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The Impact of Strategic Decisions of Employee Training and Development on Organisational Goals and the Quality of Healthcare Services in Saudi Arabia

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ABSTRACT

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The study aims to examine the impact of strategic decisions of training and development of healthcare employees for achieving their organisational goals and improving healthcare services in Saudi Arabia. Survey-based quantitative data were collected from 388 employees working in various public sector healthcare units in Saudi Arabia. The analysis procedure employed in the study utilised a PLS-based structural equation modelling approach using Smart PLS 4. The findings revealed that the strategic decision of employee training and development in healthcare units of Saudi Arabia significantly improves their service quality, and strongly helps to achieve their organisational goals. Additionally, the researcher found that achieving patient safety, and value-added activities as organisational goals strongly help to improve the quality of services in the healthcare unit of Saudi Arabia. Furthermore, patient safety and value-added activities also strongly mediate the positive impact of training and development of employees for improving the quality of healthcare service in Saudi Arabia. The findings of the study provide important policy guidelines for the management, administration, and policymakers in healthcare units of Saudi Arabia. The study adds to the existing literature and extends the relevant theory for the role of training and development as the strategic decision for achieving organisational goals and improving the quality of service in the public healthcare sector of Saudi Arabia.

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Saudi Arabia's healthcare system is rapidly evolving to fulfill population needs (Alqarni et al., 2023; Alshuwaikhat & Mohammed, 2017; Asmri et al., 2020). Healthcare employees play a major role in fulfilling this need. Hence, training and development is considered a crucial aspect of healthcare organisations to update employees with recent developments and provide quality services (Gupta et al., 2022; Mosadeghrad, 2014). However, the strategic implications of such training and development programs for organisational goals and service quality improvement are not widely understood. The healthcare sector in Saudi Arabia is characterized by a diverse workforce consisting of both local and expatriate specialists operating in a complex and dynamic setting (Abaker et al., 2019; Al-Hanawi et al., 2019; Aldaheri et al., 2023). Effective training and development programs can boost corporate performance and service excellence while helping employees grow professionally and skillfully (Gope et al., 2018; Raj Adhikari, 2010). In this context, it is crucial to study how training and development programs affect strategic healthcare decisions in Saudi Arabia. This study examines the relationship between these initiatives and organisational goals, particularly patient safety, value-added activities, and teamwork, to optimize workforce development strategies and improve healthcare quality nationwide. The literature on training and development programs and organisational performance and service quality improvement is scattered. Thus, this study investigates the following research question to fill this gap: *How does Saudi Arabia's healthcare workforce training and development strategy affect organisational goals and service quality?* This study results tried to achieve the following objectives: 1) to examine the impact of employee training and development as a strategic decision of public healthcare units in Saudi Arabia for achieving their organizational goals, 2) to investigate the effect of strategic decision of employee training and development on improving the quality of services in public healthcare units of Saudi Arabia, 3) to determine the mediating role of achieving organizational goals for the impact of employee training and development in improving healthcare service quality in Saudi Arabia.

The significance of this study covers the new insights for organizational leaders, policymakers, and practitioners in the healthcare sector of Saudi Arabia based on empirical evidence regarding the effectiveness of training and development for achieving organisational goals and providing better services in this sector.

Theoretical Framework

The social exchange theory suggests that human relationships are built on subjective cost-benefit analysis and comparisons of alternatives during negotiated exchanges (McClintock et al., 1984). Employee perception of organisational support, including training opportunities, professional development, and learning opportunities is crucial (Lancaster & Di Milia, 2014). Moreover, when employees perceive a high level of organisational support, they tend to reciprocate through positive work behaviours as highlighted by the norm of reciprocity (Settoon et al., 1996). This implies that even small factors, such as providing training, can result in larger returns in terms of improved work performance and customer service.

Employee engages in training programs to acquire new knowledge and skills to enhance their performance at work. Based on goal-setting theory, which posits that setting and accepting a goal logically drives an individual to work toward its achievement (Brown et al., 1998). It can be inferred that after completing the required training and development programs, employees will be motivated to apply newly acquired knowledge and skills to meet their

performance goals. Therefore, the completion of training is likely to improve the trainee's work performance, as they are driven to transfer and utilize the learned competencies on the job to achieve their goals (Sitzmann & Ely, 2011). Therefore, the theoretical framework of this study is built by integrating the social exchange, reciprocity norms, and goal-setting theories to address the complex relationship between employee training and development, organisational goals, and healthcare service quality in Saudi Arabia.

Literature Review and Hypotheses Development

The literature has revealed that employee training and development improve organisational effectiveness and service quality. Numerous studies on Saudi Arabian healthcare have underscored the pivotal role of employee training and development in enhancing the quality of their services. According to Lie et al. (2011), targeted training programs not only augment the skills and competencies of healthcare professionals but also improve patient outcomes and satisfaction levels. Moreover, continued development of employees' skills strongly contributes towards decreasing procedural errors, and increasing healthcare output (Balmer, 2013). Furthermore, training and employees' professional development in a healthcare organisation strongly enhance their service, coordination, cooperation, and collaboration (Shahzad et al., 2019). However, the literature lacks empirical evidence for the impact of employee training and development on improving the service quality of healthcare units in Saudi Arabia. Therefore, the present study requires to fill this gap by testing the following set of hypotheses:

H₁: *Employee Training and Development helps to enhance healthcare service quality.*

A healthcare unit is required to achieve its goals regarding patient safety, value-added services, and teamwork by providing employees required skills and training. Asmri et al. (2020) highlighted that healthcare units in Saudi Arabia are undergoing important reforms to increase their service quality, and patient care and safety. Furthermore, several studies also highlighted the role of continuously updating the skills and competencies of healthcare employees by adopting advanced technology and training arrangements (Aceto et al., 2018; Haleem et al., 2021; Wang et al., 2018). Likewise, it was found that training plays a significant role in improving outcomes and decreasing errors in operational procedures (Abdulmajeed et al., 2020). Several studies found positive effects of employee training for delivering value-added services, improving healthcare efficiency, and optimizing operational procedures (Ciasullo et al., 2024; Vahdat, 2022). According to Schwindt et al. (2019), "an efficient training initiative can boost the employee productivity in providing their services and offering some valuable activities. Similarly, training plays a significant and positive role in a collaborative work environment (Banister et al., 2020; Dincă et al., 2023). However, the literature lacks empirical evidence for the impact of employee training and development on achieving the organisational goals of healthcare units in Saudi Arabia. Therefore, the present study requires to fill this gap by testing the following set of hypotheses:

H_{2a}: *Training and Development ensures patient safety in healthcare.*

H_{2b}: *Training and Development increases the value-added activities in healthcare.*

H_{2c}: *Training and Development encourage teamwork in a healthcare setting.*

When an organization achieves its important goals, it encourages the firm to improve its services in terms of customer satisfaction, value addition, and employee's teamwork. According to Al-Taweel (2021), the healthcare units in Saudi Arabia need a collaborative work environment, minimum error to ensure patient safety, and value-added services, to ensure better quality of their services. Several studies highlight the positive impact of training on teamwork, patient outcomes, and organizational efficiency (Jan et al., 2019; Murphy et al., 2016). However, some studies underscore the importance of collaboration, value-added activities, and patient safety within the context of the healthcare sector of Saudi Arabia (Abdulmajeed et al., 2020; Al-Hanawi et al., 2019; Al-Taweel, 2021; Almujaidei et al., 2022; Alqarni et al., 2023). The critical literature lacks empirical evidence for the impact of achieving organizational goals like patient safety goals, value-added activities, and teamwork in healthcare units in Saudi Arabia. Therefore, the present study requires to fill this gap by testing the following set of hypotheses:

H_{3a}: *Achieving patient safety goals leads to improvement in healthcare services.*

H_{3b}: *Achieving value-added goals leads to enhancing healthcare services.*

H_{3c}: *Achieving teamwork goals leads to enhancing healthcare services.*

The study aims to mediate the positive impact of employee training and development as a strategic decision on the quality of healthcare services in Saudi Arabia through organisational goals like patient safety, value-added activities, and teamwork. Global studies highlight the positive link between employee training and development and service quality improvement (Eze et al., 2020; Randall et al., 2017). However, several studies underscore the role of training and development in enhancing patient safety, promoting value-added activities, and fostering collaboration within the context of healthcare in Saudi Arabia (Al-Taweel, 2021; Aldaheri et al., 2023). Therefore, the following set of hypotheses is required to test the mediating role of organisational objectives like patient safety, value-added activities, and teamwork for the healthcare units' service quality through the training and development of their employees:

H_{4a}: *Achieving a patient safety goal mediates the impact of Training and Development on Healthcare services Quality.*

H_{4b}: *Achieving a value-added activities goal mediates the impact of Training and Development on Healthcare services Quality.*

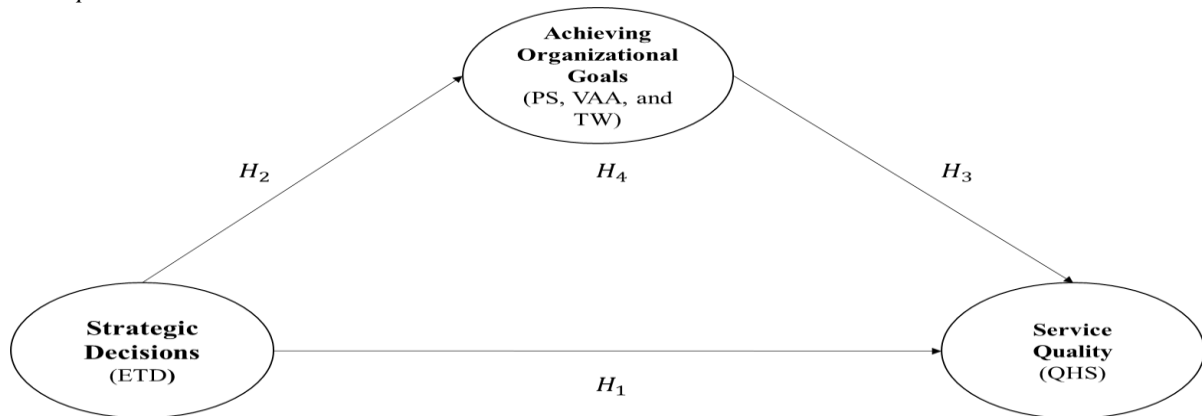
H_{4c}: *Achieving teamwork goals mediates the impact of Training and Development on Healthcare services Quality.*

The following conceptual model in Figure 1 is formulated based on research objectives, hypotheses, and relevant theory after exhaustive research. As per this model, employee training and development (ETD) as the strategic decision impacts the healthcare service quality using 1st hypothesis. Additionally, employee training and development also affect organisational goals like patient safety, value-added activities, and teamwork by means of 2nd hypothesis. Furthermore, achieving the organisational goals in healthcare units like patient safety, value-added activities, and teamwork may also impact the healthcare service quality using 3rd hypothesis. Finally, 4th hypothesis indicates a mediating role of organisational goals of patient

safety, value-added activities, and teamwork to examine the effect of employee training and development on the quality of healthcare services in Saudi Arabia.

Figure 1

Conceptual Model



Method

Research Design and Approach

The study aims to examine the impact of employee training and development as a strategic decision on achieving the organisational objectives and improving the quality of healthcare services in Saudi Arabia. To achieve these aims, the researcher employed a quantitative methodology using a questionnaire-based primary survey. The quantitative approach uses numerical data for analysing a set of hypotheses for cause-and-effect relationships (Bloomfield & Fisher, 2019). Additionally, the study requires inferring the findings based on objectives and facts collected through survey questionnaires. Therefore, the study adopts a positivist approach as suggested by Mauthner (2020).

Sampling

The study focused on collecting data from the employees of public healthcare units in Saudi Arabia. These include the employees working in different departments; medical, administrative, and management in public healthcare units of Saudi Arabia. Each of these three departments plays a crucial role in the functioning and development of healthcare units. The medical department includes surgeons, physicians, nurses, technicians, medical technologists, pharmacists, therapists, etc. Similarly, the administrative department in healthcare includes receptionists, front desk staff, medical billers, coders, and liaison officers. Additionally, the management department in healthcare includes executives, and managerial employees from HR, Accounting and Finance, IT, public relations, etc. The research assumes that all the employee of these public healthcare units has an equal chance of selection, therefore, simple random sampling is used.

The sample size of the research is based on the items response theory as proposed by Reise and Waller (2009). According to this theory, the number of survey questionnaire items is multiplied by 10 to get the recommended sample size. As the number of survey questions is 22, therefore, the minimum sample size is 220 ($22 \times 10 = 220$). However, to control the possible

issue of incomplete information or missing values, survey responses were obtained from double this sample size ($220 \times 2 = 440$).

Instruments

A close-ended format of a survey questionnaire was used as a research instrument for data collection from the employees of public healthcare units in Saudi Arabia. The questionnaire contains three sections; introduction, demographic details, and question statements. The introduction part includes the objectives of the study, respondent rights, and some pre-requisites. The demographic part includes questions related to gender, age, education level, department, healthcare size, and total years in health service. Finally, the third part includes the question statements regarding the objectives of the study. It includes five items related to Employee Training and Development (ETD) in healthcare units of Saudi Arabia, adopted from Sendawula et al. (2018). Similarly, the questionnaire contains six items related to the Quality of Healthcare Services (QHS) adopted from Owusu-Frimpong et al. (2010). Furthermore, the survey contains five items related to patient safety adopted from Farup (2015), three items for value-added activities adopted from Patel (2015), and three items for teamwork adopted from Valentine et al. (2015). These constructs are measured using a five-point type of Likert scale of “strongly disagree to strongly agree”.

Procedure

The primary data survey method was used for collecting data from the employees of public healthcare units in Saudi Arabia. The researcher took ethical approval from his parent organisation, as well as requested voluntary participation from the target population. A research assistant was engaged to formally contact participants, obtain a list of employees working in different departments of their healthcare units (medical, administrative, and management), and select participants from the list using a simple random sampling approach. Therefore, based on the sample size, the questionnaire was randomly shared with 440 employees. However, the researcher was able to get complete responses from 388 employees giving a response rate of 88% approximately.

Method of Estimation

The data were analyzed using SPSS and Smart PLS software. Demographic summaries were estimated using SPSS 27. The remaining analyses like confirmatory factors analysis, convergent validity, discriminant validity, model fit indices, model explanatory powers, and hypotheses testing using PLS-based structural equation modelling were used as per the guidelines provided by Hair et al. (2021), and Hair et al. (2014).

Results

Table 1 presents the demographic profile of respondents from public healthcare units in Saudi Arabia. The table includes the demographic characteristics; gender, age, education, department, healthcare unit size, and employment experience in years for the respondents of this study. A total number of 388 participants responded to the survey including 220 (56.7%) males, and 168 (43.3%) females. Thus, the majority participation from the male participants represents the healthcare sector of Saudi Arabia to be a male-dominated sector. Similarly, these participants

represent 4 age groups including 104 (26.8%) from 20-29 years, 196 (50.5%) from 30-39 years, 80 (20.6%) from 40-49 years, and 8 (2.1%) from 50 or older years. Therefore, the majority of participants are from the young and middle age group represented by the 20-39 years of age category. Furthermore, based on education, 120 (30.9%) hold diplomas, 124 (32%) hold bachelors, and 144 (37.1%) hold Master/MSc, or M.Phil. degrees by the participants of this study. Therefore, the majority of the participants from the public sector healthcare units in Saudi Arabia hold Masters, MSc, or M.Phil. Degrees.

Moreover, the survey indicates the participation of respondents from three departments of public sector healthcare units in Saudi Arabia; medical (176 or 45.4%), administrative (172, or 44.3%), and management (40, or 10.3%). Therefore, the majority of the participants (89.7%) are from medical, and administrative departments. [Table 1](#) also presents the size of the public sector healthcare units in Saudi Arabia in terms of their number of employees. As presented in [Table 1](#), 136 (35.1%) participants belong to less than 100 employee healthcare units, 100 (25.8%) belong to 100-199 employee public healthcare units, 72 (18.6%) belong to 200-299 employee healthcare units, and finally, 80 (20.6%) belongs to 300 or greater employee healthcare units. Therefore, the majority of these participants belong to healthcare units having less than 200 employees. Finally, [Table 1](#) presents five categories of experience of their total service in healthcare units in Saudi Arabia. The table presents that 132 (34%), 144 (37.1%), 36 (9.3%), 44 (11.3%), and 32 (8.2%) participants have a service experience of up to 5, 10, 15, 20, or more than 20 years in the healthcare units of Saudi Arabia. Therefore, the majority of participants in this study (71.1%) have a service experience of up to 10 years.

Table 1

Demographic Summary

Characteristics	N	%
Gender	388	100%
Female	168	43.3%
Male	220	56.7%
Age	388	100%
20 – 29 years	104	26.8%
30 – 39 years	196	50.5%
40 – 49 years	80	20.6%
≥ 50 years	8	2.1%
Education	388	100%
Diploma	120	30.9%
Bachelor	124	32.0%
Masters/MSc/M.Phil.	144	37.1%
Department	388	100%
Medical	176	45.4%
Administrative	172	44.3%
Management	40	10.3%
No. of Employee in Healthcare Unit	388	100%
< 100 employees	136	35.1%
100 – 199 employees	100	25.8%
200 – 299 employees	72	18.6%
≥ 300 employees	80	20.6%
Employment Experience	388	100%
1-5 years	132	34.0%
6-10 years	144	37.1%
11-15 years	36	9.3%
16 – 20 years	44	11.3%
> 20 years	32	8.2%

Figure 1 presents the measurement model of this study. The measurement model represents the relationship between observed variables, and latent variables (Citation). The figure indicates a significant relationship between the latent variable “employee training and development (ETD)” as a strategic decision and its five observed variables (ETD1-5). Similarly, the figure also indicates a significant relationship between the latent variable “quality of healthcare service (QHS)” and its six observed variables (QHS1-6). Moreover, the figure also indicates a significant relationship of three latent variables as the measure of organisational goals; patient safety (PS), teamwork (TW), and value-added activities (VAA) with their observed variables; PS1-5, TW1-3, VAA1-3.

Figure 1

Measurement Model

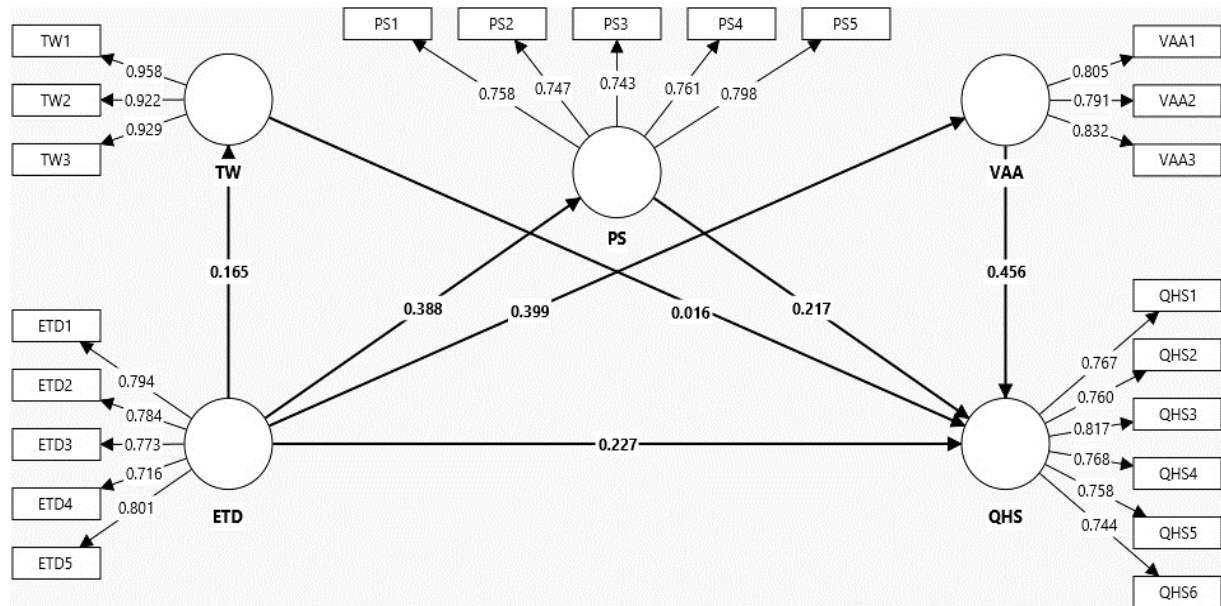


Table 2 presents the Confirmatory Factor Analysis (CFA) by representing factor loading values “of the latent variables of the study, and construct validity” in terms of Cronbach Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). Furthermore, the table also includes the Variance Inflation Factors (VIF) of the observed variables of different constructs. A factor with a loading value of .70 or more is considered a significant factor to measure its construct as per the recommendations of Hair et al. (2021). The factor loading values of ETD, QHS, PS, TW, and VAA meet and exceed the minimum criteria which makes them significant factors for their constructs. Furthermore, Hair et al. (2021) also suggested .70 as the minimum value for CA, and CR, while .50 for AVE. The constructs of this study also meet this threshold which makes them validated and reliable as per convergent validity. The table also presents the variance inflation factor values for each factor of the study’s constructs. According to Kock (2017), a VIF value less than 5 is desired to consider the factors as collinearity-free. The reported values indicated VIF less than 5 which confirmed that there is no issue of multi-collinearity in observed factors.

Table 2
CFA and Convergent Validity

Constructs and Factors	FL	CA	CR	AVE	VIF
Employee Training and Development (Strategic Decision)		.83	.88	.59	
ETD1	.79				1.56
ETD2	.78				1.81
ETD3	.77				1.70
ETD4	.71				1.56
ETD5	.80				1.94
Patient Safety		.82	.87	.58	
PS1	.75				1.50
PS2	.74				1.51
PS3	.74				1.72
PS4	.76				1.70
PS5	.79				1.69
Quality of Health Services		.86	.89	.59	
QHS1	.76				1.93
QHS2	.76				2.10
QHS3	.81				2.86
QHS4	.76				2.24
QHS5	.75				2.23
QHS6	.74				2.02
Teamwork		.93	.95	.87	
TW1	.95				2.16
TW2	.92				2.50
TW3	.92				2.83
Value Added Activity		.73	.85	.65	
VAA1	.80				1.48
VAA2	.79				1.42
VAA3	.83				1.48

According to Hair et al. (2021), discriminant validity requires that the observed variables should be strongly related to their latent variables as compared to other latent variables. There are three methods of assessing discriminant validity using Smart PLS; HTMT ratio, Fornel Larcker criterion, and cross loadings.

Table 3a presents the discriminant validity of latent variables of this study using the HTMT ratio technique. According to Hair et al. (2021), “the HTMT ratio should be less than .90 between two different latent variables to confirm the discriminant validity and reliability”. Table 3a, 3b, and 3c indicates that all the latent variables are discriminant valid and reliable by meeting the criteria.

Table 3a
HTMT Ratio

	ETD	PS	QHS	TW	VAA
ETD					
PS	.45				
QHS	.55	.65			
TW	.15	.20	.18		
VAA	.48	.76	.84	.21	

Table 3b presents the discriminant validity and reliability using the Fornel Larcker criteria. According to Hair et al. (2014), for conforming to the discriminant validity of latent variables, the square root of AVE for a particular latent variable should be greater than its correlation value with another latent variable. The square root values of AVE for ETD, PS, QHS, TW, and VAA are .77, .76, .76, .93, and .81 “which are greater than the correlation values of the same

latent variables with other latent variables.” Therefore, discriminant validity using the Fornel-Larker criterion is established here.

Table 3b

Fornel Larker Criterion

	ETD	PS	QHS	TW	VAA
ETD	.77				
PS	.38	.76			
QHS	.49	.57	.76		
TW	.16	.14	.16	.93	
VAA	.39	.59	.67	.18	.81

Table 3c presents the convergent validity using cross-loading criteria. According to Hair et al. (2021), the observed variables should indicate a higher loading value for their latent variable as compared to other latent variables. Furthermore, if an observed variable indicates a cross-loading value with a difference of less than .10 in other latent variables, it will be considered a threat due to cross-loading (Henseler et al., 2015). Table 3c indicates higher loading values for each observed variable with its latent variables and more than .10 difference in cross-loading values of other latent variables. Therefore, the observed variables are discriminately valid and reliable in measuring their latent variables.

Table 3c

Cross Loadings

	ETD	PS	QHS	TW	VAA
ETD1	.79	.31	.55	.25	.38
ETD2	.78	.34	.31	.08	.22
ETD3	.77	.27	.34	.09	.33
ETD4	.71	.31	.29	.10	.25
ETD5	.80	.26	.33	.05	.30
PS1	.37	.75	.46	.37	.56
PS2	.30	.74	.44	-.05	.40
PS3	.18	.74	.33	.17	.41
PS4	.23	.76	.43	-.01	.44
PS5	.33	.79	.48	.06	.40
QHS1	.44	.31	.76	.04	.51
QHS2	.40	.58	.76	.17	.55
QHS3	.36	.53	.81	.07	.62
QHS4	.40	.37	.76	.14	.45
QHS5	.36	.44	.75	.11	.45
QHS6	.30	.34	.74	.22	.50
TW1	.21	.12	.16	.95	.20
TW2	.11	.14	.14	.92	.12
TW3	.10	.13	.15	.92	.17
VAA1	.23	.62	.56	.08	.80
VAA2	.30	.41	.52	.21	.79
VAA3	.41	.41	.55	.14	.83

Table 4 presents the model fit indices of structural equation modelling using Smart PLS 4. According to Hair et al. (2021), the SRMR value less than .08, and the NFI value close to or greater than .90 is recommended. Additionally, the estimated values of the saturated model should be less than the estimated model in the case of d_ULS, d_G, and Chi-square (Hair et al., 2014). Table 4 indicates that SRMR, and NFI along with d_ULS, d_G, and Chi-square confirm the minimum threshold. Therefore, the results indicate good model fit indices for this study.

Table 4
Model Fit Indices

	Saturated model	Estimated model
SRMR	0.07	0.10
d_ULS	2.19	3.75
d_G	0.96	1.07
Chi-square	1975.55	2058.87
NFI	0.84	0.83

The term explanatory power is defined as the model's ability to explain variation in the data (using R-square), its predictive relevance (using Q-square), and the effect size (using F-square) of exogenous variables on endogenous variables (Hair et al., 2021; Hair et al., 2014; Henseler et al., 2015). A model that contains a set of exogenous variables substantially explaining, predicting, and having a substantial effect on endogenous variables is considered a model with high explanatory power (Hair et al., 2021). According to Hair et al. (2021), an R-square value between .02-.12, .13-.25, and .35 or greater indicates that exogenous variables are explaining their endogenous variable weakly, moderately, and substantially respectively. The study considered ETD as the exogenous variable, QHS as the ultimate endogenous variable, and PS, TW, and VAA as the mediating variable (2nd endogenous variables). QHS indicates an R-Square value of .55 which means the exogenous variables; ETD, PS, TW, and VAA substantially explain the variation in QHS. Similarly, the R-square value of PS, TW, and VAA are .15, .02, and .15 which indicates a moderate, weak, and moderate explanation of these variable's variation by ETD.

According to Hair et al. (2021), a Q-square value greater than 0 indicates that the endogenous variable has some predictive relevance. Additionally, a Q-square value of 0, .01-.25, .26-.50, and .51 or greater indicates no accuracy, low accuracy, moderate accuracy, and high accuracy respectively (Hair et al., 2021). Table 5 presents the Q-square values for QHS, PS, TW, and VAA as .24, .14, .02, and .15 respectively. Therefore, the model indicates low predictive accuracy for PS, TW, and VAA, and moderate predictive accuracy for QHS. Similarly, according to Hair et al. (2021), the F-square value less than .02, .02-.14, .15-.34, and .35 or greater indicates no effect, small effect, medium effect, and large effect respectively. The F-square values of QHS indicate the effect size of ETD as .09, PS as .06, TW as .001, and VAA as .28 showing a small effect, small effect, no effect, and medium effect respectively. Furthermore, ETD as the exogenous variable has some effect size on PS, TW, and VAA as the mediating/2nd endogenous variables of study as .17 (medium effect), .02 (small effect), and .18 (medium effect) respectively.

Table 5
Model Explanatory Power

Constructs	R ²	Q ²	F ²			
			PS	QHS	TW	VAA
ETD	-	-	.17	.09	.02	.18
PS	.15	.14		.06		
QHS	.55	.28		-		
TW	.02	.02		.00		
VAA	.15	.15		.28		

Finally, the researcher executed the bootstrapping procedure using Smart PLS 4 by considering 5000 as the sub-samples, complete (slower) number of results, bias-corrected and

accelerated bootstrap as the confidence interval method, and test type as the two-tailed and significance level as .05.

Figure 2 presents the graphical shape of the structural model of the study. It indicates the coefficient values as well as the p-values of each path to verify the impact and significance of exogenous variables on endogenous variables. The figure indicates a positive and statistically significant impact of employee training and development as the strategic decision on the quality of healthcare service as well as on achieving organisational goals like patient safety, value-added activities, and teamwork. Furthermore, the figure also indicates a positive and significant impact of value-added activities, and patient service while a positive but insignificant impact of teamwork on the quality of healthcare service in public sector healthcare units in Saudi Arabia.

Figure 2

Structural Equation Model

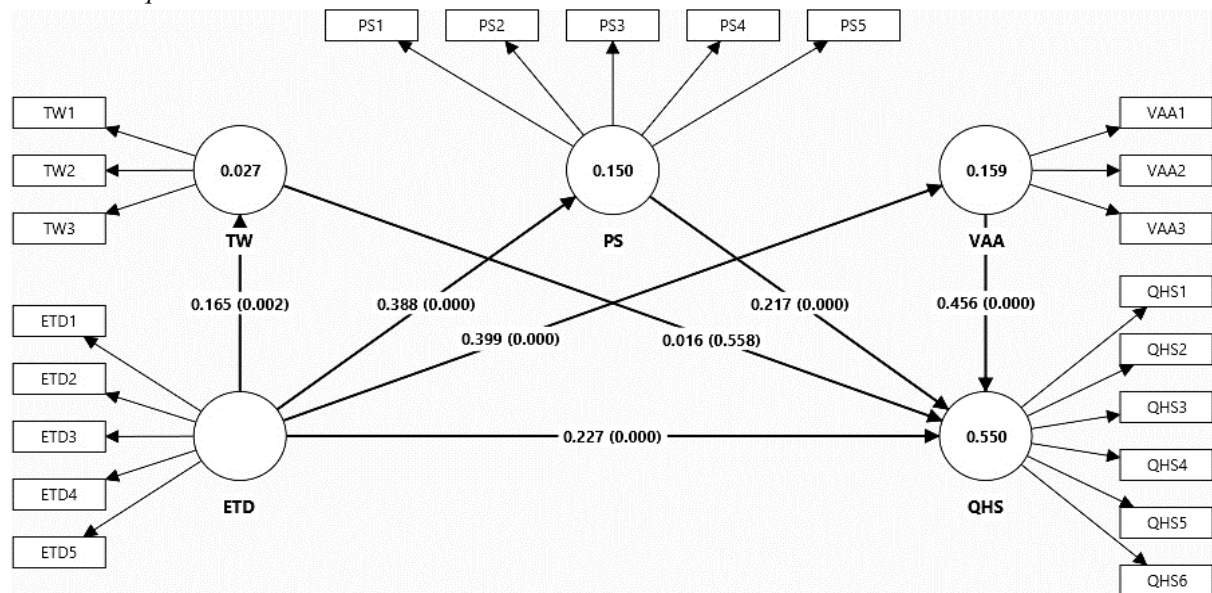


Table 6 presents the direct and indirect paths for testing the required set of hypotheses using the structural equation modelling approach of Smart PLS 4. The 1st hypothesis of this study requires that employee training and development improves the quality of services in healthcare units. The estimated results indicated in Table 6 show a positive and highly significant role of employee training and development as the strategic decision in the healthcare sector of Saudi Arabia to improve the quality of their services ($\beta = .22, p < .05$). Therefore, H_1 is accepted.

Furthermore, the 2nd hypothesis of this study is subdivided into three hypotheses which require that employee training and development as the strategic decision helps to achieve organisational goals like improving patient safety, enhancing value-added services, and boosting teamwork in the healthcare sector of Saudi Arabia. The estimated results indicated in Table 6 show a positive and highly significant impact of employee training and development on patient safety ($\beta = .38, p < .05$), value-added activities ($\beta = .39, p < .05$), and teamwork ($\beta = .16, p < .05$). Therefore, H_{2a} , H_{2b} , and H_{2c} are accepted.

Additionally, the 3rd hypothesis of this study is also subdivided into three hypotheses which require that patient safety, value-added activities, and teamwork as the important organisational goals in healthcare should help to enhance the quality of service in this sector of Saudi Arabia.

The estimated results as per Table 6 show a positive and highly significant impact on patient safety ($\beta = .21, p < .05$), and value-added activities ($\beta = .45, p < .05$) on the quality of healthcare service. Therefore, H_{3a} and H_{3b} are accepted. However, Table 6 also indicates a positive but insignificant impact of teamwork ($\beta = .01, p = .55$) on the quality of healthcare service. Therefore, H_{3c} is failed to accept.

Finally, the 4th hypothesis of this study is subdivided into three hypotheses which require that patient safety, value-added activities, and teamwork play a significant moderating role in explaining the impact of employee training and development on the quality of healthcare service in Saudi Arabia. The estimated results indicated in Table 6 a positive and highly significant moderating role of patient safety ($\beta = .08, p < .05$), and value-added activities ($\beta = .18, p < .05$) for explaining the impact of employee training and development on the quality of healthcare services in Saudi Arabia. Therefore, H_{4a} and H_{4b} are accepted. However, the estimated results also indicated a positive but insignificant moderating role of teamwork ($\beta = .003, p = .57$), in explaining employee training and development on the quality of healthcare services in Saudi Arabia. Therefore, H_{4c} is failed to accept.

Table 6

Hypotheses Testing

Direct Paths	β	p	Decision
Employee Training and Development -> Quality of healthcare service	.22	.000	H ₁ Supported
Employee Training and Development -> Patient Safety	.38	.000	H _{2a} Supported
Employee Training and Development -> Value Added Activities	.39	.000	H _{2b} Supported
Employee Training and Development -> Teamwork	.16	.002	H _{2c} Supported
Patient Safety -> Quality of healthcare service	.21	.000	H _{3a} Supported
Value Added Activities -> Quality of healthcare service	.45	.000	H _{3b} Supported
Teamwork -> Quality of healthcare service	.01	.558	H _{3c} Not Supported
Indirect Paths			
Employee Training and Development -> Patient Safety -> Quality of healthcare service	.08	.000	H _{4a} Supported
Employee Training and Development -> Value Added Activities -> Quality of healthcare service	.18	.000	H _{4b} Supported
Employee Training and Development -> Teamwork -> Quality of healthcare service	.003	.578	H _{4c} Not Supported

Discussion

The research aimed to investigate the role of employee training and development as an important strategic decision in the “healthcare sector of Saudi Arabia” for improving their service quality. Additionally, the study examined the role of employee training and development in achieving important organisational goals of healthcare units in Saudi Arabia, such as patient safety, value-added services, and teamwork. Finally, the study also aimed to determine the mediating role of important organizational goals in healthcare sectors, such as patient safety, value-added services, and teamwork in explaining the impact of employee training and development in improving the quality of services in healthcare units of “Saudi Arabia. The findings of the study confirmed the majority of the hypotheses, except for the direct and indirect role of teamwork, which was not found to be significant in both cases.

Firstly, a positive and highly significant role of employee training and development as an important strategic decision in the healthcare units of Saudi Arabia was found to improve the quality of services. According to Lie et al. (2011), a long-term decision for continuous training and development enables health professionals to obtain updated skills and knowledge, thereby providing efficient and effective care to their patients. Similarly, the healthcare staff can

significantly improve their professional development through continuous training to perform with a higher level of excellence and a strong commitment to their organisation (Balmer, 2013).

Secondly, positive and strong impacts of employee training and development as a strategic decision were found to achieve organisational goals in healthcare units of Saudi Arabia, such as patient safety, value-added activities, and teamwork. According to Sendawula et al. (2018) training and development in healthcare employees help them to get the necessary skills, and knowledge to decrease procedural errors, risks, and adverse events. Furthermore, continuous training and professional development create a culture of following best practices, vigilance, and accountability for healthcare employees that ensure the safety standards for the patients (Haleem et al., 2021).

Thirdly, the researcher found a positive and significant role of patient safety, and value-added services for improving the quality of healthcare service in Saudi Arabia. However, the researcher could not find a significant role of teamwork in enhancing service quality in this target sector and region. According to Vahdat (2022), efficient measures towards patient safety and value-added services help to enhance trust and patient personal experiences which leads to improving the quality of services in a healthcare unit. However, the nature of teamwork is multifaceted and complex in the healthcare setting of Saudi Arabia (Al-Taweel, 2021; Almujaidei et al., 2022). Therefore, it may not play a significant role in improving the service quality of their healthcare sector.

Fourthly, the researcher found the positive and significant mediating role of patient safety, and value-added services in the healthcare sector of Saudi Arabia in explaining the positive impact of training and development on service quality. However, the researcher again could not find a significant mediating role of teamwork for explaining the positive impact of training and development on the service quality of healthcare units in Saudi Arabia. Continuous training and professional development help healthcare employees to the necessary skills, and knowledge to follow best practices, vigilance, accountability, and reduce adverse events, risks, and procedural mistakes which leads to improving the quality of services in a healthcare setting (Al-Taweel, 2021; Aldaheri et al., 2023).

Theoretical and Practical Implications

The findings of the study provide some important theoretical implications when viewed through the lenses of social exchange theory, reciprocity norms theory, and goal-setting theory. The strong enhancement of service quality in healthcare units due to employee training and development aligns with the social exchange theory. According to this theory, human relationships are built on subjective cost-benefit analysis. Furthermore, the significant increase in patient safety and value-added activities resulting from employee training and development can be attributed to the perceived organisation support which aligns with Reciprocity Norms Theory. Additionally, the Goal Setting Theory supports the notion that employee training motivates individuals to apply acquired skills, enhancing work performance, and subsequently, service quality.

The findings of the study offer crucial practical implications for the public healthcare sector in Saudi Arabia. For example, investing in targeted healthcare employees' training and professional development is essential to elevate service quality and improve patient outcomes. The significant increases in patient safety and value-added activities underscore the need for a

supportive organisational environment that encourages continuous learning and skill application. Although teamwork remains insignificant, its positive impact on service quality suggests the necessity for additional strategic interventions to enhance collaborative practices in the public healthcare units of Saudi Arabia. Moreover, aligning training programs with organisational goals, particularly patient safety and value-added activities, is imperative to maximize the benefits of employee development initiatives and effectively improve service quality in the public healthcare sector of Saudi Arabia.

Limitations and Suggestions for Future Research

The study has a few limitations that should be considered when interpreting its findings. Firstly, the cross-sectional design restricts the ability to establish a causal relationship between employee training and the observed improvements in service quality, patient safety, and teamwork. A longitudinal approach would offer a more definitive understanding of the long-term effects of training programs on these outcomes. Secondly, the reliance on self-reported data from healthcare professionals may introduce response bias and potential inaccuracies in reporting the actual impact of training and development. Furthermore, the study's exclusive focus on the public healthcare sector in Saudi Arabia limits the generalisability of the findings to other healthcare settings or private institutions within the country, as well as to healthcare systems in different cultural or socio-economic contexts.

Based on the findings and limitations of the study, future recommendations for enhancing the effectiveness of employee training and development in the public healthcare sector of Saudi Arabia include adopting a longitudinal research design to understand the long-term impact of training programs. To mitigate potential biases, a combination of qualitative and quantitative methodologies should be employed for a more accurate assessment. Additionally, expanding the scope of research to include private healthcare intuitions and different cultural contexts within Saudi Arabia would provide a holistic understanding of the factors influencing service quality and inform tailored training strategies. Furthermore, exploring the influence of other organisational or external factors, such as resource availability and leadership styles, on service quality is crucial for developing more effective interventions and achieving organisational goals.

Declarations

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Disclosure Statement

No potential conflict of interest was reported by the authors.

Ethics Approval

Ethical approval was obtained from the University of Ha'il Research Ethics Committee (Number: H-2024-155) in Saudi Arabia. Informed consent was obtained from all subjects involved in the study.

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References

- Abaker, M.-O. S. M., Al-Titi, O. A. K., & Al-Nasr, N. S. (2019). Organizational policies and diversity management in Saudi Arabia. *Employee Relations: The International Journal*, 41(3), 454–474. <https://doi.org/10.1108/ER-05-2017-0104>
- Abdulmajeed, A., Lisa, K., & Eileen, C. (2020). Factors contributing to the patient safety culture in Saudi Arabia: a systematic review. *BMJ Open*, 10(10), e037875. <https://doi.org/10.1136/bmjopen-2020-037875>
- Aceto, G., Persico, V., & Pescapé, A. (2018). The role of Information and Communication Technologies in healthcare: taxonomies, perspectives, and challenges. *Journal of Network and Computer Applications*, 107, 125–154. <https://doi.org/https://doi.org/10.1016/j.jnca.2018.02.008>
- Al-Hanawi, M. K., Khan, S. A., & Al-Borie, H. M. (2019). Healthcare human resource development in Saudi Arabia: emerging challenges and opportunities—a critical review. *Public Health Reviews*, 40(1), 1. <https://doi.org/10.1186/s40985-019-0112-4>
- Al-Taweel, I. R. (2021). Impact of high-performance work practices in human resource management of health dispensaries in Qassim Region, Kingdom of Saudi Arabia, towards organizational resilience and productivity. *Business Process Management Journal*, 27(7), 2088–2109. <https://doi.org/10.1108/BPMJ-11-2020-0498>
- Aldaheri, N., Guzman, G., & Stewart, H. (2023). Reciprocal knowledge sharing: exploring professional–cultural knowledge sharing between expatriates and local nurses. *Journal of Knowledge Management*, 27(5), 1483–1505. <https://doi.org/10.1108/JKM-10-2021-0735>
- Almujadidi, B., Adams, A., Alquaiz, A., Van Gorp, G., Schuster, T., & Andermann, A. (2022). Exploring social determinants of health in a Saudi Arabian primary health care setting: the need for a multidisciplinary approach. *International Journal for Equity in Health*, 21(1), 24. <https://doi.org/10.1186/s12939-022-01627-2>

- Alqarni, S. A., Althobaiti, S. A., Althagafi, S. M., Almutairi, F. M., Alotaibi, A. A., Al Harthi, R. S., . . . Aljueed, M. M. (2023). A review of the public healthcare system in Saudi Arabia. *Migration Letters*, 20(S12), 1356–1370. <https://migrationletters.com/index.php/ml/article/view/8659>
- Alshuwaikhat, H. M., & Mohammed, I. (2017). Sustainability matters in national development visions—evidence from Saudi Arabia's Vision for 2030. *Sustainability*, 9(3).
- Asmri, M. A., Almalki, M. J., Fitzgerald, G., & Clark, M. (2020). The public health care system and primary care services in Saudi Arabia: a system in transition. *Eastern Mediterranean Health Journal*, 26(4), 468–476. <https://doi.org/10.26719/emhj.19.049>
- Balmer, J. T. (2013). The transformation of continuing medical education (CME) in the United States. *Advances in Medical Education and Practice*, 4(null), 171–182. <https://doi.org/10.2147/AMEP.S35087>
- Banister, G., Portney, L. G., Vega-Barachowitz, C., Jampel, A., Schnider, M. E., Inzana, R., . . . Knab, M. (2020). The interprofessional dedicated education unit: Design, implementation and evaluation of an innovative model for fostering interprofessional collaborative practice. *Journal of Interprofessional Education & Practice*, 19, 100308. <https://doi.org/https://doi.org/10.1016/j.xjep.2019.100308>
- Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design [Journal Article]. *Journal of the Australasian Rehabilitation Nurses Association*, 22(2), 27–30. <https://doi.org/10.33235/jarna.22.2.27-30>
- Brown, S. P., Cron, W. L., & Slocum, J. W. (1998). Effects of trait competitiveness and perceived intraorganizational competition on salesperson goal setting and performance. *Journal of Marketing*, 62(4), 88–98. <https://doi.org/10.1177/002224299806200407>
- Ciasullo, M. V., Douglas, A., Romeo, E., & Capolupo, N. (2024). Lean Six Sigma and quality performance in Italian public and private hospitals: a gender perspective. *International Journal of Quality & Reliability Management*, 41(3), 964–989. <https://doi.org/10.1108/IJQRM-03-2023-0099>
- Dincă, M., Berge, T., Onițiu, A., Thomassen, M., Luștrea, A., Luchș, D., & Crașovan, M. (2023). Immersive Team-based learning in transnational virtual classrooms. *European Review Of Applied Sociology*, 16(27), 51–70. <https://doi.org/doi:10.2478/eras-2023-0010>
- Eze, N. D., Mateus, C., & Cravo Oliveira Hashiguchi, T. (2020). Telemedicine in the OECD: an umbrella review of clinical and cost-effectiveness, patient experience and implementation. *PloS one*, 15(8), e0237585. <https://doi.org/https://doi.org/10.1371/journal.pone.0237585>
- Farup, P. G. (2015). Are measurements of patient safety culture and adverse events valid and reliable? Results from a cross sectional study. *BMC Health Services Research*, 15(1), 186. <https://doi.org/10.1186/s12913-015-0852-x>
- Gope, S., Elia, G., & Passiante, G. (2018). The effect of HRM practices on knowledge management capacity: a comparative study in Indian IT industry. *Journal of Knowledge Management*, 22(3), 649–677. <https://doi.org/10.1108/JKM-10-2017-0453>
- Gupta, N., Vrat, P., & Ojha, R. (2022). Prioritizing enablers for service quality in healthcare sector – a DEMATEL approach. *Journal of Health Organization and Management*, 36(5), 633–649. <https://doi.org/10.1108/JHOM-06-2021-0222>
- Hair, Jr. J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). An Introduction to Structural Equation Modeling. In J. F. Hair Jr, G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, & S. Ray (Eds.), *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook* (pp. 1–29). Springer International Publishing. https://doi.org/10.1007/978-3-030-80519-7_1
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Haleem, A., Javaid, M., Singh, R. P., & Suman, R. (2021). Telemedicine for healthcare: Capabilities, features, barriers, and applications. *Sensors International*, 2, 100117. <https://doi.org/https://doi.org/10.1016/j.sintl.2021.100117>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jan, B. S., Laurenz, L. M., & Tanja, M. (2019). How effective is teamwork really? The relationship between teamwork and performance in healthcare teams: a systematic review and meta-analysis. *BMJ Open*, 9(9), e028280. <https://doi.org/10.1136/bmjopen-2018-028280>
- Kock, N. (2017). Common method bias: A full collinearity assessment method for PLS-SEM. In H. Latan & R. Noonan (Eds.), *Partial least squares path modeling: Basic concepts, methodological issues and applications* (pp. 245–257). Springer International Publishing. https://doi.org/10.1007/978-3-319-64069-3_11
- Lancaster, S., & Di Milia, L. (2014). Organisational support for employee learning. *European Journal of Training and Development*, 38(7), 642–657. <https://doi.org/10.1108/EJTD-08-2013-0084>

- Lie, D. A., Lee-Rey, E., Gomez, A., Bereksnyi, S., & Braddock, C. H. (2011). Does cultural competency training of health professionals improve patient outcomes? A Systematic review and proposed algorithm for future research. *Journal of General Internal Medicine*, 26(3), 317–325. <https://doi.org/10.1007/s11606-010-1529-0>
- Mauthner, N. S. (2020). Chapter 12: Research philosophies and why they matter how to keep your doctorate on track. In Edward Elgar Publishing. <https://doi.org/10.4337/9781788975636.00018>
- McClintock, C. G., Kramer, R. M., & Keil, L. J. (1984). Equity and Social Exchange in Human Relationships¹The preparation of this chapter was supported by NSF Grant, BNS 80-16214. The present chapter represents a revision and extension of an earlier chapter by C. McClintock and L. Keil entitled “Equity and Social Exchange” which appeared in J. Greenberg and R. Cohen (Eds.) *Equity and Social Justice*, NY: Academic Press, 1982. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 17, pp. 183-228). Academic Press. [https://doi.org/https://doi.org/10.1016/S0065-2601\(08\)60120-3](https://doi.org/https://doi.org/10.1016/S0065-2601(08)60120-3)
- Mosadeghrad, A. M. (2014). Factors influencing healthcare service quality. *International Journal Health Policy Management*, 3(2), 77–89. <https://doi.org/10.15171/ijhpm.2014.65>
- Murphy, M., Curtis, K., & McCloughen, A. (2016). What is the impact of multidisciplinary team simulation training on team performance and efficiency of patient care? An integrative review. *Australasian Emergency Nursing Journal*, 19(1), 44–53. <https://doi.org/https://doi.org/10.1016/j.aenj.2015.10.001>
- Owusu-Frimpong, N., Nwankwo, S., & Dason, B. (2010). Measuring service quality and patient satisfaction with access to public and private healthcare delivery. *International Journal of Public Sector Management*, 23(3), 203–220. <https://doi.org/10.1108/09513551011032455>
- Patel, S. (2015). Value management program: Performance, quantification, and presentation of imaging value-added actions. *Journal of the American College of Radiology*, 12(3), 239–248. <https://doi.org/https://doi.org/10.1016/j.jacr.2014.07.036>
- Raj Adhikari, D. (2010). Human resource development (HRD) for performance management. *International Journal of Productivity and Performance Management*, 59(4), 306–324. <https://doi.org/10.1108/17410401011038883>
- Randall, S., Crawford, T., Currie, J., River, J., & Betihavas, V. (2017). Impact of community based nurse-led clinics on patient outcomes, patient satisfaction, patient access and cost effectiveness: A systematic review. *International Journal of Nursing Studies*, 73, 24–33. <https://doi.org/https://doi.org/10.1016/j.ijnurstu.2017.05.008>
- Reise, S. P., & Waller, N. G. (2009). Item response theory and clinical measurement. *Annual Review of Clinical Psychology*, 5(1), 27–48. <https://doi.org/10.1146/annurev.clinpsy.032408.153553>
- Schwindt, R., McNelis, A. M., Agley, J., Hudmon, K. S., Lay, K., & Wilgenbusch, B. (2019). Training future clinicians: An interprofessional approach to treating tobacco use and dependence. *Journal of Interprofessional Care*, 33(2), 200–208. <https://doi.org/10.1080/13561820.2018.1534808>
- Sendawula, K., Nakyejwe Kimuli, S., Bananuka, J., & Najjemba Muganga, G. (2018). Training, employee engagement and employee performance: Evidence from Uganda’s health sector. *Cogent Business & Management*, 5(1), 1470891. <https://doi.org/10.1080/23311975.2018.1470891>
- Settoon, R. P., Bennett, N., & Liden, R. C. (1996). *Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity*. American Psychological Association. <https://doi.org/10.1037/0021-9010.81.3.219>
- Shahzad, M., Upshur, R., Donnelly, P., Bharmal, A., Wei, X., Feng, P., & Brown, A. D. (2019). A population-based approach to integrated healthcare delivery: a scoping review of clinical care and public health collaboration. *BMC Public Health*, 19(1), 708. <https://doi.org/10.1186/s12889-019-7002-z>
- Sitzmann, T., & Ely, K. (2011). A meta-analysis of self-regulated learning in work-related training and educational attainment: What we know and where we need to go. *Psychological Bulletin*, 137(3), 421–442. <https://doi.org/10.1037/a0022777>
- Vahdat, S. (2022). The role of IT-based technologies on the management of human resources in the COVID-19 era. *Kybernetes*, 51(6), 2065–2088. <https://doi.org/10.1108/K-04-2021-0333>
- Valentine, M. A., Nembhard, I. M., & Edmondson, A. C. (2015). Measuring teamwork in health care settings: A review of survey instruments. *Medical Care*, 53(4). https://journals.lww.com/lww-medicalcare/fulltext/2015/04000/measuring_teamwork_in_health_care_settings__a.15.aspx
- Wang, Y., Kung, L., & Byrd, T. A. (2018). Big data analytics: Understanding its capabilities and potential benefits for healthcare organizations. *Technological Forecasting and Social Change*, 126, 3–13. <https://doi.org/https://doi.org/10.1016/j.techfore.2015.12.019>