

Table (7): Correlation between head nurses age, experience collaboration and transformational leadership style

Subject characteristics	Transformational leadership style	Collaboration
Age R p	0.012 0.09	0.28 0.05*
Experience R p	.044 .07*	0.24 0.09*

*Significance: * P<0.05

Table (7): Correlation between head nurses' age, experience and transformational leadership style**.**According to this table, there was significant positive correlation between head nurses` age, experience and their transformational leadership style and collaborationat p ≤ 0.05.

Table (8): Correlation between staff nurses` age, experience and work engagement

Subject characteristics	Work engagement
Age R P	-0.030 0.6
Experience R p	-0.042 0.47

*Significance: * P<0.05

Table (8): Correlation between staff nurses` age, experience and work engagement**.**According to this table, there was non significant negative correlation between staff nurses` age, experience and their work engagement at p P<0.05.

DISCUSSION

Certainly, managers and coworkers play an important role in how employees engage on the job. Now a day health care organizations are in a constant state of flow and often experience large scale of change; so exhibiting visionary leadership is vital to the success of any work [21].As a result, collaboration is no longer an option but it is a necessity. The healthcare organizations are strived to improve the quality of patient care by strengthening the collaboration among healthcare provider including nurses [22]. According to [23] engagement leads to human advantages for the individual practicing it,and since head nurses are more likely to have daily contact and influence over their staff nurses , they are also most important to the discussion of collaborated nursing leadership because of their ability to influence staff nurses to stay motivated and engaged at work.

The present study result showed that sixty of head nurses perceived their selves high transformational leadership style**.**This result indicates that head nurses arebelieved inthe importance of demonstrating behaviors of transformational leadership style which include pure vision, commitment to excellence, ability to motivate, collaborate and lead others to higher achievement, and engagement their staff nurses. They also encourage innovation and emphasize the importance of appreciating and valuing staff nurses. These will drive good quality outcomes, healthy nurse work environments, and safe patient-centered care to new levels of service and sustainability.

This result is similar to research by [24] who found that the supervisors/heads of departments perceived that they used transformational leadership as a whole. [25] and [26] found that nurse managers considered themselves to be more transformational. Further [27] found that the highest score was seen to be with the head nurses who followed the transformational style of leadership. On other side result by [28] indicates that the majority of the North Gondar Zone public preparatory school teachers' level of overall transformational leadership is low.

The present study result showed that high percent of head nurses perceived their selves high in idealized influence domain of transformational leadership. This revealed that these heads nurses are leaders who fairly often talk about important values in organization and focus on attractive and worthwhile visions and the ethical aspects of their activities as values are very important for them. Further they behave in ways that optimize a strong sense of purpose and talk about their most important values and belief. Head nurses act in ways that foster respect and provide a strong role model to follow. [29] assert that one of the most prominent ideal behavior of a leader is to instill pride in members to cooperate and collaborate with the leader, and concede from individual wishes and prefer others' interests than individual interests .

This result is similar to research by [24] who found that the supervisors/heads of departments perceived that they used idealized influence domain. [25] found that managers valued idealized influence more highly. [30] found that idealized influence dimension of transformational leadership received the highest mean scores.

Current study result indicated that more than fifty of head nurses perceived their selves high in intellectual simulation domain. This result signifying that those head nurses motivating their staff nurses creativity and innovation through reinforcing interest of how problems can be solved**.** This finding is agreed with [24] who found that the supervisors/heads of departments perceived that they used intellectual simulation domain. [25] found that nurse managers valued intellectual stimulation more highly.

Current study result indicated that more than fifty of head nurses perceived their selves high in individualized consideration domain. This meansthat their head nurses lead staff nurses through training coaching and serve as a role model to them.Individualized influence occurs when leaders gain the trust and respect of their followers by doing the right thing. Similarly, [31] posited that by means of individualized consideration, a leader addresses issues of competence, meaningfulness and impact with each team member, and encourages continued individual development.This finding is agreed with [24] who found that the supervisors/heads of departments perceived that they used individualized consideration domain. In addition, [25] clarifies that nurse managers were highly considerate of every individual staff member.

Study result indicated that more than fifty of head nurses perceived their selves high in inspirational motivation domain.This indicating that head nursesdevelops and promotes a vision of a team spirit among the staff nurses. They inspire them by preparing challenges and meaning for followers. Adding, they motivate and encourage nurses to accomplish their responsibilities, and imagine the future of work by optimism. This is supported by the Multifactor Leadership Model according to which followers are more inclined toward leaders who show natural enthusiasm and optimism [32].An inspirational leader is dedicated to drive followers to take moral values into consideration as their duties toward the organization and profession [27]. This finding is congruence with [24] who found that the supervisors/heads of departments perceived that they used inspirational motivation domain. [25] found that nurse managers valued the inspirational motivation as more highly.They agreed that an inspiring and motivating leader expresses confidence that goals will be achieved, articulates a compelling vision of the future, talks enthusiastically about what needs to be accomplished and talks optimistically about the future.

Head nurses, who perceived themselves high transformational leaders, would collaborate with their staff nurses. The result of present study showed that high percent of head nurses perceived their selves high and moderate level of collaboration relationship. **.**This may be indicated that those head nurses' transformational leadership had the ability to foster teamwork, collaboration and partnerships.

They valuing open communication, sharing of power, information and resources, and interpersonal relation amongstaff. They are respect and value the difference between nurses; set boundaries, define and assign clear roles and responsibilities as well as concrete achievable goals to every nurse. They are believed that the high level of collaboration between nurses is important and beneficial for effective nursing care and the creation of supportive working environments. [33] found that high percent of study subject agree that there is teamwork and collaboration between the various levels of nursing staff. A transformational leader qualifies staff to find meaning in their work, empowering them to communicate their ideas, share collaboratively in a team and work towards effective change.

So, there was significant positive relation between head nurses` transformational leadership style, individualized consideration, intellectual stimulation and their collaboration relationship.. In fact, Transformational leadershave to put their effort wisely into building collaboration that is able to get the best outcome. They possess qualities in turn produce a good working atmosphere that encourages open interaction as well as mutual recognition of roles, skills and responsibilities. Transformational leader's futuristic focus on creativity and innovation, and they are able to inspire synergistic environments that enhance collaboration among nurses. This result is consistent with [25] who found that transformation leadership was significantly and positively correlated with nurse manager collaboration relationship..

Transformational leader produce nurses feel more engaged, empowered and more likely to be perceived them as important employees in a transformational environment [34].Finding of the present study clarified that more than half of staff nurses had high level of work engagement. This may be due to that their head nurses have transformational leadership behaviors that generate better levels of staff nurses engagement at work. [35] indicates that transformational leaders positively contribute to the work engagement of employees. This result is consistent with [36] who their participants indicate that their level of engagement was high. On contrary, [14] found that more than half of staff nurses had moderate level perception of work engagement.

The result of present study reveals that over fifty of staff nurses had high level of dedication dimension of work engagement.The finding of this study implying that staff nurses feel a strong sense of significance, inspiration, and challenge from their work. This may be related to their head nurses who have high level of transformational leadership. They motivate them through purposeful tasks that tend to be challenging. This finding is supported by [36] who their participants reported their level of dedication high. On the other side, [14] found that staff nurses had moderate level of dedication dimension of work engagement.

The result of present study reveals that over fifty of staff nurses had high level of vigor dimension of work engagement.This result indicating that staff nurses have high levels of energy and readiness to develop one's work.This

may be due to their head nursesexhibited high level of transformational leadership. Transformational leaders energizing followers by using enthusiasm of optimistic goalsand vision.This result is contradicted with [14] found that staff nurses had moderate level of vigor dimension of work engagement. [36] their participants reported their level of vigor was moderate.

The result of present study reveals that over fifty of staff nurses had high level of absorption dimension of work engagement.This result indicatingthat staff nurses feel the sense of being happily engrossed and immersed in one's work. Because transformational leaders have a positive influence on followers' effort and performance levels, both of which could indicate high levels of absorption in one's work. Supervisors who engage in Idealized influence and inspirational motivation are often expected to depend on idealistic visions and persuasive communication to influence followers to immerse themselves in their work [3].This result is similar to result of [36] who their participants reported their level of absorption as moderately high. This result is contradicted to [14] who found that staff nurses had moderate level of absorption.

There is empirical evidence that transformational leadership is positively associated with work engagement, even in different organizational and cultural settings [37-39] While, the finding of this study declared that there were no significant relations between head nurses` transformational leadership style, collaboration and staff nurses` work engagement as whole .This result is almost agreed with [21] who found that there were no significant relations between head nurses` collaboration and staff nurses` dimensions of work engagement .On the other hand, [29] showed that transformational leadership is associated with work interaction. Also, ideal traits, ideal behaviors, inspirational motivation, intellectual persuasion and individual considerations are linked to work interaction. And also the finding of this study indicated that head nurses` total transformational leadership style had significant positive relation with staff nurses' vigor dimension of work engagement. This result is supported by [40] who reported that there is a positive relationship between transformational leadership and vigor.

Head nurses` idealized influence showed significant positive relation with staff nurses' total work engagement and dedication dimension of work engagement. This means that head nurses have a positive influence on staff nurses' effort and performance levels, both of which could indicate high levels of dedication in one's work. Head nurses who engage in idealized influence are often expected to use idealistic visions and open communication to influence followers to involve themselves in their work [3]. This result is supported by [40] who found that idealized influence subscale of transformational leadership is positively and significantly correlated with dedication dimension of work engagement. [29] found that there is a positive relation between ideal behaviors and work engagement. Talking about the most important values and beliefs and having a strong attitude about the collective goal and care about spiritual and moral results of decisions are features of ideal behaviors.

The result of present study showed that intellectual stimulation showed significant positive relation with staff nurses' total work engagement and absorption dimension of work engagement. This may be indicated that head nurses are provide opportunities to staff nurses to grow and progress intellectually, which lead to work engagement. Encouraging nurses to grow, helps them to learn new things leads to positive emotions, which filter it through the holistic organization. This result is supported by [40] who found that intellectual stimulation subscale transformational leadership is positively and significantly correlated withabsorption dimension of work engagement. [29] found that there is a positive relation between intellectual persuasion and work engagement. [41] mentioned that intellectual stimulation leaders are able to encourage subordinates to be more creative thinkers and innovators which will enhance their need to make significant contributions towards work. These contributions are likely to increase intrinsic motivation of subordinates and work engagement.

The result of present study declared that there was significant positive correlation between head nurses` age, experience and their transformational leadership style and collaboration. This result is supported by [42] who found that there are relationships between leadership style and age, number of years of experience. [40] correlation analysis revealed a strong, negative statistically significant correlation between: (1) inspirational motivation, intellectual stimulation, individualized consideration, and age; (2) idealized influence behaviors, inspirational motivation, intellectual stimulation, individualized consideration and education; and (3) idealized influence behaviors, inspirational motivation, and number of direct reports. This may suggest that transformational leadership may have less positive impact on followers as they increase in age, education, and the number of direct reports. No significant negative correlation was identified between staff nurses` age, experience and their work engagement. On contrary [43] shows significant differences in nurses' work engagement among the various work settings and in nurses' age and experience.

CONCLUSION

Based on the results of this study it were concluded that:

Sixty of head nurses at Sidi -Salim Central hospital perceived their selves high transformational leadership style. High percent of head nurses perceived their selves high and moderate level of collaboration relationship. More than half of staff nurses had high level of work engagement.Significant positive relation was found between head nurses` total transformational leadership style, individualized consideration, intellectual stimulation and their collaboration relationship.

Head nurses` total transformational leadership style, idealized influence and intellectual stimulation had significant positive relation with staff nurses' vigor,dedication, total work engagement, absorption dimension of work engagement and total work engagement.There were no significant relations between head nurses` transformational leadership style, collaboration and staff nurses` work engagement.

RECOMMENDATION

In the light of the present findings, the following recommendationsare suggested that
1- Head nurses still need to further demonstration of transformational leadership behaviors to create attractive atmosphere, collaborative relation with staff nurses and team to promote engagement.
2- Pre-service, in-service and refreshing training for head nurses to improve tomorrow's transformational leaders, collaboration and work engagement.
3- Consider transformational leadership, collaborative behavior and ability to engage staff nurses are basic requirements for head nurses during employment procedure and promotions.
4- Head nurses have to work on being transformed, be a role model and be the center of attention to all around her.
5- Further researches are needed in areas of staff nurses' engagement influenced by transformational leadership and collaboration

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REFERENCE

[1]. **H, Ying .**Transformational leadership and organizational innovation: A study of MNCs in Malaysia. Universitisains, 2009: p1.

eprints.usm.my/.../1/TRANSFORMATIONAL_LEADERSHIP_AND.

[2]. **S I S H Mohammad, H A AL-Zeaud, and A M E, Batayneh.** The relationship between transformational leadership and employees' satisfaction at Jordanian private hospitals. BEH - Business and Economic Horizons Volume 5 | Issue 2 | April 2011: p 35-46.

[3]. **M, Ghadi, M, Fernando & P Caputi.** Transformational leadership, workplace engagement and the mediating influence of meaningful work: building a conceptual framework. Australian New Zealand Academy of Management Annual Conference. 2010: p 1-15. Adelaide: ANZAM.

[4]. **R Imran and A Ul-Haque.** Mediating effect of organizational climate between transformational leadership and innovative work behavior. Pakistan Journal of Psychological Research. Vol. 26, No. 2, 2011: P 183-199.

[5]. **K Drenkard.** The transformative power of personal and organizational leadership. . Nurs Admin Q Wolters Kluwer Health | Lippincott Williams & Wilkins Vol. 36, No. 2, 2012: P 147–154.

[6]. **B Akter.** Transformational leadership of nurse supervisors: expectation and perception of nurses in a tertiary hospital,

Bangladesh, Master of Nursing, Prince of Songkla University. 2010; P13.

kb.psu.ac.th/psukb/bitstream/**2010**/7831/1/326014.pdf

[7]. **S Downe & A Fleming** .Creating a collaborative culture in maternity care. Journal of Midwifery &Womens Health. 55(3); 2010: P 250-254.

[8]. **T Ylitörmänen, T Kvist,and H Turunen.** A web-based survey of Finnish nurses' perceptions of conflict management in nurse-nurse collaboration .International Journal of Caring Sciences May-August 2015 Volume 8 Issue 2; 2015:P 263-273.

www.internationaljournalofcaringsciences.org/.../4_ylito.

[9]. **J Moore, D Prentice and M Mc-Question.** Social interaction and collaboration among oncology nurses. Nursing Research and Practice. Volume 25 May 2015: P1-7. www.hindawi.com/journals/nrp/**2015**/248067/

[10]. **E S Almutairi.** Transformational leadership, collaborative nurse management and their relationships to staff nurse job satisfaction. Master of Science in Nursing. Faculty of San Diego State University 2011. https://sdsu-dspace.calstate.edu/.../AlmutairiEman.pdf.

[11]. **B J Avolio & B M Bass** .Multifactor Leadership Questionnaire: Third Edition Manual and Sampler Set. Mind Garden, Inc., California. (2004).

[12]. **L Gfrerer.** Empowerment and engagement through informal learning: exploring the relationship between learning opportunities and the work environment of nurses" education doctoral degree. Faculty of the school of education of the University of ST. Thomas. 2014:P 16 -17 .Dissertations in Organization Development ir.stthomas.edu .

[13]. **V ŽYDŽIŪNAITĖ** .Leadership Styles in Ethical Dilemmas Reasons, actions and consequences when head nurses make decisions in ethical dilemmas .School of Medicine of the University of Tampere, Medisiinarinkatu 3, Tampere, on June 12th, 2015: P 12.

[14]. **MMA Al-Sayed**. Nursing practice environment and its relation to work engagement, Unpublished Master Thesis Nursing Administration, Faculty of Nursing Tanta University. Egpypt.2015:P 2.

[15]. **K A Elsayed**. Leadership styles, empowerment and job satisfaction among nursing leaders. Unpublished Doctorate Thesis, Nursing Administration, Faculty of Nursing, Ain Shams University, Egypt, 2005.

[16]. **H Kalf**. The Relationship between Transformational Leadership and the Creative Management among Academics Heads Departments at the Islamic University in Gaza. Published Master Thesis. Faculty of Commerce, Islamic University, 2010.

[17]. **B M Bass & B J Avolio**. Training full range leadership. Redwood City, CA**:** Mindgarden. 1999.

[18]. **J Stichler**. The effects of collaboration, organizational climate, and job stress on job satisfaction and anticipated turnover in nursing. Doctoral dissertation. University of San Diego, San Diego, CA, 1990.

[19]. **G C Homans.** The human group. New York, NY: Harcourt, Brace and Company. 1950.

[20]. **W B Schaufeli, M Salanova, V G Roma, & AB Bakker.** The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. Journal of Happiness Studies, 3(1), 2002: 71–92.

[21]. **R Koppula.** Examining the relationship between transformational leadership and engagement" Master's Theses. The Faculty of the Department of Psychology San Jose State University scholarworks. 2008: p11 sjsu.edu/cgi/viewcontent.cgi?article.

[22]. **C Liao, Y Qin, Y He and Y Guo.** The Nurse- Nurse Collaboration Behavior Scale: Development and psychometric testing. International Medical Services Department, Peking Union Medical College Hospital. International Journal of Nursing Sciences 2(4), December 2015, P 334–339.

www.sciencedirect.com/science/article/pii/S2352013215000 927

[23]. **J R Jones and J K Harter.** Race effects on the employee engagement-turnover intention relationship. J Leadership Org Stud. 11 (2); 2005: p 78–88. doi: 10.1177/107179190501100208.

[24]. **M Moussa, A Aboshaiqah , A Alotaibi**. Effect of nurse's supervisor's leadership style on nurse's job satisfaction. Swift Journal of Nursing and Midwifery. 2 (2); March 2016:p. 018-025. http://www.swiftjournals.org/sjnm.

[25]. **F Alshammari** .Nursing leadership in the ministry of health hospitals of Saudi Arabia. Doctor of Philosophy (PhD) School of Health Sciences College of Science, Engineering and Health RMIT University May 2014:p 232-242.https://researchbank.rmit.edu.au/eserv/rmit:160740/Alsh ammari.pdf.

[26]. **W A Suliman.** Leadership Styles of Nurse Managers in a multinational environment. Nurse Administration Quarterly. Vol. 33, No. 4, 2009; pp. 301–309.

[27]. **I M Abdelhafiz, A Mah'dAlloubani, M Klaledeh , N Mutari and MM Almukhtar** .Impact of leadership styles among head nurses on level of job satisfaction among staff nurses. European Scientific Journal November 2015: p 1857 – 7881.

[28]. **G Tessema**. Assessing the relationships between transformational leadership and employees' engagement in North Gondar Zone Public Preparatory School Teachers, Ethiopia Sch . J Econ Bus Manag, 2015; 2(10B):1076-1085 p-ISSN 2348-8875.

[29]. **M Ebrahimi and Y Khodaverdi**. Investigating the relation between transformational leadership and work interaction (work engagement) among employees of Tejarat Bank and National Bank. Sci. Int.(Lahore),27(3); 2015: p 2795-2802 .

[30]. **A Sadeghi and Z A L Pihie.** Transformational leadership and its predictive effects on leadership effectiveness. International Journal of Business and Social Science. 3 (7); April 2012: p 186-197.

ijbssnet.com/**journals**/Vol_**3**_No_**7_April_2012**/21.pdf.

[31]. **S Dionne, F Yammarino, L Atwater, & W Spangler**. Transformational leadership and team performance. Journal of Organizational Change Management, 17(2):2004: p 177 193.

[32]. **B M Bass.** Transformational leadership: individual, military and educational impact. Mahwah, NJ: Erlbaum. 1998.

[33]. **K Surawachakul.** Transformational leadership has its place in mental health nursing .Mental Health Nurse at Eastern Intermediate Care Centre (EICC) .2013: Slide 1-21. https://www.anmfsa.org.au/.../Kanchana-Surawachakul-Transformati.

[34]. **M Salanova, L Lorente, M J Chambel, & I M Martinez.** Linking transformational leadership to nurses' extra-role performance: the mediating role of self-efficacy and work engagement. Journal of Advanced Nursing, 67, 2011. 2256-2266.

[35]. **M Tims, A B Bakker, and D Xanthopoulou.** "Do transformational leaders enhance their followers' daily work engagement?" The Leadership Quarterly, 22 (2); 2010): p121-131.doi: 10.1016/j.leaqua.2010.12.011.

[36]. **A R Willingham.** Meaningful Recognition in a Healthy Work Environment for Nurse Engagement in a Critical Care Setting. Degree of Master's in Nursing Science In the WellStar College of Health and Human Services Kennesaw State University "(2014):p34 -42.

digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article1657.

[37]. **M Attridge**. "Measuring and managing employee work engagement: a review of the research and business literature". Journal of Workplace Behavioral Health. 24 (4), 2009: p 383-98.

[38]. **B J Avolio, W Zhu, W Koh, and P Bhatia**. "Transformational leadership and organizational commitment: mediating role of psychological empowerment and moderating role of structural distance". Journal of Organizational Behavior.25 (8); 2004: p951-68.

[39]. **P Cotton and P Hart.** "Occupational wellbeing and performance: a review of organizational health research", Australian Psychologist.38 (2); 2003: p 118-27.

[40]. **R Freeborough and K Patterson** .Exploring the effect of transformational leadership on nonprofit leader engagement .Servant leadership: theory and practice. Abbott Turner College of Business .2 (1); February 2015:p 49-70.

[41]. **M S F Foon.** A Conceptual framework of transformational and transactional leadership on nurse educators' job satisfaction**.** International Journal of Social Science and Humanities Research. 4(1); 2016: p 596-605. www.researchpublish.com

[42]. **R G Reiss.** Comparison of leadership styles of occupational therapy education program directors and clinic administrators. Doctoral degree .University of North Texas December 2000.

[43]. **A E Aboshaiqah , H Y Hamadi , O A. Salem and NM.A. Zakari** .The work engagement of nurses in multiple hospital sectors in Saudi Arabia: a comparative study. Journal of Nursing Management.24 (4); May 2016:p 540–548,