

The Relationship between Servant Leadership and Self-Efficacy of Staff Nurses

Noura Gamal Sherief Mohamed ⁽¹⁾, Farida Mahmoud Hassona ⁽²⁾, and
Nora Mahdy Attia Mohammed ⁽³⁾

⁽¹⁾ B.Sc. Nursing, Faculty of Nursing - Zagazig University, ⁽²⁾ Professor of Nursing Administration, Faculty of Nursing - Zagazig University, & ⁽³⁾ Lecturer of Nursing Administration, Faculty of Nursing - Zagazig University

Abstract

Background: Servant leadership is unique of the greatest useful leadership approaches that work across healthcare settings. So, today's to lead healthcare nursing staff requires trend leadership approaches as servant leadership and respecting positive value for nursing profession that enable enthuse all levels of staff nurses to adopt an updated era of interconnection and dependability of health care environment shift for better whilst also struggling for superiority in the nursing and self-efficacy. **Aim of the study:** Was to investigate the relationship between servant leadership and Self -efficacy of staff nurses. **Subjects and Methods; Research design:** Descriptive correlational research design was adopted to carry out this study. **Setting:** The present study was conducted at Zagazig University hospitals. **Subjects:** Proportionate Stratified random sample of 375 staff nurses working at Zagazig university hospitals. **Tools of data collection:** Two tools were used for collecting data: Servant leadership assessment instrument and Self Efficacy Scale. **Results:** 61.9% of the studied nurses report that their leader had a high level of servant leadership. Also, 54.1% of them had moderate level of self-efficacy. **Conclusion:** There is highly statistical significant correlation between servant leadership and self-efficacy. **Recommendations:** Provide supportive management for healthcare professionals to acquire new skills and encourage a culture of learning from criticism and admitting mistakes, Foster an environment that encourages healthcare professionals to utilize their talents, generate new ideas, and actively contribute to problem-solving.

Key words: Servant leadership, and Self-efficacy, Staff nurses.

Introduction:

Servant leadership can go above and beyond the traditional leadership style and provide excellent care by keeping the patient at the center while ensuring the employees are well developed and engaged in their roles, Servant leadership is unique and can influence an organization positively where employees can be more engaged and satisfied with their work culture. According to the experts, a competent leader must first be a person of moral character ⁽¹⁾.

Servant leadership is a leadership philosophy in which the goal of the leader is to serve. This is different from traditional leadership where the leader's main focus is the thriving of their company or organization. A servant leader shares power, puts

the needs of the employees first and helps people develop and perform as highly as possible. Instead of the people working to serve the leader, this paradigm emphasizes the integration of different fields, collaboration among stakeholders, ethical conduct, and shared decision-making processes to facilitate the professional growth of practitioners and improve the quality of healthcare services ⁽²⁾.

Servant leadership (SL)'s top priority has to serve others. It begins with a natural desire to serve, lead and augment the growth of the followers and the organization; additionally it encourages the followers by focusing on their needs, empowering them and

nurturing their potentiality to the maximum performance⁽³⁾.

It is valuable when put into practice as it empowers people through humility, authenticity, stewardship, vision, trust, and fairness. Servant leadership places value on believing, serving, listening, developing, encouraging, collaborating, and building personal relationships, with the servant leader demonstrating openness, accountability, and willingness to learn. Servant leaders are honest, principled individuals, making fair decisions and communicating ethical values, expectations, and standards⁽⁴⁾.

Servant leadership behavior creates a pervasive social context that positively affects staff nurses' attitudes and behavior. Also, servant leadership can make staff nurses' to promote commitment to the supervisor, increase self-efficacy, help to perceived the whole organizational culture, inducing greater performance and the well-being of the workforce for increased engagement, and building trust with leader. Furthermore, such leader behavior provides situational cues from which followers' interpret and understand their environment and pass love to followers, which would greatly improve their confidence of their capabilities to give up voice for improving organizational performances⁽⁵⁾.

The servant-leader formation is virtues that are defined as the perfect ethic goodness in a nurse as human, or the general quality of goodness, or moral excellence, Servant leaders focus on the stabilization and growth and well-being of their staff for improving their self-efficacy⁽⁶⁾.

Self-efficacy is a personality trait and a controlling mechanism which plays significant roles in dealing with daily tasks and achieving goals. It reflects a belief and a sense of confidence and the ability in whether individuals can use their capacity to

achieve tasks. It allows nurses to establish meaningful relationships at work and promotes their commitment to their organizations⁽⁷⁾. Self-efficacy in nursing plays a key role in applying scientific and professional knowledge and skills. Individuals with high self-efficacy are more likely to use their motivation and cognitive resources to perform the actions needed to achieve the goal and favorable outcomes for patients⁽⁸⁾.

Self-efficacy is defined as a person's sense of belief that he or she can demonstrate the required behavior in a specific situation. Self-efficacy is more directed at the individual's assessment of his ability; it refers to self-confidence about its ability to motivate the cognitive resources and actions needed to succeed in carrying out certain tasks. It also plays a vital role in determining a person's performance such as goal aspirations, outcome incentives, and perceived opportunities for a given task, the importance of self-efficacy will affect the effort required and ultimately can be seen from work performance⁽⁹⁾.

Additionally Self-efficacy refers to a global confidence in one's coping ability across a wide range of demanding or novel situations, self-efficacy aims at a broad and stable sense of personal competence to deal effectively with a variety of stressful situations General self-efficacy beliefs can be conceived of as a personal resource or vulnerability factor that may influence people's feelings, thoughts and actions, People with a high sense of efficacy trust in their own capabilities to master different types of environmental demands⁽¹⁰⁾.

Moreover, Self-efficacy is as an also individual's beliefs about his or her capabilities to produce the desired outcomes they want. Staff nurse's perceived self-efficacy is believed to be influential on the staff nurse's level of performance, choice of tasks, and the amount of effort put into performing those tasks Beliefs

associated with self-efficacy can influence goals and desires and can form the consequences of human behavior. It specifies how individuals examine the obstacles ⁽¹¹⁾. Self-efficacy beliefs affect how consistently and effectively staff nurses apply what they know and they are a much better predictor of intellectual performance than skills alone. Thus, it is vital that staff nurses' leader begin to understand the influence staff nurses self-efficacy has on organizational success; and the influence that they themselves have on staff nurses' self-efficacy ⁽¹²⁾.

Significance of the study:

Servant leadership has now become one in all the foremost leading characters of the leadership, It is a holistic leadership approach that engages followers in multiple dimensions (e.g., relational, ethical, emotional, spiritual), such that they are empowered to grow into what they are capable of becoming. It seeks first and foremost to develop followers on the basis of leaders' altruistic and ethical orientations ⁽¹³⁾. It gives a positive value for the nursing profession, which helps for establishing new links between leaders and their subordinates and improves self-efficacy ⁽¹⁴⁾. Previous study was conducted by **Sorour et al.** ⁽¹⁵⁾ at Menoufia University, Egypt about servant leadership and its effect on staff nurses' creativity, however and up to our knowledge, there is no studies done to investigate the relationship between servant leadership and, self-efficacy of staff nurses.

Aim of the study:

The aim of the study was: to investigate the relationship between servant leadership and self -efficacy of staff nurses.

Research Questions:

1. What is the level of servant leadership from staff nurses perception?

2. What is the level of self-efficacy among staff nurses?
3. Is there a relationship between servant leadership and self-efficacy of staff nurses?

Subjects and methods:

Research design:

A descriptive correlational research design was adopted to carry out this study.

Study setting:

This study was conducted at Zagazig University Hospitals, Al-sharqia Governorate, Egypt, which includes two sectors involving eight teaching hospitals, namely; the Emergency sector includes four hospitals and El-Salam sector includes four Hospitals. The total bed capacity of the hospitals is approximately 2043 beds.

Study subjects:

A proportionate stratified random sample of 375 staff nurses of 375 staff nurses was taken from staff nurses working at Zagazig University Hospitals according to the following **inclusion criteria:**

- The available three categories of nurses were included (bachelor, technical nurses, and diploma).
- Both genders.
- Had at least one year of experience.

Sample size:

The total population size is 2770 nurses working in the setting of the study, Sample size was calculated using a simplified formula ($n=N/1+N(e)$) 2 which provided by **Yamane** ⁽¹⁶⁾. A 95% confidence level and $P = 0.05$ are assumed for Equation. Where "n" is sample size. "N" is Number of population (total number of nurses in all hospitals). "e" is Coefficient factor = 0.05. Then, the required number of nurses from each hospital was calculated with the following formula (number of nurses in each hospital x required sample size / total number of nurses in all hospitals).

Table 1: Required sample size of staff nurses from each hospital

Hospital name	Total number of staff nurses	Required sample size
1. New-Surgical Hospital	551	75
2. Internal Medicine Hospital	523	71
3. Emergency Hospital	345	47
4. Delivery and Premature Hospital	202	27
5. The out-patient Hospital	189	26
6. The Cardiac and Chest Hospital	357	48
7. El -Salam Hospital	295	40
8. The Pediatric Hospital	262	35
9. El- Sadat Hospital	46	6

Tools of data collection:

Two tools were used to collect necessary data.

Tool 1: Servant leadership Assessment Instrument: This tool contained two parts as follows:

- **Part I: Personal and job data characteristics of staff nurses:** This part was developed by the researcher to collect data about staff nurses' age, gender, department of work, marital status, level educational qualification and years of experience.
- **Part II: Servant leadership Assessment Instrument:** This part was developed by van Dierendonck et al. (17) to measure servant leadership level as perception of staff nurses about their supervisors' servant leadership style in their organization. It consists of 41 items

categorized into eight domains namely: Empowerment (5 items), stewardship (5 items), Accountability (5 items), Humility (5 items), Standing back (5 items), Authenticity (4 items), Courage (6 items), and Forgiveness (6 items).

Scoring system:

The nurses' responses to the instrument were measured on a five-point Likert scale ranged from (1) strongly disagree to (5) strongly agree. Total score was extended from (41-205), which considered the summation of all staff nurses' responses on the present scale. Scores from (41-81) degree reflected the "low Servant Leadership". Whereas, scores ranged from (82-122) denote "moderate Servant Leadership", as well as scores extended from (123-205) represent "high Servant Leadership" (15).

Tool II: Self-Efficacy Scale:

The scale was developed by Schwarzer and Jerusalem (18) to assess self-Efficacy level of nurses. It consists of 10 items such as I can always manage to solve difficult problems if I try hard enough, if someone opposes me, I can find means and ways to get what I want.

Scoring system:

the response to the scale was on 4 point Likert scale ranged from these are not at all true (1), hardly true (2), moderately true (3), exactly true (4). Scores ranged from (10 -> 40) indicate low self-efficacy, Scores ranged from (40 -> 60) indicate moderate self-efficacy, and Scores ranged from (60 -> 100) indicate high self-efficacy (19).

Content validity and Reliability:

The questionnaire was translated into Arabic; and then content and face validity were established by a panel of five experts at the Faculty of Nursing, Zagazig University. Experts were requested to express their opinions and comments on the tool and provide any suggestions for any additions or omissions of items. According to their opinions, all recommended modifications were performed by the

researcher. Reliability was measured by using the Cronbach's Alpha Coefficient factor test to determine the internal consistency of each scale and all were satisfactory for the Servant leadership instrument (0.986), and self-efficacy Cronbach's Alpha was (0.959).

Fieldwork:

Data collection phase of the study took three months from the 1st of January to the end March 2023. During this stage all the data were collected from the study subjects. The preparatory phase was done by meeting the study subjects, each nurse was met individually, got a full explanation about the aim of the study and was invited to participate. The nurse who gave his/her verbal informed consent to participate was handed the self-administered questionnaire and was instructed during the filling.

The second phase included handing the required number of questionnaire sheets to staff nurses in their work setting by the researcher to elicit their opinions. The data were collected three days a week, the researcher met staff nurses in each unit in the morning and evening shifts after finishing their work to distribute the questionnaires. Staff nurses completed the questionnaires at the same time of distribution and took about 10-15 minutes. The researcher checked each questionnaire sheet after they had been completed to ensure the completion of all information.

Pilot study:

A pilot study was carried out on 10 % of study subjects (37 staff nurses) to test applicability, feasibility, practicability of the tools. In addition, to estimate the time required for filling in the questionnaire sheets. The pilot study was conducted one week before collection of data and staff nurses were selected randomly and they were excluded from the main study sample.

Administrative and ethical considerations:

Official permissions were obtained from the dean of the Faculty of Nursing Zagazig University, and approval to conduct the study was obtained from the medical and nursing directors of the each hospital after explaining the nature of the study.

The study was approved by ethics committee and dean of the Faculty of Nursing, Zagazig University. Then, a letter containing the aim of the study was directed from the Faculty of Nursing to the medical and nursing administration of the Zagazig University Hospitals requesting their approval and cooperation for data collection. Consent was established with the completion of the questionnaires. As well, verbal explanation of the nature and aim of the study had been explained to staff nurses included in the study sample. Likewise, an individual oral consent was received from each participant in the study after explaining the purpose of the study. Staff nurses were given an opportunity to refuse or to participate, and they were assured that the information would be used confidentially for the research purpose only.

Statistical analysis:

All data were collected, tabulated and statistically analyzed using IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp. Quantitative data were expressed as the mean \pm SD & median (range), and qualitative data were expressed as number & percentage. Percent of categorical variables were compared using Chi-square test. Pearson' correlation coefficient was calculated to assess relationship between various study variables, (+) sign indicate direct correlation & (-) sign indicate inverse correlation, also values near to 1 indicate strong correlation & values near 0 indicate weak correlation. Multiple linear regression is a predictive analysis. Multiple linear

regression is used to describe data and to explain the relationship between one dependent continuous variable and one or more independent variables. All tests were two sided. P-value < 0.05 was considered statistically significant, p-value \geq 0.05 was considered statistically insignificant.

Results:

Table (1): Shows frequency and percentage distribution of the studied nurses according to personal data characteristics. It's clear from the table that the majority of studied nurses (77.1%) were female aged from 20 to 30 years old, married. (41.1%) of studied nurses having technical institute, While more than half of them having less than five years' experience.

Table (2): Shows total mean scores of servant leadership among studied nurses. It's clear from the table that the highest mean scores of servant leadership were related to forgiveness and humility dimension (20.64 ± 5.43 & 16.83 ± 4.73 respectively). While the lowest mean scores were related to stewardship and authenticity (15.01 ± 4.27 & 9.49 ± 3.38 respectively); with total mean score of servant leadership 127.73 ± 30.76 .

Figure (1): Total level of servant leadership as perceived by studied nurses. This figure shows that (61.9%) of studied nurses report that their leader had a high level of servant leadership.

Figure (2): Shows Total level of self-efficacy among studied nurses, it's clear from the table that slightly more than half of studied nurses (54.1%) had moderate level of self-efficacy. While (21.1%) of them had low level of self-efficacy.

Table (3): Relation between servant leadership assessment level of studied nurse's and their personal and job characteristics. This table shows that there was only statistically significant relation between servant

leadership and personal characteristics of studied nurses regarding their experience $p = (0.0001)$.

Table (4): Relation between self - efficacy level of studied nurse's and their personal data characteristics , This table shows that, there was only statistically significant relation between Self-efficacy and personal characteristics of studied nurses regarding their gender $p = (0.04)$.

Table (5): Shows Correlations between servant leadership and Self-efficacy of studied Nurses ($n = 375$), It's clear from the table that there is a highly statistical significant correlation between servant leadership and self-efficacy score ($r = 4680.558$, P value = 0.000).

Discussion:

Concerning the demographic characteristics of the studied nurses

The finding of the present study indicated that the majority of studied nurses were female and married. This result could be due to the high numbers of students who enter the faculty or school of nursing are females and the main core of nursing occupation is feminists, Regarding qualification the majority of studied nurses had technical institute of nursing, this could be due to the bachelor degree in nursing wasn't very popular until recently. Hence, the study sample is a true reflection of the nurses working in our community .Also this result shows that about three fifth of them having less than five years of experience.

These results agree with the study by **El-seidy et al.** ⁽²⁰⁾ about " Relationship between Spiritual Leadership and Creativity as Perceived by staff Nurses at Shoubrakhit General Hospital in Damanhur University and showed that more than one -half of the studied staff nurses were female, married and had nursing technical institute. As well, a study carried out at Beni-Sueif

University Hospital by **Mahgoub et al.** ⁽²¹⁾ who assessed the relationship between work environment and innovative behavior among staff nurses and found that the majority of staff nurses in the study with age ranged from (20-29) years, had technical degree of nursing and had experience less than 5 years.

On the other hand, this study result was dissimilar to a study conducted by **Otuwuronne et al.** ⁽²²⁾ to explore the relationship between nurse supervisor's servant leadership behavior and nursing employee's self-assessment of engagement and burnout in on 82 participants and found that more than half of the study participants had a bachelor degree in nursing, while the majority of them were aged between thirty to thirty nine years old, and had six to ten years of experience.

Concerning total mean scores of servant leadership as perceived by studied nurses, the finding of the present study indicated that the highest mean scores of servant leadership were related to forgiveness and humility dimensions. While the lowest mean scores were related to stewardship and authenticity. This might be due to most of studied nurses perceived that their leaders show trust worthiness in by being open to receiving input from them, Keeping their promise and commitments to others, promoting tolerance kindness and honesty at work place .

This result goes in the same line with a study conducted by **Elsayed et al.** ⁽²³⁾, who studied "The association between Servant Leadership, Career Adaptability and Job Embeddedness among staff nurses working at main Mansoura university hospital, Egypt and found that the highest mean scores of servant leadership was related to humility dimension. Conversely, the previous findings contradicted with a study conducted by **Sorour et al.** ⁽¹⁵⁾ who examined the relationship between servant leadership and it's' role on staff

Nurses' creativity and sustainable development behavior at Shebin el-kom teaching Hospital, Menoufia Governorate and found that the highest mean score of servant leadership was related to courage dimension.

Concerning total level of servant leadership among studied nurses, the finding of the present study indicated that servant leadership level was high as perceived by studied nurses. This might be due to staff nurses perceive their leaders empower them with opportunities so that they develop their skills, give them the authority they need to do their job, they include employees' vision into the organization' goals and objectives, act with integrity and honesty and give them the opportunity to challenge their decisions, be a mentor to them, helping them through a variety of different professional and personal situations, always place team success above personal success and keep promises and commitments to others.

This result goes in the same line with a study conducted by **Maglione et al.** ⁽²⁴⁾ they examined relationship between servant leadership and spirituality among undergraduate and graduate nursing Students at USA and demonstrated that leaders had high levels of servant leadership as perceived by the graduated nurses. As well a study conducted by **Malak et al.** ⁽¹⁾ who examined the impact of practicing servant leadership style among chief nursing officers in nursing organizations at Drexel University, Philadelphia, , USA and demonstrated that servant leadership was highly being practiced among the hospitals.

on the same line a study by **Kul et al.** ⁽²⁵⁾ who examined the effect of nurse managers' servant leadership on nurses' innovative behaviors and job performances to determine the effect of servant leadership on nurses' innovative behavior and job performance for nurses selected from three public hospitals in Istanbul, Turkey and reported that their leaders

had a high levels of servant leadership.

On the other hand, this study result was dissimilar to **Salih et al.** ⁽²⁶⁾ who studied servant leadership and its impact on social loafing: Organizational happiness as moderating" and found that the level of servant leadership was moderate as perceived by the studied nurses, as well **Murphy et al.** ⁽²⁷⁾ who studied the leadership baseline to assess servant leadership and leadership self-efficacy in first year health professions students and stated that servant leadership level was moderate as perceived by studied nurses.

Concerning total level of self-efficacy among studied nurses, The finding of the present study indicated that slightly more than half of studied nurses had a moderate level of self-efficacy, This may be due to staff nurses 'ability to manage to solve difficult problems if they try hard enough, find means and ways to get what they want, they can solve most problems if they invest the necessary effort and If they are in trouble, they can usually think of something to do. This study goes in the same line with a study conducted in south of Iran by **Mehralian et al.** ⁽²⁸⁾ to examine Communication competence, self-efficacy, and spiritual intelligence and showed a moderate level of the nurses' self-efficacy. Conversely the previous study findings contradicted with a study by **Simonetti et al.** ⁽²⁹⁾ who investigated anxiety, sleep disorders and self-efficacy among nurses in Italy and showed that more than half of studied nurses have a low level of self-efficacy.

Concerning relation between servant leadership assessment level and personal and job characteristics of studied nurse's, the finding of the present study indicated that there was statistically significant relation between servant leadership perception and personal characteristics of studied nurses regarding their experience staff

nurses' from the researcher point of view, this could be related to that, experienced staff nurses be more oriented and be able to maintain close relationship with leaders, they feel that their supervisors care for them as persons, encourage them for further growth and development by giving them more authority on carrying out their jobs.

This finding matched with a study by **Gunnarsdottir et al.** ⁽³⁰⁾ to examine if servant leadership useful for sustainable Nordic health care and found that there was statistically significant relation between staff nurses perception of servant leadership and their experience. Conversely, the previous finding contradicted with a study by **Elsayed et al.** ⁽²¹⁾ who found that there was no statistically significant relation between servant leadership and their experience.

Concerning relation between self-efficacy and personal and job characteristics of studied nurses, the finding of the present study indicated that there was only statistically significant relation between Self-efficacy and personal characteristics of studied nurses regarding their gender in favor males who have a high self-efficacy level. Possibly because men have the ability to solve problems and find solutions and emotional stability to cope with problems. This study matched with a study by **Simonetti et al.** ⁽²⁹⁾ who found that there was statistically significant relation between staff nurses self-efficacy and their personal characteristics and gender.

Concerning correlations among servant leadership and self-efficacy among studied Nurses, the finding of the present study shows that there was a highly statistical significant correlation between servant leadership and self-efficacy. These positive correlations meant that highly utilizing and applying of servant leadership approach led to a high level of nurses' Self-efficacy, This may be due to

servant leadership has been proven to promote self-efficacy among staff nurses by encouraging initiative and adaptability to work. Therefore, servant leadership can be considered as a variable that motivates intrinsic motivation in any organization when leadership is focused on the development and growth of the followers, this leads to positive employee's perception regarding their capabilities to perform well and as servant leaders.

This study was in agreement with a study conducted by **Su et al.**⁽³¹⁾ who demonstrated that servant leadership enhances employees' internal motivation and encourages them to engage in innovative behavior with more creative and patient-oriented services.

Conclusion:

In the light of the main study results; it can be concluded that slightly more than half of studied nurses report that their leader had a high level of servant leadership. Also, slightly more than half of studied nurses had moderate level of self-efficacy. In addition, there is a highly statistical significant correlation between servant leadership and self-efficacy score was maintained.

Recommendations:

In view of the main results of the study the following recommendations were derived and suggested:

1. Nurse Managers should adopt servant leadership, and organizations should also design work structures in the workplace that reinforce the advantages of servant leadership and its effect on nurses' self-efficacy.
2. Supportive management provided for health-care professionals to learn new skills and management learning from criticism and admitting mistakes.
3. Encouraging health-care professionals to use their talents, come up with new ideas, and solve problems.
4. Promoting employee competence, then, should become a consistent objective that can benefit organizations by serving as a focal point of leaders' skill advancement and a consistent standard for the appraisal of a leadership training program's success.
5. Creating a perceived supportive environment to increase nurses competence should not be regarded as purely the responsibility of immediate managers, but should also be regarded as a responsibility of other seemingly more distal organizational entities.

Table (1): Frequency and Percentage distribution of the studied nurses according to personal characteristics (n=375)

Variables		N	%
Gender	Males	86	22.9%
	Females	289	77.1%
Age	20-30 years	251	66.9%
	31-40 years	68	18.2%
	41-50 years	41	10.9%
	>50 years	15	4.0%
Social status	Single	165	44.0%
	Married	198	52.8%
	Divorced	5	1.3%
	Widow	7	1.9%
Education	Nursing diploma	69	18.4%
	Technical institute	154	41.1%
	Bachelors	146	38.9%
	Post graduate	6	1.6%
Experience	<5 years	217	57.9%
	5-10 years	54	14.4%
	>10 years	104	27.7%

Table (2): Total mean scores of servant leadership among studied nurses (n= 375)

Dimensions	Dimension score	
	Mean± SD	Median(range)
Empowerment	15.67±4.05	16(7-24)
Stewardship	15.01±4.27	15(5-23)
Accountability	16.15±4.48	16(7-25)
Humility	16.83±4.73	18(6-25)
Standing back	15.82±4.23	17(8-24)
Authenticity	9±3. 3849.	10(4-16)
Courage	18.89±4.88	19(8-27)
Forgiveness	20.64±5.43	21(6-30)
Total mean	127.73±30.76	132(41-197)

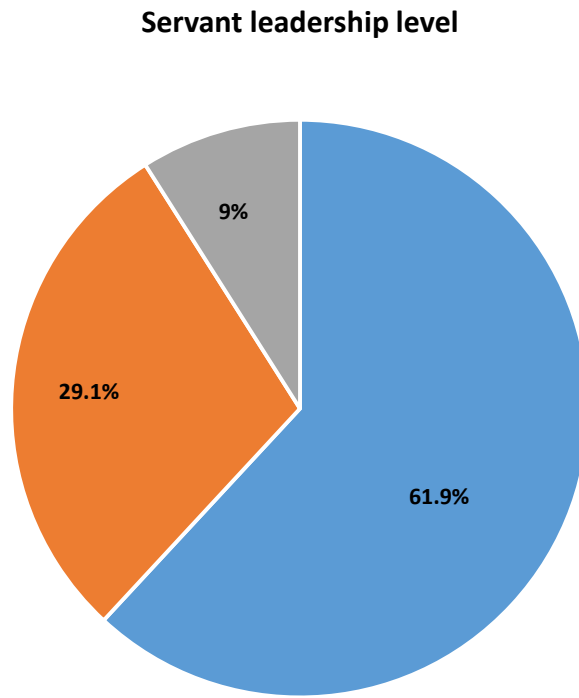


Figure (1): Total level of servant leadership as perceived by studied nurses (n=375)

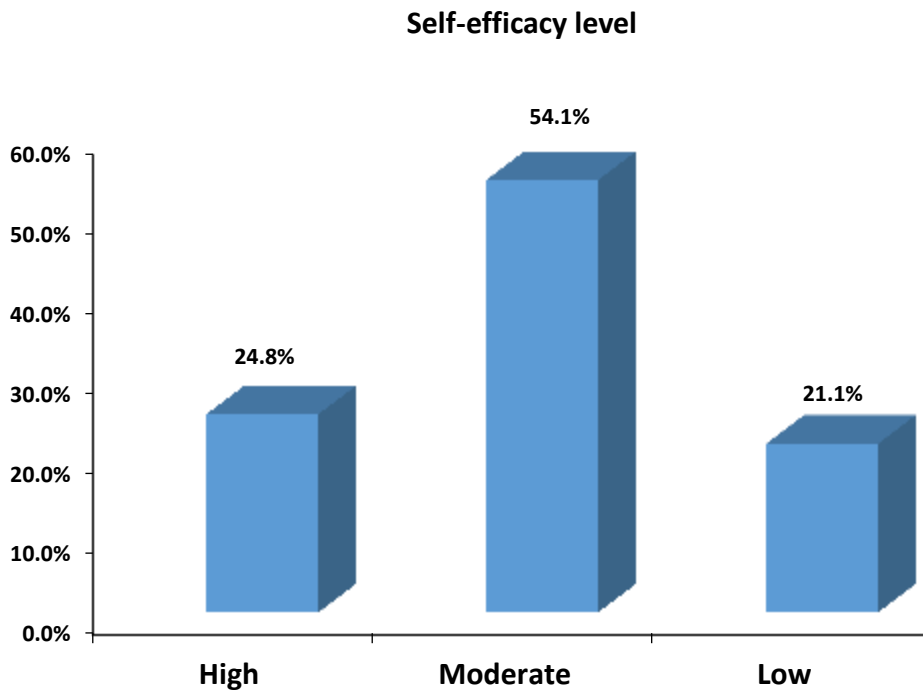


Figure (2): Total level of self-efficacy among studied nurses (n=375)

Table (3): Relation between servant leadership level of studied nurse's and their personal and job characteristics (n==375)

Personal and job characteristics	Servant leadership						n	χ^2	p
	High servant leadership (n.232)		Moderate servant leadership (n.109)		Low servant leadership (n.34)				
	No.	%	No.	%	No.	%			
Gender									
Males	59	68.6	23	26.7	4	4.7	86	3.43	0.18
Females	173	59.9	86	29.8	30	10.4	289		
Age per years									
20-30 years	151	60.2	78	31.1	22	8.8	251	6.89	0.33
31-40 years	39	57.4	21	30.9	8	11.8	68		
41-50 years	29	70.7	9	22.0	3	7.3	41		
>50 years	13	86.7	1	6.7	1	6.7	15		
Social status									
Single	104	63.0	52	31.5	9	5.5	165	7.91	0.25
Married	120	60.6	53	26.8	25	12.6	198		
Divorced	4	80.0	1	20.0	0	.0	5		
Widow	4	57.1	3	42.9	0	.0	7		
Education									
Nursing diploma	37	53.6	25	36.2	7	10.1	69	10.65	0.1
Technical institute	91	59.1	44	28.6	19	12.3	154		
Bachelors	98	67.1	40	27.4	8	5.5	146		
post graduate	6	100.0	0	.0	0	.0	6		
Experience									
<5 years	136	62.7	67	30.9	14	6.5	217	22.196	0.0001*
5-10 years	29	53.7	11	20.4	14	25.9	54		
>10 years	67	64.4	31	29.8	6	5.8	104		

χ^2 Chi square test *significant $p < 0.05$

Table (4): Relation between self-efficacy of studied nurse's and their personal and job characteristics (n=375)

Personal and job characteristics	Self-efficacy						n	χ^2	p
	High Self-efficacy n.93		Moderate Self-efficacy n.203		Low Self-efficacy n.79				
	No.	%	No.	%	No.	%			
Gender									
Males	28	32.6	47	54.7	11	12.8	86	6.34	0.04*
Females	65	22.5	156	54.0	68	23.5	289		
Age per years									
20-30 years	69	27.5	132	52.6	50	19.9	251		
31-40 years	12	17.6	36	52.9	20	29.4	68	6.64	0.36
41-50 years	8	19.5	26	63.4	7	17.1	41		
>50 years	4	26.7	9	60.0	2	13.3	15		
Social status									
Single	49	29.7	84	50.9	32	19.4	165		
Married	40	20.2	115	58.1	43	21.7	198	7.55	0.27
Divorced	2	40.0	2	40.0	1	20.0	5		
Widow	2	28.6	2	28.6	3	42.9	7		
Education									
Nursing diploma	13	18.8	41	59.4	15	21.7	69		
Technical institute	44	28.6	78	50.6	32	20.8	154	5.09	0.53
Bachelors	36	24.7	79	54.1	31	21.2	146		
post graduate	0	.0	5	83.3	1	16.7	6		
Experience									
<5 years	62	28.6	113	52.1	42	19.4	217	8.48	0.08
5-10 years	16	29.6	27	50.0	11	20.4	54		
>10 years	15	14.4	63	60.6	26	25.0	104		

χ^2 Chi square test *significant $p < 0.05$

Table (5): Correlations between servant leadership and Self-efficacy of studied Nurses (n= 375)

Items	Servant leadership assessment	
	(r)	P
Self-efficacy score	0.46**	0.0001

Pearson 'Correlation coefficient (r) ** Correlation is significant $P < 0.01$.

References:

1. Malak, H.M.B., ... et al. Impact of practicing servant leadership style among Chief Nursing Officers in nursing organizations *Journal of Inter professional Education & Practice*. 2022; 29(1).
2. Dahlin, C., and Coyne, P. Palliative nursing leadership essentials. *Journal of Pain and Symptom Management*. 2019; 57(2): 357-358.
3. Yang, J., Gu, J., and Liu, H. Servant leadership and employee creativity: the roles of psychological empowerment and work-family conflict. *Current Psychology*. 2019; 38(6):1417-1427.
4. Simon, E., Mathew, A., and Thomas. V. Demonstrating Servant Leadership during the COVID-19 Pandemic. *Intervarsity Christian Fellowship*. 2022; 39(4): 258-262.
5. Tian, Q., Peng, D., and long Zahang, J. Servant Leadership and Voice Behavior: Self-efficacy as a Mediator. *Advances in Social Science, and Education*. 2018.
6. Murphy, C., Campbell, E., and Sick, B. The leadership baseline: Assessing servant leadership and leadership self-efficacy in first year health professions students. *Journal of Interprofessional Education & Practice*. 2020; 20 (1): 22-99.
7. Chegini, Z., Janati, A., Asghari-Jafarabadi, M., and Khosravizadeh, O. Organizational commitment, job satisfaction, Organizational Justice and self-efficacy among nurses. *Nursing Practice Today*. 2019; 6(10).
8. Mehralian, G., Yusefi, A., Dastyar, N., and Bordba, Communication competence, self-efficacy, and spiritual intelligence: evidence from nurses. *BMC Nursing*. 2023; 22:99.
9. yulihardi, yulihardi, Yenni Del Rosa, & Darman. Servant Leadership, Self-Efficacy and Job Satisfaction, on the Performance of Managers of Alahan Panjang Tourism Object, Solok Regency. *Asean International Journal of Business*. 2022; 1(1): 10-23. <https://doi.org/10.54099/aijb.v1i1.64>
10. Xiong, H., Yi, S., Lin, Y., "The Psychological Status and Self-Efficacy of Nurses during COVID-19 Outbreak: A Cross-Sectional Survey. *The Journal of Health Care Organization, Provision, and Financing*. 2020; 57(1).
11. Mujanah, S.M. The Influence of Self-Efficacy, Competence, and Emotional Quotient on Employee Performance through Career Development as Intervening Variables in Companies. *Advances in Economics, Business and Management Research*. 2020;115 17th
12. Bandura, A. Health promotion by social cognitive means. *Health Educ Behav*. 2004; 31(2): 143-64.
13. Eva, N., Robin, M., Sendjaya, S., Dierendonck, D., and Liden, R. "Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*. 2019; 30(1): 111-132.
14. Nathan E, Robin M, & Robert C, Servant Leadership: A systematic review and call for future research. *The Leadership Quarterly Journal*. 2018; 7(2):21.
15. Sorour, M.S., Khairy, H.A., and Elkholy, S.M. Relationship between Servant Leadership and its' Role on Staff Nurses' Creativity and Sustainable Development Behavior. *Assiut Scientific Nursing Journal*. 2021; 9(24): 87-101.
16. Yamin, M.A.Y. Examining the Effect of Organizational Innovation on Employee Creativity and Firm Performance: Moderating Role of Knowledge Sharing between Employee Creativity and Employee Performance. *International Journal of Business Innovation and Research*. 2020; 22(3): 447-467.
17. Van Dierendonck, D., Sousa, M., Gunnarsdóttir, S., Bobbio, A.,

- Hakanen, J., Pircher Verdorfer, A., Cihan Duyan, E., and Rodriguez-Carvajal, R. The Cross-Cultural Invariance of the Servant Leadership Survey: A Comparative Study across Eight Countries. *Administrative Sciences*. 2017; 7(2):8.
18. Schwarzer, R., and Jerusalem, M. Generalized Self-Efficacy scale. In *Measures in health psychology: A user's portfolio. Causal and control beliefs* Windsor. Weinman J, Wright S, Johnston M, Nfer-nelson UK.1995; 35-37.
 19. Xie, J., Luo, X., Zhou, Y. ... et al. Relationships between depression, self-efficacy, and professional values among Chinese oncology nurses: a multicenter cross-sectional study. *BMC Nurse*. 2023; 22: 140.
 20. Elsayed, R., and Abdel-Ghan, A.M. The association between Servant Leadership, Career Adaptability and Job Embeddedness among Staff Nurses at Main Mansoura University Hospital, *Tanta Scientific Nursing Journal*. 2022; 25(2):217-234.
 21. Mahgoub, S.A., Shazly, M.M., and El-sayed, S.M. Relationship between work environment and innovative behavior among staff nurses. *Egyptian Journal of Health Care*. 2019; 10(3): 64-76.
 22. Otuwurunne, M. Exploring the Relationship between Nurse Supervisor's Servant Leadership Behavior and Nursing Employee's Self-Assessment of Engagement and Burnout in Nigeria. 2023. *Seton Hall University Dissertations and Theses (ETDs)*. 3084.
<https://scholarship.shu.edu/dissertations/3084>
 23. Elsayed, R., and Abdel-Ghan, A.M. The association between Servant Leadership, Career Adaptability and Job Embeddedness among Staff Nurses at Main Mansoura University Hospital. *Tanta Scientific Nursing Journal*. 2022; 25(2):217-234.
 24. Maglione, J.N.K. Servant Leadership and Spirituality Among Undergraduate and Graduate Nursing Students" *Journal of Religion and Health*. 2021; 60:4435-4450.
 25. Kul, S.S., and Sonmez, B. The effect of nurse managers' servant leadership on nurses' innovative behaviors and job performances. *Leadership & Organization Development Journal*. 2021; 42 (8): 1168:1184.
 26. Salih, A.A, and Hijazin, A.F. Servant leadership and its impact on social loafing: organizational happiness as moderating. *International Journal of Psychosocial Rehabilitation*. 2020; 24(10).
 27. Murphy, C., Campbell, E., Boland, P., and Sick, B. The leadership baseline: Assessing servant leadership and leadership self-efficacy in first-year health professions students. *Journal of Interprofessional Education and Practice*. 2020; 20,100354.
 28. Mehralian, G., Yusefi, A.R., Dastyar, N., and Bordbar, S. Communication competence, self-efficacy, and spiritual intelligence: evidence from nurses. *BMC Nurs*. 2023; 22(1):99.
 29. Simonetti, V., and Durante, A. Anxiety, sleep disorders and self-efficacy among nurses during COVID-19 pandemic: A large cross-sectional study. *Journal of clinical Nursing WILEY*. 2022; 30:1360-1371.
 30. Gunnarsdottir, S. Is Servant Leadership Useful for Sustainable Nordic Health Care? *Nordic Journal of Nursing Research*. 2014; 34: 53-55.
 31. Su, W., Lyu, B., Chen, H., and Zhang, Y. How does servant leadership influence employees' service innovative behavior? The roles of intrinsic motivation and identification with the leader. *Baltic Journal of Management*. 2020; 15(4): 571-586.