


“Servant leadership and leadership effectiveness in healthcare institutions”

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SERVANT LEADERSHIP AND LEADERSHIP EFFECTIVENESS IN HEALTHCARE INSTITUTIONS

Abstract

The significance of leadership in the healthcare sector has been increasingly recognized in recent times. It is now widely acknowledged as a crucial determinant of patient security, clinical treatment quality, and the overall healthcare culture prevailing in the community. The purpose of the present study is to analyze the moderating effect of cognitive style indicator on the relationship between servant leadership style and leadership effectiveness. Mix method explanatory sequential research design was used to collect data. AMOS SEM was run for data analysis, and development of measurement and structural models. The study population were drawn from healthcare institutions in the Qassim region, Saudi Arabia. The results showed a positive association between servant leadership style, cognitive style indicator, and leadership efficiency. In addition, all values were significant and indicative of the cognitive style's moderating impact on servant leadership and leadership effectiveness.

Keywords

employee, leadership style, cognitive style, indicator,
decision-making, performance

JEL Classification

I11, M16

INTRODUCTION

Digital transformation has changed the way organizations are managed and run today. The digital disruption brought more complexities, which have social, economic, and psychological repercussions; hence, they have a grave impact on the relationship between the management and employees and the organization's performance. Concerning human factors, today, organizations are facing problems that are recurring in nature.

A key component of any organization's success is effective leadership. Making considerable efforts is crucial, particularly in high-tech organizations where performance is constantly under pressure. Leadership ability is essential to an engineering organization's success. Leaders who possess technical proficiency may assist and promote workers' development by sharing their knowledge. Due to the increasing usage of technology, leaders must expand their technical abilities to support staff growth and maintain connections, especially in the healthcare sector.

A servant leader interacts with individuals in positions of management or fellow employees in order to develop authority rather than power. The structural composition of this system is decentralized. Leaders that adhere to this method include staff who interact directly with customers. Because of their direct contact with the clients, these personnel are better positioned to make choices that will help a company keep existing customers and attract new ones.

Even though nurses make up a substantial quantity of the global workforce in the healthcare industry, there is a considerable shortage of nurses worldwide. Additional projections indicate that the anticipated deficit in nursing human resources in the future will be exacerbated by the significant number of nurses retiring and the increasing demand for healthcare services (Alluhidan et al., 2020). As nursing is designated as one of the healthcare professions having the most considerable scarcity across various nations (WHO, 2020), the healthcare system in Saudi Arabia must create ways to expand its human resources.

1. LITERATURE REVIEW

Servant leadership refers to an all-encompassing method of leadership that considers a variety of facets of followership, including relational, ethical, emotional, and spiritual dimensions. This leadership style is also known as the holistic approach to leadership. Followers are allowed to expand their horizons and realize their full potential under this kind of leadership. Leadership is the primary component that determines the efficiency of an organization. In a similar vein, Khan et al. (2019) estimated that the success of leadership is based on the successful communication of the goals to both the spearheads and the followers of the corporation. Therefore, supervisors are responsible for encouraging their staff to think of fresh ideas and respond independently.

According to Mahembe and Engelbrecht (2013), achieving the desired levels of efficacy, efficiency, and effectiveness depends on cultivating a favorable social environment. Irving and Longbotham (2007) and Shaikh et al. (2022) researched servant leadership and effectiveness and concluded that there is a considerable connection between the two concepts, similar to Khan et al. (2018). However, as of now, there is a shortage of investigation about servant leadership and leadership efficacy.

Mughal and Busari (2015) conducted a study on cognitive style and reported it as a moderator. Busari (2011) reported that leadership effectiveness and cognitive style play an influential character in attaining the anticipated targets of an organization. Implicit followership theories have been absent from the leadership and followership literature, which has resulted in a gap between how leaders and followers behave and what activities they take (Khan et al., 2018).

Healthcare management makes decisions by employing cognitive style, which is one of the criti-

cal indicators (Cools, 2007). Mughal et al. (2016) and Uzunbacak et al. (2022) used an intellectual manner as an administrator in predicting servant leadership and leadership effectiveness.

Successful governance is depicted as “the leader’s ability to effectively influence followers and other organizational stakeholders to reach the goals of the organization” (Yukl, 2013). The ineffectiveness of leadership is the main challenge for healthcare institutions (Yukl, 2002), whereas Busari (2011), for the first time, developed a scale to evaluate their efficiency. According to Uhl-Bien et al. (2014), in order to be an effective leader, leaders must involve their followers in the decision-making process.

Ineffectiveness of leadership is an old issue faced by the management; however, it was overlooked for many decades, but today it is among one of the most researched areas since it is hampering the efficiency and productivity of the organizations on the one hand and eating budget and resources on the other. The focal point of this approach is to emphasize the cultivation of followers through their leaders’ ethical and selfless principles, as posited by Greenleaf (1977). When the focus is on the development and welfare of followers, there remains an inclination for those followers to demonstrate a greater concentration of engagement and effectiveness in their job.

According to van Dierendonck (2011), leaders who follow the servant leadership style regard themselves as caretakers of their organizations, working to maximize monetary and non-monetary assets. This is the case even when they may not have direct control over such assets. Because of this, even while they are intent on advancing the individual growth of the people who follow them, they never lose sight of the need to live up to the standards that have been set. Compared to performance-oriented leadership styles, which often

“sacrifice people on the altar of profit and growth” (Sendjaya, 2015), servant leaders put quality on the extensive development of performance as their primary concern.

According to Pidduck et al. (2023), organizations that desire to flourish in a complex and competitive world must demonstrate entrepreneurial behaviors. These behaviors are vital for developing innovation, adaptation, and inventiveness. Gelmar et al. (2019) found strong leadership as one of the primary driving factors behind the successful transformation, and businesses that must flourish in today’s briskly modifying commerce climate cannot be contingent on antiquated organization concepts.

There is widespread consensus that organizational spearheads influence the growth of their workforce by helping workers recognize and capitalize on their latent potential. Servant leaders are more concerned with meeting the requirements of their followers and less concerned with gratifying their requirements. The notion of servant leadership, which is only one of many management theories, provides a framework for investigating this phenomenon. As a result of cultural and linguistic demographic changes brought on by the increasing variety of healthcare workers, patients, and customers, healthcare organizations worldwide are transforming. The changes to an organization’s workforce that result from increased diversity place a premium on skilled leadership and management of diversity, as well as strong work ethics and abilities. Isolation, prejudice, a breakdown in communication, interpersonal disputes, attrition, and inferior overall worker performance may all be potential concerns linked with diversity.

In contrast, many considerations have shown that diversity may benefit an organization since it may bring in a wide variety of perspectives, information sources, and skill sets. This directly affects creativity and innovation in the workplace, as well as increased productivity and improved outcomes. Diversity can be achieved by bringing people from different backgrounds together (Minh et al., 2017).

Within the healthcare sector, organizational diversity has been recognized for its favorable impact, encompassing multilingualism and multicultural-

alism. These benefits extend beyond the nursing workforce, permeating throughout the interactions between racially as well as linguistically varied persistent customers and the healthcare organizations they engage with. This assertion has validity since the advantageous outcomes stemming from organizational variety, such as the presence of several languages and cultures, are directly attributable to the existence of organizational diversity. When it comes to leadership, the concept of managing diversity involves the task of guiding a workforce that is composed of individuals with varying genders, ages, ethnicities, cultural backgrounds, and linguistic abilities. However, the extent workers can integrate into an organization is a major factor in determining how well a diverse workforce may be used to its full potential. The term “organizational socialization” refers to the process whereby a newcomer to an organization overcomes organizational hurdles and learns the essential abilities for successful transition to a given job. This process is defined by organizational socialization theory. The process of effectively integrating individuals into an organization, sometimes called organizational integration, onboarding, or adaption, is crucial in fostering healthy organizational socialization. All of these phrases are interconnected and pertain to a common subject. Furthermore, engagement in such activities facilitates the development of crucial professional competencies, enhances the alignment between individuals and the organization, and mitigates the inclination to resign and the employee turnover rate (Kamau et al., 2022).

2. AIM AND HYPOTHESES

In this analysis, only three dimensions of servant leadership given by Sendjaya et al. (2008) were used; however, in the future, the researchers can use altruistic calling, wisdom, and stewardship given by Van Dierendonck (2011). Studies show that earlier most researchers focused on the governance sorts, i.e., transactional, transformative, and laissez-faire. Rasool et al. (2019) claimed that servant leadership is an ignored area in healthcare research. This study considered the first three factors of servant leadership behavior. In every leadership style, decision-making is critical in complex situations (Patel & Bakari, 2022; Albejaidi et al., 2020).

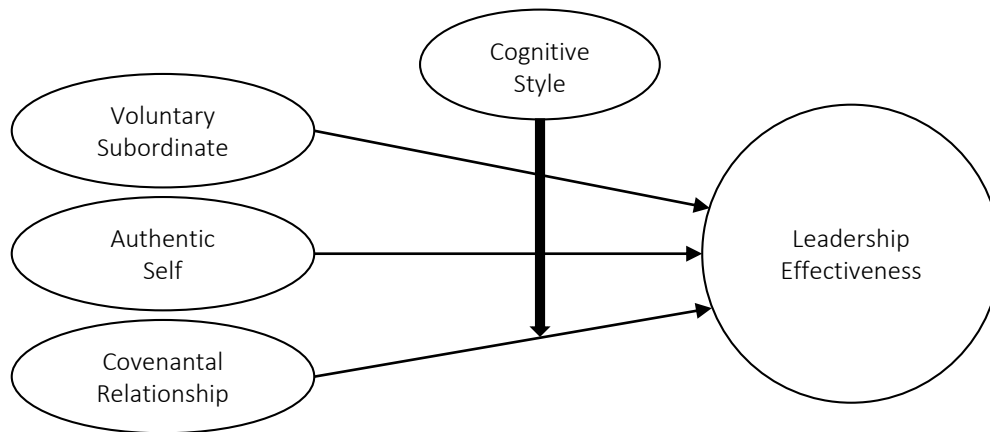


Figure 1. Conceptual framework

Therefore, this study aims to explore the link between servant control mode and leadership effectiveness, focusing on voluntary subordinates, authentic self, covenantal relationships, and leadership effectiveness. The elementary is to judge the potential moderating guidance of the cognitive style indicator among healthcare organizations in the Qassim region of Saudi Arabia.

Figure 1 presents a conceptual framework investigating the impact of leadership effectiveness and servant leadership within healthcare organizations. The hypotheses suggested in this study are:

- H1: There is a substantial correlation between servant leadership, leadership efficacy, and cognitive style indicator.*
- H2: Cognitive style indicator significantly moderates the relationship between servant leadership and leadership effectiveness.*

3. METHODOLOGY

This study adopted a mixed-methods explanatory sequential research design, incorporating a quantitative deductive survey and a qualitative exploratory approach. A review of the existing literature was undertaken using an SLR approach. In contrast, a cross-sectional survey was undertaken to collect primary data through a structured questionnaire based on Busari et al. (2017), and Rasool et al. (2019). Semi-structured interviews were conducted using a video recording mechanism and the generation of notes.

The population of this study was professionals working within the healthcare institutions of the Qassim region, Saudi Arabia. There are 19 hospitals in the Qassim region working under the Ministry of Health with 2,909 beds, complemented by four private hospitals and two other governmental hospitals with a capacity of 343 and 456 beds, respectively. The total population of healthcare professionals comprises 3,564 physicians and dentists, 6,781 nurses and midwives, 270 pharmacists, and 5,463 allied health professionals (Ministry of Health, 2021).

Nonprobability convenience sampling was used to select study participants. The sample size of this study was 301. The respondents comprised 218 males and 83 females, with a public-to-private sector split of 184 to 117. The sample size was determined based on the results of the pilot study using the statistical formula for the finite population $[\sigma^2/((E^2/Z^2)+(\sigma^2/N))]$ developed by Weiers (1984, p. 126). Social scientists suggest using a 95% confidence level to determine the sample size for a finite population equal to the 1.96 Z-value.

The instruments used in this study were adopted from existing research. The seven-item scale for servant leadership style was adopted from Sendjaya et al. (2008). This scale uses a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The study used Busari's (2011) leadership effectiveness scale, which has twenty-one items and a scale ranging from 0 (not at all) to 4 (frequently, if not always). Cools et al. (2014) scale for cognitive style indicator was also adopted; it has eighteen items which are measured on

a range from 1 (strongly disagree) to 5 (strongly agree). All these scales were validated in the context of developing countries through a pilot study since none of them have previously been used in a Saudi Arabian context.

Additionally, semi-structured interviews were conducted. The interview schedule was adopted from Busari (2011), and the interviewees encompassed both the management and the staff of healthcare institutions. Leadership is the main factor contributing to organizational effectiveness. Similarly, Khan et al. (2019) contend that effective leadership relies upon the clear communication of objectives to both leaders and followers. Leaders should communicate the organization's vision to their employees, encourage the generation of innovative ideas and show a willingness to act upon these (Salman et al., 2023). Creating a positive social climate is crucial in ensuring that the right decisions are taken and a climate is characterized by efficacy, efficiency, and effectiveness (Mahembe & Engelbrecht, 2013).

Experts recommend structural equation modeling as a multivariate statistical analysis technique to analyze structural relationships. This method combines factor analysis and multiple regression analysis to analyze the structural relationships between latent constructs and measured variables (Hayes, 2022). The measurement model and structural models were developed using AMOS SEM. The measurement model included factors loading, CR, AVE, and Cronbach's alpha, with all values in the acceptable range of $CR > 0.7$, $AVE > 0.5$, $Loading > 0.5$ and Alpha values were also > 0.7 (Hair et al., 2017). The structural model was used to test the hypotheses.

4. RESULTS

The exploratory factor analysis (EFA) was conducted. First, sampling adequacy was checked through KMO, its value of 0.827 was above 0.5, with $BTS = 5518.483$, $p < 0.05$. The decision to retain how many factors were done using Kaiser Criterion and scree plot; it is recommended to keep only the factors with Eigenvalues larger than 1. There were seven factors with Eigenvalues greater than 1, yet their commonalities were less than 0.7. Therefore,

four factors were excluded, and three factors (servant leadership, cognitive style indicator, and leadership effectiveness) were retained. There are no cross-loadings; all items fall in their respective factors (Table 1).

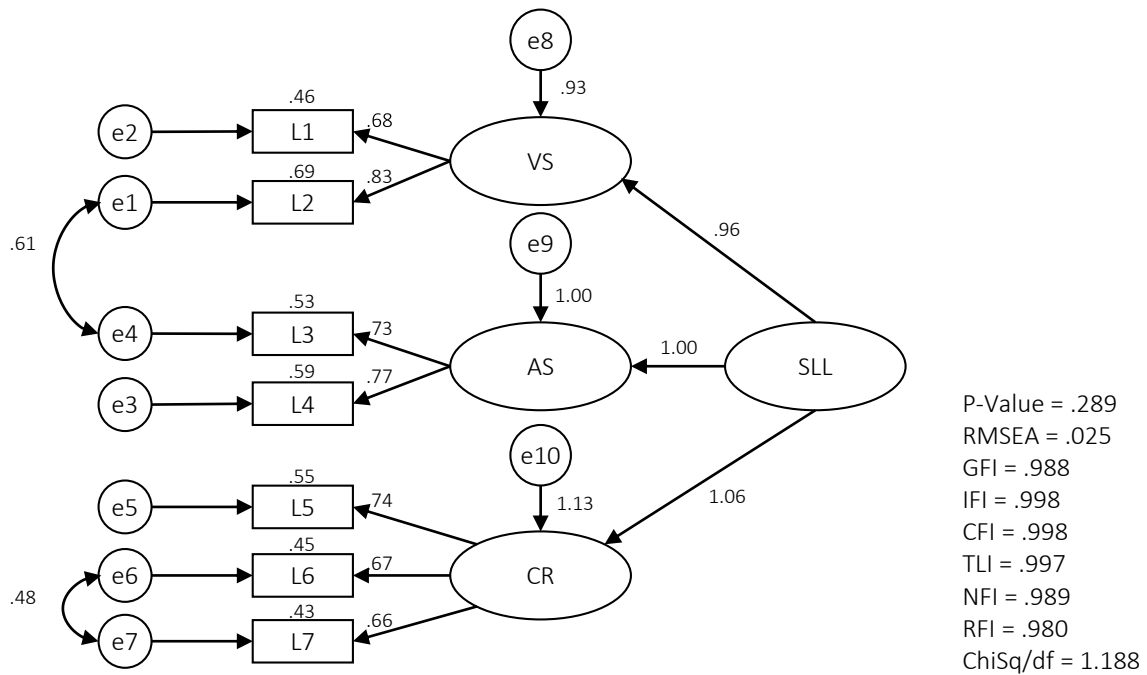
Table 1. Exploratory factor analysis

Items	F1	F2	F3	Alpha
P5	0.717			
C2	0.716			
P2	0.702			
P4	0.701			
C6	0.681			
P7	0.678			0.888
P3	0.673			
C5	0.655			
P6	0.648			
C1	0.639			
C4	0.594			
K2	0.521			
C7	0.508			
K3	0.485			
C3	0.478			
K4	0.464			
L2		0.884		
L3		0.817		
L6		0.788		
L4		0.783		0.899
L7		0.766		
L5		0.761		
L1		0.721		
E14			0.877	
E5			0.858	
E17			0.832	0.857
E13			0.727	
E18			0.699	
E9			0.616	

Note: F1 is cognitive style indicator, F2 is leadership, and F3 is leadership effectiveness.

The cognitive indicator had eighteen items; however, two items have been deleted due to low loadings. Likewise, the analysis of results reveals that none of the items was deleted out of seven for servant leadership. Similarly, leadership effectiveness was measured with twenty-one items, fifteen items were deleted, and this scale was validated on six items scale.

Following the EFA, a confirmatory factor analysis for leadership was done. The second-order CFA was also run for each variable and construct. According to Hair et al. (2007), the threshold for factor loadings was decided to be 0.5. This paper examined servant leadership through three char-



Note: SLL= Servant leadership; VS= Voluntary subordinates; AS= Authentic self; CR = Covenantal relationships.

Figure 2. Confirmatory factor analysis: Servant leadership

acteristics: voluntary subordination, genuine self-expression, and covenantal connections. A seven items scale was adopted from Sendjaya et al. (2008), having two items for voluntary subordination, two for the authentic self, and three for covenantal relationship. As shown in Figure 2, the factor loadings for all constructs of servant leadership have a value greater than 0.5. The model fit can also be observed in Table 2, i.e., goodness of fit index. RMSEA value is 0.025, which is less than the threshold value of 0.08; the value of GFI is 0.988, IFI is 0.998, CFI is 0.998, TLI is 0.997, NFI is 0.989, and RFI is 0.980. The results for GoF are consistent with Hair et al. (2007), i.e., 0-1 and Gaskin 0.8 and 0.9. Thus, all values are greater than 0.9, and the value of χ^2 is 1.188, which must be less than 3. Third, convergent validity, AVE, and composite reliability were also calculated separately, the CV must be 0.5 or above, and CR must be 0.7 or above. Thus, the values of this study met the criteria, so the scale of this study has been validated.

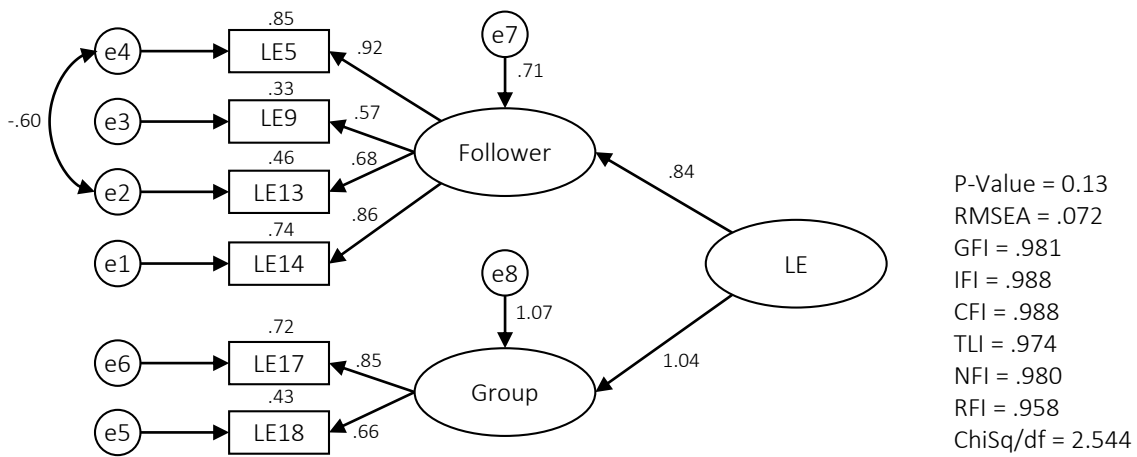
Leadership effectiveness was used as a criterion variable in this study. It has three dimensions and 21 items; seven items for aims, seven for followers, and seven for the group were adopted from Busari (2011). However, the construct of aims was deleted because of its minimal factor loadings (0.50). Similarly, three objects for the construct of followers were also excluded from the analysis; five items for the group construct were also excluded. Thus, the scale of leadership effectiveness is validated on two constructs, i.e., followers and groups with six items (see Figure 3). Table 3 shows the goodness of fit index; the value of RMSEA was 0.072, which is less than 0.08, followed by GFI = 0.981, IFI = 0.988, CFI = 0.988, TLI = 0.974, NFI = 0.980, and RFI = 0.958, all values are greater than 0.90 and meet the criterion (Hair et al., 2007). The 0.589 value of AVE and 0.893 value of CR validated the instrument of the study.

Figure 4 and Table 4 show that the cognitive style indicator has 18 items for three constructs, i.e.,

Table 2. Indices of appropriateness: Servant leadership

Variable	GFI	IFI	CFI	TLI	NFI	RFI	χ^2	RMSEA	p	CV	CR
SL	0.988	0.998	0.998	0.997	0.989	0.980	1.188	0.025	0.289	0.53	0.887

Note: SL = Servant leadership.



Note: LE = Leadership effectiveness.

Figure 3. Confirmatory factor analysis: Leadership effectiveness

knowing, planning, and creating, adopted from Cools et al. (2009). One item for knowing and one for planning were deleted from the analysis; the remaining sixteen items were used in this study. All items contain factor loading larger than 0.50, i.e., the integrity of suited indicator, i.e., RMSEA = 0.067, followed by GFI = 0.912, IFI = 0.940, TLI = 0.927, NFI = 0.901, RFI = 0.879 are greater than 0.8 and 0.9 and $X^2 = 2.345$ less than 3 and AVE = 0.552 and composite reliability = 0.917 are also validated. Therefore, the study accepted the sixteen-item scale for cognitive style indicator.

The results of the moderation analysis are presented in Table 5. Hierarchical multiple regression was run using the Hayes (2007) process file. The first model used the cognitive style indicator as a moderator with voluntary subordination and leadership effectiveness. It is recorded that cognitive style and voluntary subordination show $R^2 = 0.1805$ variance upon leadership effectiveness, i.e., 18%. The cognitive style shows a 0.054 (5.4%) change in R^2 between voluntary subordination and leadership effectiveness. Further, the

goodness of fit index was $F = 19.616$, $p < 0.01$, and beta values for cognitive style were $\beta = 0.164$, $p < 0.01$, for voluntary subordination $\beta = 0.159$, $p < 0.01$ and interaction term, i.e., $CoSI*VS = 0.511$, $p < 0.01$; all value were significant and evident on the moderating effect of cognitive style on voluntary subordination and leadership effectiveness. In the second model, the cognitive style was added as an arbitrator in the connection between the dependable self and leadership effectiveness; the value $\Delta R^2 = 0.06$ brings to the fore that cognitive style indicates a 6% variation between the authentic self and leadership effectiveness. Whereas the interaction term $AS*CoSI = -0.18$, $p < 0.01$ is also significant; this implies that cognitive style does act as a moderator. In the third model, the value of $\Delta R^2 = 0.073$ shows a 7.3% variance by cognition on the covenantal relationship and leadership effectiveness; likewise, the values for the goodness of fit index F were 76.46, $p < 0.01$ and $CoSI*CR = 0.432$, $p < 0.01$; that is also momentous. Thus, cognition also does act as a moderator on covenantal relations and leadership effectiveness.

Table 3. Goodness of fit indices: Leadership effectiveness

Variable	GFI	IFI	CFI	TLI	NFI	RFI	X^2	RMSEA	p	CV	CR
LE	0.981	0.988	0.988	0.974	0.980	0.958	2.544	0.072	0.013	0.589	0.893

Note: LE = Leadership effectiveness.

Table 4. Goodness of fit indices: Cognitive style indicator

Variable	GFI	IFI	CFI	TLI	NFI	RFI	X^2	RMSEA	p	CV	CR
CoSI	0.912	0.940	0.940	0.927	0.901	0.879	2.345	0.067	0.000	0.552	0.917

Note: CoSI = Cognitive of style indicator.

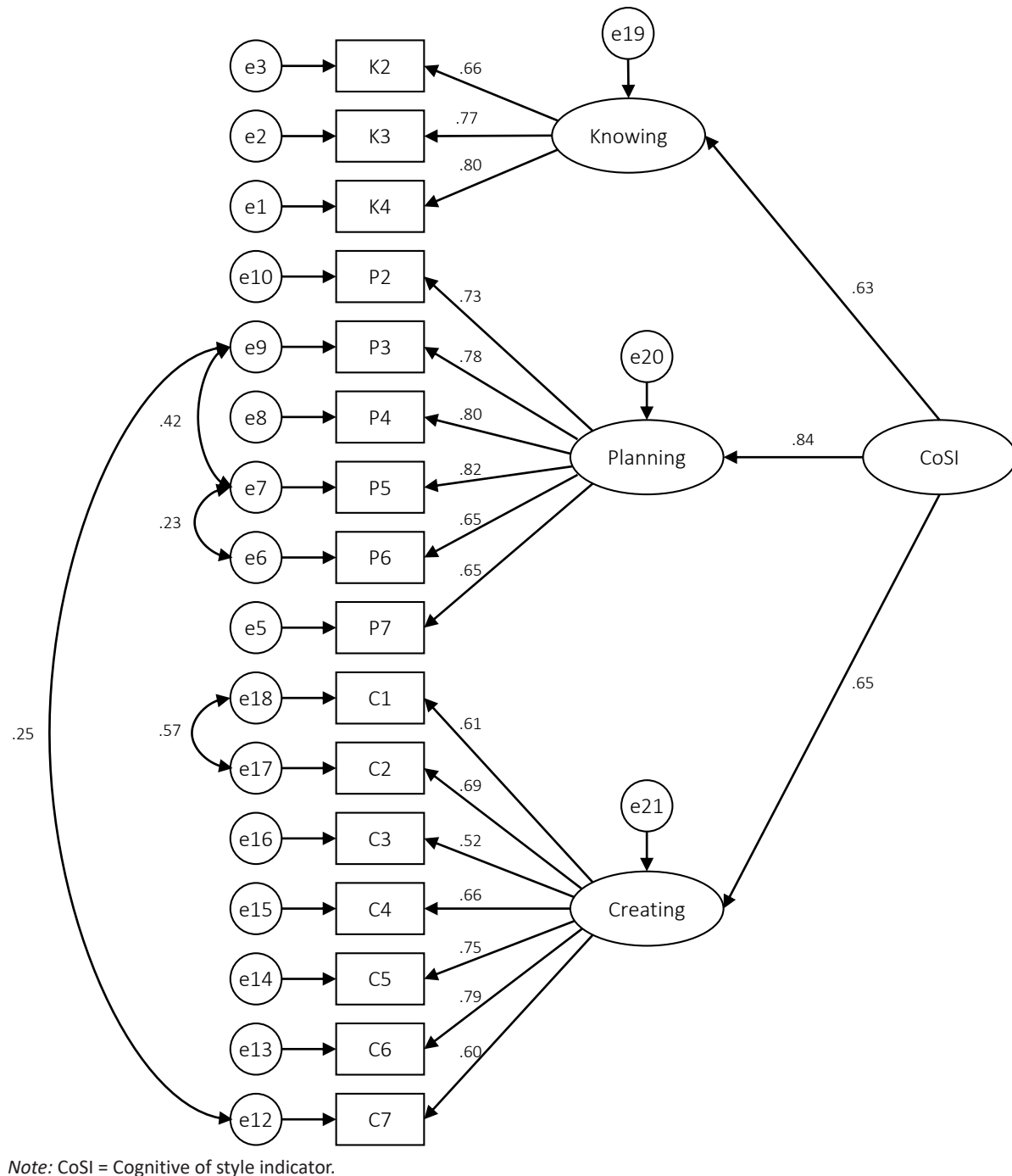


Figure 4. Confirmatory factor analysis: Cognitive style indicator

Leaders were asked to express their ideas regarding servant leadership styles using the same questionnaire. Analysis of results in Table 6 illustrates that the cognitive style indicator significantly moderates the relationship between voluntary subordination and leadership effectiveness. The inclusion of CoSI brings a 4.3% change in R^2 . Further, the goodness of fit index $F = 35.175$ is significant at $p < 0.05$. Similarly, analysis of results also high-

lights that when cognition is added as a moderator between the authentic self and leadership effectiveness, it shows variance upon leadership effectiveness, i.e., $\Delta R^2 = 0.120$, i.e., 12% change in the variance, GoF index is $F = 44.185$, and interaction term $\text{CoSI} \times \text{AS} = 0.78$, $p < 0.05$. Further, CoSI brings $\Delta R^2 = 0.096$ (9.6%) variation between covenantal relation and leadership effectiveness. The model was also found to fit, i.e., $F = 87.215$, $p <$

Table 5. Moderation results

D.V.	I.V.	R	R ²	ΔR ²	β	F	p
Model 1							
LE	Constant	0.428	0.1805	0.054		19.616	0.000
	CoSI				0.1643		0.000
	VS				0.1599		0.000
	Int				0.511		0.000
Model 2							
LE	Constant	0.4316	0.1863	0.060		29.997	0.000
	CoSI				0.1298		0.010
	AS				0.2005		0.000
	Int				-0.180		0.000
Model 3							
LE	Constant	0.3820	0.1459	0.073		76.4619	0.000
	CoSI				0.1310		0.000
	CR				0.1687		0.000
	Int				0.432		0.000

Note: CoSI = Cognitive of style indicator; LE = Leadership effectiveness; VS= Voluntary subordinates; AS= Authentic self; CR = Covenantal relationships.

Table 6. Moderation results: Leader's version

D.V.	I.V.	R	R ²	ΔR ²	β	F	p
Model 1							
LE	Constant	6155	0.3739	0.043		35.175	0.0061
	CoSI				0.2785		0.001
	VS				0.1185		0.010
	Int				0.163		0.001
Model 2							
LE	Constant	0.5707	0.3257	0.120		44.185	0.000
	CoSI				0.3165		0.010
	AS				0.1347		0.000
	Int				0.78		0.000
Model 3							
LE	Constant	0.6740	0.4543	0.0965		87.2151	0.0011
	CoSI				0.763		0.000
	CR				0.2253		0.0031
	Int				0.3099		0.001

Note: CoSI = Cognitive of style indicator; LE = Leadership effectiveness; VS= Voluntary subordinates; AS= Authentic self; CR = Covenantal relationships.

0.05, and interaction = 0.3099 is significant at $p < 0.05$. Based on the results, it is found that cognitive style acts as a moderator between covenantal relation and leadership effectiveness.

5. DISCUSSION

In analyzing the qualitative data, three themes of servant leadership styles were developed, presented in Table 6. Thus, voluntary subordination means that a person must offer his/her services to the com-

munity, society, and employees first. According to Sendjaya (2003), authentic self means staying true to oneself. This implies that if a leader makes a promise to employees, society, or customers, he/she should fulfill that promise. These are the relationship that starts after the exchange of ideas and sharing of knowledge between colleagues. The cognitive approach is used for decision-making. Researchers have introduced diverse reasoning designs, yet this study used cognitive style index and cognitive style indicators with three themes, i.e., knowing, planning, and creating.

Leadership effectiveness has three attributes, i.e., aims, followers, and groups. Yukl (2002) and Busari (2011) previously identified these themes. From the beginning, a leader must set his/her aims and goals for the year, i.e., what needs to be achieved must be determined before any meaningful initiative. Team building and teamwork are human-driven aspects of today's organizations. Therefore, today's leader pays more attention to teams, group development, and cohesion. For this purpose, organizations adopt numerous strategies.

The results of this study filled the research gap, which was overlooked in past studies by investigating the effect of cognitive style on the connection between servant leadership style and leadership effectiveness. The study used reflecting views of leaders on followers and, inversely, followers'

views about leaders to enhance the effectiveness and performance of organizational leadership in healthcare. It is an initial experimental review that examined the moderating properties of the cognitive style indicator on servant leadership and leadership effectiveness by adding cognitive style as a moderator.

It is suggested to enhance the broader generalizability of findings, as the analysis may be extended to more sectors in different regions of the developing and developed economies. Though this study has investigated the positive side, there is a dusky adjacent of cognitive style that is impeding the efficiency and effectiveness of leadership and may badly affect leaders and organizational performance. The dark aspect also needs investigation, which was overlooked in most former findings.

CONCLUSION

The study aimed to investigate whether a cognitive style indicator moderates the connection between servant leadership and leadership effectiveness in the context of Saudi Arabian healthcare sector. The paper used two distinct datasets, yet both were derived through the implementation of one questionnaire, which was delivered to both leaders and followers. The hypotheses were tested using bivariate correlation and hierarchical multiple regressions. Correlation results show a high and positive association among servant leadership style, cognitive style, and leadership efficiency, which means if leaders offer themselves as servants, they can become good leaders. The results reveal that the cognitive style indicator substantially regulates the association relating servant leadership and leadership effectiveness. This study provides a diverse range of findings concerning the cognitive style indicator having three attributes, i.e., knowing, planning, and creating styles.

Leaders and followers with creative styles are considered an asset to the organization; they develop novel ideas and try to finish their tasks using new techniques. Likewise, such individuals do not follow the traditional methods to solve the problems and issues faced by the organization. They prefer critical thinking. With this context, it was essential to use cognitive style indicator in developing countries' perspectives; therefore, this study successfully added cognitive style indicators to servant leadership. Therefore, the results provide a significant contribution to the understanding of servant leadership and leadership effectiveness inside healthcare organizations and institutions in a developing economy.

The findings showed a substantial relationship between servant leadership and cognitive style for both the followers and the leaders. Moreover, cognitive style acts as a moderator of the connection between voluntary subordination, authentic self, and covenantal relationship and leadership effectiveness. Therefore, it is concluded that allowing followers to make decisions and provide solutions to problems increases leadership effectiveness, as both leaders and followers make a bond to work as a team to achieve a common objective.

This study has several limitations. Although cognitive styles have several determinants, this study used only three attributes. Therefore, it is strongly recommended that future researchers work on the other dimensions. This study further suggests that leadership effectiveness could be used as a dependent variable in future research.

AUTHOR CONTRIBUTIONS

Conceptualization: Mohammad Faleh Alharbi, Ghulam Muhammad Kundi.

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