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## SYSTEMATIC REVIEW

### Evaluation of the Factors Influencing Self-leadership in the Saudi's Healthcare Sector: A Systematic Review

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#### Abstract:

##### Background:

Self-leadership in the Saudi Arabian healthcare sector is vital due to the ongoing transformation of this industry. However, research on self-leadership training for Saudi healthcare workers is presently limited.

##### Objective:

A systematic literature review is performed, focusing on articles about self-leadership and the impact of factors influencing self-leadership in the Saudi Arabian health sector.

##### Methods:

PRISMA reporting was used for this systematic review. Data was sourced from various electronic databases based on predefined selection criteria.

##### Results:

Nine studies met the study inclusion criteria and were reviewed further. Results showed a lack of evidence on leadership training for healthcare workers in the Saudi Arabian healthcare sector. In some studies, self-leadership was associated with emotional intelligence, education, job satisfaction, job engagement, and internalized moral skills. High levels of self-leadership positively correlated with increased performance of healthcare workers in the Saudi Arabian health sector.

##### Conclusion:

Healthcare workers should have the necessary skills and strategies to develop self-leadership, thus enhancing communication competence and collaboration to achieve high performance in the health sector. Further research is needed in the Saudi Arabian healthcare sector to close the literature gap regarding self-leadership.

**Keywords:** Self-leadership, Health sector, Performance, Healthcare workers, Leadership, Self-management concept.

#### Article History

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## 1. INTRODUCTION

The self-leadership concept has emerged from the self-management concept. This prompted researchers to explore the concept of empowerment as an alternative to a heroic leadership model [1]. In an organizational setting, self-managing work teams should behave in a manner that indicates self-leadership strategies in personal goal setting, self-reward,

and self-observation. However, this requires training interventions to improve performance and enhance job motivation [1].

Self-leadership is the act through which individuals express self-influence over their way of thinking and their practices at work [2]. Multiple studies indicate that employees develop self-leadership strategies to improve their attitude and workplace performance, giving them a sense of self-reward rather than external influence. A previous study tested the impact of the involvement of self-leadership on engagement in

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work, performance, and well-being of 195 healthcare employees from different organizations by proposing a hypothesis that the trained employees can influence autonomously their behavior and cognitions which will affect their engagement in work, apparent performance, and wellbeing [3]. The results showed that self-leadership training positively influences healthcare professionals' performance and work engagement without directly affecting general health. However, improved engagement in work was found to mediate the impact of training on health. Hence it was concluded that healthcare workers who are more engaged in their jobs have better performance and general health [3]. Self-leadership also involves using set strategies to manage one's perceptions and behaviors in order to become more self-driven toward personal goals, identify needs, and work effectively [4]. Therefore, the development of self-leadership requires the acquisition of self-awareness, goal setting, and self-motivation, as well as the development of constructive thought patterns.

Self-leadership can be used in different fields and settings, such as businesses, governmental organizations, and the healthcare sector. In healthcare, self-leadership is vital for the development of self-motivation since the work within this field is often stressful, dissatisfying, and demanding, leading to high levels of absenteeism and early exit from the healthcare industry [5]. Self-leadership, therefore, allows individuals in the healthcare sector to take responsibility and initiative by using the available self-influencing strategies to improve self-motivation and well-being [5].

According to researchers, individuals with highly developed self-leadership skills are less reliant on situational management mechanisms and can independently establish what (guidelines and goals), why (direction), and how (methods) to do things [6]. True self-leadership is characterized by the ability to completely embrace one's own actions and to act on the basis of higher-order considerations. It also requires behavioral and cognitive self-influencing methods (such as positive thinking and natural reward strategies) to maximize motivation, well-being, and performance [6]. A previous study showed that these strategies are a combination of behavioral and cognitive techniques that are designed to increase good feelings and self-motivation. The authors argued that it is possible to create more pleasant working environments to get natural rewards intentionally. In their view, by shifting the mental emphasis from painful components of one's work to the pleasant, naturally rewarding ones, one may cognitively improve natural rewards as well [7].

Macro and micro levels of an organization are affected by self-leadership, as there is a direct correlation between self-leadership tactics used by staff and their work satisfaction [8]. The same is true for the health sector, where various characteristics and aspects of the work environment, the happiness of employees, and a company's success are interrelated [9]. The leaders are thus required to assist their subordinates in learning the skills needed for them to succeed in their positions and improve their leadership abilities. Self-leadership is instrumental in this process, as each leader and follower have an equal chance of acquiring power in this system [10]. Self-leadership is vital in the new kind of

leadership to help organizations overcome the challenges of the 21st century.

A meta-analysis was performed to evaluate the role of self-leadership, and its principal strategies, including behaviour-focused, natural rewards and constructive idea approaches as interpreters of self-efficacy, job attitudes and job performance. The results of the study indicated that self-leadership was significantly related to conscientiousness, directness, extroversion, and transformational leadership [2]. It was suggested that encouraging self-leadership in employees might foster valuable cognition, feelings, and behaviours. Hence concluding that the training programs for self-leadership could affect particular approaches for coaching depending on the required outcomes [2]. As far as our knowledge, no systematic review has been conducted on self-leadership in Saudi healthcare.

The Saudi healthcare system is already highly developed, but it is expected to advance further due to the health sector transformation program (HSTP) incorporated into the Saudi Vision 2030, launched to define responsibilities and commitments, set objectives, and support developmental and economic efforts. Specifically, it aims to restructure the Saudi health sector and boost its capabilities and status as a value-based, integrated, and effective ecosystem centered on patients' health. Like many establishments, this program considers leadership essential in achieving its goals and sustainability [11]. Leaders help direct organizational resources to achieve goals and improve efficiency.

Through disease prevention and public health promotion, HSTP strives toward financial sustainability and transparency. This mission is realized through guidance and motivation from effective leaders who offer clarity of purpose. Consequently, the program facilitates access to insurance and free healthcare services for society, including visitors, residents, and citizens [12]. This modern healthcare model will require leadership skills in the distribution of resources to ensure healthcare quality improvement, digital solutions expansion, and comprehensive and fair geographical coverage. Effective leaders will ensure that HSTP improves traffic safety awareness among communities and implements global best and value-based practices, increasing beneficiary satisfaction levels [11].

Moreover, during the COVID-19 pandemic, leaders in Saudi Arabia were recognized for their contribution in response to social, economic, and health turmoil associated with the pandemic. The country was commended for handling this crisis better than most other countries as it overcame its challenges, emerging among the best-performing markets with a significant rise in value [13]. Similarly, the population experienced positive well-being and was ranked first among Arab countries in the World Happiness Report, which has provided opportunities for new wellness and health tourism packages and increased medical tourism [14]. In addition, in partnership with political leaders, the program leadership fulfilled its ambitious social and long-term plan of reducing dependency on crude oil. This achievement resulted in improved healthcare economic potential by facilitating access to emergency health services.

Considering leadership in the HSTP context is important since the program objective is identifying challenges experienced by government agencies, and the project requires institutional capacity to achieve its goals. Improving healthcare quality to the levels that meet expectations requires commitment from all employees, including administrators, health practitioners, and physicians [15]. Due to the increasing transformation, innovation, and adoption of digital technologies, leaders must educate workers on innovations and bring about change. Therefore, this research aims to systematically review extant studies focusing on the factors that exert both positive and negative influences on self-leadership in the Saudi Arabian health sector.

### 1.1. Research Objectives

As the purpose of this research is to systematically review extant studies focusing on the factors that exert both positive and negative influence on self-leadership in the Saudi Arabian health sector, its specific aims are:

1. To identify different factors influencing self-leadership.
2. To identify whether these factors have a positive or negative influence on self-leadership.
3. To further identify the factors influencing self-leadership in the Saudi Arabian healthcare sector and their impact on the performance of hospital staff.

Thus, the study is guided by the following research questions:

1. What are the different factors influencing self-leadership in a healthcare setting?
2. How do the factors influencing self-leadership affect the performance of hospital staff in the Saudi Arabian healthcare sector?

## 2. MATERIALS AND METHODS

This systematic review followed the PICO (population, intervention, comparison, and outcome) research strategy and PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) approach for reporting and presenting the gathered information. It aimed to provide evidence on the level of training on self-leadership that healthcare workers in Saudi Arabia receive by assessing, locating, and summarizing the available research findings. Its further objective was to identify future directions for studies in this domain.

### 2.1. Search Strategy

Seven biomedical and social science databases, including PubMed, Cochrane Library CINHALL, MEDLINE, PsycINFO, and EMBASE, were searched using a combination of text-based queries and index terms (employed to help assess the search terms, initiate the search process, and formulate search strategy and the scope of terminology easily applicable in other databases). The combination of free-text terms (text-based queries) and index terms used when searching electronic databases included terms relating to self-leadership, factors influencing self-leadership both negatively and positively, self-leadership in healthcare sectors, and self-leadership in the

Saudi Arabian healthcare sector. Only text-based queries were utilized where the controlled index terms did not match. Additionally, relevant websites and databases were searched for pertinent literature published between January 2016 and August 2022. Finally, electronic searches were supplemented with forward citation tracking and reference list screening through Google Scholar under group expert advisory.

### 2.2. Selection Criteria

Studies were eligible for inclusion if the authors (a) addressed the different factors influencing self-leadership in general; (b) primarily focused on self-leadership in the healthcare sector; (c) discussed the factors that develop self-leadership in the healthcare setting with both positive and negative impacts of factors on self-leadership in the healthcare setting; (d) demonstrated knowledge about the role of healthcare staff's self-leadership in the performance of the healthcare institutions in Saudi Arabia; (e) evaluated both positive and negative factors on self-leadership; and (f) their work was published between January 2016 and August 2022 in English. PRISMA flow diagram of the article selection process is presented in Fig. (1).

### 2.3. Quality Assessment

Evidence-based groups like the Joanna Briggs Institute (JBI) were established to create standards for conducting systematic reviews. Joanna Briggs formed a working group in 2012 to evaluate the prevalence of systematic reviews and develop guidelines for researchers conducting such studies. Critical appraisal checklists were explicitly developed for evaluating the strength of a specific research design used in systematic reviews [16]. Checklists may be used to assess several types of research, such as cohort studies, randomized controlled trials, and cross-sectional studies.

All the included articles were assessed for quality using the Joanna Briggs checklist, the results of which are summarized in Table 1. All of the included articles were of high quality with low risks of bias. All the responses against the checklist are explained in Table 2. The risk of bias summary is shown in Fig. (2), based on the review authors' judgement about the selection, performance, detection, attribution, reporting, and other types of bias for each included study. The green color in the graph shows a low risk of bias and red represents a high risk, whereas colorless blocks represent unclear bias. All the included studies showed a low risk of bias across all categories except detection bias.

## 3. RESULTS

Nine papers fully met the inclusion criteria, as demonstrated by the PRISMA flow diagram presented below. The electronic database search produced 486 relevant articles, and a further 106 articles were identified *via* other search methods. These 592 potentially relevant articles included 93 duplicates, which were eliminated. The authors then reviewed the abstracts and titles of the remaining 499 articles to determine their potential relevance, which led to the exclusion of 346 articles due to irrelevance. The full text of the remaining 153 articles was thus reviewed, and 144 articles were further

excluded based on limited information on the factors influencing self-leadership. Thus, only nine articles satisfied all

the eligibility criteria and were included in the qualitative synthesis below.

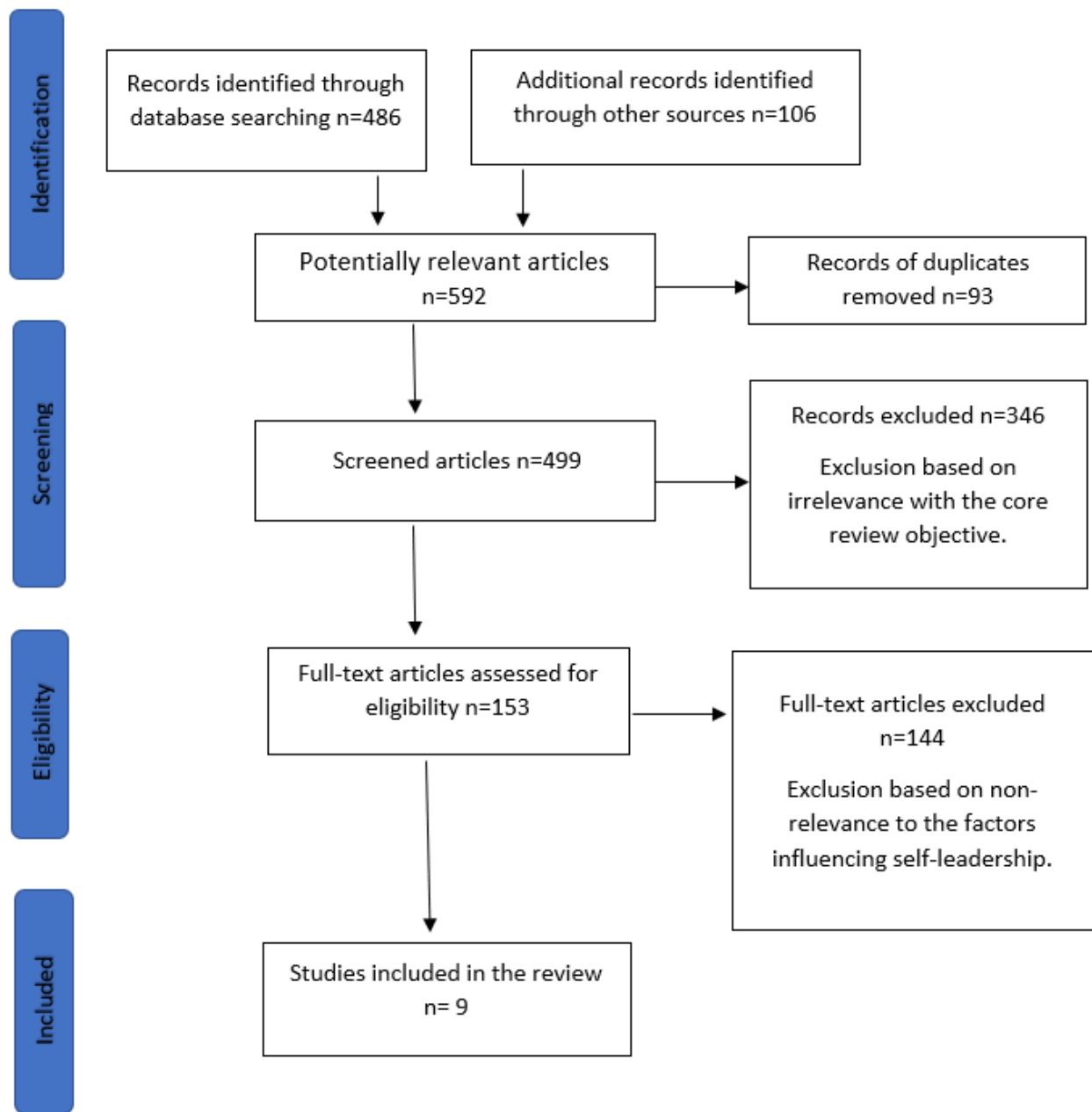


Fig. (1). PRISMA flow diagram.

Table 1. Quality assessment.

Authors	Is the Review Question Clearly and Explicitly Stated?	Were the Inclusion Criteria Appropriate for the Review Question?	Was the Research Strategy Appropriate?	Were the Sources and Resources used to Search for Studies Adequate?	Were the criteria for Appraising Studies Appropriate?	Was Critical Appraisal Conducted by Two or more Reviewers Independently?	Were there Methods to Minimize Errors in Data Extraction?
Alabdulbaqi, Banjar & Felemban	Yes	Yes	Yes	Yes	Yes	Unclear	Yes

(Table 1) contd.....

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Algarni <i>et al.</i>	Yes	Yes	Yes	Unclear	Yes	Unclear	Yes
Al-Yami, Galdas & Watson	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Turki Alshahrani	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Asiri <i>et al.</i>	Yes	Yes	Yes	Unclear	Yes	Yes	Yes
Alshammari <i>et al.</i>	Yes	Yes	Yes	No	Yes	Yes	Yes
Nabil Alaaddin, Khamis Ibrahim & Kadi	Yes	Yes	Yes	Yes	Yes	Unclear	Yes
Al-Dossary	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Baker & Alghamdi	Yes	Yes	Yes	Yes	Yes	No	Yes

Table 2. Critical review of included literature range and characteristics.

Study Title & Journal	Article Details	StudyY Design	Outcomes
<i>Study Title:</i> The relationship between self-leadership and emotional intelligence among staff nurses. <i>Journal:</i> IOSR Journal of Nursing and Health Science (IOSR-JNHS)	<i>Authors:</i> Alabdulbaqi, Banjar & Felemban, <i>Year:</i> 2019 <i>Aim:</i> To assess the relationship between self-leadership and emotional intelligence among nurses.	<i>Study Design:</i> cross-sectional study <i>Number of Participants:</i> 158	The leading outcome of the study was that self-leadership is directly related to emotional intelligence; thus, high self-leadership leads to a high level of emotional intelligence.
<i>Study Title:</i> Identifying factors influencing the leadership performance of Saudi's healthcare sector. <i>Journal:</i> The Journal of Organizational Management Studies	<i>Authors:</i> Algarni <i>et al.</i> <i>Year:</i> 2018 <i>Aim :</i> Assessment of the factors influencing leadership performance of Saudi Arabia's healthcare sector.	<i>Study Design:</i> Survey research, Cross interview surveys <i>Number of Participants:</i> 29	The study suggested that the relationship between leaders and their followers should be supervised by the highest tiers of management.
<i>Study Title:</i> Leadership style and organisational commitment among nursing staff in Saudi Arabia <i>Journal:</i> Journal of Nursing Management	<i>Authors:</i> Al-Yami, Galdas & Watson <i>Year:</i> 2018 <i>Aim :</i> To evaluate the leadership styles and organizational commitment among nurses in Saudi Arabia.	<i>Study Design:</i> Questionnaires <i>Number of Participants:</i> 219	There was significance in the organizational commitment of nurses and transformational leadership.
<i>Study Title:</i> Impact of Self-sacrificial Leadership on Organizational Engagement: A Psychological Mechanism of Job Satisfaction. <i>Journal:</i> International Journal of Organizational Leadership	<i>Authors:</i> Turki Alshahrani <i>Year:</i> 2022 <i>Aim :</i> To assess the impact of self-sacrificial leadership on organizational engagement.	<i>Study Design:</i> across-sectional study <i>Number of Participants:</i> 176	The link between self-sacrificial leadership and organizational engagement is mediated by job satisfaction.
<i>Study Title:</i> The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: a cross-sectional study. <i>Journal:</i> BMC nursing	<i>Authors:</i> Asiri <i>et al.</i> <i>Year:</i> 2016 <i>Aim:</i> To assess the association between leadership styles and the empowerment of nurses' healthcare setting commitment.	<i>Study Design:</i> across-sectional study <i>Number of Participants:</i> 350	The study suggests that leadership styles and nurse empowerment could play a major role in promoting organizational commitment in Saudi Arabia.
<i>Study Title:</i> Emotional intelligence and authentic leadership among Saudi nursing leaders in the Kingdom of Saudi Arabia. <i>Journal:</i> Journal of Professional Nursing	<i>Authors:</i> Alshammari <i>et al.</i> <i>Year:</i> 2020 <i>Aim:</i> To evaluate the role relationship between emotional intelligence and leadership among nurses in Saudi Arabia.	<i>Study Design:</i> questionnaires <i>Number of Participants:</i> 152	Using emotions was the strongest influence on leadership among the nurses and experienced nurses are more authentic leaders.

(Table 2) contd.....

Study Title & Journal	Article Details	StudyY Design	Outcomes
<i>Study Title:</i> Leadership Skills and their Associated Factors among Pharmacy Students at Umm Al-Qura University, Makkah, Saudi Arabia. <i>Journal:</i> Journal of Pharmaceutical Research International.	<i>Authors:</i> Nabil Alaaddin, Khamis Ibrahim & Kadi <i>Year:</i> 2021 <i>Aim:</i> To assess leadership skills and their associated factors among pharmacy students.	<i>Study Design:</i> across-sectional study <i>Number of Participants:</i> 400	Training in both leadership skills and emotional intelligence leads to the development of highly qualified healthcare personnel.
<i>Study Title:</i> Leadership Style, Work Engagement and Organizational Commitment Among Nurses in Saudi Arabian Hospitals. <i>Journal:</i> Journal of Healthcare Leadership.	<i>Authors:</i> Al-Dossary <i>Year:</i> 2022 <i>Aim:</i> To critically review the relationship between nurse managers' leadership styles, work engagement, and organizational commitment in Saudi Arabia.	<i>Study Design:</i> cross-sectional <i>Number of Participants:</i> 390	Results showed that nurses showed low work engagement and organizational commitment compared to nurse managers, which is a major concern in times when Saudi Arabia is planning to completely transform healthcare facilities.
<i>Study Title:</i> Casey-Fink Graduate Experience Survey for Nurses and Preceptors in the Kingdom of Saudi Arabia. <i>Journal:</i> Nurse Media Journal of Nursing.	<i>Authors:</i> Baker & Alghamdi <i>Year:</i> 2020 <i>Aim:</i> To evaluate the relationship between the experience of nurses and preceptors in Saudi Arabia.	<i>Study Design:</i> Cross-sectional study <i>Number of Participants:</i> 84	No significant relationship was found between support, patient safety, leadership, job satisfaction, and professional satisfaction.

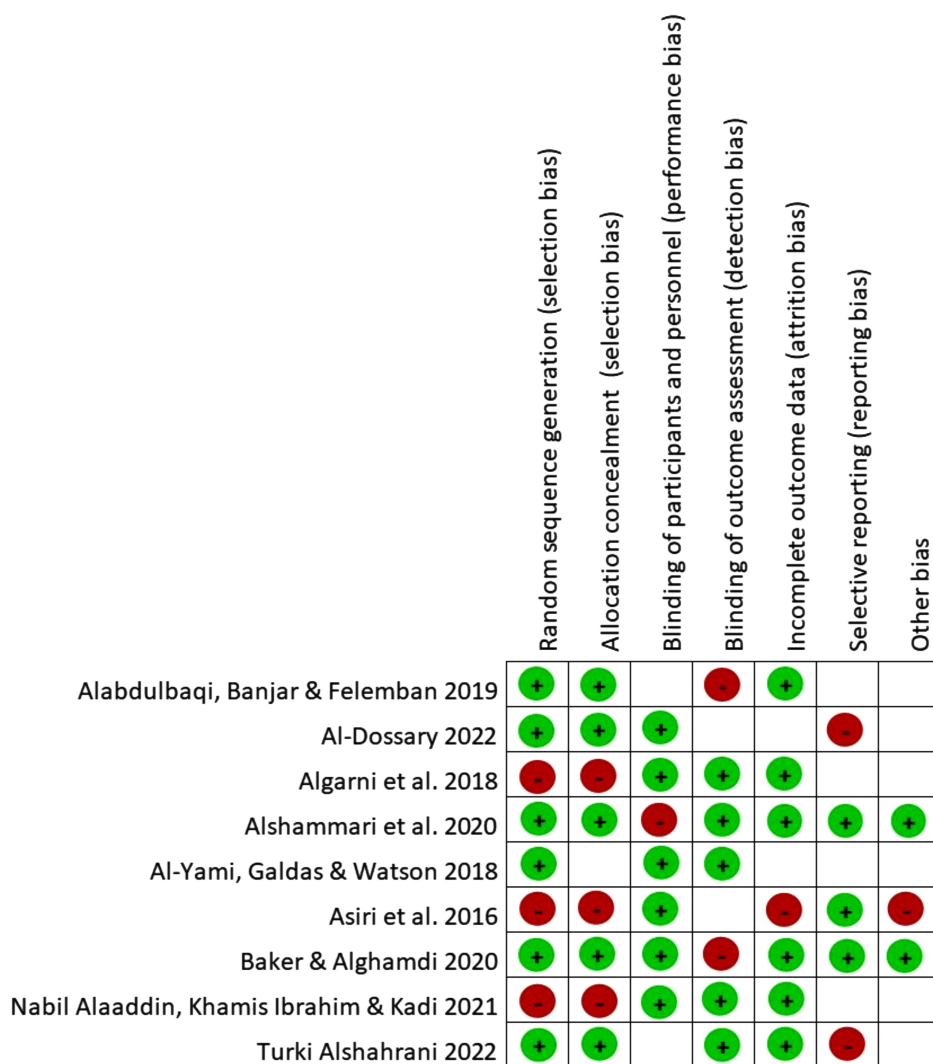


Fig. (2). Risk of bias summary (Joanna Briggs checklist).

### 3.1. Positive and Negative Impact of the Factors on Developing Self-leadership in the Healthcare Setting

Some of the papers identified the negative and positive effects of factors influencing self-leadership in the healthcare setting in Saudi Arabia. As presented by Alabdulbaqi *et al.* [17], Self-leadership among the nurses involved in their study was directly associated with their level of emotional intelligence. The study indicated that nurses with a bachelor's degree or higher levels of education had higher self-leadership levels than nurses with lower education levels. They also noted that the association of self-leadership with emotional intelligence in nurses was mediated by self-regulation and several shared commonalities. The authors thus argued that healthcare workers that exhibit emotional intelligence help establish a workplace culture that is not toxic in the organization. They were also of the view that using emotions was the strongest influence on leadership among nurses, and experienced nurses presented more authentic leadership [17].

Research conducted by Baker and Alghamdi [18] revealed that self-leadership is associated with transformational leadership, openness, extraversion, and conscientiousness and is moderated by national power distance. The authors thus suggested fostering employee self-leadership to promote productive cognition, behaviors, and attitudes. In relation to nurses in the Kingdom of Saudi Arabia, the authors reported a statistically significant association between experiences and preceptors. However, no association was found between leadership, professional and job satisfaction, support, communication, and patient safety. Management-level workers in hospitals are therefore required to have the necessary skills and strategies to develop communication competencies that will enhance self-leadership in nurses, resulting in high performance in the organization [18].

Similarly, Alshahrani [19] stated that self-sacrificial leadership positively impacted organizational engagement and job satisfaction. The results obtained in this study indicated that the association between self-sacrificial leadership and organizational engagement was mediated by job satisfaction. As previously noted, job satisfaction is achieved in an organization when there is job autonomy, where employees are given the freedom to carry out their duties and responsibilities in a way that suits them. Job autonomy increases motivation, creativity, overall well-being, and a sense of job satisfaction. Available evidence also indicates that empowering employees in healthcare organizations and using appropriate leadership styles could play a major role in promoting the organizational commitment of nurses in the Saudi Arabian healthcare sector [20]. Empowerment of employees builds their confidence to carry out tasks in an organization and establish trust, as well as creates a secondary level of leadership to help run the organization in times of crisis.

According to Al-Dossary [21], whose study focused on leadership styles, work engagement, and organizational commitment, the level of work engagement and organizational commitment is higher among nurse managers relative to nurses, which is a cause for concern due to the planned transformation in the healthcare organizations in Saudi Arabia. According to Asiri *et al.* [20], nurses perceive themselves to

have moderate levels of confidence, autonomy, and psychological empowerment believing they have a very low impact on their working environment. As a result, they feel less motivated at work and may experience burnout because they feel that their effort is unrecognized. Algarni *et al.* [22] similarly suggested that the highest tiers of management should supervise the relationship between leaders and their followers to ensure that nurses are properly trained and not exposed to stress to enhance their job performance.

In their study, Alaaddin *et al.* [23] focused on leadership skills and related factors. Based on the analysis of data pertaining to 400 pharmacy university students, they concluded that leadership plays an important role in enhancing the quality of clinical and pharmacy practice, as well as patient satisfaction. Based on the participants' responses to the leadership, emotional intelligence, anxiety and stress scales, the highest levels of leadership were related to internalized moral skills, while depression and anxiety were negatively associated with internalized moral dilemmas, indicating the need for training on leadership skills and emotional aptitude, along with supporting physical activities.

### 3.2. Demonstration of how Self-leadership of Healthcare Staff Develops the Performance of Saudi Arabia's Healthcare Sector

Authors of extant research proposed various ways in which self-leadership of healthcare staff develops the performance of Saudi Arabia's healthcare sector. According to Alshammari *et al.* [24], training nurses on self-leadership and emotional intelligence is vital to help in the establishment of leadership. Articles on the leadership styles nurse managers use further show that transformational leadership is the only theory tested in relation to nurses and their outcomes in Saudi Arabian healthcare institutions. In order to support the goals of caregivers and healthcare leaders as well as improve nursing care delivery procedures and outcomes, effective leadership is required. According to Al-Yami *et al.* [25], transformational leadership is linked to the organizational commitment among the nurses in Saudi Arabia, which is expected given that transformational leaders are more likely to make better decisions that lead to better results. Moreover, the leadership style employed by nurse managers has a major impact on the quality of patient care delivered by the nurses and on the organization's job satisfaction. The authors also noted that the retention of the nursing staff was an important element for Saudi Arabian healthcare institutions and was linked to job satisfaction among employees.

Alshahrani [19] argued that the current approach to healthcare planning and development in the Kingdom of Saudi Arabia should be revised with a focus on personnel training to ensure that the staff can cope with the issues that may arise.

According to Baker and Alghamdi [18], the development of self-leadership in the Saudi Arabian healthcare sector has enabled healthcare workers to collaborate with other leaders from within and across organizations in order to put the needs of patients ahead of the performance of individual institutions. As presented by Alaaddin *et al.* [23], providing training on self-leadership and emotional intelligence to healthcare

workers is required for the development of highly qualified healthcare personnel in Saudi Arabia.

#### 4. DISCUSSION

This literature review offers critically synthesized information about the positive and negative factors influencing self-leadership in the Saudi Arabian health sector. As presented by Alshammari *et al.* [24], the level of emotional intelligence among nurses showed a positive relationship with the level of leadership. However, Baker and Alghamdi [18] found no link between job satisfaction, leadership, and support among nurses, indicating that nurse educators and nurse managers have the opportunity to choose leadership styles and orientation programs for new graduates. Their study suggests that nurse leaders in Saudi Arabia should remain consistent in developing and retaining competent nurses in the organization. Alaaddin *et al.* [23] similarly called for leadership and emotional intelligence training as prerequisites for the development of highly qualified personnel.

According to Alabdulbaqi *et al.* [17], as most nurses in the Saudi Arabian healthcare sector are non-Saudi and only have diplomas, more efforts are required in recruiting Saudi nurses as well as nurses with bachelor's degrees. Albagawi *et al.* [26] further argued that lack of training on leadership skills in the healthcare settings in Saudi Arabia has led to nurse managers being solely responsible for decision-making which has resulted in hospital environments where nurses did not feel motivated and supported when performing tasks. Nurse leaders use the following leadership styles to lead other nurses: transformational leadership, transactional leadership, authentic leadership, situational leadership, classical leadership, and contemporary leadership.

In Saudi Arabia, leadership styles are the major factor affecting the attitudes and behaviors of nurses in healthcare settings. Despite the evidence that nurse managers have a direct and substantial effect on the healthcare environment, there is little research on the leadership styles nurse managers use in Saudi Arabia. According to Aboshaiqah [27], many issues nurses working in Saudi Arabia experience (such as shortages of staff, job satisfaction, and intention to leave the job) are caused by inadequate leadership. Research shows that the retention of nursing staff is an important factor for healthcare organizations in Saudi Arabia. Yet, according to Al-Yami *et al.* [25], little is known about the impact of leadership styles on outcomes in Saudi Arabia.

Research shows self-leadership is associated with positive work engagement through feedback and development opportunities. Therefore, training employees on self-leadership can be a valuable tool to help enhance the adaptive performance and job satisfaction during organizational crises. As presented by Alshahrani [19], the association between self-sacrificial leadership and work engagement is mediated by job satisfaction in the Kingdom of Saudi Arabia. The author further noted that the self-sacrificial leadership approach may outperform conventional leadership styles in multiple ways.

As presented by Al-Dossary [21], the differences in the leadership styles among nurse managers and nurses that result in issues in nursing management can be addressed by

encouraging nurse managers to demonstrate transformational leadership to enhance the development of respect, competence, and mutual trust [20]. Algarni *et al.* [22] stated that there was a need for a clear security system for both leaders and employees in the healthcare sector to protect the rights of each person. Leaders helping employees, having moral criteria for employment, individualizing their motivation, and evaluating the employees' mindset were some of the factors affecting leadership performance according to this study.

In summary, the most important factors of self-leadership that emerged from this review are emotional intelligence, education, job satisfaction, job engagement, and internalized moral skills [19, 20, 24, 27]. The self-leadership in Saudi Arabia was found to have a positive association with these factors. However, Baker and Alghamdi [18] reported no statistically significant relationship between experience and preceptors of self-leadership but rather noted that stress caused by the living situation, finances, relationships, *etc.*, was the most important factor [23]. Most authors also identified the transformational approach as the most suitable for promoting self-leadership because it involves developing a unified vision for an organization and pushing the employees to work their best individually and collectively [2, 27 - 29]. The employees have intrinsic motivation as well as a high understanding of what they need to change so that they can evolve personally and professionally to achieve organizational goals. Further, due to the freedom of expressing one's thoughts and preferences, the lines of communication remain open under this type of leadership [28].

#### CONCLUSION

This systematic review provides insight into the factors affecting self-leadership in the health sector. Therefore, the outcomes of this study might impact the theoretical and practical clinical education offered to the healthcare personnel in Saudi Arabia, which is essential to prepare them mentally and encourage them when performing their daily tasks.

Moreover, self-leadership gives staff members the self-drive and motivation to achieve their goals and to respond effectively to challenges and changes, allowing them to increase their performance in the workplace. Healthcare leaders might encourage the employees to become more positive and help them develop self-leadership skills by using training interventions which would in turn, motivate them to enhance their knowledge and improve their performance.

The main strength of this review stems from its comprehensive search approach and deep data synthesis and analysis. However, as the review focused on self-leadership among nurses in Saudi Arabia, no generalization of findings to other settings is possible. This systematic review has implications for self-leadership in the Saudi Arabian health sector, as more research is required to develop more appropriate training aimed at healthcare workers. Further research on self-leadership in Saudi Arabia is needed to validate the findings and offer further insight into this phenomenon. It is presently unclear how different leadership styles affect the performance of nurses in Saudi Arabia, thus warranting additional studies.



## LIST OF ABBREVIATIONS

**HSTP** = Health Sector Transformation Program

**PICO** = Population, Intervention, Comparison, and Outcome

## STANDARDS OF REPORTING

PRISMA guidelines and methodology were followed.

## AVAILABILITY OF DATA AND MATERIALS

Not applicable.

## FUNDING

None.

## CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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## SUPPLEMENTARY MATERIAL

PRISMA checklist and the published article are available as supplementary material on the publisher's website.

## REFERENCES

- [1] Neck CP, Houghton JD. Two decades of self-leadership theory and research. *J Manag Psychol* 2006; 21(4): 270-95. [http://dx.doi.org/10.1108/02683940610663097]
- [2] Harari MB, Williams EA, Castro SL, Brant KK. Self-leadership: A meta-analysis of over two decades of research. *J Occup Organ Psychol* 2021; 94(4): 890-923. [http://dx.doi.org/10.1111/joop.12365]
- [3] Dorssen-Boog P, Vuuren T, Jong JP, Veld M. Facilitating health care workers' self-determination: The impact of a self-leadership intervention on work engagement, health, and performance. *J Occup Organ Psychol* 2021; 94(2): 259-81. [http://dx.doi.org/10.1111/joop.12352] [PMID: 34149206]
- [4] Na-Nan K, Saribut S. Validation of employees' self-leadership using exploratory and confirmatory factor analysis. *Int J Qual Reliab Manage* 2020; 37(4): 552-74. [http://dx.doi.org/10.1108/IJQRM-10-2018-0287]
- [5] van Dorssen-Boog P, de Jong J, Veld M, Van Vuuren T. Self-leadership among healthcare workers: A mediator for the effects of job autonomy on work engagement and health. *Front Psychol* 2020; 11: 1420. [http://dx.doi.org/10.3389/fpsyg.2020.01420] [PMID: 32765341]
- [6] Wada S, Hasegawa M. The long-term process of recovering self-leadership in patients with disability due to acquired brain injury: II. Interactions with surrounding people that promote recovery of self-leadership. *Jpn J Nurs Sci* 2019; 10(0): 50-9. [http://dx.doi.org/10.11336/jjers.10.50]
- [7] Inam A, Ho JA, Sheikh AA, Shafiqat M, Najam U. How self leadership enhances normative commitment and work performance by engaging people at work? *Curr Psychol* 2021; 13: 1-14. [http://dx.doi.org/10.1007/s12144-021-01697-5] [PMID: 33867780]
- [8] Avci N, Kaya G. The relationship of learned resourcefulness with self-leadership skills: A study with nurse and midwife students. *Nurse Educ Today* 2021; 107: 105125. [http://dx.doi.org/10.1016/j.nedt.2021.105125] [PMID: 34534783]
- [9] Marques-Quinteiro P, Vargas R, Eifler N, Curral L. Employee adaptive performance and job satisfaction during organizational crisis: the role of self-leadership. *Eur J Work Organ Psychol* 2019; 28(1): 85-100. [http://dx.doi.org/10.1080/1359432X.2018.1551882]
- [10] O'Grady ET. Self-Leadership for Nurse Practitioners in Complex Times. *J Nurse Pract* 2021; 17(2): 197-201. [http://dx.doi.org/10.1016/j.nurpra.2020.09.008]
- [11] Health Sector Transformation Program. Saudi Vision 2030 2022. Available from: <https://www.vision2030.gov.sa/v2030/vrps/hstp/#:~:text=Health%20Sector%20Transformation%20Program%20The%20program%20aims%20to,%28including%20the%20citizen%2C%20the%20resident%20and%20the%20visitor%29.6>
- [12] Rahman R, Al-Borie HM. Strengthening the Saudi Arabian healthcare system: Role of Vision 2030. *Int J Healthc Manag* 2021; 14(4): 1483-91. [http://dx.doi.org/10.1080/20479700.2020.1788334]
- [13] AlFattani A, AlMeharish A, Nasim M, AlQahtani K, AlMudraa S. Ten public health strategies to control the Covid-19 pandemic: the Saudi Experience. *IJID Regions* 2021; 1: 12-9. [http://dx.doi.org/10.1016/j.ijregi.2021.09.003] [PMID: 35721774]
- [14] Chowdhury S, Mok D, Leenen L. Transformation of health care and the new model of care in Saudi Arabia: Kingdom's Vision 2030. *J Med Life* 2021; 14(3): 347-54. [http://dx.doi.org/10.25122/jml-2021-0070] [PMID: 34377200]
- [15] Khan KM, Khan MB. Research, Innovation and Entrepreneurship in Saudi Arabia Vision. 1st ed.. Routledge: Taylor & Francis Group 2020; pp. 146-66.
- [16] Munn Z, Moola S, Rittano D, Lisy K. The development of a critical appraisal tool for use in systematic reviews addressing questions of prevalence. *Int J Health Policy Manag* 2014; 3(3): 123-8. [http://dx.doi.org/10.15171/ijhpm.2014.71] [PMID: 25197676]
- [17] Alabdulbaqi E, Banjar H, Felemban O. The relationship between self-leadership and emotional intelligence among staff nurses. *IOSR Nurs Health Sci* 2019; 8(1): 58-65. [http://dx.doi.org/10.9790/1959-0801035865]
- [18] Baker OG, Alghamdi MS. Casey-fink graduate experience survey for nurses and preceptors in the kingdom of Saudi Arabia. *Nurse Media Journal of Nursing* 2020; 10(1): 76-85. [http://dx.doi.org/10.14710/nmjn.v10i1.29056]
- [19] Turki Alshahrani S. Impact of self-sacrificial leadership on organizational engagement: A psychological mechanism of job satisfaction. *J Leadersh Organ Stud* 2022; 11(1): 112-26. [http://dx.doi.org/10.33844/ijol.2022.60622]
- [20] Asiri SA, Rohrer WW, Al-Surimi K, Da'ar OO, Ahmed A. The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: A cross-sectional study. *BMC Nurs* 2016; 15(1): 38. [http://dx.doi.org/10.1186/s12912-016-0161-7] [PMID: 27293380]
- [21] AL-Dossary RN. Leadership style, work engagement and organizational commitment among nurses in Saudi Arabian hospitals. *J Healthc Leadersh* 2022; 14: 71-81. [http://dx.doi.org/10.2147/JHL.S365526] [PMID: 35698661]
- [22] A Algarni N, McLaughlin P, Al-Ashaab A, Hamad R. Identifying Factors Influencing the Leadership Performance of Saudi's Healthcare Sector. *J Organ Manag Stud* 2018; 2018: 1-17. [http://dx.doi.org/10.5171/2018.683208]
- [23] Alaaddin RN, Ibrahim NK, Kadi M. Leadership skills and their associated factors among pharmacy students at Umm Al-Qura University, Makkah, Saudi Arabia. *J Pharm Res Int* 2021; 33(50A): 63-76. [http://dx.doi.org/10.9734/jpri/2021/v33i50A33383]
- [24] Alshammari F, Pasay-an E, Gonzales F, Torres S. Emotional intelligence and authentic leadership among Saudi nursing leaders in the Kingdom of Saudi Arabia. *J Prof Nurs* 2020; 36(6): 503-9. [http://dx.doi.org/10.1016/j.profnurs.2020.04.003] [PMID: 33308547]
- [25] Al-Yami M, Galdas P, Watson R. Leadership style and organisational commitment among nursing staff in Saudi Arabia. *J Nurs Manag* 2018; 26(5): 531-9. [http://dx.doi.org/10.1111/jonm.12578] [PMID: 29573023]
- [26] Albagawi B, Laput V, Pacis C, AlMahmoud T. Nurses' perceptions of nurse manager leadership styles. *Am J Nurs Res* 2017; 5(1): 22-31. [http://dx.doi.org/10.12691/ajnr-5-1-3]
- [27] Aboshaiqah A. Strategies to address the nursing shortage in Saudi Arabia. *Int Nurs Rev* 2016; 63(3): 499-506. [http://dx.doi.org/10.1111/inr.12271] [PMID: 27324589]
- [28] Ahmad MK, Abdulhamid AB, Wahab SA, Nazir MU. Impact of the project manager's transformational leadership, influenced by

mediation of self-leadership and moderation of empowerment, on project success. *Int J Managing Proj Bus* 2022; 15(5): 842-64. [<http://dx.doi.org/10.1108/IJMPB-03-2021-0066>]

[29] Alharbi M. An investigation of the saudi healthcare system's readiness for change in the light of vision 2030: The role of transformational leadership style. *Int J Health Serv* 2018; 6(2): 45. [[http://dx.doi.org/10.4103/jhs.JHS\\_142\\_17](http://dx.doi.org/10.4103/jhs.JHS_142_17)]

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