

العنوان باللغة العربية

العلاقة بين أساليب القيادة ونتاجية التمريض

The Relationship Between the New Leadership Styles and Nursing Productivity

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المستخلص : Abstract

الخلفية: تستلزم أساليب القيادة الاتجاهية الحالية والمبتكرة أساليب قيادة تحويلية، وعدم التدخل، والتجنب السلي، والمعاملات. وبالتالي، تؤثر أنماط القيادة المختلفة على نتائج العمل في مجال التمريض. يمثل انخفاض الإنتاجية بين الممرضات تحديًا رئيسيًا لأنظمة الرعاية الصحية على مستوى العالم، بما في ذلك المملكة العربية السعودية.

الهدف: دراسة العلاقة بين أنماط القيادة الجديدة لقادة التمريض وإنتاجية التمريض في مستشفى الملك فهد بالمدينة المنورة.

الطرق: تم استخدام تصميم البحث الارتباطي الوصفي لجمع البيانات المناسبة. عينة ملائمة (العدد = 47) من جميع قادة الممرضات في مستشفى الملك فهد بالمدينة المنورة قامت بملء ثلاث أدوات لجمع البيانات. استفسرت الأدوات عن البيانات الديموغرافية، ونموذج استبيان القيادة متعدد العوامل لقياس القيادة، وإطار المعرفة والمهارات التابع لبيئة الخدمات الصحية الوطنية لقياس إنتاجية الممرضة. قام IBM-SPSS v.24 بإدارة المتغيرات الفئوية والعديد للبيانات الديموغرافية. قامت الإحصائيات الاستنتاجية لاختبار t لعينة مستقلة، وتحليل التباين الأحادي (One-Way ANOVA) بتحليل العلاقة بين أساليب القيادة وإنتاجية التمريض. تم استخدام ارتباط بيرسون لمزيد من التحقيق في الارتباط بمستوى أهمية عند $P = <0.05$

النتائج: أساليب القيادة التحويلية والمعاملات تزيد من مهارات الممرضات مثل التواصل والموظفين والتطوير المهني والسلامة الصحية والأمن والجودة والمساواة والتنوع. بالإضافة إلى ذلك، تعمل أساليب القيادة على تحسين تحسين الخدمة والتدخلات والعلاجات. ومع ذلك، وجدت النتائج أنه لا توجد علاقة ذات دلالة إحصائية بين قيادة سياسة عدم التدخل وإنتاجية التمريض.

الاستنتاجات والتوصيات: إن تنفيذ أساليب القيادة التحويلية والمعاملات أمر ضروري لممارسة التمريض التي تسعى إلى زيادة إنتاجية الممرضات. تجري الدراسات المستقبلية دراسة طويلة للعثور على الآثار طويلة المدى لنموذج المعاملات التحويلي على إنتاجية الممرضات العاملين.

Abstract

Background: Current and innovative trend leadership styles entail transformational, laissez-faire, passive-avoidant, and transactional leadership styles. Thus, different leadership styles influence work outcomes in the nursing field. Low productivity among nurses is a key challenge for healthcare systems globally, including Saudi Arabia.

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

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. IBM-SPSS v.24 managed demographic data categorical and numerical variables. Inferential statistics of independent sample t-test, One-Way ANOVA analyzed the association between leadership styles and nursing 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. However, the findings found that there is no significant relationship between Laissez-Faire leadership and nursing productivity.

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. Future studies conduct a longitudinal study to find the long-term effects of the transformational, transactional model on the productivity of staff nurses.

الفصل الأول

المقدمة:

1.1.Research Problem

Low productivity among nurses is a key challenge for healthcare systems across the globe, including Saudi Arabia. The poor commitment to service delivery creates preventable harms besides causing increase morbidity and mortality. Some hospitals confront competing priorities of high administration costs, increased population, and pressure to deliver quality healthcare. Consequently, nurses face the reality of variable products, which have implications on the quality of patient outcomes. Inconsistent productivity translates into low patient discharge readiness scores and a high likelihood of readmissions. (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 remains a critical challenge for healthcare systems across the globe, including Saudi Arabia. Furthermore, healthcare systems struggle with building nursing productivity due to the existing nursing shortage. Yakusheva et al., 2019. For that, due to the gaps in the productivity of local and foreign nurses Saudi Arabia taking a critical step to increase local nursing productivity by training their professionals to generate sustainable quality patient care(Bell., 2019).

Aboshaiqah .,2016 suggested improving the productivity of nurses through investment in nurse leadership. Thus, the nurse manager's leadership acumen plays a pivotal role in engendering the delivery of quality services, job satisfaction, and retention among nurseswhich, the efficient use of leadership styles is a vital ingredient of excellent leadership skills. (Olu-Abiodun, & Abiodun., 2017)

Otherwise, most current and innovative trend leadership styles are transformational and transactional leadership styles. Transformational leadership is considered as a leadership approach that results in a change in individuals and thus the social systems where followers become leaders which is suitable in a dynamic, adaptive, and progressive learning

environment (Alzahrani., 2019) .While transactional leaders operate by identifying what actions their subordinate must take to achieve a detailed outcome or performance, 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).

Cummings et al., 2018 studied different leadership styles and the influence on the outcome patterns for the working setting as well as the nursing workforce. Leadership focused on task completion alone is not sufficient to achieve optimum outcomes for the nursing workforce..

Nursing productivity is a general term related to the ratio or relationship between one or more inputs. considered as bound up with terms “efficiency” or “effectiveness.” in nursing, professional productivity is measured by three different approaches; first approach is basic, which compares the output (treatment activity) to input (labor and capital); second approach quality of treatment, which emphasize outputs or outcomes like mortality, morbidity, and infection; and third approach economic performance, like the impact of ill health on the economy (Carvalho et al., 2017).

Maximized productivity of nurses is expected to improve the standard of care in health facilities. Instead, health care organizations should generate a healthy work atmosphere that prioritizes the welfare of nurses and patients, promotes health and well-being, and inspires healthy performance for nurses (Suratno., 2018).

Significance of the Research:

Professional nurse will increase the productivity and efficiency of utilizing the resources within the healthcare system. Change-oriented leadership will improve the human capital and influence the management of human resource within the healthcare system. The management and leadership leaders can use different strategies to build satisfaction and

organizational commitment of the nursing staff. 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 national health system will benefit from the outcomes of the study in diverse ways. 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). The growing Saudi population needs a reliable nursing population that will meet the expectations of different patient demographics. The findings will affirm the value of investing in leadership styles that could improve the quality of the patient care needed at the national level. The planning and development process will improve the health of the Saudi population when leaders invest in the styles that delivery the best performance.

The engagement will improve the overall skill and growth of the nursing workforce, comprising Saudis as well as foreigner nurses or healthcare workers.

The significance and distinctiveness of this study will direct to investigate the relation between the new Leadership Styles and Nursing Productivity.

Value of study to the Kingdom Saudi Arabia:

Since there are no studies related to the study topic in Saudi Arabia at Al Madinah Al Munawara , the results of the current study will provide significant value to the hospitals, nurse managers, and nursing staff through addressing an effective leadership style that encourages the nurses to be more productive.

More importantly, the results of current study might provide a basic milestone regarding the role of effective nursing leadership toward their staff and might be utilized by nursing colleges to improve their academic skills regarding nursing education about leadership and management.

Therefore, current research will improve the followings:

The nurse productivity workforce in Al Madinah Al Munawara Government Hospitals

The job satisfaction between the nursing staff, nursing service that introducing in different parts of hospitals, and highlighting on the possible defected in leadership style to can treat.

The global healthcare system which adopt either a transformational or transactional approach depending on its influence on the productivity of the nursing staff. Consequently, the study outcomes help by building the leadership process through the styles ratified in the finding of study.

أهداف الدراسة **Aim:**

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

Through following specific objectives:

1. To assess nursing staff' productivity levels.
- 2-. To identify the relationship between the new leadership style of nurse managers and the nurses' productivity.
- 3-To assess the leadership style of nurse managers working 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?

- **Definition of key terms: Nurse Leaders:** in the present study the nurses' leader will be the three levels' leaders (nursing director, nursing supervisors and head nurse)
 - **Leadership styles:** “An intentional means by which a leader influences a group of people in an organization to a widely understood future state that is different from the present one.” (Gandolfi & Stone., 2016)
- **Nursing productivity:** is a general term related to the ratio or relationship between one or more inputs. A definition of productivity is bound up with terms “efficiency” or “effectiveness.” In nursing, professional productivity is measured by three different approaches: (1) basic, which compares the output (treatment activity) to input (labor and capital); (2) quality of treatment, which emphasize outputs or outcomes like

mortality, morbidity, and infection; and (3) economic performance, like the impact of ill health on the economy (Carvalho et al., 2017).

Literature review .2

2.1.Systematic Search Process

The following PICOT research question guided the systematic search process:

How do the new leadership nurses' leaders' styles relate to nursing productivity?

The research was broken down into specific terms according to the PICOT mnemonic as follows:

- **P** - Nurses' leaders' and nursing staff
- **I** –Leadership styles and productivity
- **C** –Leadership styles.
- **O** – Impact of Leadership styles on Nursing productivity.
- **T** – 2021

The PICOT framework and research questions generated the search terms and the keywords that initiated the systematic search process. The main keywords include nurse leaders, leadership styles, and nursing productivity. A focused search necessitated the use of synonyms, phrases, and brand names to generate results that aligned with the PICOT research questions as outlined in the table below.

Table 1: Keywords and Synonyms

Keyword	Synonym
Nurse leaders	Nursing staff, nurse managers, staff nurses,
Leadership styles	Transformational, transactional, situational, authentic, passive, ethical, and mixed leadership styles
Nursing productivity	Nursing effectiveness, nursing outcomes, nursing performance, treatment activity, morbidity, infections, economic performance, and professional productivity

The keywords facilitated the search on PubMed, PubMed has selected to get accurate retrieval when searching. Because PubMed is a human-curated database based on

scholarly and quality criteria and data about each article is entered into the database in a uniformly structured way: author, title, date, journal name.

Limits were applied to the search process on the database. The search limits include literature published in the years (2016-2021) and published in the English language. The search was further limited to scholarly-peer reviewed journal articles. Following a comprehensive search of journals from PubMed, the database generated 616 articles as outlined in PubMed search history in Figure 1 below. However, it was imperative to select and screen for journal articles that defined the literature review.

Search	Actions	Details	Query	Results	Time
#6	...	>	Search: ((transactional leadership) AND (transformational leadership)) AND (servant leadership) Filters: in the last 5 years	2	05:39:51
#5	...	>	Search: (((nurse leadership style) AND (nurse staff)) AND (productivity)) AND (performance)) AND (nurse managers) Filters: in the last 5 years	3	05:37:41
#4	...	>	Search: leadership style AND nurse leaders AND nursing productivity Filters: in the last 5 years	6	05:35:01
#3	...	!	Search: transformational leadership in nursing Filters: in the last 5 years	204	02:14:25
#2	...	!	Search: leadership and nurse productivity Filters: in the last 5 years	397	01:26:48
#1	...	!	Search: transactional leadership in nursing practice Filters: in the last 5 years	4	01:25:20

Figure 1: History and Search Details on PubMed

The screening process began with removing duplicates and then focused on the availability of full-text articles. The articles were then examined against inclusion and exclusion criteria in Table 2. The screening process generated 48 studies for the literature review.

Table 2: inclusion and Exclusion Criteria

INCLUSION CRITERIA	EXCLUSION CRITERIA
- Journal articles that address the research question on the effect of leadership styles on nurse leaders' productivity - Articles published within theyears (between 2016 and 2021)	- Journal articles that addressed other areas other than the effect of leadership styles on nurse leaders' productivity - Articles (published before 2016)

• Journal articles published in English.	• Articles published in other languages as opposed to English, including Arabic.
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1.1.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.

Vaismoradi et al. ,2016 agreed with Poghosyan and Bernhardt .,2018that transformational leadership being an imperative for the nursing practice. However, the findings from the discussion paper found that the four elements of the leadership style influenced the teaching and advancement of medical safety. The research was a subjective review that lacked an empirical foundation. Therefore, the four components of transformational leadership anchor nursing practice.

Studies associate transformational leadership style with different outcomes or impact the nursing practice. Dhaliwal and Hirst .,2018 considered transformational leadership as the foundation effective leadership styles that support the creation of healthy work environment. The safety and security concerns concurred with the outcomes of Vaismoradi et al. ,2016 on nursing practice relying on a leadership style that could foster caring-focused attitudes. However, the study did not specify the effectiveness of the practices of nurse leaders.

In another review, Collins et al.,2019 associated transformational leadership with better behaviors and practices for nursing proficiency despite lacking an empirical element. According to Fischer .,2016, a concept analysis of transformational leadership style found its usefulness in improving performance, patient safety rather than general advancement of

the nursing practice. The idealized influence, inspired motivation, rational stimulation, and individualized consideration shape professional standards as well as practice development for all nurses rather than nurse leaders.

According to Brewer et al. ,2016 highlighted on that nurses should rely on a transformational leadership style to boost their organizational commitment and minimal change in intentions to stay and job satisfaction. The cross-sectional survey used a representative sample of 1037 newly licensed registered nurses (RNs), which enhanced generalizability and application to nurses under a transformation leadership.

However, according to Morsiani, Bagnasco, and Sasso .,2016 stated that the ward nurse managers habitually assumed a transactional leadership style directed at catching mistakes and overriding to correct those mistakes and punishing them, which had a confrontational impression on staff nurses' levels of job satisfaction. In contrast, nursing managers in the same unit rarely adopt transformative leadership styles that are usually associated with job satisfaction in the form of respect, caring for others, professional development, and appreciation. Morsiani, Bagnasco, and Sasso .,2016 compared transactional and transformational leadership styles and noted different impacts on the nurse managers. The mixed-methods study noted that transactional leadership's elements such as management actively to reduce errors and reduced job satisfaction.

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 improved staff stability, and decreased turnout. However, the findings disagreed with the views of Morsiani, Bagnasco, and Sasso (2016), as the review found a short-term impact on task completion and overall effectiveness in the healthcare settings as opposed to nursing..

On other hand, the leadership approach enhanced incivility among 237 nurses after a survey by Kaiser .,2016 . The studies used replicable methodologies despite discovering different outcomes of transformational leadership in nursing practice and among nurse practitioners. The effect of the leadership style adopted by nurses varies with the settings. Manning .,2016 conducted a correlational research design involving 441 staff nurses in three acute care settings. The analysis responses from a Multifactorial Leadership Questionnaire found transactional and transformational leadership were effective in boosting the work engagement of staff nurses.

The previous finding is fully consistent, with the Amir et al 'finding.,2018 that use specific leadership styles to decrease the stress of the nurse job. In addition, the transformational and transactional leadership styles are effective styles. For that, nurse leaders can use transformational and transactional leadership styles to promote the satisfaction of nurse job and nurse productivity and their health care outcomes.

According to Sabbah et al. ,2020, different leadership styles lead to different outcomes for nurses stationed in different healthcare settings. The assertion emerged from a cross-sectional study of 250 nurses in eight hospitals in Lebanon. The nurse managers adopted laissez-faire, transformational, and transactional leadership. Transformational leadership was more popular and impactful for the social functioning of nurses than the laissez-faire style. The laissez-faire-style reduced the emotional and mental health stability of nurses.

However, Solà et al. ,2016 noted that the self-perception of nurses or managers determined the overall value of leadership style. While the study used a smaller sample than Sabbah et al.,2020, it established transactional and transformational styles' correlation with efficiency and job satisfaction. The self-perception shaped the satisfaction and better working approach of nurses under transactional and transformational leadership.

Moreover, the satisfaction and improved work engagement by nurses under different leadership regimes shape their abilities in different healthcare settings. Padauleng, Sidin, and Ansariadi ,2020 undertook a cross-sectional survey of 104 nurses who showed improved independent culture, motivation, and subsequent sustenance of quality patient safety culture. While the inpatient nurse managers used transactional leadership more than transformational or laissez-faire styles, the study confirmed that leadership could increase nurses' motivation to the learner and execute safe practice. However, Specchia et al., 2021 noted from a systematic review of 12 studies that transformational style had more impact than transactional, authentic, servant, resonant, passive-avoidant, and laissez-faire styles. The style increases satisfaction and moral which then increased commitment to quality service delivery.

Nursing Staffs' Productivity Level

In relation to nurses different productivity levels based Wang et al. ,2019studied the mediating effect of inclusive leadership and it's impact on work engagement and innovativeness of Chinese head nurses. The survey of 374 Chinese nurses established that inclusive leadership increased their work engagement and innovative behaviors. The head nurses increased their productivity through quality and high competitiveness levels.

However, Lui and Johnston.,2019 noted that the productivity and presence of nurses were depended on the work environment after examining a large representative sample of 1146 nurses. The nurses required the absence of work stress and adequate work resources besides work engagement. Thus , theoutcomes of nurses in the two distinct hospitals depended on the policies and efforts by the management to reduce productivity losses.

However, the policies and work structures in place determine the productivity of staff nurses and their managers in any hospital setting this declarationstated in a study conducted by Goedhart, van Oostveen, and Vermeulen .,2017 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, safety climate, and effectiveness in their work units. The structural empowerment may emanate from the nurse leaders and the organizational policies intended to cement patient-centeredness.

Rhéaume and Mullen .,2017 found from the analysis of the work environment of 28 nurses that different shifts reduced their sleep quality, which then reduced their ability to execute their duties. While the study used a small sample that affected representativeness, the shift-work and long work hours increased the cognitive errors. Therefore, there should be shift work flexibility and quality sleep patterns to maintain quality outcomes among staff nurses.

A few studies agree on productivity being a product of work processes in the nursing care settings. Gander et al. ,2019 undertook an online questionnaire survey of six practice areas. The analysis of the survey responses revealed varied outcomes such as increased sleepiness, errors, and limited participation in the work due to fatigue. The study used a large representative sample of 3133 nurses who helped to emphasize the value of a flexible program for better safety management and reduction of errors.

Alghamdi .,2016concurred that nursing workload was a determinant of the overall productivity of nurses after undertaking concept analysis. The research attributed the outcomes of nurses to the existence of workloads in the settings. On the other hand, the

attributes of nursing workload found in the literature represent five main categories: the amount of nursing time; the amount of nursing competency; a load of direct patient care; the quantity of physical exertion; and then the complexity of care. These attributes are organized according to major precedents, which are determined due to patients, nurses, and health institutions.

Other studies consider the mixture of work and personal factors as some of the compelling determinants of the performance of nurses. The findings were evident in a cross-sectional study by Giorgi et al., 2018 as they examined the relationship between sleep quality, burnout, and job performance of shift nurses conducted on 315 nurses in seven Italian healthcare centers revealed their inability to perform well without proper sleep. Furthermore, burnout increased the dysfunctional nature and their execution of critical patient tasks.

Comparatively, Griffiths et al., 2018 reported that the nurse staffing framework and subsequent omissions underlined their care more than the general work schedule did. The systematic review used a smaller sample of 18 studies and maintained the rigor of the study with the involvement of two reviewers. The findings established that at least 75% of nurses reported omissions in the execution of care in environments with low staffing levels. Therefore, staffing adequacy and work schedules determine the overall productivity of the workforce.

Harvey et al., 2020 disagreed with the assertions of Griffiths et al., 2018 on the staffing and work schedules influencing the productivity of nurses alone. Thematic analysis of telephone interviews and videos on four RNs revealed that the interlinked nature of care provided, work environments, and workloads shaping the performance of nurses. While the small sample affected the generalizability of the findings to RNs, the effort done by hospitals to achieve financial targets at the expense of quality patient care or work environment reduced the overall work productivity of the informants.

According to Irani et al., 2018 proper planning of work schedules was imperative for the performance of the home health nurses. The planning reduces work pressure as the nurses could identify patients' needs, prioritize visits, accommodate patient preferences, and coordinate care to meet productivity expectations. The studies portray the productivity level of nurses as a multifaceted component that depends on work schedules, workload, and workplace environment.

A healthcare crisis creates a challenging environment for nurses to improve their skills. Giménez-Espert, Prado-Gascó, and Soto-Rubio.,2020 discovered from 92 nurses that COVID-19 created a health crisis that reduced their capacity to perform well. The descriptive correlational study would have been replicable with a large sample. However, the results confirmed that crises such as the COVID-19 pandemic increased psychosocial risks, psychological distress, and excessive work demands. The study also revealed that any misalignment between work schedules and engagement of nurses will reduce satisfaction and overall productivity and subsequently it will increase the risk of spreading of COVID-19 virus.

found as The crisis affected the quality of sleep, which Park, Lee, and Park., 2018 an antecedent for nurse productivity in a Korean hospital. There should have proper leadership to oversee the creation of work schedules for guiding staff nurses in executing their skills. The nurses were subject to the shift-work; clockwise schedule orders, sleep 2018 proper program, and break times for shift work. According to Booker et al. schedules could reduce excessive sleepiness, shift work disorders, and insomnia, also, failure to accommodate the workload and environment could reduces overall nurse productivity.

Both nursing staff and nurse managers require specific leadership styles to guide their practices. The findings emerged in a study by Al-Yami, Galdas, and Watson .,2018 where they focused on the link between organizational commitment and leadership styles among nursing employees in Saudi Arabia. The 219 nurses presented different views of leadership and its impact on their level of organizational commitment. The Saudi respondents revealed that transformational leadership was more prominent than transactional approach. , which fostered organizational commitment than the transactional approach did. However, the study proposed the adoption of a full-range leadership approach that could enable nursing staff and managers to increase commitment to offer quality care for the patients.

Contrastingly, Spiva et al., 2020 noted that nurse staff could not commit to their organizations without leadership that could boost resiliency and training. Moreover, the assessment of comparison and intervention showed that the former benefitted from a leadership training program that enhanced in-person learning and nurtured resiliency.

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 conducted a systematic review to establish the link between leadership styles and the productivity of the nursing workforce and their work settings. While the studies generated different outcomes, they all agreed that relational leadership practices requisite to be encouraged and reinforced by administrations to improve nursing job satisfaction, job retention, work environment dynamics and individual productivity inside healthcare locales. Of the 129 include studies, findings of 16 studies associated task-focused on leadership with low job satisfaction, which leadership styles followed could make or break individual productivity.

Udod et al. ,2020 studied a lean management style that included transformative leadership in a qualitative exploratory study of 14 nurse managers. Transformational leadership's impact on the perceptions and capability of nurses varies with the demographic characteristics and occupational places, as established by Sarıköse and Türkmen .(2020).

According to Sarıköse and Türkmen(2020) who reported from their study on 300 from Turkish staff nurses high self-perception towards transformational leadership. The positive perceptions fostered high-performance expectations and innovativeness guided by the evidence-based standards of the Turkish hospitals. Correspondingly, Choi et al. ,2016 found that transformational leadership could improve the performance of the nurses in the healthcare systems despite using a smaller sample of 200 nursing staff than Sarıköse and Türkmen (2020) and noted increased empowerment and job satisfaction, which then enhanced task performance in different Malaysian hospitals' settings. Therefore, the choice of a leadership style could build nursing staff empowerment to generate expected productivity. The empowerment and subsequent impact on the performance of nurses vary with the leadership style.

Asiri et al., 2016 undertook a cross-sectional study of 350 nurses from King Abdulaziz Medical City to measure the impact of the prevailing perceptions towards leadership style on the commitment and empowerment of staff nurses. The acute care nurses considered the use of transformational leadership by the nurse managers as essential component in shaping their psychological empowerment. However, the commitment varied with the nationality of the nurses besides the transactional leadership style.

Sarıköse and Türkmen (2020) noted in descriptive correlational cross-sectional research that 45.3% of the 300 nurses viewed transformational leadership as a determinant

of innovativeness. and addressed the transformational aspect of leadership for staff nurses without querying or comparing the impact of other leadership styles such as laissez-faire, transactional, authentic, or situational leadership.

Another integrative review by Kiwanuka et al. ,2020 focused on the link between nursing leadership styles and the quality measures of the intensive care unit (ICU) nurses. While including five studies from 253 identified studies were affected reliability and representativeness, the review found that transformational, exemplary, trusted, and considerate leadership approaches fostered productivity as well as the morale of the ICU nurses. The leadership styles further enhanced the staff outcomes such as intent to stay, reduction of medication errors, job satisfaction, and relational effects within the critical care unit.

Yoon, Kim, and Shin (2016) studied the link between delegation confidence and leadership among 199 RNs working in a long-term healthcare setting in Korea. While the study did not concentrate on the nurse managers or leaders, it provided generalizable findings on the value of leadership style. The descriptive correlational study established that transformational leadership increased delegation confidence, which expanded the clinical experience of RNs. The experience translates into the exceptional long-term performance of nurses.

Other studies considered ethics, and personality-oriented leadership styles to determine the impact of them on nurse leaders' productivity. According to Yeh et al., 2016 leadership and personality determined the outcomes of 135 head nurses and 1353 RNs. While the performance varied with the nurse's demographics and revealed that there are a high impact of leadership style on the nurses' level of conscientiousness, agreeableness, and extraversion, which increased their efficiency in performing tasks in their leading or subordinate roles. in addition to, some nurses found a structured leadership style fostered openness and improved their performance, for instance, in training the RNs.

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 sustenance of ethical leadership behaviors influenced growth, patients' satisfaction, leaders' satisfaction, and overall productivity. Therefore, nurse leaders' ability to maintain high productivity depends on the leadership style adopted in the healthcare setting.

Maintaining appropriate leadership should enhance the efficacy of nurses. Pishgooie et al., 2018 explored the impact of leadership of nurse managers on job stress and turnover among staff nurses. The cross-sectional correlational study of 1617 Iranians was replicable and representativeness for using an appropriate design as well as sample. Data showed the immense impact of transformational and transactional leadership on the reduction of job stress and staff turnover. However, the laissez-faire approach increased stress and nurses' intention to leave their workstations. Therefore, adopting transformational and transactional styles enabled managers to foster satisfaction as well as the quality of the nursing services delivered to patients.

The findings were validated in another study of 1141 full-time nurses by Lui and Johnston (2019). The study noted that the overall effectiveness of leadership styles in influencing performance depended on the prevailing organizational culture. Transformational leadership was associated with better confidence level than passive or laissez-faire leadership styles. A favorable organizational culture builds the capability to execute leadership and enhance nurses' abilities.

The impact of leadership might vary with the settings besides the organizational culture or style adopted by nurse leaders. Backman et al., 2018 undertook a cross-sectional design to understand how 3605 staff nurses relied on leadership to minimize job stress and optimize their productivity. However, the study noted that the nursing home settings relied on nurse home manager leadership to reduced perceived job workforce and offered social support to the subordinate nurses. The study generalized leadership style without specifying its nature.

According to Heckemann et al., 2020 leadership was imperative for managing aggressive situations and enhancing team efficacy as opposed to the social support noted by Backman et al., 2018. However, both studies concurred on nurse managers relying on the positive elements of leadership styles to maintain quality performance in either nursing homes or general hospital settings.

A recent study reported that the high percentage of nurse's turnover and their burnout nurse, shortage in nursing, and the quality of healthcare given of the patients are modern challenges for any healthcare team in any healthcare institutes, so the nurse leaders and their leadership styles considered as an instrument in effecting on resilience nursing workforce and improve the outcomes. Besides, the nature of the nurse job is a difficult job,

due to facing a death case and dying, and showing closely of patients' pains, so prone to enduring compassion fatigue and bad mood (Holley et al., 2018).

Other studies consider nurse leadership as the antecedent for nurses' ability to handle critical incidences or adverse events that require the exceptional application of skills. Lima et al. ,2017 explored 61 critical incidents involving nurses to understand the value of leadership-related situations that shaped behaviors among staff nurses. The usage of mixed leadership approach (situational and transformational leadership) during communication, daily exercises, people management, and administration of critical care units is effective in reducing the Brazilian nurses' conflicts.

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). While the qualitative study of 11 Finnish nurses utilized a small and non-representative sample, it established different impacts of transformational leadership. The style enabled the 11 nursing managers to sustain skills of patient-centeredness, common action principles, and execution of operational models. The outcomes emphasized the importance of using a transformational approach to reduce conflicts through blame and fostering open discussions on the adverse events. However, studies on Brazil and Finland use a more advanced healthcare system than Saudi Arabia to the extent of reducing reliability.

Method and Methodology .1

The following chapter outlines the methods and methodology used to gather insights for solving the primary research problem. The chapter outlines the research setting, study participants, and sampling process for selecting a representative sample of the respondents. The researcher developed three tools for data collection, which included demographic data, multifactor leadership questionnaire, and nursing productivity. Research Approach

The research used a quantitative research approach where the researchers sought numerical data, which was then, analyzed using mathematic and statistical techniques (Curtis et al., 2016). The research approach guided the collection of numerical insights from the nursing students, then using the outcomes to generalize them to the target population. The quantitative research approach enabled the researchers to seek objective and conclusive answers on the relationship between the new leadership styles and the productivity of the nursing staff at KFH, Saudi Arabia. Finding the decisive answers

involved an analytical process in responding to pre-defined questions on the various aspects of leadership styles that defined the nursing productivity of different respondents at KFH, as Harvey and Land (2017) recommended.

The characteristic of the quantitative research approach defined comprises measurable variables (Lobiondo-Wood, 2021). The variables identified in the research process leadership styles and nursing productivity. The insights assisted in predicting the relationship between styles such as transformational, transactional, and laissez-faire styles, which could influence the effectiveness, additional effort, and satisfaction of the nurse leaders at KFH. Understandably, quantitative methods predict the intended outcomes by specifying the models or statistical formula. The models enabled the researchers to construct different scenarios to conceptualize the relationships between variables based on the data gathered from a significant sample size.

A quantitative-deductive approach was valuable to the research process in different ways. The strategy allowed quantitative measurement of the relationship based on the insights gathered from different respondents. Harvey and Land., 2017 argued that the approach fosters analysis based on a reasonable research gap. The researchers conducted an exhaustive literature review to bridge this gap and appraise the scientific investigation. On the other hand, the method established trustworthy results as the quantitative-deductive technique dictated data collection and analysis using a standardized as well as a replicable methodology (Lobiondo-Wood, 2021). The approach required the recruitment of a large sample size so that the researcher can generalize the outcomes to the entire group of nurses by applying different new leadership styles to influence their performance and productivity level.

Research Design.1.1

A descriptive correlational design was used to collect the appropriate data to answer the research questions with conclusive answers.

Data Collection Methods

Three data collection tools using different data collection modalities was valuable in collecting a large volume of data, which was effective in investigating the research problem as follows:

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. It contains 12 factors that detailed the comprehensive variety of leadership styles. The tool comprises five transformational, three transactional, one laissez-faire concepts, which assisted in demonstrating the consequences of leadership. 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. The 5-point Likert Scale was useful in establishing the specific opinions of the respondents on leadership and outcomes in different nursing contexts. The scale measured the extent of the respondents' agreed or disagreed with how the adoption of different leadership approach defined outcomes such as satisfaction, safety, effectiveness, and quality of care 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), developed the NHS KSF to enable researchers to collect different insights on productivity within the professional nursing practice and to identify the nurses' productivity level and appraise their performance by their leaders. It consisted of major competencies such as Communication, Personnel, and people Development, Health Safety and Security, Service improvement, Quality, Equality, and diversity. Additionally, the nursing productivity components included the assessment and treatment planning, interventions, and treatments as they underscored the different perspectives of nursing productivity.

Each competency contained different indicators, which supported nurses' level so that the researchers appraised how they performed. Respondents were asked to spot each item's relative rank to their subordinate level. The nurses' leaders were asked to grade the items for five subordinate abilities on each item ranged as poor, good, and excellent grading system. The survey organization and question format were reviewed for reliability and validity with an expert in survey research, and the knowledge and skill item variables are reviewed by experts in nursing administration.

Instruments' Reliability and Validity

According to Harvey and Land., 2017, the researchers must ensure that data collection tools meet face content, and construct validity. Face validity ascertained the tools were effective in measuring the traits of interests based on the views of a research expert. The supervisor provided valuable input to ensure the three tools gathered demographic data, collected leadership styles, and measured nursing productivity components. Content validity affirmed the instruments' capacity to measure the constructs of interests following a rational analysis by selected raters such as the supervisors. On the other hand, the researchers ensured that the three data collection tools measured the components of nursing productivity based on the adoption of leadership styles such as transformational, transactional, passive-avoidant, and laissez-faire. Bloomfield and Fisher (2019) argued that a valid data collection instrument should obtain data that solved the research problem at hand.

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). Two groups of individuals were issued with the tools, and their responses correlated to find input on the structure and clarity of the questions. The questions met the internal consistency test by prompting similar responses by the respondents despite receiving the data collection at different times. On the other hand, test-retest reliability tests were more complex than internal consistency because they involved testing the stability of the tool over time. Two individuals received the three tools at the same time within the same conditions to establish discrepancies in their responses. A correlation coefficient analysis was undertaken to establish the r values, which indicated the reliability of the tools. The test revealed r scores of above 0.70, which confirmed the stability of the three data collection tools. The score confirmed that the tools' features or memories of respondents do not change over time.

Pilot study

The pilot study was conducted on 10 % of the total sample queried in the research. Harvey and Land (2017) argued that a pilot study should be conducted to assess the data collection tools should have exceptional clarity and applicability. Therefore, it was imperative for the small sample size to facilitate the time it would take the respondents to answer all the queries. The modification of tool was then done according to the result of the pilot study. the participants were excluded from the research sample to prevent the bias of results of data collected. A comprehensive report was prepared to outline the views of the respondents and the modifications were done to each data collection tool.

Internal consistency was conducted to test the validity of the three data collection tools. Curtis et al. ,2016 opine that the internal consistency validity confirms that the designed items measure the same factor. The function tested how highly these items, or the questions were correlated and how good they predicted others. Cronbach's alpha was integrated to confirm the conformation of the tools to the internal consistency reliability test.

The validity of Transformational leadership styles: As shown in Table (1), the Transformational leadership styles were measured using five dimensions or styles scales in a 5-point Likert scale. The respondents categorized frequently, if not always =4 to Not at all =0. The respondents tested the transformational leadership values such as Idealized Attributes (IA), Idealized Behaviors (IB), Inspirational Motivation (IM), Intellectual Stimulation (IS), and Individual Consideration (IC). The Table shows the Cronbach alpha achieved a good value whereas ($\alpha=0.849$), and the correlation between each item and the total degree of the scale was excellent as it ranged between ($r=0.91$) and ($r=50$) ($p<0.05$). A high value indicated high internal consistency. However, four items showed insignificant correlations (IB3, IM1, IC3 and IC4). Overall, piloting the scale to the respondents confirmed its excellence in measuring the components of leadership styles in life with the study purposes.

Table 3: The validity of Transformational leadership styles

Style	No	Pearson (r)	Cronbach alpha
Idealized Attributes (IA)	1	0.79**	0.849
	2	0.50**	
	3	0.87**	

	4	0.79**	
Idealized Behaviors (IB)	1	0.79**	
	2	0.62**	
	3	0.03	
	4	0.87**	
Inspirational Motivation (IM)	1	-0.17	
	2	0.63**	
	3	0.87**	
	4	0.89**	
Intellectual Stimulation (IS)	1	0.89**	
	2	0.81**	
	3	0.84**	
	4	0.87**	
Individual Consideration (IC)	1	0.36**	
	2	0.91**	
	3	0.00	
	4	0.12	
** Correlation is significant at the 0.01 level (2-tailed)			

The descriptive analysis of Transactional leadership styles:As shown in Table (2), the Transactional leadership styles were measured by two dimensions or styles scales contained in a 5-point Likert scale (Frequently, if not always =4 to Not at all =0). The scale sought the respondent's views on the Management-by-Exception (Active) (MBEA) and Contingent Reward (CR). The Cronbach alpha revealed a representative value whereas ($\alpha=0.772$), 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.

Table 4: The validity of Transactional leadership styles

Style	No	Pearson (r)	Cronbach alpha
Management-by-Exception (Passive) (MBEP)	1	0.74**	0.772
	2	0.05	
	3	0.24**	
	4	0.00	
Contingent Reward (CR)	1	0.87**	
	2	0.65**	
	3	0.99**	
	4	0.91**	
** Correlation is significant at the 0.01 level (2-tailed)			

The descriptive analysis of Passive Avoidant leadership styles: As shown in Table (3), the Laissez-Faire leadership styles were measured by two dimensions/styles scales using a 5-point Likert scale (Frequently, if not always =4 to Not at all =0). Management-by-Exception (Passive) and Laissez-Faire (LF). The Cronbach alpha achieved a reprehensive value whereas ($\alpha=0.760$), and the correlation between each item and the total degree of the MBEP scale was ranged between ($r=0.98$) and ($r=50$) ($p<0.05$). However, LF had 0.000 values due to the consistent value, which equaled zero after using a small sample size for the pilot study.

Table 5: The validity of Passive Avoidant leadership styles

Style	No	Pearson (r)	Cronbach alpha
Management-by-Exception (Passive) (MBEP)	1	0.98**	0.760
	2	0.50**	
	3	0.97**	
	4	0.98**	
Laissez-Faire (LF)	1	0.000	
	2	0.000	
	3	0.000	
** Correlation is significant at the 0.01 level (2-tailed)			

The Validity of Outcomes of Leadership: The outcomes of leadership were measured by three dimensions or styles of Effectiveness (EFF) and Satisfaction (SAT), and Extra Effort (EE). The researchers tested the concepts using a 5-point Likert scale (Frequently, if not always =4 to Not at all =0). The Cronbach alpha generated a representative value whereas ($\alpha=0.793$). The correlation between each item and the total degree of the scale was ranged between ($r=0.93$) and ($r=24$) ($p<0.05$). Therefore, the scale was appropriate for the study purposes of collecting data from the respondents at KFH.

Table 6: The validity of Outcomes of Leadership

Style	No	Pearson (r)	Cronbach alpha
Extra Effort (EE)	1	0.80**	0.793
	2	0.33**	
	3	0.00	
Effectiveness (EFF)	1	0.76**	
	2	0.93**	

	3	0.76**	
	4	0.24**	
Satisfaction (SAT)	1	0.80**	
	2	0.76**	
** Correlation is significant at the 0.01 level (2-tailed)			

The validity of NHS-KSF in measuring nursing productivity: NHS-KSFscale was measured by eight dimensions, which the researcher tested using a 3-point Likert scale ranged from (excellent =3 to poor =0). The Cronbach alpha achieved a representative value whereas ($\alpha=0.984$). The correlation between each item and the total degree of the scale was found, and it ranged between ($r=0.89$) and ($r=0.53$) ($p<0.05$) as outlined in Table 5. Overall, the scale is excellent for pursuing study purposes.

Table 7: Validity of NHS-KSF in measuring nurses' productivity

Dimension	No	Pearson (r)	Cronbach alpha
Communication	1	0.76**	0.984
	2	0.63**	
	3	0.67**	
	4	0.60**	
	5	0.75**	
Personal development	1	0.81**	
	2	0.71**	
	3	0.89**	
	4	0.77**	
	5	0.77**	
	6	0.81**	

Health safety and security	1	0.80**	
	2	0.86**	
	3	0.57**	
	4	0.53**	
	5	0.69**	
	6	0.85**	
	7	0.76**	
Service development	1	0.76**	
	2	0.80**	
	3	0.66**	
	4	0.72**	
	5	0.69**	
	6	0.85**	
	7	0.75**	
Equality, diversity, and rights	1	0.66**	
	2	0.65**	
	3	0.92**	
	4	0.78**	
Ensuring quality	1	0.78**	
	2	0.68**	
	3	0.88**	
	4	0.76**	
	1	0.74**	

Assessment and treatment planning	2	0.83**	
	3	0.77**	
	4	0.89**	
	5	0.94**	
	6	0.85**	
	7	0.81**	
	8	0.68**	
	9	0.73**	
	10	0.78**	
Intervention and treatment	1	0.76**	
	2	0.63**	
	3	0.67**	
	4	0.60**	
	5	0.75**	
	6	0.81**	
	7	0.71**	
	8	0.89**	
	9	0.77**	
** Correlation is significant at the 0.01 level (2-tailed)			

Operationalization of Data Collection

The development of valid and reliable data collection tools initiated the collection of insights from the respondents. The researchers obtained the email addresses of the respondents from the administration of KFH following the approval by MOH. An e-mail was sent to all respondents where they were instructed to fill the tools within a week. The

inclusion of the questions in online forms simplified the data collection as the respondents filled and submitted them in the real-time. The process saved time and cost in gathered the data in readiness for the comprehensive data analysis process. Which the coordinated data collection process increased the response rate and limited the errors the respondents would have made in answering research questions with other modalities.

Research Setting

The study was conducted at King Fahad Hospital in Al Madinah Al-Munawara, Saudi Arabia. The researcher selected the hospital guided by their location and the convenience of accessing the selected respondents. The hospital capacity consisted of 300-bed which essential in providing quality medical care to different patients while offering the nurses a platform to exercise their leadership skills and restructure their productivity (King Faisal Specialists Hospital., 2020). The standards of medical care offered to the different cohorts of patients depends on the efforts made to improve the clinical and personal outcomesThe facility undergoes continuous reforms and assessment to improve the quality of care delivered to the patients irrespective of their health outcomes.

Research Population

Target Population

The target population was nursing leaders' from different categories atKFH, 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. The nursing leadership oversees the implementation of treatment protocols, development of the nurses, and prevention of diseases. The leadership applies different modalities to entrench safety and quality-oriented initiatives that align with the expectations of the respondents. The output of the nurse leaders depends on the styles and measures taken to influence proper administration of care in line with KFH policies as well as MOH guidelines.

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. The respondents were recruited and selected from the nursing directors, head nurses, and nursing supervisors. Gerrish and Lathlean (2015) insisted on the

importance of selecting a sample to minimize bias and assemble a representative group, which would then influence applicable findings in the descriptive correlational design.

Sampling Method

A convenient sample was selected after equation computation using as the following method:

$$n = \frac{Z^2 p (1-p)}{d^2}$$

. A convenience sampling method maximized the response rate from the respondents, who further ensured that the study achieved a high representativeness level. The researcher will maximize the response rate and minimize bias (Lobiondo-Wood., 2021). The sample size was determined at the time of data collection as they were all nurse leaders working at KFH. Additionally, the inclusion criteria comprised All Saudi and non-Saudi nurse leaders on the three different levels, working at King Fahad Hospital in Al Madinah Al-Munawara. The exclusion criteria entailed nurse leaders with experience of fewer than two years.

. According to Jager et al., 2017, convenience sampling process are suitable for examining development queries, particularly when researchers adopt homogenous samples. The differences in sociodemographic elements such as gender, ethnicity, culture, nationality, urban location, or nursing experience did not affect the selection process. The researchers recruited convenience samples to boost their overall generalizability to the nurse leaders working at different levels of KFH.

Recruitment Method

Flyers and mailboxes were the primary methods used to recruit as well as access the participants in the study. Harvey and Land (2017) argue that the recruitment process should maximize the response rate, so that including aims and benefits of the study are essential. The flyers and emails extended the invitation to the nurse directors to establish a prior relationship and projecting potential participation in the data collection process. Consequently, the flyers and mailboxes submitted to different nurse leaders were flexible and inexpensive, besides increasing the familiarity with the research methods. The process made it easier to incentivize the potential respondents.

Data Analysis Method

IBM-SPSS was used for data analysis to accomplish the primary aim of the correlational. The Demographic data collected from the participants comprised categorical and numerical variables, which included age, gender, experience, educational level, etc. Data entries for demographic variables were compiled using numeric codes to match each demographic variable in the questionnaire. 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. Moreover, Pearson correlation was incorporated to explore the correlation between selected domains of the questionnaire. 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. The results were presented in tables and figures, which then initiated an in-depth discussion.

Discussion Summary

Transformational, transactional, and Laissez-Faire leadership styles are the popular models used by the nurse leaders in the nursing practice. The three leadership styles are the most valuable leadership because they shape the productivity of staff nurses. The indicators of staff nurses' productivity levels include communication, personnel, and professional development, health safety and security, style, service improvement and quality. The elements further comprise service improvement, equality and diversity, assessment and treatment planning and interventions, and treatments. Transformational, transactional, and Laissez-Faire leadership styles outline communication, personnel, and professional development, health safety and security, style, service improvement and quality. However, transactional leadership is incapable of building interventions and treatments capacities of staff nurses. That Laissez-Faire leadership style does not influence service improvement, equality and diversity, assessment and treatment planning and interventions, and treatments.

Conclusion .1

A new leadership style has effect of transactional, transformational, passive-avoidant, and laissez-faire confirms the varied respondents of different demographic groups. Age, marital status, gender, educational level, and experience of the respondents determined the level of productivity and perceived role of new leadership styles at KFH in Al Medina Al Munawara. The job position of the nurses at the department drives their productivity.

There is a positive relationship of the leadership styles of nurse managers and nursing productivity. Also, there is a significant link between productivity and the leadership style. The staff nurses followed leadership styles as transformational, transactional, and laissez-faire have possible changes to the nurses's performance.. Staff nurses adopted communication, personnel or people development, health safety and security, service improvement, quality, assessment, and treatment planning. Moreover, transformational, transactional, and laissez-faire leadership styles build equality and diversity besides the interventions and treatments of their subordinate nurses.

There are a relationship between nurse's productivity and their demographic characteristics after they experience the execution of transformational, transactional, and laissez-faire styles. Age, marital status, and gender have an insignificant effect on performance. Higher education level and years of experience determine nursing productivity. The changes vary with the dimensions of leadership styles, as the study found to impact different facets of nurse productivity. Additionally, there is a significant relationship exists between transformational leadership style and nurse productivity.

Transformational leadership increases the productivity of staff nurses due to its impactful structure. The leadership model changes the followers with its social system, which comprises a dynamic, adaptive, and progressive learning environment. Transformational leadership leaders enable staff nurses to exercise communication, personnel and people development, health safety and security, quality, equality, and diversity. Correspondingly, transactional leadership builds communication, personnel and professional development, health safety and security, quality, equality, diversity, service improvement, assessment, and treatment planning despite the insignificant effect on the interventions as well as treatments.

Laissez-faire leadership has minimal effect on communication, personnel, and professional development, health safety and security, style and service improvement, and quality. The leadership style does not direct service improvement, equality and diversity, assessment and treatment planning and interventions, and treatments. Consequently, the nature of leadership style has aremarkable effects on job satisfaction levels and organizational commitment among staff nurses. Nurse leaders are effective directors of subordinate or followers' outcomes, which then shape the patient outcomes and organizational performance.

The perception of nurses towards laissez-faire leadership style is poor as findings affirmed the insignificant effect on the communication, personnel, and people development, health safety and security, style and service improvement, and quality.

Recommendations .1

Recommendations to the Managers/ Leaders:

The leaders or supervisors should be aware of what is important for the subordinates and the organizations as a whole and encourage the employees to see the opportunities and challenges around them creatively. The managers are highly recommended to take time and discuss with their subordinates, accept their feedbacks and comments and react on it . Supervisors should clarify expectations and provide goals and standards to be achieved for the followers. They should not wait until the problems become more serious and then take action they should monitor performance on timely basis. The leaders should encourage and motivate their subordinates to perform exceptionally, which will ensure job satisfaction and organizational commitment which indirectly increased nursing productivity. Empower leaders to enhance their leadership skills and this in return will help them to empower their employees to even greater organizational performance and commitment and to keep it consistent. The nursing managers should use the laissez-faire leadership style sparingly to influence the productivity of nurses.

References .2

1. References

- Abdelhafiz, I. M., Alloubani, A. M., &Almatari, M. (2015). Impact of leadership styles adopted by head nurses on job satisfaction: a comparative study between governmental and private hospitals in Jordan. *Journal of Nursing Management*, 24(3), 384–392.
<https://doi.org/10.1111/jonm.12333>
- Abdelhafiz, I. M., Alloubani, A. M., &Almatari, M. (2016). Impact of leadership styles adopted by head nurses on job satisfaction: a comparative study between governmental and private hospitals in Jordan. *Journal of Nursing Management*, 24(3), 384–392.

<https://doi.org/10.1111/jonm.12333>

- Aboshaiqah, A. (2016). Strategies to address the nursing shortage in Saudi Arabia. *International Nursing Review*, 63(3), 499–506. <https://doi.org/10.1111/inr.12271>
- Akpoviroro, K. S., Kadiri, B., & Owotutu, S. O. (2018). Effect of participative leadership style on employee's productivity. *International Journal of Economic Behavior*, 8(1), 47-60.
- Al-Dossary, R. N. (2018). The Saudi Arabian 2030 vision and the nursing profession: the way forward. *International Nursing Review*, 65(4), 484–490. <https://doi.org/10.1111/inr.12458>
- Alghamdi, M. G. (2016). Nursing workload: a concept analysis. *Journal of Nursing Management*, 24(4), 449–457. <https://doi.org/10.1111/jonm.12354>
- Alghamdi, M. G., Topp, R., & AlYami, M. S. (2017). The effect of gender on transformational leadership and job satisfaction among Saudi nurses. *Journal of Advanced Nursing*, 74(1), 119–127. <https://doi.org/10.1111/jan.13385>
- Al-Maqbali, F. H. A. (2017). The impact of the leadership styles of deans on the faculty members' level of job satisfaction in nursing education in Oman [Doctoral dissertation, University of Glasgow].
- Alshammari, F., Pasay-An, E., Gonzales, F., & Torres, S. (2020). Emotional intelligence and authentic leadership among Saudi nursing leaders in the Kingdom of Saudi Arabia. *Journal of Professional Nursing*, 36(6), 503-509.
- Alsufyani, A. M., Alforihidi, M. A., Almalki, K. E., & Aljuaid, S. M. (2020). Linking the Saudi Arabian 2030 Vision with Nursing Transformation in Saudi Arabia: Roadmap for Nursing Policies and Strategies. *International Journal of Africa Nursing Sciences*, 13, 100256. <https://doi.org/10.1016/j.ijans.2020.100256>
- Al-Yami, M., Galdas, P., & Watson, R. (2018). Leadership style and organisational commitment among nursing staff in Saudi Arabia. *Journal of Nursing Management*, 26(5), 531–539. <https://doi.org/10.1111/jonm.12578>
- Alzahrani, S. (2019). Transformational leadership style on nursing job satisfaction amongst nurses in hospital settings: Findings from systematic review. *Global Journal of Health Science*, 11(6), 1-25.
- Asamani, J. A., Naab, F., & Ofei, A. M. A. (2016). Leadership styles in nursing management: implications for staff outcomes. *Journal of Health Sciences*, 6(1), 23–36. <https://doi.org/10.17532/jhsci.2016.266>
- Asiri, S. A., Rohrer, W. W., Al-Surimi, K., Da'ar, O. O., & Ahmed, A. (2016). The association of

leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: a cross-sectional study. *BMC Nursing*, 15(1).

<https://doi.org/10.1186/s12912-016-0161-7>

Asrar-ul-Haq, M., & Kuchinke, K. P. (2016). Impact of leadership styles on employees' attitude towards their leader and performance: Empirical evidence from Pakistani banks. *Future Business Journal*, 2(1), 54-64.

Backman, A., Sjögren, K., Lövheim, H., & Edvardsson, D. (2018). Job strain in nursing homes- Exploring the impact of leadership. *Journal of Clinical Nursing*, 27(7-8), 1552-1560.

<https://doi.org/10.1111/jocn.14180>

Barkhordari-Sharifabad, M., Ashktorab, T., & Atashzadeh-Shoorideh, F. (2017). Ethical leadership outcomes in nursing: A qualitative study. *Nursing Ethics*, 25(8), 1051-1063.

<https://doi.org/10.1177/0969733016687157>

Bell, J. (2019, July 27). *Why Gulf states must build a local nursing workforce*. Arab News.

<https://www.arabnews.com/node/1531396/saudi-arabia>

Bloomfield, J., & Fisher, M. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses' Association*, 22(2), 27-30. <https://doi.org/10.33235/jarna.22.2.27-30>

Booker, L. A., Magee, M., Rajaratnam, S. M. W., Sletten, T. L., & Howard, M. E. (2018). Individual vulnerability to insomnia, excessive sleepiness and shift work disorder amongst healthcare shift workers. A systematic review. *Sleep Medicine Reviews*, 41, 220-233.

<https://doi.org/10.1016/j.smrv.2018.03.005>

Brewer, C. S., Kovner, C. T., Djukic, M., Fatehi, F., Greene, W., Chacko, T. P., & Yang, Y. (2016). Impact of transformational leadership on nurse work outcomes. *Journal of Advanced Nursing*, 72(11), 2879-2893. <https://doi.org/10.1111/jan.13055>

Broyles, L. M., Rodriguez, K. L., Price, P. A., Bayliss, N. K., & Sevvick, M. A. (2011). Overcoming Barriers to the Recruitment of Nurses as Participants in Health Care Research. *Qualitative Health Research*, 21(12), 1705-1718. <https://doi.org/10.1177/1049732311417727>

Carvalho, D. P. D., Rocha, L. P., Tomaschewski-Barlem, J. G., Barlem, E. L. D., Cecagno, D., & Dalmolin, G. D. L. (2017). Productivity versus workloads in the nursing working environment. *Revista da Escola de Enfermagem da USP*, 51.

Choi, S. L., Goh, C. F., Adam, M. B. H., & Tan, O. K. (2016). Transformational leadership, empowerment, and job satisfaction: the mediating role of employee empowerment. *Human Resources for Health*, 14(1). <https://doi.org/10.1186/s12960-016-0171-2>

- Collins, E., Owen, P., Digan, J., & Dunn, F. (2019). Applying transformational leadership in nursing practice. *Nursing Standard*, 35(5), 59–66. <https://doi.org/10.7748/ns.2019.e11408>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 85, 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018a). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 85, 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018b). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 85, 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 85, 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- Curtis, E. A., Comiskey, C., & Dempsey, O. (2016). Importance and use of correlational research. *Nurse Researcher*, 23(6), 20–25. <https://doi.org/10.7748/nr.2016.e1382>
- Dhaliwal, K. K., & Hirst, S. P. (2018). Correctional nursing and transformational leadership. *Nursing Forum*, 54(2), 192–197. <https://doi.org/10.1111/nuf.12314>
- Diebig, M., Bormann, K. C., & Rowold, J. (2016). Day-level transformational leadership and followers' daily level of stress: a moderated mediation model of team cooperation, role conflict, and type of communication. *European Journal of Work and Organizational Psychology*, 26(2), 234–249. <https://doi.org/10.1080/1359432x.2016.1250741>
- Fischer, S. A. (2016). Transformational leadership in nursing: A concept analysis. *Journal of Advanced Nursing*, 72(11), 2644–2653. <https://doi.org/10.1111/jan.13049>
- Gander, P., O'Keeffe, K., Santos-Fernandez, E., Huntington, A., Walker, L., & Willis, J. (2019). Fatigue and nurses' work patterns: An online questionnaire survey. *International Journal of Nursing Studies*, 98, 67–74. <https://doi.org/10.1016/j.ijnurstu.2019.06.011>
- Gandolfi, F., & Stone, S. (2016). Clarifying leadership: High-impact leaders in a time of leadership

crisis. *Revista de Management Comparat International*, 17(3), 212.

Ghazzawi, K., Shoughari, R. E., & Osta, B. E. (2017). Situational leadership and its effectiveness in rising employee productivity: A study on North Lebanon organization. *Human Resource Management Research*, 7(3), 102-110.

Giménez-Espert, M. del C., Prado-Gascó, V., & Soto-Rubio, A. (2020). Psychosocial Risks, Work Engagement, and Job Satisfaction of Nurses During COVID-19 Pandemic. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.566896>

Giorgi, F., Mattei, A., Notarnicola, I., Petrucci, C., & Lancia, L. (2018). Can sleep quality and burnout affect the job performance of shift-work nurses? A hospital cross-sectional study. *Journal of Advanced Nursing*, 74(3), 698–708. <https://doi.org/10.1111/jan.13484>

Glabek, M., Skogstad, A., & Einarsen, S. (2018). Workplace bullying, the development of job insecurity and the role of laissez-faire leadership: A two-wave moderated mediation study. *Work & Stress*, 32(3), 297–312. <https://doi.org/10.1080/02678373.2018.1427815>

Goedhart, N. S., van Oostveen, C. J., & Vermeulen, H. (2017). The effect of structural empowerment of nurses on quality outcomes in hospitals: a scoping review. *Journal of Nursing Management*, 25(3), 194–206. <https://doi.org/10.1111/jonm.12455>

Goh, A. M. J., Ang, S. Y., & Della, P. R. (2018). Leadership style of nurse managers as perceived by registered nurses: A cross-sectional survey. *Proceedings of Singapore Healthcare*, 27(3), 205–210. <https://doi.org/10.1177/2010105817751742>

Griffiths, P., Recio-Saucedo, A., Dall'Ora, C., Briggs, J., Maruotti, A., Meredith, P., ... Ball, J. (2018). The association between nurse staffing and omissions in nursing care: A systematic review. *Journal of Advanced Nursing*, 74(7), 1474–1487. <https://doi.org/10.1111/jan.13564>

Harvey, M., & Land, L. (2017). *Research methods for nurses and midwives : theory and practice*. Sage Publications.

Harvey, C., Thompson, S., Otis, E., & Willis, E. (2020). Nurses' views on workload, care rationing and work environments: a qualitative descriptive study. *Journal of Nursing Management*, 28(4). <https://doi.org/10.1111/jonm.13019>

Heckemann, B., Siegrist-Dreier, S., Thilo, F. J. S., & Hahn, S. (2020). Team efficacy and leadership in managing aggressive situations in the general hospital setting: A qualitative descriptive analysis of focus groups with ward managers. *Journal of Clinical Nursing*, 29(5-6), 974–986. <https://doi.org/10.1111/jocn.15169>

Irani, E., Hirschman, K. B., Cacchione, P. Z., & Bowles, K. H. (2018). How home health nurses plan

their work schedules: A qualitative descriptive study. *Journal of Clinical Nursing*, 27(21-22), 4066–4076. <https://doi.org/10.1111/jocn.14548>

Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). More than Just Convenient: the Scientific Merits of Homogeneous Convenience Samples. *Monographs of the Society for Research in Child Development*, 82(2), 13–30. <https://doi.org/10.1111/mono.12296>

Kaiser, J. A. (2016). The relationship between leadership style and nurse-to-nurse incivility: turning the lens inward. *Journal of Nursing Management*, 25(2), 110–118. <https://doi.org/10.1111/jonm.12447>

King Faisal Specialists Hospital. (2020). *King Faisal Specialists Hospital Al Madinah Al Munawwarah*. King Faisal Specialist Hospital & Research Centre. <https://www.kfshrc.edu.sa/en/home/about/megaprojects/8995>

Kiwanuka, F., Nanyonga, R. C., Sak-Dankosky, N., Muwanguzi, P. A., & Kvist, T. (2020). Nursing leadership styles and their impact on intensive care unit quality measures: An integrative review. *Journal of Nursing Management*, 1. <https://doi.org/10.1111/jonm.13151>

Labrague, L. J., Nwafor, C. E., & Tsaras, K. (2020). Influence of toxic and transformational leadership practices on nurses' job satisfaction, psychological distress, absenteeism, and turnover intention. *Journal of Nursing Management*, 28(5). <https://doi.org/10.1111/jonm.13053>

Lima, E. C., Bernardes, A., Baldo, P. L., Maziero, V. G., Camelo, S. H. H., & Balsanelli, A. P. (2017). Critical incidents connected to nurses' leadership in Intensive Care Units. *Revista Brasileira de Enfermagem*, 70(5), 1018–1025. <https://doi.org/10.1590/0034-7167-2016-0137>

Liukka, M., Hupli, M., & Turunen, H. (2017). How transformational leadership appears in action with adverse events? A study for Finnish nurse manager. *Journal of Nursing Management*, 26(6), 639–646. <https://doi.org/10.1111/jonm.12592>

Lobiondo-Wood, G. (2021). *Nursing research: Methods and critical appraisal for evidence-based practice*. Elsevier.

Lui, J. N. M., & Johnston, J. M. (2019a). Validation of the nurse leadership and organizational culture (N-LOC) questionnaire. *BMC Health Services Research*, 19(1). <https://doi.org/10.1186/s12913-019-4290-z>

Lui, J. N. M., & Johnston, J. M. (2019b). Working while sick: validation of the multidimensional presenteeism exposures and productivity survey for nurses (MPEPS-N). *BMC Health Services Research*, 19(1). <https://doi.org/10.1186/s12913-019-4373-x>

Manning, J. (2016). The Influence of Nurse Manager Leadership Style on Staff Nurse Work

Engagement. *JONA: The Journal of Nursing Administration*, 46(9), 438–443.
<https://doi.org/10.1097/nna.0000000000000372>

Morsiani, G., Bagnasco, A., & Sasso, L. (2016). How staff nurses perceive the impact of nurse managers' leadership style in terms of job satisfaction: a mixed method study. *Journal of Nursing Management*, 25(2), 119–128. <https://doi.org/10.1111/jonm.12448>

Naseem, S., Afzal, M., Sehar, S. and Gilani, S.A. (2018). Relationship between Leadership Styles of Nurse Managers and Staff Nurses Job Satisfaction in Public Hospital of Punjab, Pakistan. *International Journal of Social Sciences and Management*. 5, 3 (Jul. 2018), 201-208. DOI: <https://doi.org/10.3126/ijssm.v5i3.20611>.

Nielsen, M. B., Skogstad, A., Gjerstad, J., & Einarsen, S. V. (2019). Are transformational and laissez-faire leadership related to state anxiety among subordinates? A two-wave prospective study of forward and reverse associations. *Work & Stress*, 33(2), 137–155.
<https://doi.org/10.1080/02678373.2018.1528307>

Olu-Abiodun, O., & Abiodun, O. (2017). Perception of transformational leadership behaviour among general hospital nurses in Ogun State, Nigeria. *International journal of Africa nursing sciences*, 6, 22-27.

Padauleng, A. W., Sidin, A. I., & Ansariadi. (2020). The relationship between leadership style and nurse's work motivation with the implementation of patient safety culture in hospital, Bone regency. *Enfermería Clínica*, 30, 161–164. <https://doi.org/10.1016/j.enfcli.2020.06.037>

Park, E., Lee, H. Y., & Park, C. S.-Y. (2018). Association between sleep quality and nurse productivity among Korean clinical nurses. *Journal of Nursing Management*, 26(8), 1051–1058.
<https://doi.org/10.1111/jonm.12634>

Phillips, N., & Norman, K. (2019). A case study of frontline nurse leadership informed by complex responsive processes of relating. *Journal of Clinical Nursing*, 29(13-14), 2181–2195.
<https://doi.org/10.1111/jocn.15091>

Pishgooie, A. H., Atashzadeh-Shoorideh, F., Falcó-Pegueroles, A., & Lotfi, Z. (2018). Correlation between nursing managers' leadership styles and nurses' job stress and anticipated turnover. *Journal of Nursing Management*, 27(3), 527–534. <https://doi.org/10.1111/jonm.12707>

Poghosyan, L., & Bernhardt, J. (2018). Transformational leadership to promote nurse practitioner practice in primary care. *Journal of Nursing Management*, 26(8), 1066–1073.
<https://doi.org/10.1111/jonm.12636>

Rhéaume, A., & Mullen, J. (2017). The impact of long work hours and shift work on cognitive errors

in nurses. *Journal of Nursing Management*, 26(1), 26–32.
<https://doi.org/10.1111/jonm.12513>

Richards, A. (2020). Exploring the benefits and limitations of transactional leadership in healthcare. *Nursing Standard*, 35(12). <https://doi.org/10.7748/ns.2020.e11593>

Ronquillo, C., Dahinten, V., Bungay, V., & Currie, L. (2019). The Nurse LEADership for Implementing Technologies – Mobile Health Model (Nurse LEAD-IT – mHealth). *Canadian Journal of Nursing Leadership*, 32(2), 71–84. <https://doi.org/10.12927/cjnl.2019.25960>

Ross, D. (2017) Challenges for Men in a Female Dominated Environment. Links to Health and Social Care Vol 2 (1), pp. 4 -20.

Rowell, L. L., Bruce, C. D., Shosh, J. M., Riel, M. M., & Springerlink (Online Service. (2017). *The Palgrave International Handbook of Action Research*. Palgrave Macmillan US.

Sabbah, I. M., Ibrahim, T. T., Khamis, R. H., Bakhour, H. A.-M., Sabbah, S. M., Droubi, N. S., & Sabbah, H. M. (2020). The association of leadership styles and nurses well-being: a cross-sectional study in healthcare settings. *Pan African Medical Journal*, 36.
<https://doi.org/10.11604/pamj.2020.36.328.19720>

Santos, J. L. G. D., Pin, S. B. D., Guanilo, M. E. E., Balsanelli, A. P., Erdmann, A. L., & Ross, R. (2018). Nursing leadership and quality of care in a hospital setting: Mixed methods research.

Sarıköse, S., & Türkmen, E. (2020). The relationship between demographic and occupational variables, transformational leadership perceptions and individual innovativeness in nurses. *Journal of Nursing Management*, 28(5), 1126–1133. <https://doi.org/10.1111/jonm.13060>

Sheiner, L., & Malinovskaya, A. (2016). Measuring productivity in healthcare: An analysis of the literature. Hutchins Center on Fiscal and Monetary Policy at Brookings.

Solà, G. J. i, Gené i Badia, J., Hito, P. D., Osaba, M. A. C., & Del Val García, J. L. (2016). Self-perception of leadership styles and behaviour in primary health care. *BMC Health Services Research*, 16(1). <https://doi.org/10.1186/s12913-016-1819-2>

Specchia, M. L., Cozzolino, M. R., Carini, E., Di Pilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2021). Leadership Styles and Nurses' Job Satisfaction. Results of a Systematic Review. *International Journal of Environmental Research and Public Health*, 18(4), 1552.
<https://doi.org/10.3390/ijerph18041552>

Spiva, L., Davis, S., Case-Wirth, J., Hedenstrom, L., Hogue, V., Box, M., ... Ahlers, L. (2020). The Effectiveness of Charge Nurse Training on Leadership Style and Resiliency. *JONA: The Journal of Nursing Administration*, 50(2), 95–103.

- Suratno, K. (2018). The relationship between transformational leadership and quality of nursing work life in hospital. *International Journal of Caring Sciences*, 11(3), 1416-1422.
- Udod, S. A., Duchscher, J. B., Goodridge, D., Rotter, T., McGrath, P., & Hewitt, A. D. (2020). Nurse managers implementing the lean management system: A qualitative study in Western Canada. *Journal of Nursing Management*, 28(2), 221–228. <https://doi.org/10.1111/jonm.12898>
- Vaismoradi, M., Griffiths, P., Turunen, H., & Jordan, S. (2016). Transformational leadership in nursing and medication safety education: a discussion paper. *Journal of Nursing Management*, 24(7), 970–980. <https://doi.org/10.1111/jonm.12387>
- Vali, L., Tabatabaee, S. S., Kalhor, R., Amini, S., & Kiaei, M. Z. (2016). Analysis of productivity improvement act for clinical staff working in the health system: A qualitative study. *Global journal of health science*, 8(2), 106.
- Vatankhah, S., Alirezaei, S., Khosravizadeh, O., Mirbahaeddin, S. E., Alikhani, M., & Alipanah, M. (2017). Role of transformational leadership on employee productivity of teaching hospitals: Using structural equation modeling. *Electronic Physician*, 9(8), 4978.
- Wang, Y., Yang, Y., Wang, Y., Su, D., Li, S., Zhang, T., & Li, H. (2019). The mediating role of inclusive leadership: Work engagement and innovative behaviour among Chinese head nurses. *Journal of Nursing Management*, 27(4), 688–696. <https://doi.org/10.1111/jonm.12754>
- Yakusheva, O., Weiss, M. E., Bobay, K. L., Costa, L., Hughes, R. G., Hamilton, M., Bang, J., & Buerhaus, P. I. (2019). Individual Nurse Productivity in Preparing Patients for Discharge Is Associated With Patient Likelihood of 30-Day Return to Hospital. *Medical Care*, 57(9), 688–694. <https://doi.org/10.1097/mlr.0000000000001170>
- Yeh, S.-C. J., Yuan, K.-S., Chen, S.-H. S., Lo, Y.-Y., Chou, H.-C., Huang, S., ... Wan, T. T. H. (2016). The moderating effect of leadership on the relationship between personality and performance. *Journal of Nursing Management*, 24(7), 869–883. <https://doi.org/10.1111/jonm.12391>
- Yoon, J., Kim, M., & Shin, J. (2016). Confidence in delegation and leadership of registered nurses in long-term-care hospitals. *Journal of Nursing Management*, 24(5), 676–685. <https://doi.org/10.1111/jonm.12372>

Appendices .2

Appendix I: Socio-demographic characteristics of participants

Please tick (✓) in the boxes provided.

1) Gender
b. ☐ Female a. ☐ Male
2) Marital status
a. ☐ Single b. ☐ Married c. ☐ Divorced d. ☐ Widowed
e. ☐ separated
2) You are:
a. ☐ nursing director b. ☐ area supervisor c. ☐ overall supervisor
d. ☐ head nurse f. ☐ office nurses
3) Age:
b. ☐ 31-40 c. ☐ 41-50 d. ☐ older than 51 a. ☐ 20-30
4) Highest level of education:
c. ☐ Master d. ☐ PhD a. ☐ Diploma b. ☐ Bachelor.
5) Experience years:
a. ☐ 1-2 b. ☐ 2-5 c. ☐ 6-9 d. ☐ more than 10.
6) Type of current hospital:
a. ☐ General b. ☐ Special c. ☐ Teaching and Research Hospital
7) What department do you work in the hospital?

a. ☐ Emergency	b. ☐ neurosurgical	c. ☐ Surgical
d. ☐ Medical	e. ☐ isolations	f. ☐ burns
g. ☐ Outpatient department	h. ☐ ICU department	i. ☐ Other
8) How many Number of supordinate you lead?		
a. ☐ less than 10	b. ☐ 10-20	c. ☐ 21-30
d. ☐ 31-40		
7) How many hours you working per week? (hr.)		
a. ☐ less than 40	b. ☐ 41-50	c. ☐ 51-60
d. ☐ 60-70	e. ☐ 70-80	f. ☐ more than 80

Appendix II: MLQ Multifactor Leadership Questionnaire Leader Form (5x-Short)

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank. Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word “others” may mean your peers, clients, direct reports, supervisors, and/or all of these individuals. Use the following rating scale.

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not a
0	1	2	3	4

Item	Scale			
1. I provide others with assistance in exchange for their efforts	0	1	2	3
2. I re-examine critical assumptions to question whether they are appropriate	0	1	2	3
3. I fail to interfere until problems become serious	0	1	2	3
4. I focus attention on irregularities, mistakes, exceptions, and deviations from standards	0	1	2	3
5. I avoid getting involved when important issues arise	0	1	2	3
6. I talk about my most important values and beliefs	0	1	2	3
7. I am absent when needed...	0	1	2	3
8. I seek differing perspectives when solving problems	0	1	2	3
9. I talk optimistically about the future.	0	1	2	3
10. I instill pride in others for being associated with me	0	1	2	3
11. I discuss in specific terms who is responsible for achieving performance targets	0	1	2	3
12. I wait for things to go wrong before taking action	0	1	2	3
13. I talk enthusiastically about what needs to be accomplished	0	1	2	3
14. I specify the importance of having a strong sense of purpose	0	1	2	3
15. I spend time teaching and coaching	0	1	2	3
16. I make clear what one can expect to receive when performance goals are achieved	0	1	2	3
17. I show that I am a firm believer in "If it isn't broke, don't fix it."	0	1	2	3
18. I go beyond self-interest for the good of the group	0	1	2	3
19. I treat others as individuals rather than just as a member of a group	0	1	2	3
20. I demonstrate that problems must become chronic before I take action	0	1	2	3
21. I act in ways that build others' respect for me	0	1	2	3
22. I concentrate my full attention on dealing with mistakes, complaints, and failures	0	1	2	3
23. I consider the moral and ethical consequences of decisions	0	1	2	3
24. I keep track of all mistakes	0	1	2	3

25. I display a sense of power and confidence	0	1	2	3
26. I articulate a compelling vision of the future	0	1	2	3
27. I direct my attention toward failures to meet standards	0	1	2	3
28. I avoid making decisions	0	1	2	3
29. I consider an individual as having different needs, abilities, and aspirations from others	0	1	2	3
30. I get others to look at problems from many different angles	0	1	2	3
31. I help others to develop their strengths	0	1	2	3
32. I suggest new ways of looking at how to complete assignments	0	1	2	3
33. I delay responding to urgent questions	0	1	2	3
34. I emphasize the importance of having a collective sense of mission	0	1	2	3
35. I express satisfaction when others meet expectations	0	1	2	3
36. I express confidence that goals will be achieved	0	1	2	3
37. I am effective in meeting others' job-related needs	0	1	2	3
38. I use methods of leadership that are satisfying	0	1	2	3
39. I get others to do more than they expected to do.	0	1	2	3
40. I am effective in representing others to higher authority	0	1	2	3
41. I work with others in a satisfactory way	0	1	2	3
42. I heighten others' desire to succeed	0	1	2	3
43. I am effective in meeting organizational requirements.	0	1	2	3
44. I increase others' willingness to try harder	0	1	2	3
45. I lead a group that is effective	0	1	2	3

Appendix III: (Nurses' productivity) The NHS Knowledge and Skills Framework (NHS KSF)

place rate your subordinate performance as **poor, good or excellent in the following items**

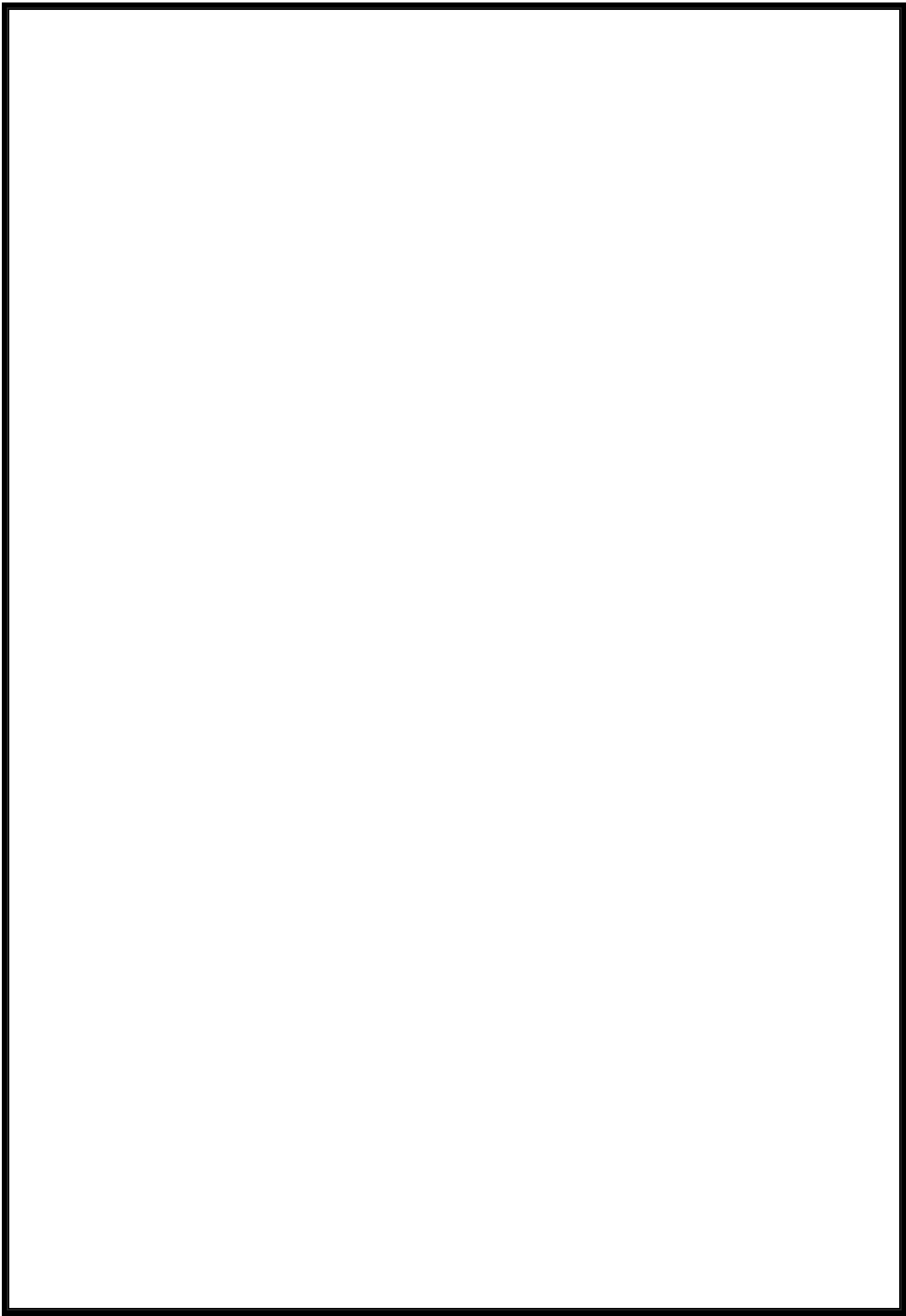
Item	Subordinate Level	Poor	Good	Excellent

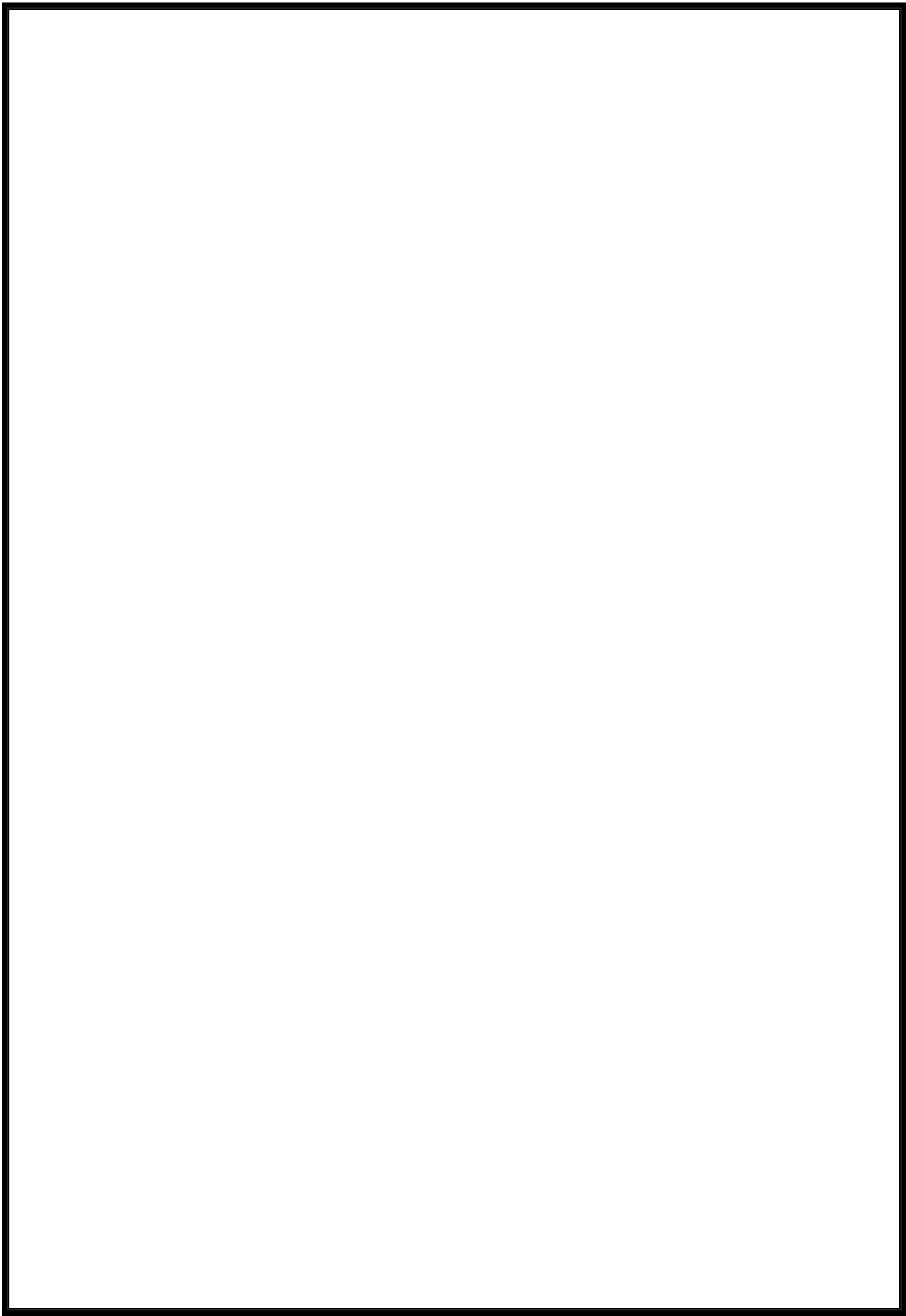
1. Communication					
a) The subordinate communicates with a range of people on a range of matters in a form that is appropriate to them and the situation	2				
b) The subordinate improves the effectiveness of communication through the use of communication skills	2				
c) The subordinate Constructively manages barriers to effective communication	2				
d) The subordinate keeps accurate and complete records consistent with legislation, policies and procedures	2				
e) The subordinate Communicates in a manner that is consistent with relevant legislation, policies and procedures	2				
2. Personal and People development					
a) The subordinate assesses and identifies feedback from others on own work	2				
b) The subordinate Takes an active part in the development review of own work and suggests areas for learning and development in the coming year	2				
c) The subordinate takes responsibility for own personal development and takes an active part in learning opportunities	2				
d) The subordinate values the effectiveness of learning opportunities and alerts others to benefits and problems	2				
e) The subordinate keeps up-to-date records of own development review process	2				
f) The subordinate offers information to others when it will help their development and/or help them meet work demands.	2				
Health Safety and Se					
a) The subordinate identifies and assesses the potential risks involved in work activities and processes for self and others	2				
b) The subordinate identifies how best to manage the risks	2				
c) The subordinate undertakes work activities consistent with: -legislation, policies and procedures -the assessment and management of risk	2				
d) The subordinate takes the appropriate action to manage an emergency summoning assistance immediately when this is necessary	2				
e) The subordinate takes the appropriate action to manage an emergency summoning assistance immediately when this is necessary	2				

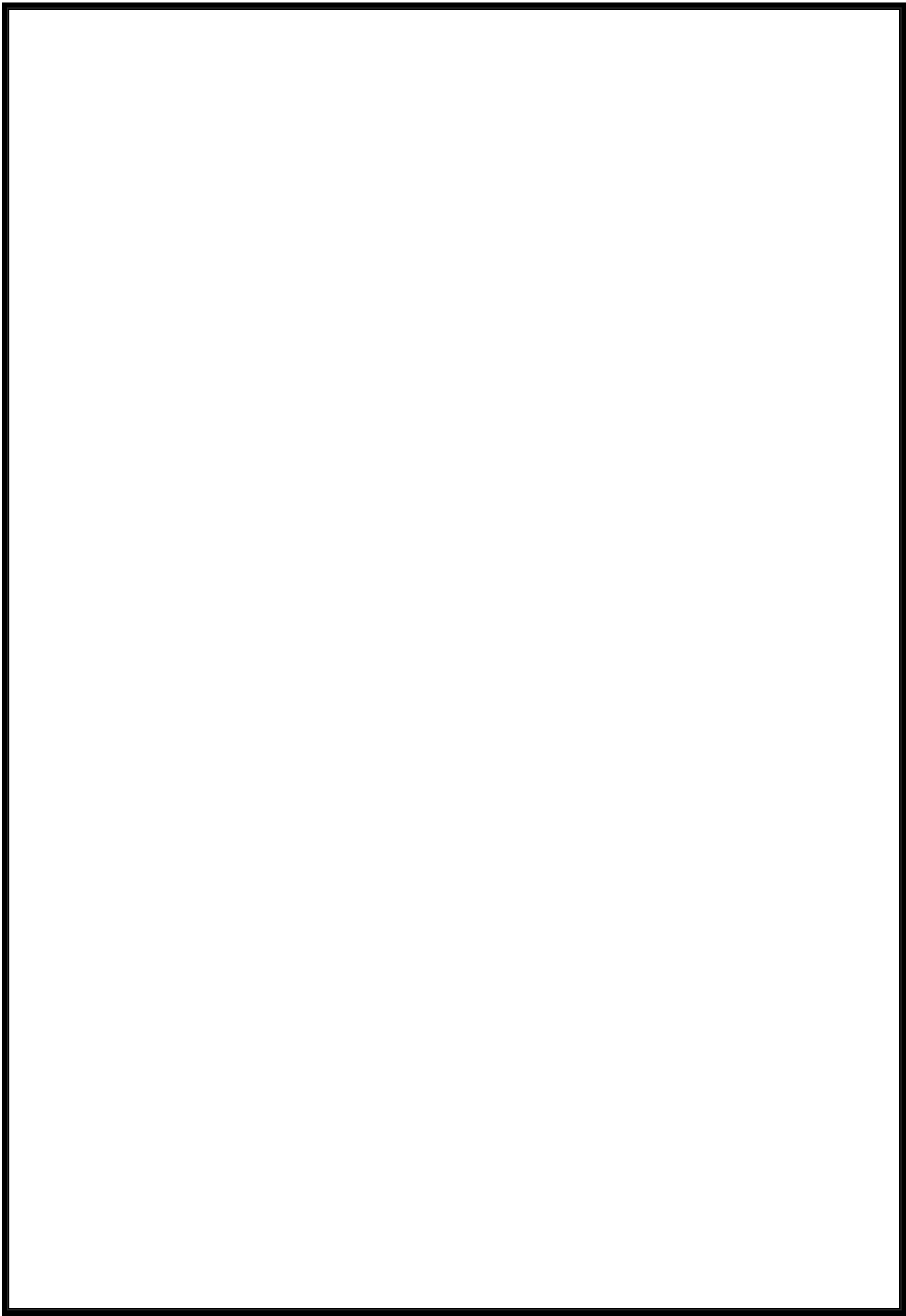
f) The subordinate reports actual or potential problems that may put health, safety and security at risk and suggest how they might be addressed	2				
g) The subordinate support others in maintaining health, safety and security.	2				
Service Development					
a) The subordinate discusses and agree with the work team	2				
b) The subordinate constructively makes agreed changes to own work in the agreed timescale seeking support as and when necessary	2				
c) The subordinate supports others in understanding the need for and making agreed changes	2				
d) The subordinate evaluates own and other's work when required to do so completing relevant documentation	2				
e) The subordinate makes constructive suggestions as to how services can be improved for users and the public	2				
f) The subordinate constructively identifies issues with direction, policies and strategies in the interests of users and the public	2				
Ensuring quality					
a) The subordinate acts consistently with legislation, policies, procedures and other quality approaches and encourages others to do so	2				
b) The subordinate works within the limits of own competence and levels of responsibility and accountability in the work team and organization	2				
c) The subordinate works as an effective team member	2				
d) The subordinate prioritizes own workload and organizes own work to meet these priorities and reduce risks to quality	2				
e) The subordinate uses and maintains resources efficiently and effectively and encourages others to do so	2				
Equality, Diversity and Inclusion					
a) The subordinate recognizes the importance of people's rights and in accordance with legislation, policies and procedures	2				
b) The subordinate acts in ways that: -acknowledge and recognize people's expressed beliefs, preferences and choices - respect diversity –value people as individuals	2				
c) The subordinate takes account of own behavior and its effect on others	2				

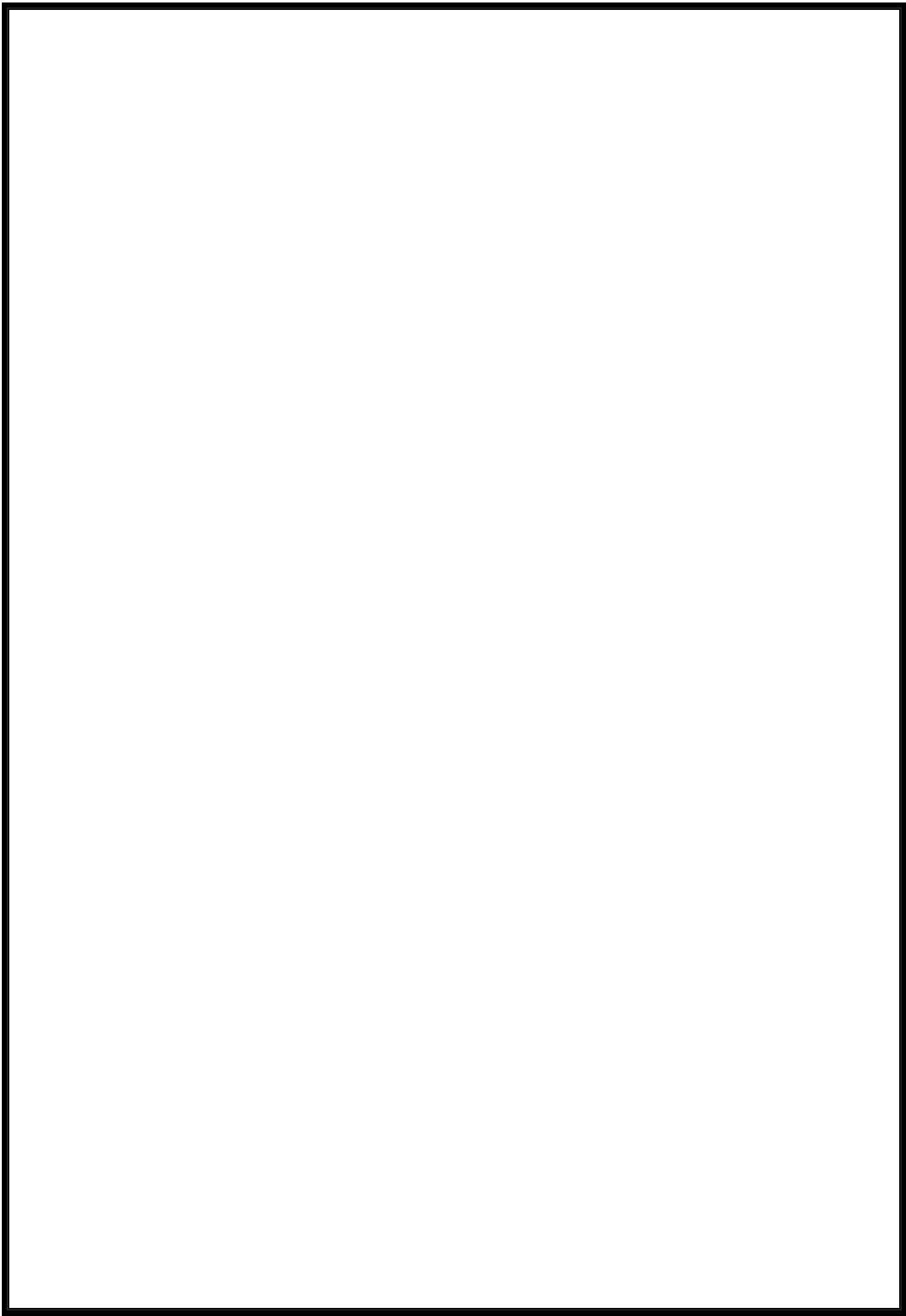
d) The subordinate identifies and takes action when own or others' behavior undermines equality and diversity	2				
Assessment and treatment planning					
a) The subordinate evaluates relevant information to plan the range and sequence of assessment required and determines the specific activities to be undertaken	3				
b) The subordinate selects appropriate assessment approaches, methods, techniques and equipment, in line with -individual needs and characteristics - evidence of effectiveness - the resources available	3				
c) The subordinate respects people's dignity, wishes and beliefs; involves them in shared decision making and obtains their consent	3				
d) The subordinate prepares for, carries out and monitors assessments in line with evidence based practice ,and legislation, policies and procedures and/or established protocols, theories and models	3				
e) The subordinate monitors individuals during assessments and takes the appropriate action in relation to any significant changes or possible risks	3				
f) The subordinate evaluates assessment findings/results and takes appropriate action when there are issues	3				
g) The subordinate considers and interprets all of the information available and reaches a justifiable conclusion and explains the outcomes to those concerned	3				
h) The subordinate determines and records diagnosis and treatment plans according to agreed protocols/pathways/models	3				
i) The subordinate monitors and reviews the implementation of treatment plans and makes changes within agreed protocols/pathways/models for clinical effectiveness and to meet people's needs and views	3				
j) The subordinate Identifies individuals whose needs fall outside protocols/ pathways/ models and makes referrals to the appropriate practitioners with the necessary degree of urgency	3				
Interventions and t					
a) The subordinate respects individual's dignity, wishes and beliefs, involves them in shared decision making and obtains their consent	3				
b) The subordinate identifies with the individuals concerned: -goals for the specific activities to be undertaken within the context of the overall treatment plan and the individual's physiological and/or psychological functioning	3				
c) The subordinate prepares appropriately for the intervention/ treatment to be undertaken	3				

d) The subordinate undertakes the intervention/treatment in a manner that is consistent with; -evidence-based practice and/or clinical guidelines/ established theories and models -multi-disciplinary team working	3				
e) The subordinate monitors individuals' reactions to interventions/treatments and takes the appropriate action to address any issues or risks	3				
f) The subordinate reviews the effectiveness of the interventions/ treatments as they proceed and makes any necessary modifications	3				
g) The subordinate provides feedback to the person responsible for the overall treatment plan on its effectiveness and the health and wellbeing and needs of people	3				
h) The subordinate makes accurate records of the interventions/treatments undertaken and outcomes	3				
i) The subordinate responds to, records and reports any adverse events or incidents relating to the intervention/treatment with an appropriate degree of urgency	3				









Midocean University

College of Management

Department of...project management

Title in English

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