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ORIGINAL ARTICLE

The Relationship between the new Leadership Styles and Nursing Productivity

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ABSTRACT

Background: Current and innovative trend leadership styles entail transformational, laissez-faire, passive-avoidant, and transactional leadership styles.

Aim: To examine the relationship between nurse leaders' new leadership styles and nursing productivity at King Fahad Hospital in Al Medina Al Munawara.

Material and Methods: A descriptive correlational research design was used to collect the appropriate data. A convenient sampling (n=47) of all nurse's leaders at King Fahad Hospital in Al Madinah Al-Munawara filled three data collection tools. The tools queried demographic data, Multifactor Leadership Questionnaire Rater Form to measure leadership and NHS Knowledge and Skills Framework to measure nurse's productivity. Pearson correlation was used to investigate the correlation further with a significance level of at P= <0.05.

Results: Transformational and transactional leadership styles increase staff nurses skills as communication, personnel and Professional development, health safety, security, quality, equality, and diversity. Additionally, the leadership styles improve service improvement, interventions, and treatments.

Conclusion and Recommendations: The implementation of transformational and transactional leadership styles is imperative for the nursing practice that seeks to increase the productivity of the nurses, a new leadership style has effect of transactional, transformational, passive-avoidant, and laissez-faire confirms the varied respondents of different demographic groups.

Keywords: Relationship, new leadership, styles, nursing, productivity

INSTRODUCTION

Research Problem: Low productivity among nurses is a key challenge for healthcare systems across the globe, including Saudi Arabia. (Valiel et al.,2016). However, creating structures to enhance and measure individual nurse productivity to maintain the high scores in the delivery of patient care. Yakusheva et al., 2019. Saudi Arabia taking a critical step to increase local nursing productivity by training their professionals to generate sustainable quality patient care(Bell., 2019).

simplifying that action involves transactional leadership behaviors, which are aligned with actions that support simple expectations to realize expected rewards, avoid punishments, and enable achieving the desired reward (Al-Maqbali., 2017).

Significance of the Research: Professional nurse will increase the productivity and efficiency of utilizing the resources within the healthcare system. Otherwise, the management and leadership can use different strategies to build satisfaction and organizational commitment of the nursing staff (Asrar-ul Haq&Kuchinke., 2016). The Saudi Arabia 2030 Vision requires ways to improve the productivity of the local nursing staff to meet the demand for quality healthcare (Alsufyani et al., 2020).

Aim: To examine the relationship between nurse leaders' new leadership styles and nursing productivity at King Fahad Hospital in Al Medina Al Munawara.

Research Questions: What is the relationship between new leadership styles and the productivity of the nursing staff at KFH in Madinah?

Literature Review Findings: Leadership Styles of Nurse Leaders: Transformational leadership has permeated the nursing practice and influence the conduct and action of nurse leaders. Poghosyan and Bernhardt .2018 conducted a cross-sectional survey to investigate the use of transformational leadership by 278 primary care nurses in New York. The study used a large representative sample despite focusing on nurse practitioners in general as opposed to the nurse leaders in the primary care units. At least 50% concurred that transformational leadership created idealized influence, stimulated nurses' intellect, inspired motivation, and fostered individual considerations. Transformational leadership influenced job satisfaction more than transactional leadership did. Richards.,2020 confirmed the effectiveness of transactional leadership in fostering improved nursing practice by promoting greater nursing proficiency through transactional leadership. Transformational leadership was more popular and impactful for the social functioning of nurses than the laissez-faire style. Nursing Staffs' Productivity Level: In relation to nurses different productivity levels based Wang et al. ,2019studied the mediating effect of inclusive leadership and its impact on work engagement and innovativeness of Chinese head nurses. based on a scoping review of 12 cross-sectional studies. The existence of structural empowerment for nurse managers and staff enhanced their positive perceptions towards care. The relation between leadership styles and the productivity of the nursing: Different leadership styles character the outcomes of the nurses and productivity within the healthcare environment. Cummings et al., 2018. The experience translates into the exceptional long-term performance of nurses. Barkhordari-Sharifabad, Ashktorab, and Atashzadeh-Shoorideh (2017) used a smaller sample of 14 than Yeh et al. ,2016 did but focused on ethical leadership. The effect of transformational leadership in handling adverse events within the nursing practice was more pronounced in another study by Liukka, Hupli, and Turunen (2017).

METHODOLOGY

The researcher developed three tools for data collection, which included demographic data,multifactor leadership questionnaire, and nursing productivity.

Research Design: A descriptive correlational design was used to collect the appropriate data.

Data Collection Methods: Three data collection tools using different data collection modalities were valuable in collecting a large volume of data.

Tool 1: Nurse's Demographic Data (Appendix I): The researchers developed this tool to collect personal demographic data to underscore the participants' new leadership styles.

Tool 1: Nurse's Demographic Data (Appendix I): The researchers developed this tool to collect personal demographic data to underscore the participants' new leadership styles and their nursing productivity. The data included age, gender, education, years of experience, work title or position, and department. The

demographic data was the primary identifier of the nurses working in different settings or units at KFH. The insights allowed the establishment and subsequent prediction of the relationship to the specific sociodemographic component.

Tool 2: Multifactor Leadership Questionnaire (Appendix II): The Multifactor Leadership Questionnaire Rater Form (MLQ 5x-Short). adapted tool from Bass and Avolio., 2004 for the MLQ 5x-Short to evaluate the different new leadership styles of nurse leaders at all three levels. The 45-item questionnaire queried the respondents about all levels of nursing leaders by rating the occurrence of performances and activities. A 5-point Likert scale ranged from 0 (not at all) to 4 (frequently, if not always) was used to rate the leadership styles by the participants at KFH.

Tool 3: The Nursing Productivity (Appendix III): The NHS Knowledge and Skills Framework (NHS KSF) was used to gather the different perspectives on nursing productivity for leaders who adopted specific leadership styles Based on (The Agenda for Change Project Team. 2004), additionally the nursing productivity components included the assessment and treatment planning, interventions, and treatments as they underscored the different perspectives of nursing productivity.

Instruments' Reliability and Validity: The researchers must ensure that data collection tools meet face content, and construct validity. The researchers then proceeded to ascertain the three tools' ability to satisfy internal consistency and test-retest reliability as suggested by Harvey and Land (2017).

Pilot study: The pilot study was conducted on 10 % of the total sample queried in the research. The modification of tool was then done according to the result of the pilot study.

The validity of Transformational leadership styles: The Transformational leadership styles were measured using five dimensions or styles scales in a 5-point Likert scale. The Cronbach alpha revealed a representative value whereas (α=0.772), and the correlation between each item and the total degree of the scale was high as it ranged between (r=0.99) and (r=24) ($p<0.05$), the test found no significant correlations (MBEA2 and MBEA4). The scale was validated for the study purposes.

Operationalization of Data Collection: The development of valid and reliable data collection tools initiated the collection of insights from the respondents.

Research Setting: The study was conducted at King Fahad Hospital in Al Madinah Al-Munawara, Saudi Arabia. The hospital capacity consisted of 300-bed the nurses a platform to exercise their leadership skills and restructure their productivity (King Faisal Specialists Hospital., 2020).

Research Population

Target Population: The target population was nursing leaders' from different categories at KFH, located at Al Madinah Al-Munawara, Saudi Arabia. The prospective participants were the nursing directors, head nurses, and nursing supervisors who assumed different roles in varied nursing units within the hospital.

Sample Size: The participants of this study were a convenient sample of 47 of all available nurse leaders across three levels working at King Fahad Hospital in Al Madinah Al-Munawara at the time of data collection.

Sampling Method: A convenient sample was selected after equation computation. The researcher will maximize the response rate and minimize. The sample size was determined at the time of data collection as they were all nurse leaders working at KFH.

Data Analysis Method: IBM-SPSS was used for data analysis to accomplish the primary aim of the correlational. Inferential statistics such as the independent sample t-test, One-Way ANOVA were selected to establish the correlation between the variables and answer the research questions. The significance level was set at P=<0.05 value. The value indicated the existence of any statistical difference between new leadership styles and nurses' productivity.

Ethical Considerations and Administration: Ethical approval was obtained through requested the University of Umm Al Qura

RESULTS

Research Findings: The pilot study was conducted on 10 % of the total sample at King Fahad Hospital in Al Madinah Al-Munawara, Saudi Arabia.

Data Analysis: The statistical package for the Social Sciences (SPSS, IBM Version 24). Demographic data was managed as categorical and numerical variables; these data include age, gender, experience, educational level, etc.

Part I: Managers nurses ' Personal and demographic Data: Table 1 shows the distribution of head nurses in relation to their demographic characteristics. It was noted in table 1 that more than half of the participants (61.7%) were female while 38.3% of the study participant was male. To analyze the number of participants according to their age, the mean age of participants was 4.3% of the respondents aged between 20 to 30 years old. The age category between 31-40 years old constituted the majority of the study participants (85.1%), while the participant ages between 41-50 years old constituted just only 10.6%of the study sample. Moreover, more than half (63.8%) of the participants were married and 36.2% were single. In relation to the educational level, it was found that 59.6% of respondents have bachelor degree, 14.9% of them have diploma degree and 25.5% of the respondents have a master degree.

Table 1: distribution of head nurses in relation to their demographic response (N=47)

Demographic Response of Study Participants		N	%
Gender	Female	29	61.7
	Male	18	38.3
Marital status	Married	30	63.8
	Single	17	36.2
Job position	Supervisor	7	14.9
	Overall supervisor	4	8.5
	Head nurse	30	63.8
	Nursing director	4	8.5
	Office nurses	2	4.3
Age	20-30	2	4.3
	31-40	40	85.1
	41-50	5	10.6
level of education	Bachelor.	28	59.6
	Diploma	7	14.9
	Master	12	25.5
years of experience	3-5.	3	6.4
	6-9.	5	10.6
	10 or more	39	83
Hospital departments	Burns	1	2.1
	Emergency	2	4.3
	ICU department	2	4.3
	Medical	9	19.1
	Neurosurgical	3	6.4
	Other	23	48.9
	Outpatient department	2	4.3
	Surgical	5	10.6
Numbers of subordinates	10-20.	8	17
	21-30	14	29.8
	31-40	8	17
	less than 10	17	36.2
Number of working hours per week	40 or less	6	12.8
	71-80	1	2.1
	41-50	29	61.7
	51-60	5	10.6
	61-70	4	8.5

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relation to the educational level, it was found that 59.6% of respondents have bachelor degree, 14.9% of them have diploma degree and 25.5% of the respondents have a master degree. Additionally, 63.8% of the respondents were head nurses, while, just only 8.5% were overall supervisor and nursing director. In relation to head nurses working experience, it was noted that the majorities (83.0%) of the respondents have experience 10 years and more, while only 6.4% of the respondents have experience between 3-5 years. Regarding the hospital department the majority of participants in other were (48.9%) follow by medical were(19.1%). Regarding number of subordinates, it was found that slightly more than one third (36.2%) of the head nurses have less than 10 subordinate, while the biggest numbers of subordinates (31-40) only leaded by 17% of nurses leaders . When analyzing number of hours working per week, it was noted that more than half (61.7%) of the respondents were working for 41-50 hours per week.

Part II: Shapiro-Wilk Normality for selected Variables: To determine the data is normally distributed or not, test of Normality were used. From (Table 2), the p-value for variables(transformational, transactional, communication, personnel, and people development, health safety and security, service improvement, quality and intervention, and treatment) are greater than 0.05 level of significance.

Table 2: Shapiro-Wilk test.

Field	Shapiro-Wilk	
	Statistic	P-value
Transformational	0.939	0.439
Transactional	0.939	0.443
laissez- faire	0.800	0.007
MLQ	0.860	0.039
Communication	0.913	0.199
Personnel, and people development	0.909	0.180
Health safety and security	0.901	0.137
Service improvement	0.936	0.404
Quality	0.895	0.114
quality and diversity	0.863	0.042
Assessment and treatment planning	0.846	0.025
Interventions, and treatments	0.910	0.185
Nurse productivity	0.814	0.010

Part III: Leadership Style of the Nurse Managers: Table 3 displays that the mean score of nurses' managers 'leadership styles.

Table 3: Descriptive Statistics (Mean and Std. Deviation) for Leadership Style

Item	N	Mean	SD
All items of the transformational style	47	1.770	0.712
All items of the Leadership Styles	47	2.240	0.688
All items of the transactional style	47	2.289	0.672
All items of the Leadership Styles	47	2.240	0.688
All items of the laissez- faire	47	2.620	0.850
All items of the Leadership Style	47	2.240	0.688

Table 3 shows that the mean of the field “transactional leadership style "which equals 2.2890 and Std. Deviation equal 0.672 05, those findings indicates that the respondents were moderately agree to all items of this field. also shows that the mean of the field “laissez- faire leadership style "which equals 2.6195 and Std. Deviation equal .84977, and those values indicates that the respondents highly agree to all items of this field**.**

Part IV: Staff Nurses’ Level of productivity: The NHS knowledge and skills framework (NHS KSF): T NHS KSF was developed by (Agenda for Change Project Team 2004). It was adopted and modified by the researchers and want to identify the nurses' productivity level and appraise their performance by their leaders. The tool was consisted of a major competencies like (Communication, Personnel, and people Development, Health Safety and Security, Service improvement, Quality, Equality and diversity,.

Table 4: Distribution of staff Nurses’ Level of productivity

Item	N	Mean	SD
All items of the Communication	47	3.234	0.508
All items of the Health Safety and Security	47	3.301	0.485
All items of the Service improvement	47	3.228	0.584
All items of the Quality	47	3.234	0.551
All items of the Nurse's productivity	47	3.230	0.430
All items of the Equality and diversity	47	3.234	0.517
All items of the Assessment and treatment planning	47	3.252	0.456
All items of the Interventions, and treatments	13	3.094	0.354
All items of the Nurse productivity	47	3.230	0.430
All items of the Personnel, and people Development	47	3.174	0.528
All items of the Nurse productivity	47	3.230	0.430

Regarding the mean score that equals to (3.2340, 3.2515, and 3.0940 respectively) and Std. Deviation that equals to (.51711, .45605, and .35383 respectively) of the field “Equality and diversity, Asses sment and treatment planning, Interventions, and treatments”

Also shows that the mean scores of the field “Personnel, and people Development” that equals 3.1738 and Std. Deviation which equal .52814, and those values indicates that the respondents have a moderate level of agree to all items .

Part V: Relationship between the nurses' demographic characteristics and nurse productivity One-Way ANOVA test was used to determine whether there are a relationship between demographic characteristic and nurse's productivity by compares the p-value to significance level.

Table 5: Distribution relationship between demographic characteristic and nurse's productivity(gender, age)

Table 5	Gender		Age	
Field	t	P-Value	t	P-Value
Communication	0.594	0.555	1.408	0.256
Personnel, and people Development	0.116	0.908	0.379	0.687
Health Safety and Security	-0.255	0.800	0.179	0.836
Service improvement	-0.636	0.528	0.250	0.780
Quality	-0.565	0.575	0.733	0.486
Equality and diversity	0.021	0.983	0.082	0.921
Assessment and treatment planning	0.857	0.396	0.127	0.881
Interventions, and treatments	0.293	0.775	0.155	0.701
Nurse productivity	0.594	0.555	1.408	0.256

Regarding the gender to determine whether any of the relationship between nurse's gender and their productivity Table 5 shows that the p-value (Sig.) is greater than the level of significance α = 0.05 for each field**,** then there is no significant difference was found among the respondents toward each field in relation to their gender**.** It can be said that gender has no effect on each field. Regarding the Age to determine whether there was a relationship between nurse's age and their productivity Table 5.2 shows that the p-value (Sig.) is greater than the level of significance α = 0.05 for each field. So, there is no significant difference was found among the respondents toward each field in relation to their age. It can be said that age has no effect on each field.

5.2 Distribution relationship between demographic characteristic and nurse's productivity (level of education , Experience years). Regarding the level of education determine whether there is a relationship between level of education and nurse productivity, Table 5.2 shows that the p-value (Sig.) is smaller than the level of significance α = 0.05 for the fields of “Quality and Assessment and treatment planning” . So, a significant difference was found among the respondents toward

these fields in relation to the level of education. It can be said that nurses' level of education has an effect on these fields.

Table 5.2: Distribution relationship between demographic characteristic and nurse's productivity (level of education, Experience years)

Table5.1	ANOVA test for level of education		ANOVA test for Experience years	
	F	P-value	F	P-value
Quality	5.852	0.006		
Assessment and treatment planning	4.080	0.024		
Communication	1.467	0.242	1.275	0.290
Personnel, and people Development	2.341	0.108	0.618	0.544
Health Safety and Security	1.436	0.249	1.758	0.184
Service improvement	0.478	0.623	0.223	0.801
Equality and diversity	2.263	0.116	1.035	0.364
Interventions, and treatments	3.241	0.099	0.346	0.710
Nurse productivity	2.541	0.090	0.835	0.441
Interventions, and treatments			0.490	0.498
Nurse productivity			0.646	0.529

For the other fields, table 5.2 shows the p-value (Sig.) is greater than the level of significance α = 0.05, then there is no significant difference was found among the respondents toward these fields in relation to their level of education. It can be said that nurses' level of education has no effect on the other fields of productivity. Also regarding determine whether there were any relationship between years of experience and nurse productivity shows that the p-value (Sig.) is greater than the level of significance α = 0.05 for each field, then there was no significant difference were found among the respondents toward each field in relation to their years of experience. It can be said that the year of experience has no effect on each field.

Part VI: Relationship between Leadership Styles of Nurse Manager and nurse productivity.

Table (6) shows the Correlation that the p-value (Sig.) between "transformational, transactional, laissez- faire" and nurse productivity is less than 0.05. So, there are a statistically significant correlation were found at α = 0.05 between "transformational, transactional, laissez- faire" and nurse productivity.

Table 6

	r	P-value
transformational and nurse productivity	0.333	0.011
transactional and nurse productivity	0.449	0.001
laissez- faire and nurse productivity	0.302	0.019
Transformational Leadership Style and Communication	0.339	0.010
Transformational Leadership Style and Personnel, and people Development	0.349	0.001
Transformational Leadership Style and Health Safety and Security	0.300	0.019
Transformational Leadership Style and Quality	0.372	0.005
Transformational Leadership Style and Equality and diversity	0.328	0.012
Transformational Leadership Style and Service improvement	0.209	0.079
Transformational Leadership Style and Assessment and treatment planning	0.238	0.054
Transformational Leadership Style and Interventions, and treatments	-0.134	0.332
Transactional Leadership Style and Interventions, and treatments	-0.043	0.455
Laissez-faire Leadership Style and Communication	0.527	0.000
Laissez-faire Leadership Style and Personnel, and people Development	0.313	0.016
Laissez-faire Leadership Style and Health Safety and Security	0.263	0.037
Laissez-faire l Leadership Style and Quality	0.301	0.020

Relationship between Nurse Managers' Transformational Leadership Style and Staff Nurses' Level of productivity: To determine whether any of the relationship between transformational leadership styles and nurse productivity Table 6 shows The p-value (Sig.) is less than 0.05., So, There were a statistically significant relationship were found between Transformational Leadership Style and (Communication, Personnel, and people Development, Health Safety and Security, Quality, Equality and diversity) at α = 0.05. Relation between Transformational Leadership Style and nurse productivity: As shown by Table 6 the p-value (Sig.) is greater than 0.05. So, there is no significant relationship between. Transformational Leadership Style and (Service improvement, Assessment and treatment planning and Interventions, and treatments) at α = 0.05**.**

Relationship between Nurse Managers' Laissez-faire Leadership Styleand Staff Nurses' Level of productivity: To determine whether any of the relationship between laissez-faire leadership styles and nurse productivity Table 6.1 shows that the p-value (Sig.) is less than 0.05, . So, there were a statistically significant relationship found between Laissez-faire Leadership Style and (Communication, Personnel, and people Development, Health Safety and Security and Quality) at α = 0.05.

Table 6.1: Correlation coefficient between Laissez-faire Leadership Style and nurse productivity

Items	r	P-Value
Relationship between Laissez-faire Leadership Style and Communication	0.527	0.000*
Relationship between Laissez-faire Leadership Style and Personnel, and people Development	0.313	0.016*
Relationship between Laissez-faire Leadership Style and Health Safety and Security	0.263	0.037*
Relationship between Laissez-faire l Leadership Style and Quality	0.301	0.020*

Part VII: Regression Analysis of Leadership Style and Staff Nurses productivity: The Simple Linear Regression Model was used, and the following table illustrates the correlation coefficient R =0.333 and R-Square = 0.111. This means 11.1% of the variation in Staff Nurses productivity is explained by Leadership Style. The Analysis of Variance for the regression model. F=5.623, p-value (Sig.) less than 0.05, so there was a statistically significant relationship between Staff Nurses productivity and the Leadership Style. The t-test =2.371, the P-value (Sig.) less than 0.05, Hence this variable has a positive statistically significant. Correlation between leadership styles & nurse's productivity

DISCUSSION

The following a discussion about the results of the study conducted at KFH Al Madinah Al-Munawara, Saudi Arabia to examine the relationship between the new forms of nursing leadership and nurse productivity. The discussion outlines the profile of the participants and the various nursing leadership style that influence different aspects of productivity in staff nurses.

Demographic Response of Study Participants: The demographic characteristics of the respondents include gender, marital status, and ages of at least 20years. Based on the finding of the present study the population shows the implementation of nursing leadership styles transcends the identity of the nurse leaders as they seek better outcomes from their followers. The claims underline the role of transformational leadership in inspiring performance through its idealized influence, stimulated nurses' intellect, inspired motivation, and individual consideration. Nursing staff rely on the transactional and laissez-faire leadership styles of their nurse managers to shape their motivation for work, execution of safe practice, and advance the quality service that meets patients' expectations as well as satisfaction. For instance, Yoon, Kim, and Shin (2016) associated the clinical experiences of RNs with the exceptional delegation confidence and improvement of healthcare execution at the subordinate level. The RNs understood the value of adopting transformational, and extraversion with

experience nurse managers as emphasized by Yeh et al. ,2016 or openness and improved their performance as Barkhordari-Sharifabad, Ashktorab, and Atashzadeh-Shoorideh (2017) who established analysis of leadership styles versus personalities. The findings of the present study reveal that the year of experience, different hospital departments, number of followers or subordinates, and working hours define the adoption of leadership styles to enhance productivity. Theses finding goes in the same way with Abdelhafiz et al. ,2016 who emphasized on that when they noted potential varied outcome patterns within the nursing workforce as well as the clinical work environment. Also, the adoption of transformational, transactional, or laissez-faire leadership shapes the quality of the work environment for the staff nurses which the styles influence the models of care, Additionally, Cummings et al., 2018 recommended that each style influences behaviors, staff's growth, patients' satisfaction, leaders' satisfaction, and their productivity levels, perceptions towards the transformational, transactional, and laissez-faire styles with the nurses. Leadership Style of the Nurse Managers: Current study revealed that the outcomes of nurses' leadership styles are transformational, transactional, Laissez-Faire leadership styles as the most prevalent approaches. It displayed the mean responses of the leadership styles (M = 2.23) transformational leadership (M = 1.77), transactional leadership (M = 2.28), and laissez-faire leadership (M = 2.61). Theses finding goes in the same line with previous finding.

Staff Nurses' Level of productivity: Regarding different competencies underline the productivity of staff nurses. the present study revealed that factors such as communication, personnel, and people development, health, safety and security and the competencies further include service improvement, quality, equality and diversity, assessment and treatment planning, interventions, and treatments remains as indicator directed to measure the performance appraisal potential of nurses when nurse leaders execute their leadership style in different contexts of clinical practice. These findings supported with Wang et al 2019 who highlighted on examined the impact of inclusive leadership on the work engagement as well as innovativeness of staff nurses and reported that overall transformation of the nurses' productive capacities as they experienced increased interactions with nurses, guidance, and participative approach on their clinical practice.

Relationship between Leadership Styles of Nurse Manager and Nurse Productivity: According to the findings of the present study regarding different leadership styles that influence productivity of the nurses. The present study revealed that the three styles of leadership including transformation, transactional, and laissez-faire leadership by the nurse leaders affect productivity in different ways. For instance, Dhaliwal and Hirst., 2018found that transformational leadership led to the support for the staff nurses and appropriate working environment. On the other hand, Morsiani et al. 2016 considered the style as the means to caring for the nurses.

Transformational Leadership and Nurses' Productivity: Concerning relationship between Transformational leadership style and nurse's productivity, the present study revealed that there is a positive relationship was found between transformational leadership with nursing productivity. Current study revealed that Transformational leadership increases staff nurse's productivity by enhancing communication, personnel, and people development, health safety and security, quality, equality and diversity. These findings supported with Goedhart, van Oostveen, and Vermeulen., 2017 Moreover, the finding of the present study showed that nurse leaders who adopt transformational leadership style further influence the productivity of nurses by promoting their service improvement, assessment and treatment planning and interventions, and treatments. These findings agree with the reports of several previous studies on the effect of transformational leadership in different aspects nursing care productivity. In this regard, Fischer.,2016 established the usefulness of the leadership in service improvement, planning, interventions, and treatment protocols because it changed the behaviors as well as practices of the nurses. Brewer et al., 2016. Therefore, nurse managers build professional development, reduce errors and adapt to patients' needs.

Transactional Leadership and Nurses' Productivity: Concerning the relationship between transactional leadership and nurse's productivity, the present study revealed that there is a positive relationship between transactional leadership and staff nurses' productivity. This finding goes in the same line with Goh et al., 2018 who confirmed the positive perception of staff nurses towards transactional leadership among nurse managers and RNs, which the effect of transactional relationship on the organizational outcomes shaped the high perceptions as nurses' increases their self-awareness of clinical practice. From another point of views, The findings confirm the assertions of another analysis by Morsiani, Bagnasco, and Sasso .,2016.

Laissez-faire Leadership Style, as Perceived by Staff Nurses, and Level of Productivity: Concerning the relationship Laissez-faire Leadership Style and nurse's Level of Productivity as they Perceived, the present study revealed that Laissez-Faire leadership has a positive relationship with staff nurses' productivity as much as they recognize the invaluable role of transformational and transactional leadership. This finding supported with Specchia et al., 2021 on the nature of laissez-faire leadership in promoting centralized decision-making, then allowing the staff nurses to select the best possible solution to the different work conflicts. Nurses adopt creative approaches to different patient situations and network with their fellow subordinate nurses to enhance their effectiveness in the clinical practice. Furthermore, Lui and Johnston.,2019 argued that the confidence level of the nurses increases as the nurses' leaders dictate the role execution and engagement. Otherwise, the present study confirmed that Laissez-Faire leadership style does not influence quality work improvement, equality and diversity, assessment and treatment planning and interventions, and treatments. According to Agreeably, Nielsen et al., 2019 laissez-faire leadership style associated with increased anxiety levels due to the non-participative decision-making by the nurse leaders. Also, Glambek et al. (2018) highlighted on the non-responsive leadership behavior created by the laissez-faire approach as it may increase victimization of the staff nurses.

Leadership Style and Staff Nurses Productivity: The present study revealed that there is a clear link between different leadership styles and staff nurses' productivity. According to Sabbah et al. (2020), the adoption of transformational and transactional leadership styles fosters professional development while creating the relationship and healthcare environment for executing the patient care roles.

CONCLUSION

A new leadership style has effect of transactional, transformational, passive-avoidant, and laissez-faire confirms the varied respondents of different demographic groups.

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