THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP STYLES OF HEAD NURSES AND STAFF NURSE AUTONOMY

Maha Mahmoud Mohamed[1]*, Gehan Mohamed Ahmed Mostafa[2] and Waffaa El Sayed Hassan Helal[3]

[1] Head Nurse, Emergency Department, Kobry El Qobba Military hospital, Egypt. (*Corresponding Author)
[2] Professor, Nursing Administration, Faculty of Nursing, Helwan University, Egypt.
[3] Assistant Professor, Nursing Administration, Faculty of Nursing, Helwan University, Egypt.

Abstract

Introduction: It is crucial for healthcare organizations to be competitive in the global market that transformational nursing leaders foster a supportive work environment that encourages staff nurses to become more engaged in their work, thereby contributing to the organization's success through increased levels of commitment to the organization, increased rates of satisfaction, and decreased rates of intention to leave..**Aim:** The purpose of this research was to investigate how nurses' autonomy is connected to their leaders' transformational leadership styles. **Setting:** The study was conducted at the Military hospital. **Design:** A descriptive correlation design was utilized in carrying out this study. **Subject:** All available sample composed of two groups of subjects, namely head nurses' group and staff nurses' group. **Tools of data collection:** Nurse managers filled out the Transformational Leadership Style Questionnaire, while nurses in other positions filled out the Autonomy Questionnaire.. **Results:** The majority of the nurses (79.2%) and the majority of the nurses (65%) who were surveyed reported having a high degree of autonomy and a transformational leadership style. **Conclusion:** Total transformational leadership style among the investigated heads and staff nurses was positively and statistically significantly correlated with nurse autonomy. **Recommendations**: Nursing administrators need access to a training curriculum that focuses on transformational leadership.

Keywords: Autonomy, Head Nurses, Staff Nurses' Transformational Leadership,

INTRODUCTION

Today's nurses face a wide variety of exciting challenges and possibilities on the job, but they are notoriously under-motivated and micro-managed. Leadership styles that encourage their followers to work together for the greater good are becoming more important. Leaders in the nursing profession need to be highly creative thinkers, able to make connections between apparently unrelated data and try out novel strategies in the quest for deeper insights that might improve patient care. As a result, the focus will shift from the "nursing leader" to the collaboration of nursing leaders with other health-related leaders and consumers. Management roles like leadership mostly deal with people and communication. It's the act of persuading a team to work together to achieve a common objective. A leader is someone who can inspire their team members to work together for the benefit of the business. To wit: (Ulfert et al., 2022).

To better prepare their followers for the future, leaders who practice transformational leadership alter their followers' core worldviews, levels of trust, attitudes, behaviors, emotions, and expectations. A transformational leader is someone who inspires their people via their own example of vision, charm, risk-taking, creative thinking, and selflessness. According to research (Al Shammari, 2020) In addition, the ability to effectively use a variety of leadership styles is a prerequisite for success in leadership roles. Different leaders use different sets of responsibilities and actions to inspire

followers to work toward common objectives. The ability to adopt a variety of leadership stances is essential. Leadership styles are a set of activities and interactions that motivate followers to take action. Over the last three decades, there has been much study of two distinct types of leadership: transactional and transformative. "Leaders and followers raise one another to higher levels of motivation and morality" is a common definition of transformational leadership. When CEOs use a transformative approach, their employees feel more invested in the company, which boosts morale and productivity (Attanasio et al., 2021).

SIGNIFICANCE OF THE STUDY

To help their staff deal with stressors and negative feelings in their daily work, nursing leaders should have strong leadership skills and use those skills as a strategy to empower staff nurses and create a positive work environment that encourages, supports, inspires, and advocates nursing staff to work effectively and achieve high quality nursing care. Source: Hughes et al. (2023). Transformative leadership has been shown to be the most effective type of leadership, according to a number of studies conducted around the world. This type of leadership has also been shown to have a positive impact on the outcomes of its followers. According to research (Singh et al., 2020).

Since transformational leadership is more cost-effective, it was suggested that it be used (Wakabi, 2016). One research conducted in the North Eastern United States found that.Staff nurses' happiness and productivity may be attributed to transformative leadership in over 71 percent of cases (Casida & Parker, 2016). The degree to which employees are trusted with autonomy is a strong predictor of work settings that foster both employee and organizational success. It is believed that independent nurses would perform well on the work and be dedicated to their profession (Maharmeh, 2019). The freedom to make judgments and take initiative based on one's own expert knowledge and discretion is the essence of autonomy. "Authority of total patient care," which includes "the power to make decisions in a relationship with the patient and the freedom to make clinical judgments, choices, and actions," is how nursing autonomy is defined. Self-determination, self-guidance, independence, and self-governance are all synonyms for autonomy. The following four ideas that emerged from her study (O'Neill et al., 2022) on the subject of nursing autonomy. This study will aim to fill a gap in the literature by focusing on the connection between the leadership style of transformational nurse managers and the autonomy of their subordinate nurses.

AIM OF THE STUDY

This study aimed to explore the relationship between head nurses' transformational leadership style and staff nurses' autonomy in Military Hospital through:

1. Assess transformational leadership style among head nurses.
2. Determine autonomy among staff nurses.

Research Question

- Is there a relationship between head nurses' transformational leadership style and staff nurses' autonomy?

Subjects and method

1) Technical Item

The technical design included research design, setting, subject and tools for data collection

Research Design

Descriptive correlational design was utilized to conduct this study.

The Study Setting

The study was conducted at the Kobry El Qobba Military hospital.it consists of the following:

1st floor

- Intensive care unit A containing 7 beds.

- Intensive care unit B containing 10 beds.

- Intensive care unit C containing 6 beds

2nd floor

- Intensive care unit for citizens containing 7 beds

3rd floor

- 2 operating rooms and 2 beds.

Study Sample

A convenience sample was composed of all available nursing personal working at the previously mentioned setting, at the time of data collection.

The study subjects included in two groups namely:

1) Head Nurses' Group

This group included all available head nurses working in the units of the Military hospital.

2) Staff Nurses' Group

This group included all staff nurses working in the units of the Military hospital.

Inclusion Criteria

1. The participants had at least one year of experience in their workplace and accepted to share in this study at the time of data collection.

Data Collection Tools

Data in this study was collected by using two different tools, namely:

First Tool: Transformational Leadership Style Questionnaire for Head Nurses:

This instrument had two components, both of which had been constructed by Avolio et al. (2004), adapted from Edrees et al. (2021), and modified by the researcher.

Part I: Personal Characteristics Data Sheet: Its purpose was to collect demographic information about the participants, such as their age, gender, marital status, level of education, job title, employer, number of years spent in the nursing profession, number

of years spent in their current position, length of time spent working under their direct leader's supervision, number of hours worked per day, and participation in a leadership development program.

Part II: Transformational Leadership Style Questionnaire Sheet: The study's head nurses' transformational leadership was evaluated using this instrument. Sixty-four items were organized into four categories and then distributed as follows:

Table 1: Transformational Leadership Style Questionnaire Sheet content

No.	Dimension	No. of items	Example
1	Head Nurses Charisma	14	Instill pride in for being associated with him/her
2	Moral Agency	14	Talks about his/her most important values and beliefs
3	Intellectual Empowerment	20	Re-examines critical assumptions to question whether they are appropriate
4	Individual Consideration	16	Spends time teaching and coaching
Total		**64**	

Scoring System

The following is a breakdown of how the participants scored each item on a Likert scale from 1 to 5:Choose one: (1) Strongly Disagree (2) Somewhat Disagree (3) Neutral (4) Somewhat Agree (5) Strongly Agree.

For positive items, category for 5 Point Likert scale was (1= strongly disagree, 2=disagree, 3=neutral, 4= agree & 5=strongly agree).

For negative items, category for 5 Point Likert scale was (5= strongly disagree, 4=disagree, 3=neutral, 2= agree & 1=strongly agree). Items of 2, 4, 7, 9, 11, 12, 14, 16, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64 are considered negative items.

Subject responses were calculated in the scoring system as following;

A mean score of the component with a total grade (320) was calculated by adding together all of the item grades and dividing by the total number of grades, yielding a percentage score that was then broken down into the following categories:

- **Low level** if the total score was less than 60%, it means less than) < 191 points.

- **Moderate level** if the total score was equal or more than 60 %, to less than 75%, it means less than) ≥ 192 < 240 points.

- **High level** if the total score was equal or more than 75%, it means more than) ≥ 240 points)

Second Tool: Autonomy Questionnaire for Staff Nurses:

This instrument had two components, both of which had been designed by Blegen et al. (1993) and adapted from Hamaideha et al. (2009) and modified by the researcher:

Part I: Personal Characteristics Data Sheet: Its purpose was to gather demographic information from staff nurses, such as their ages, sexes, marital statuses, levels of education, places of employment, lengths of time spent in various leadership roles, daily workloads, and participation in leadership development programs.

Part II: Autonomy Questionnaire Sheet: Research nurses' levels of independence were measured using this instrument. There were a total of forty-two things, which were broken down as follows:

Table 2: Autonomy Questionnaire Sheet content

No.	Dimension	No. of items	Example
1	Patient Care Decisions	21	Plan care with patient
2	Unit-Operations Decisions	21	Make patient assignments

Scoring System

Participants' ratings on a 5-point Likert scale, from 1 to 5, looked like this: One, nurses have no say or responsibility; two, they step up when requested; three, they work in tandem with others; four, they provide input during collective decision-making; and five, they make all the calls on their own. Total item scores were tallied and then divided by the total number of items to get an average for the section. The last step included converting the score to a percentage and placing it into one of the following categories:

Low Autonomy level if the total score was less than 60%, it means less than (< 126 points)

- **Moderate Autonomy levels** if the total score was equal or more than 60 %, to less than 75%, it means equal or more than ≥ 126 to less than 158 points

- **High Autonomy levels** if the total score was equal or more than 75%, it means equal or more than (≥ 158 points) .

Validity

Five professionals in nursing administration reviewed the generated tool for face and content validity, and any necessary adjustments were made based on their feedback.

Reliability

Before any data was collected, the instruments' internal consistency was statistically examined using Cronbach's alpha as follows:

Table 3: Questionnaire of Transformational Leadership Style reliability

	Questionnaire of Transformational Leadership Style		
	Questionnaire dimension	No of items	Alpha Cronbach test
1	▪ Moral Agency	14	0.660
2	▪ Head nurses' charisma	14	0.795
3	▪ Intellectual Empowerment	20	0.921
4	▪ Individual Consideration	16	0.600
Total Questionnaire		**64**	**0.844**

Table 4: Questionnaire of autonomy reliability

	Questionnaire of autonomy		
	Questionnaire dimension	No of items	Alpha Cronbach test
1	Decisions related to patient care	21	0.998
2	Decisions related to unit operations	21	0.997
Total Questionnaire		42	0.998

Ethical Considerations

The Scientific Research Ethics Committee has given its stamp of approval for the project to go on. Before signing the informed consent, participants will be provided all the information they need to make an educated decision about their participation in the research. Ethical issues included informing participants of the study's goals and methods, outlining their right to withdraw at any time, and keeping their data secure so that it couldn't be accessed by anyone else without their consent. There was a respect for morality, culture, and religion.

2) Operational Item

Preparatory Phase

Tools for data gathering were developed after a thorough examination of relevant historical, current, national, and international literature and theoretical knowledge.

Pilot Study

Ten percent of the total population participated in the pilot research, which looked at the survey instruments' readability and completion time. Changes were made in response to the findings.

Field Work

Three times a week, between morning and afternoon hours, the researcher was there to collect information for the study. Before any data was collected, the researcher visited with each participant to explain the purpose of the study and get consent to participate. Participants filled out the questionnaires, but the researcher double examined each one.

3) Administrative Item

The research was conducted after receiving approval from the Military Hospital's administrators and the dean of Helwan University's School of Nursing.

Statistical Design

Information was checked, coded, inputted, analyzed, and tabulated using SPSS version 25. Depending on the nature of the variables, we employed both descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (Pearson correlation test, chi-square test, and a nova test). The significance threshold of 0.05 was determined.

RESULTS

The nurses' demographics are shown in Table 5. The results show that the majority of head nurses (86.8%) were between the ages of 31 and 40, with a mean age of 34.85 (3.42) years old. The ratio of male to female head nurses in the sample was 0.2 to 1. More than 80% of the nurses in charge were women. When it came to their socioeconomic standing, about eighty percent were married. About three-quarters (75.5%) held a master's or doctoral degree in nursing, with just 3.8% possessing a bachelor's degree. When it comes to leadership training, more than ninety-six percent of those who attended a program did so.

In terms of demographics, we find that the majority (96%) of the nurses in our sample were under the age of 30 and that their average age was 27.47 (5.29). In addition,

54% of the nurses in the sample were female, and the male-to-female ratio was 0.9:1. More than three quarters (77%) of them did not have a significant other in their lives. About two-thirds of registered nurses (58%) had bachelor's degrees or above, with just a small percentage (2%) having master's or doctoral degrees. More than two-thirds (67%) of them did not participate in leadership training despite the fact that it was offered. Also, there is a clear distinction between the personalities of the chief nurses and the rest of the staff nurses, one that is statistically significant at the P = 0.000 level.

Figure (1) displays the educational levels of the examined nursing directors. About three-quarters (75.5%) of the surveyed head nurses held a postgraduate degree, whereas just a small percentage (3.8%). About two-thirds of registered nurses (58%) possess degrees from technical institutes, whereas just a small percentage (2%) have advanced degrees. Also, there is a clear distinction between the personalities of the chief nurses and the rest of the staff nurses, one that is statistically significant at the P = 0.000 level.

The researched nurses' average age and number of years in the field are shown in Table (6). More than 80% of the analyzed head nurses have worked in the field for 6-10 years, with a mean SD of 8.96 3.19, while only 7.5% have worked in the field for less than 5 years. More than two-thirds (66%) of them have been in their present job for 6 years or less, with a mean SD of 6.32 3.47 years. More than half (47.2%), averaging 5.23 3.86 years under direct leadership, have worked for less than three years. Over 90% of the sampled head nurses reported working more than 8 hours per day, with a mean SD of 9.42 4.43. More than half of the staff nurses in the study had less than five years of experience in the field of nursing, with a mean SD of 6.71 3.87 years, while only 4% had more than ten years of experience. More than two-thirds (66%) have been in their present job for more than five years, with a mean SD of 5.69 3.62. More over half (55%) of them have worked for less than three years under the direction of a direct leader, with a mean SD of 3.07 1.88 years. In terms of daily work hours, the majority (64%) of the staff nurses in the study put in more than 12 hours, with a mean SD of 17.22 6.69. There is a statistically significant gap, at P 0.0001, between the number of years of experience and the number of hours worked by head nurses and staff nurses. The percentage of managers who exhibit a transformational style of leadership is seen in Figure (2). It is clear that about eighty percent (79.2%) of the heads of nursing departments investigated used a highly transformative leadership style. While just roughly one-fifth (20.8%) of the investigated head nurses exhibited a modest degree of a really transformative leadership style. In addition, there is an extremely significant discrepancy between the actual and predicted values of 0.3:1 (P 0.0001).

The average score for transformative leadership among the sampled RN managers is x + SD= 250+ 16.61, with a very significant difference at P = 0.0001 (see Table 7). The researchers used Figure 3 to depict the nurses' degree of independence. More than two-thirds (65%) of the investigated nurses were found to have a high degree of autonomy. However, just 12% of the nurses in the study had a poor degree of independence. In addition, there is a statistically significant discrepancy (P 0.0001) between the actual and predicted values. According to Table 8, the mean autonomy score across the sample of staff nurses was x + SD= 163.8+38.30, a difference that was found to be very significant at P = 0.000. It also shows that the mean for autonomy in making choices about unit operations is 82.06 (19.57), followed closely by the mean

for autonomy in making decisions about patients' care (81.82 (19.81)). In addition, there is a statistically significant difference in the overall mean scores (P 0.0001).

Table (9) shows how the overall degree of transformational leadership style among the examined head nurses relates to individual variables. P values between 0.01 and 0.000 suggest a very significant relationship between individual variables (age, socioeconomic position, and education) and the overall degree of transformational leadership style among the sample of head nurses. Staff nurses' overall levels of autonomy and their individual traits are tabulated in table (10). Results showed a statistically significant correlation between individual variables (socioeconomic status, educational attainment, and training program participation) and overall nurse autonomy (P 0.0001).

Table (11) shows the relationship between the proportion of nurses who report working under a transformative leader and their level of autonomy. In terms of the whole, the results show that the examined nurses' and managers' adoption of a transformational leadership style is positively and strongly correlated (r= 0.864, P= 0.000). There was also a positive, statistically significant correlation between the studied head and staff nurses' levels of moral agency, the charisma of their leaders, the extent to which they empower their employees intellectually, and the personal consideration they show to each patient. P= 0.000

Figure (4) depicts the relationship between the proportion of head and staff nurses who adopted a transformational leadership style and their level of autonomy. It was shown that amongst the examined head and staff nurses, a positive strong statistically significant association existed between complete autonomy and transformational leadership style (r= 0.864 & P= 0.000).

Table 5: Number and percentage distribution of personal characteristics among the studied nurses (n= 153)

Items		Head nurses n=53		Staff nurses n=100		χ2	P Value
		N	%	N	%		
Age (year)	▪ 20 ≤ 30	6	11.3	96	96.0	123.7	0.000
	▪ 31 ≤ 40	46	86.8	1	1.0		
	▪ 41 ≤ 50	1	1.9	0	0.0		
	▪ ≥ 50	0	0.0	3	3.0		
	▪ **Mean ± SD**	**34.85 ± 3.42**		**27.47 ± 5.29**			
Gender	▪ Male	7	13.2	46	46.0	16.4	0.000**
	▪ Female	46	86.8	54	54.0		
	▪ **Male to female ratio**	**0.2:1**		**0.9:1**			
Social status	▪ Single	9	17.0	77	77.0	51.7	0.000**
	▪ Married	42	79.2	23	23.0		
	▪ Divorced	1	1.9	0	0.0		
	▪ Widow	1	1.9	0	0.0		
Qualifications in nursing education	▪ Diploma	6	11.3	35	35.0	101.5	0.000**
	▪ Technical Institute	5	9.4	58	58.0		
	▪ Bachelor's Degree	2	3.8	5	5.0		
	▪ Postgraduate	40	75.5	2	2.0		
Attending training program	▪ Yes	51	96.2	33	33.0	55.9	0.000**
	▪ No	2	3.8	67	67.0		

* Statistically significant p < 0.05   **Highly statistically significant p < 0.01
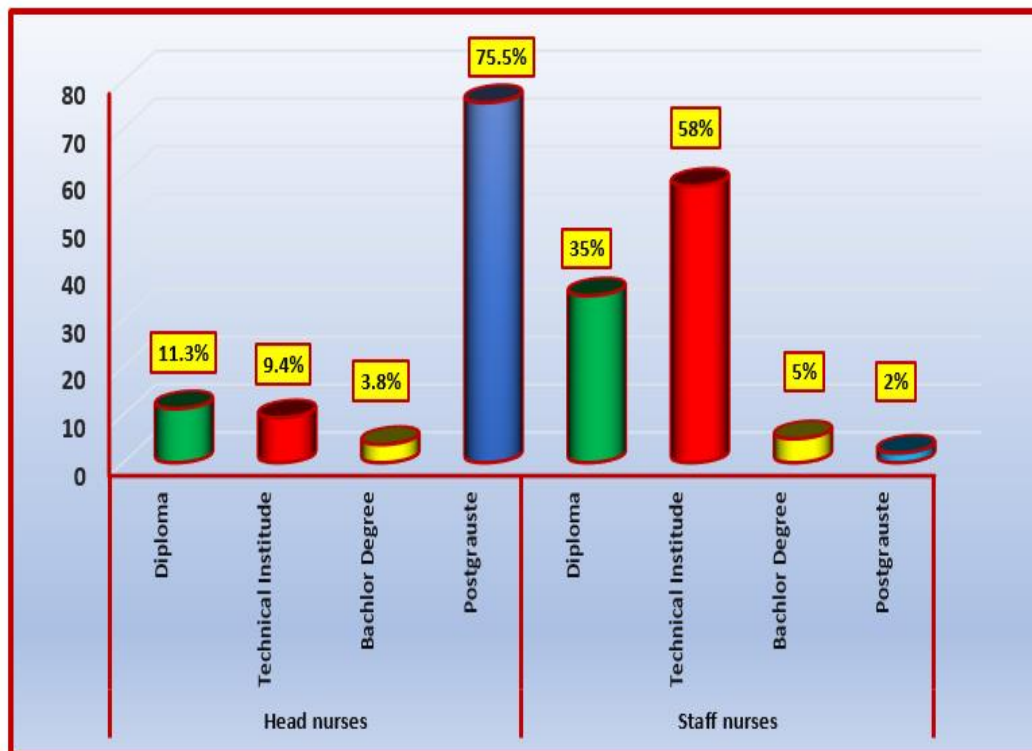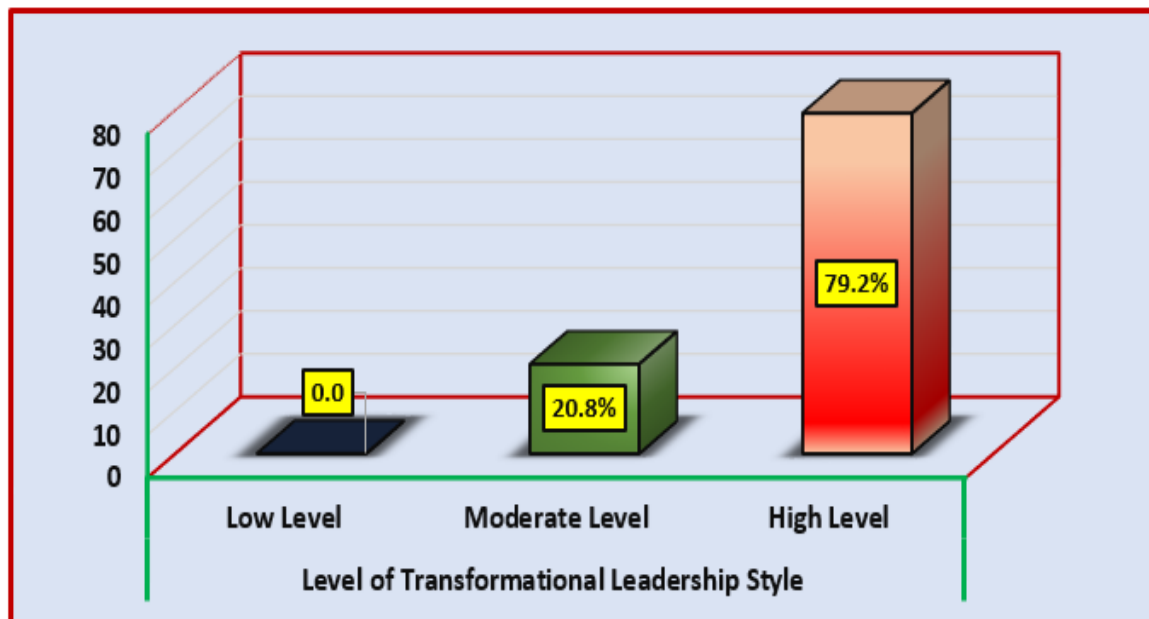
Figure 1: Frequency distribution of qualifications in nursing education among the studied nurses (n= 153)

Table 6: Frequency distribution of years of experience and time working hours among the studied nurses (n= 153)

Items		Head nurses n=53		Staff nurses n=100		χ2	P Value
		N	%	N	%		
Year of experience in nursing profession	▪ ≤ 5 years	4	7.5	58	58.0	36.5	0.000**
	▪ 6 ≤ 10	44	83.0	38	38.0		
	▪ > 10	5	9.4	4	4.0		
	▪ **Mean ± SD**	**8.96 ± 3.19**		**6.71 ± 3.87**			
Year of experience in current position	▪ ≤ 5 years	17	32.1	66	66.0	18.4	0.000**
	▪ 6 ≤ 10	35	66.0	30	30.0		
	▪ > 10	1	1.9	4	4.0		
	▪ **Mean ± SD**	**6.32 ± 3.47**		**5.69 ± 3.62**			
Working period under supervision of direct leader	▪ < 3 years	25	47.2	55	55.0	30.0	0.000**
	▪ 3 ≤ 6	4	7.5	35	35.0		
	▪ > 6	24	45.3	10	10.0		
	▪ **Mean ± SD**	**5.23 ± 3.86**		**3.07 ± 1.88**			
Daily working hours	▪ ≤ 8 hrs.	48	90.6	27	27.0	60.1	0.000**
	▪ 9 ≤ 12 hrs.	4	7.5	9	9.0		
	▪ > 12 hrs.	1	1.9	64	64.0		
	▪ **Mean ± SD**	**9.42 ± 4.43**		**17.22 ± 6.69**			

*Statistically Significant p < 0.05   **Highly Statistically significant p < 0.01

Figure 2: Frequency distribution of level of transformational leadership style among the studied head nurses (n= 53)

Table 7: Total mean score of transformational leadership style among the studied head nurses (n= 53)

Variable		No	%	Min	Max	x̄	SD	F test	P value
▪ Moral Agency	Low level	2	3.8	31	35	33.0	2.8		
	Moderate level	5	9.4	46	51	49.0	1.87		
	High level	46	86.8	53	60	57.1	1.87		
	Total	**53**	**100.0**	**31**	**60**	**55.47**	**5.42**	**187**	**0.000****
▪ Head nurses' charisma	Low level	3	5.7	32	40	36.6	4.16		
	Moderate level	19	35.8	43	52	49.8	2.44		
	High level	31	58.5	53	59	58.0	1.94		
	Total	**53**	**100.0**	**32**	**59**	**53.89**	**6.16**	**167**	**0.000****
▪ Intellectual Empowerment	Low level	3	5.7	39	59	47.33	10.40		
	Moderate level	4	7.5	61	65	62.25	1.89		
	High level	46	86.8	77	93	81.37	3.49		
	Total	**53**	**100.0**	**39**	**93**	**78.0**	**9.91**	**139**	**0.000****
▪ Individual Consideration	Low level	0	0.0	0	0	0	0		
	Moderate level	8	15.1	50	59	54.25	3.73		
	High level	45	84.9	61	70	64.78	1.65		
	Total	**53**	**100.0**	**50**	**70**	**63.19**	**4.31**	**176**	
Total	Low level	0	0.0	0	0	0	0		
	Moderate level	11	20.8	205	234	221	9.49		
	High level	42	79.2	241	265	258	6.16		
	Total	**53**	**100.0**	**205**	**265**	**250**	**16.61**	**246**	**0.000****

*Statistically Significant p < 0.05   **Highly Statistically significant p < 0.01   F: ANOVA Test
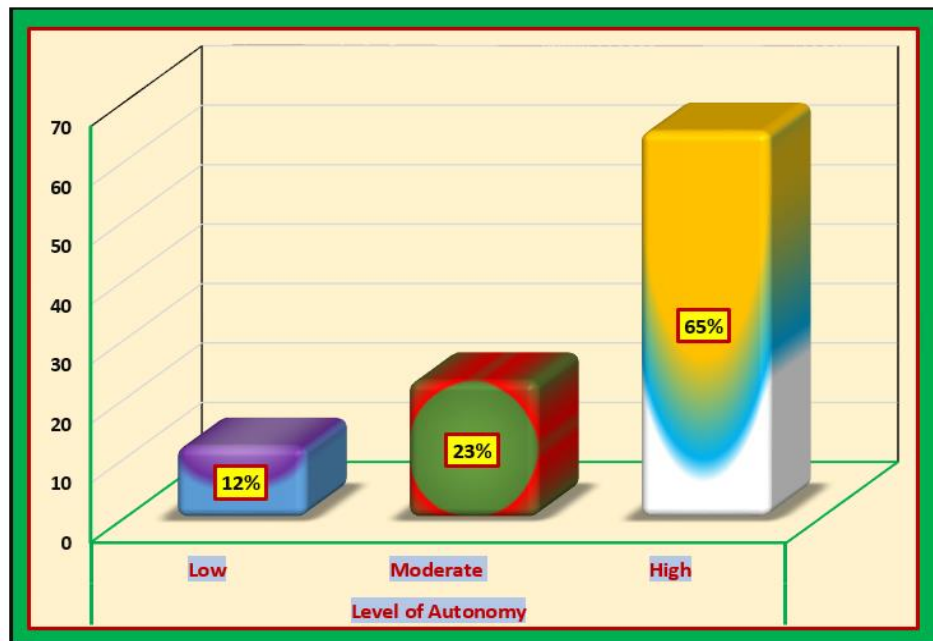
Figure 3: Frequency distribution of level of autonomy among the studied staff nurses (n= 100)

Table 8: Total mean score of autonomy among the studied staff nurses (n=100)

Variable		№	%	Min	Max	x̄	SD	F test	P value
▪ Decisions related to patient care	Low level	11	11.0	21	59	44.4	9.61		
	Moderate level	23	23.0	63	77	66.0	5.05		
	High level	66	66.0	84	105	93.5	10.5		
	Total	**100**	**100.0**	**21**	**105**	**81.82**	**19.81**	**168.1**	**0.000****
▪ Decisions related to unit operation	Low level	10	10.0	21	59	44.0	10.0		
	Moderate level	23	23.0	63	78	65.8	5.06		
	High level	67	67.0	80	105	93.3	10.6		
	Total	**100**	**100.0**	**21**	**105**	**82.06**	**19.57**	**158.0**	**0.000****
Total	Low level	12	12.0	42	124	101.1	23.1		
	Moderate level	23	23.0	126	155	130.2	8.57		
	High level	65	65.0	168	210	187.3	21.1		
	Total	**100**	**100.0**	**42**	**210**	**163.8**	**38.30**	**147.3**	**0.000****

F: ANOVA Test   *Statistically Significant $p < 0.05$ **Highly Statistically significant $p < 0.01$

Table 9: Relation between total level of transformational leadership style and personal characteristics among the studied staff nurses (n= 53)

Items		Total leadership				X^2	P-Value
		Moderate		**High**			
		11	20.8	42	79.2		
		N	%	N	%		
Age (year)	▪ 20 ≤ 30	6	11.3	0	0.0	25.9	0.000**
	▪ 31 ≤ 40	5	9.4	41	77.4		
	▪ ≥ 50	0	0.0	1	1.9		
Gender	▪ Male	9	17.0	37	69.8	0.300	0.626
	▪ Female	2	3.8	5	9.4		
Social status	▪ Single	0	0.0	9	17.0	10.0	0.019**
	▪ Married	9	17.0	33	62.3		

	▪ Divorced	1	1.9	0	0.0		
	▪ Widow	1	1.9	0	0.0		
Qualification	▪ Diploma	6	11.3	0	0.0	53.0	0.000**
	▪ Technical	5	9.4	0	0.0		
	▪ Bachelor	0	0.0	2	3.7		
	▪ Postgraduate	0	0.0	40	75.5		
Attending training program	▪ Yes	10	18.9	41	77.4	1.08	0.375
	▪ No	1	1.9	1	1.9		

*Statistically Significant p < 0.05   **Highly Statistically significant p < 0.01

Table 10: Relation between total level of autonomy and personal characteristics among the studied staff nurses (n= 100)

Items		Total autonomy						X^2	P-Value
		Low		Moderate		High			
		12	12.0	23	23.0	65	65.0		
		N	%	N	%	N	%		
Age (year)	▪ 20 ≤ 30	12	12.0	23	23.0	61	61.0	2.24	0.691
	▪ 31 ≤ 40	0	0.0	0	0.0	1	1.0		
	▪ ≥ 50	0	0.0	0	0.0	3	3.0		
Gender	▪ Male	7	7.0	15	15.0	32	32.0	1.85	0.396
	▪ Female	5	5.0	8	8.0	33	33.0		
Social status	▪ Single	8	8.0	12	12.0	57	57.0	12.9	0.002**
	▪ Married	4	4.0	11	11.0	8	8.0		
Qualification	▪ Diploma	11	11.0	20	20.0	4	4.0	68.1	0.000**
	▪ Technical	1	1.0	3	3.0	54	54.0		
	▪ Bachelor	0	0.0	0	0.0	5	5.0		
	▪ Postgraduate	0	0.0	0	0.0	2	2.0		
Attending training program	▪ Yes	1	1.0	0	0.0	32	32.0	22.3	0.000**
	▪ No	11	11.0	23	23.0	33	33.0		

*Statistically Significant p < 0.05   **Highly Statistically significant p < 0.01

Table 11: Correlation between total of autonomy and transformational leadership style among the studied head and staff nurses (n= 153)

Transformational Leadership Style		Autonomy (Decisions related to)	
		Patient care	Unit operations
▪ Moral agency	r	0.752	0.575
	P	0.000**	0.003**
▪ Head nurses' charisma	r	0.804	0.656
	P	0.000**	0.000**
▪ Intellectual Empowerment	r	0.780	0.556
	P	0.000**	0.000**
▪ Individual Consideration	r	0.835	0.595
	P	0.000**	0.000**
▪ Total	r	0.864	
	P	0.000**	
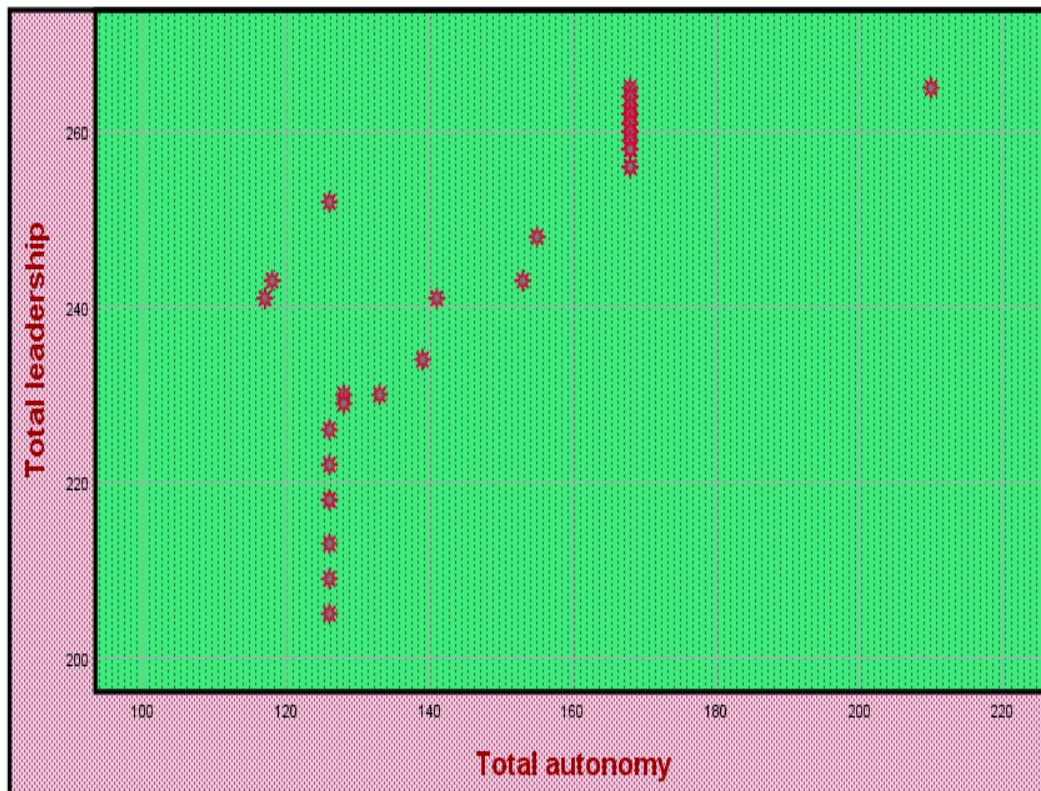
Figure 4: Scatter dot of total of total of autonomy and transformational leadership style among the studied head and staff nurses (n= 153)

DISCUSSION

The capacity to motivate and inspire one's team members to work together toward a common goal is a hallmark of effective leadership. In addition, the transformational leadership style provides a method for followers to express their gratitude and admiration for their leaders. The relevant system may be implemented in the organization by the leaders who have been given that power. In order to improve patient safety and provide nurses more leeway, it's important to cultivate a positive work environment, which necessitates taking into account a leader's management skills, communication methods, and leadership style (Afsar, Masood, & Umrani, 2019).

Furthermore, transformational leadership is recognized as a critical component in assisting healthcare companies in enhancing the quality of care provided, boosting nurse morale, and decreasing unfavorable patient outcomes. The potential and capability of any organization are greatly enhanced when its vision, purpose, and awareness are clear. Nurses were able to cultivate positive relationships with their patients, raise standards of care, and increase patient satisfaction because to the positive environment created by transformational leadership (Ur Rehman, Bhatti, & Chaudhry, 2019).

There are several facets of nursing autonomy that have been identified, and it is sometimes confused with other, related ideas such as autonomy in decision-making, autonomy in practice, and accountability in nursing. In therapeutic settings, autonomy may be thought of as existing on two levels. The capacity of the staff nurse to deviate from established protocols and make independent judgments about the treatment of

individual patients is the first. For the sake of the patient's main and urgent needs, nurses are seen as making autonomous, interdependent, and responsible decisions (Mohamed, El-Demerdash, & Hasanin, 2021).

As the "backbone" of the healthcare system, nurses perform a wide range of complex tasks. One of the keys to the success of the program in the care room is the head nurse's leadership as a first-line manager, which is connected to the use of practical efforts (Johari et al., 2022). As leaders, nurses must be flexible in the face of uncertainty, inventive in the face of adversity, reflective of transformational leadership values and principles, supportive of autonomy in practice, and motivating of staff nurses to use their knowledge and skills for the benefit of patients (Moura et al., 2019). In terms of demographics, researchers found that the majority (or more than 80%) of directors of nursing were between the ages of 31 and 41, with a mean age of 34.85 3.42. They also likely to be women, married, well educated, and participants in some kind of leadership development program.

Similarly, a study published in the American Journal of Nursing by (Abd-Elrhaman & Abd-Allah 2018) found that the majority of head nurses in the study were under the age of forty, with a mean age of 39.5. This finding was consistent with the results of a study conducted at Benha University Hospital and published in the same journal. Additionally, the vast majority were married women.

When looking at individual characteristics of nurses, the research found that more than three-quarters of the nurses in the sample were under the age of thirty-one, with a mean age of 27.47 5.29. Staff nurses in the study had an average SD of 6.71 3.87 years of experience working in the field, with the vast majority having been women with a degree from a technical institution who had not participated in a leadership development program. Also, there is a clear distinction between the personalities of the chief nurses and the rest of the staff nurses, one that is statistically significant at the $P = 0.000$ level.

Similar findings from a descriptive correlational study (Albagawi 2019) of government hospitals in Ha'il City found that more than two-thirds of the studied staff nurses were between the ages of twenty and thirty-one. This study evaluated a thesis titled "leadership styles of nurse managers and job satisfaction of staff nurses." They were mostly women with less than five years of experience who had never taken part in a leadership development program.

Findings from a similar study conducted in Health Insurance Hospital, Minia governorate, Minia city, and carried out by (Ali & Abood 2020), which assessed the connection between nurse managers' leadership styles and their employees' dedication to the company, found that the majority of nurses were under the age of 31. There were more women than men there by a wide margin. More than two-thirds of current employees have been in their positions for less than six years.

Taking into account the overall prevalence of a transformational leadership approach among the sample of chief nurses. More than three-quarters of the heads of nursing in the survey were found to have a highly transformative leadership style. While around 20% of the investigated nurse managers demonstrated a modest degree of overall transformational leadership. There is also a large discrepancy between the actual and predicted values, with the ratio being 0.3:1. This discrepancy is statistically significant at the P 0.0001 level.

A study by Setiowati (2020) published in the International Journal of Nursing and Health Services in Palang Merah Indonesia (PMI) Hospital in Bogor, Indonesia, found that more than two-thirds of the participating head nurses had a high level of total transformational leadership style in relation to five transformational leadershi More.

More than two-thirds of head nurses working in government hospitals were found to have insufficient knowledge about transformational leadership, contradicting the results of a study published in the Pakistan Journal of Medical and Health Sciences by (Mushtaq et al., 2021).

Regarding, complete independence among the sample of research nurses. The research found that more than two-thirds of the nurses in the sample have a high degree of independence. The majority of the staff nurses in the study reported high levels of autonomy. In addition, there is a statistically significant discrepancy (P 0.0001) between the actual and predicted values.

Nurses play a vital part in the delivery of healthcare and, as a result, their work has a major impact on patient outcomes. In addition, today's medical sciences place a premium on professionalism and ethical conduct. As a result, it is crucial that the nursing profession adjust to these shifts and remain current. Therefore, the role of the nurse is shifting from that of a simple order taker to that of an active participant in patient care. Professional independence is the foundational condition for nurses to meet this expectation (Alshaikh, Bakr, & Allam, 2021).

Consistent with the findings of a study on the antecedents and consequences of nurse autonomy (Labrague McEnroePetite &Tsaras, 2019), this one was conducted in nine rural hospitals on Samar Island, Philippines, and published in the International Journal of Nursing Practice. Nurses who reported greater degrees of professional autonomy were more likely to be top achievers, content with their work, and devoted to their careers, according to the findings of a cross-sectional research. Organizational initiatives to promote nurse autonomy via sufficient support, education, training, and formulated policies are crucial.

In addition, the results jived with those of a different study (Abuseif, & Abu-Al-Haija, 2018) that measured the factors influencing nurses' independence at work and found that the vast majority of their respondents enjoyed decision-making freedom and clinical independence as a result of things like "organizational culture and climate," "relationship and cooperation," "facilities and adequate resources," and "communication."

Taking into account the personal traits of the investigated nurse managers and their correlation with a more transformative leadership style. The study's findings indicated a substantial correlation between the participants' demographic information (age, socioeconomic position, and educational attainment) and their degree of transformational leadership.

Results were consistent with those from a study published in the American Journal of Nursing on a transformational leadership educational program for head nurses and its impact on nurses' job performance (Abd-Elrhaman and Abd-Allah, 2018). This study, conducted at Benha University Hospital, found a highly statistically significant correlation between demographic variables (age and education) and overall job satisfaction among participants.

On the other hand, a descriptive study conducted at a hospital affiliated with the Ministry of Health found no statistically significant relationships between staff nurses' perceptions of transformational and transactional leadership behaviors as well as organizational commitment and innovative work behaviors (Abd El Muksoud, Metwally, and Ata. 2021).

Concerning the correlation between the staff nurses' overall sense of autonomy and their unique qualities. According to the findings, between individual factors (socioeconomic status, educational background, and participation in a training program) and complete autonomy among the investigated staff nurses, there was a highly statistically significant relationship.

The findings of this study are consistent with those of a cross-sectional study of Iranian nurses' levels of professional autonomy (Shohani Rasouli & Sahebi, 2018), which was published in the Journal of Clinical and Diagnostic Research and found statistically significant relationships between the nurses' ages, years of experience in practice, and levels of education and autonomy. In contrast, the finding was in line with the result of a study by (Mohammed El-Demerdash, & Hasanin, 2022) that evaluated nurses' autonomy level in Basra Teaching Hospitals and found no statistically significant association between the subjects' gender, age, education level, work sector, experience, professional role, membership in a nursing association, number of nurses, application of a job description, or presence of a job description. Shift employment is statistically significantly linked to having more control over one's career.

Taking into account how the heads and staff nurses in the study felt about complete independence and the transformational leadership style. According to the study's summary, a positive and statistically significant relationship was found between the leadership style of the nurse manager and the level of autonomy among nurses.

The results of this study were consistent with those of a previous cross-sectional study of patient safety culture in Norwegian nursing homes (Seljemo, Viksveen, & Ree, 2020), which found a positive correlation between transformational leadership, patient safety culture, the overall perception of patient safety, and job resources (skill utilization, autonomy, and participation). As a corollary, this finding suggests that health care organizations might benefit from adopting a leadership approach known as "transformational leadership" in order to improve patient safety, reduce burnout, and establish a culture of safety for those who work in the field. In contrast, a descriptive exploratory study conducted in critical care units at New Kasr Al-Aini Teaching Hospital and authored by Mohamed, (2018)(Al-Jubouri et al., 2021) found no statistically significant correlation between nurses' clinical decision-making autonomy and lone-leader styles of leadership.

CONCLUSION

This study explored how transformational leadership style impacts staff nurses' autonomy. It concluded that, there was a positive strong statistically significant correlation between total transformational leadership style among the studied head and total autonomy of staff nurses at r= 0.864 & P= 0.000. Moreover, there was a positive strong statistically significant correlation between dimensions of total transformational leadership style (moral agency, head nurses' charisma, intellectual empowerment and individual consideration) dimensions of total autonomy (Patient care and unit operations) and among the studied head and staff nurses.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were generated as the following:

- Conduct In-service training program about transformational leadership is essential
for nursing managers.

- Develop training programs for nurse managers about behaviors and practices to promote staff nurses' autonomy and to teach nurses how to be more autonomous at their work.

- Provide continuous in-service education through attending workshops and courses to increase nurses' knowledge base that enable them to make decision

- Enhance nurses' autonomy through embedding nursing knowledge into clinical practice.

- Recognize and reward autonomous practice among nurses

- Create a learning environment through enabling formal and informal educational opportunities

- Inspire a shared vision among nurse leaders.

- Provide effective communication which increases human relations and strengthen informal power at the healthcare organization.

- Plan regular meeting with clinical nurses for exchange of ideas, problems and suggestions and consider them apart of the hospital members who can share in decisions.

- Empower nurses to gain new skills and knowledge and advance better positions that use all of their own skills and knowledge which enable them to make autonomous decisions.

- Repeat the study on larger sample size and in other geographic areas to facilitate generalization of results

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