

AN INVESTIGATION ON THE IMPACT OF TRAINING AND DEVELOPMENT ON SERVICE QUALITY IN THE HIGHER EDUCATION SECTOR

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Abstract

The most powerful competitive trend that is currently shaping marketing and business strategies is service quality. Therefore, this study delves into the effect of training and development of employees on service quality in the context higher education. Emphasis is placed on the relationship between the perception of employees with regards to training and development, and the perception of customers with regards to the service provided by specific employees. A self-administered questionnaire was distributed to 296 employees and 1480 students in Aden University in Yemen. The findings, attained through confirmatory factor analysis and structural equation modelling, revealed a positive relationship between training and development and service quality. This positive relationship was observed to be particularly obvious for the more highly qualified employees. This study conclude that, when employees provided by training and development, they will put greater effort into the delivery of good service quality, thus promoting a positive perception among customers towards the organization. A discussion on the limitations of this investigation, and suggestions for future research was included.

Keywords: Training and development, Service Quality, Higher Education, Social Exchange Theory

Introduction

Service organizations, expect their investment in employee training and development, to yield employees with improved attitudes and behaviours, as well as equip them with the required skills and ability, to perform their jobs more efficiently. This will serve to enhance the overall service quality of organizations (Shen, & Tang, 2018; Al-Refaei, 2021), set them apart from their competitors, and generate satisfied customers (Baiomy, 2021; Bambale, Ghani, & Ado, 2020). Generally, currently available literature, on the effect of training and development on individual and organizational performance, is somewhat vague and ambiguous (Tharenou, Saks, & Moore, 2007; Shen, & Tang, 2018). This situation can be attributed to the fact that, previous studies in this area did not place much emphasis, on the mechanism involved, regarding the relationship between training and development and service quality. Furthermore, applied knowledge, and the skills that employees acquire from the workplace, as well as the effect of training and development on service quality, are currently unfathomable and not clearly defined (Shen, & Tang, 2018). As such, more studies are required in this area, to clarify the effect of training and development, on employee performance and service quality.

According to several researchers, customers' experience represents the key to ascertaining the service quality, provided by an employee (Schneider, Parkington and Buxton, 1980; Parasuraman, Zeithaml, and Berry, 1988; Schneider and Bowen, 1985; Schneider, White and Paul, 1998; Gazzoli, Hancer and Kim, 2013; Jaakkola, Helkkula and Aarikka-Stenroo, 2015; Al-Refaei, Zumrah, Alsamawi, & Alshuhumi, 2019). It is notable, that customers tend to develop their perception on service quality, through their interaction with specific employees, rather than an overall assessment of service quality (Gould-Williams and Davies, 2005; Al-Refaei, Zumrah, & Alshuhumi, 2019). Also, researchers, such as Alshaibani and Bakir, (2017), Liao and Chuang, (2004); Liao, Toya, Lepak and Hong, (2009); Raub and Liao, (2012); Al-Refaei et al., (2019); Al-Refaei, (2021) argued that customer perception of service quality is directly affected by the service performance of front-line employees. Thus, previous studies, in this domain, did pay much attention to the relationship between customer perception

towards service quality, and employee perception towards organizational practices, such as training. This renders unclear, the relationship between employee training, and customer perception with regards to service quality. In order to address this gap, we investigated the relationship between training and customer perception towards service quality, with the emphasis on customer perception towards the service quality provided by specific employees.

Employees may be inclined to perceive that, the training and development provided by an organization, can go a long way towards enhancing their career prospects (Grund & Titz, 2021). Kooij et al., (2010) opined that the relationship between training and employee attitudes declines with age. However, Grund (2013) argued that, younger and better educated employees are particularly receptive, when it comes to personnel development (Grund, 2013). In the opinion of Grund and Titz (2021), the training provided by an organization affects the employee sub-groups (separated according to age and education level) differently. When it comes to the realization of good service quality, the findings don't conform the different impact of training and development on service quality based in employee age and education level.

Literature review

Training and development

Training is the use of systematic and planned instruction activities to promote the learning process (Armstrong, & Brown, 2019). while development refers to training program as well as formal education, job experiences, work relationships, and assessments of personality, skills, knowledge and abilities that help employees Prepare themselves for future jobs or positions (Noe, 2020). It contributes towards social knowledge, and enhances the skills required to perform a specific role in the organization (Chevalieret, Fouquereau, Bénichoux, & Colombat, 2019). Training has developed into an essential function in most organizations, as it equips employees with the ability to perform their tasks correctly (Ibrahim, & Dahie, 2016), or to meet the standards of well performing (Van Nguyen, 2020). In terms of human resource development, training has become increasingly significant for the enhancement of employee knowledge, abilities and good thinking. All of which will contribute towards increased productivity (Ismael, 2021), and lead to an improved organizational performance and satisfied customers. Training activities are used to align employees with the strategies of the organization (Mondy & Martocchio, 2016). The strategic benefits that the organization seeks through training, include improvements in the capability of employees, when it comes to challenges and changes in the external environment (for instance, the changes brought about by the Covid-19 pandemic), as well as improvements in the levels of employee satisfaction, organizational commitment and service delivery (Al-Refaei, Zumrah, Alsamawi, & Alshuhumi, 2019, Al-Refaei, 2021). Put plainly, training serves as a tool for enhancing employee knowledge, ability and satisfaction, which can result in quality service and satisfied customers.

Service quality

Services are economic activities performed by one party for another. Often time-based, these performances bring about desired results with regards to recipients, objects or other assets. In exchange for money, time, and effort, service customers expect value from access to labour, skills, expertise, goods, facilities, networks, and systems (Wirtz & Lovelock, 2016). However, they do not normally take ownership of the physical elements involved. Furthermore, Zeithaml, Bitner, and Gremler, (2017) proposed that services be considered deeds, processes, and performances provided, co-produced or co-created by one entity or person, for and/or with another entity or person.

Service quality is the gap between customers' expectations with regards to service, and their perception with regards to the quality of the service delivered (Parasuraman et al., 1985). In other words, the customers' opinion, regarding service quality, is formed by way of an internal comparison between performance and expectations (Parasuraman, Zeithaml & Berry, 1988). Other researchers defined service quality as the customer's perception of service, and whether or not the service performance meets, or exceeds their expectations, in terms of the performance of the service firm. The key to service quality is to meet or exceed consumer expectations (Pariseau & McDaniel, 1997).

Theoretical background and previous empirical work

Social exchanges tend to involve unspecified obligation. They are voluntary actions that occur between parties, when a person volunteers to do a favour for another, with the expectation of receiving some form of return in the future. The form of this return, and when it will be granted, is often unclear, as it is at the discretion of the one who grants it (Blau, 1964). Eisenberger et al., (2001) forwarded that when employees perceive that their organization values their efforts, and are willing to invest in them (through training programmes to improve their skills), they will feel obligated to reciprocate by increasing their efforts (with regards to providing quality service) to facilitate the achievement of the goals of the organization. Training offers a platform for employees to improve their skills and abilities, while providing new opportunities for learning and performance enhancement (Kirimi & Maende, 2019). Training plays key role in the creation of positive social exchanges between an employee and his/her employer (Shen, & Tang, 2018; Grund, & Titz, 2021; Al-Refaei, 2021). When an organization offers its employees training to develop their knowledge, skills and abilities, they will be motivated to respond by increasing their effort, to ensure the delivery of good service quality (Al-Refaei, 2021).

The relationship between training and service quality can be explained through the social exchange theory (Kirimi & Maende, 2019; Al-Refaei, 2021). when training perceived as a gift from organization to develop employee's knowledge and skills, then employees reciprocate that to the organization by increasing their efforts and providing superior service quality. This investigation delves into the relationship between training and service quality, in the context of the higher education sector.

Training can serve to enhance the productivity and performance of employees (Bartel, 1994). in this regard Ganesan (2020) when employees provided by enough of training they will work better and effect their attitude which maintain a good relationship with their organization. Narayana (2012) observed a positive relationship between training and employee performance. Similarly, during a study involving 197 schools for teachers in Pakistan. Alharthy, and Marni (2020) found that, training positively effect employees' performance in Abu Dhabi. Shaheen, Naqvi, and Khan (2013) discerned a positive relationship between employee training and the performance of the teachers. Their study revealed that training programmes improved the teachers' understanding, capacities, skills, career progression and efficiencies. Alatyoush and Salem (2020) found that, training had indirect effect on employee's performance through mediating of job satisfaction.

Training and development can also enhance the service quality level of employees. In the opinion of Liao and Chuang (2004), training and development enhances an employee's service knowledge and skills, which consequently improves the employee's service performance. Several researchers are also in agreement, that service programmes pave the way towards the realization of quality service and customer satisfaction (Schneider et al., 1980). Similarly, in a study conducted by Beigi & Shirmohammadi (2011), involving employees at five branches of a large public-sector bank in Iran, it was revealed that training plays a significant role in the development of overall service quality. While a study conducted by Samat, Ramayah and Saad (2006), did not reveal any significant impact of training on service quality, this could be due to the measurement method employed, which placed more emphasis on the skills, rather than the service quality delivery itself.

In an investigation carried out by Shen and Tang (2018), involving employees and their supervisors from different business organizations in China, an indirect effect of training on customer service quality was discerned. This indirect effect stems from the mediating influence of job satisfaction and transfer of training. This study also uncovered a direct effect of training on transfer of training, which can positively affect employee attitude, with regards to the delivery of good service quality. In a study involving tourist hotels in India, Dhar (2015) perceived a strong positive relationship between training and service quality. This study also disclosed that organizational commitment, mediates the relationship between training and service quality. As such, it can be surmised that training directly affects service quality, while enhancing organizational commitment. Likewise, Ibrahim (2020) found that, the level of training and development provided to employees in the Jordanian hotel improve the level of service quality that delivering to the customer. In a study involving employees at Kenya's labour ministry, Kirimi & Maende (2019) came to the conclusion that training and development (specifically job rotation, coaching, apprenticeship and role-playing) has a positive effect on employee performance. according to evidence reported above, the following hypothesis is proposed:

Hypothesis 1: Training and development are positively affect service quality in higher education context.

Furthermore, Al-refaei (2021) argued that, when organization support employee by offered training and development to improve their knowledge, skills and abilities, then employees feel obligated to support their organization by provided high level of service quality. and the important of training and development in employee attitudes and behaviour may be varying base of their feeling regarding the important of training and

development towards enhancing their career prospects (Grund, 2013). the relationship between training and employees' attitudes for younger and better education not conformed (Grund & Titz, 2021). therefore, our concertation is to investigate the impact of training and development on service quality within sub-groups accordance to their age and qualifications, this lead to propose the following hypotheses:

Hypothesis 2a: there is positive impact of training and development on service quality relevant for younger employees.

Hypothesis 2b: there is positive impact of training and development on service quality relevant for older employees.

Hypothesis 3a: there is positive impact of training and development on service quality relevant for less educated employees.

Hypothesis 3b: there is positive impact of training and development on service quality relevant for better educated employees.

Hypothesis 4a: the impact of training and development on service quality is much higher for younger employees than older employees.

Hypothesis 4b: the impact of training and development on service quality is much higher for better educated than less educated employees.

Methodology

The objective of this undertaking is to make clear, the impact of training on service quality, in terms of the higher education sector. A quantitative method was used to gather relevant data, for the investigation on the relationship between training and service quality, while the stratified random sample method was employed, to collect data from the faculties at Aden University. Two survey instruments were used to collect data for the testing of the hypotheses. While the first instrument was used to measure the employees' perception on training, the second was used to measure their students' perception, on the service quality delivered by the employees. The questionnaire was hand-distributed to the academic staff in the classes, following the conclusion of lectures. Five students were selected to present their perception on the service quality delivered by each academic staff member. During this process, each survey of the employee and his/her students were coded to facilitate easy matching of the customer's perception regarding the service quality delivered by specific employees. A total of 460 questionnaires were distributed to the faculty members, 306 questionnaires were returned (response rate 66.5%), and 296 were used for this undertaking. Additionally, 2300 questionnaires were distributed to the faculty customers (students), 1530 were returned (response rate 60%), and 1480 were used in the analysis process.

Measures

The training and service quality scales used in this study, are frequently employed for investigations related to management and marketing. Some of the items used for scales training and service quality measurements, were modified to accommodate the university setting, as well as our research goal and hypothesis.

Training and development

The measurement of training and development was by way of the four items developed by Bae and Lawler (2000). However, the short scale employed was introduced by Prieto-Pastor and Martin-Perez (2015), and used by Al-refaei (2021). The measurement achieved an acceptable reliability value ($\alpha = .86$).

Service quality

The objective of this undertaking is to measure customer perception of service quality, delivered directly from contact employees. We adopted 18 items from SERVQUAL to measure service quality in the higher education sector. This is in line with the method used in previous studies, to measure an employee's performance with regards to service quality, in the area of higher education (Trivellas and Dargenidou, 2009; Al-Refaei, et al., 2019; Al-Refaei, 2021). For this investigation, the four dimensions are responsiveness, reliability, assurance and

empathy. The tangibles dimension does not play any role in the measurement of service quality performance, with regards to customer-contact employees (Malhotra & Mukherjee, 2004; Alshaibani and Bakir, 2017). According to previous studies (Al-refaei, 2021), Cronbach's Alpha for each dimension is between ($\alpha = .845-.919$).

Data analysis

It is essential that the data be prepared prior to the analysis process. The data gathered for this undertaking, is for the purpose of investigating the effect of training and development on service quality. Scholars in this domain are in agreement that the service provided by front-line employees affects the customer's perception of service quality (Alshaibani and Bakir, 2017, Liao and Chuang, 2004; Liao, Toya, Lepak and Hong, 2009; Raub and Liao, 2012). The evaluation of customer perception, regarding service quality, should entail a specific employee performance, rather than a global or group assessment (Gould-Williams and Davies, 2005, Al-Refaei, et al, 2019; Al-refaei, 2021). The data collection process involves the matching of the customer's perception of service quality, with the specific employee, through whom the service was provided to the customer. This process begins with the coding and keying in of the data into the SPSS 25.0 software. The coding of the data is performed using the survey code, assigned to each employee and student, during the data collection process. This is to ensure the proper matching of each customer (student) perception of service quality, to the specific provider. SPSS 25.0 was used for the descriptive statistics and reliability analysis. Confirmatory factor analysis (CFA) was used to verify the fitness of all the scales. For the assessment of the fitness of the model, the index χ^2 adjusted by degrees of freedom or relative χ^2 (χ^2/df), comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA) were utilized. In order to test the effect of training on service quality, the hypotheses were analysed by way of AMOS 24.

Results

Descriptive statistics by SPSS 25.0 was used to express the profile of the sample for this study. The descriptive statistics of employees who participated in this study are 247 academic staff, of which 72.5% are males, and 27.5% females. In terms of age, 46.9% of the participating employees are below 40 years, while 53% are above 40 years. In the context of qualifications, 38.9% of the participating employees hold a bachelor's degree, 18.2% a master's degree, and 42.9% are PhD holders. As for their working experience, 42.3% of the respondents have been with the university for less than 10 years, while 57.7% have been with the university for more than 10 years.

The total student sample for this investigation is 1235, of which 67% are male, and 33% female. 38.2% are students in level one, 25% in level two, 21.5% in level three, 14.5% in level four, and 0.8% in level five. In terms of faculties, 8.5% attend the faculty for literature, 21.1% the faculty for commerce, science management and economics, 10.1% the faculty for medicine and health sciences, 15% the faculty for engineering, 31.6% the faculty for education, 7.3% the faculty for sharia'a and law, 4.5% the faculty for oil and minerals, and 2% the centre for continuous education, computer and languages.

Measurement model

The result of the measurement model through confirmatory factor analysis (CFA) which constructed by Training and development and service quality (reliability, responsiveness, assurance, and empathy). Concerning model fit, the result shows an excellent fit in which the χ^2 statistic was 512.634, $df = 225$ (CMINDF = 2.27, $p < 0.000$), CFI=0.96, TLI =0.956, RMSEA =0.066. These indices showed excellent model fit Gaskin, & Lim [52].

Table () presents reliability and validity of the Training and development and service quality constructs. Reliability analysis of the constructs was measured using composite reliability (C.R) whereas factor loadings for items and average variance extracted (AVE) was used for validating the data.

Table () revealed that, the factor loadings for each item in the measurement was higher than .60 (Awang, 2012), the results of composite reliabilities of each construct revealed high values which (CR) were above .70, and average variance extracted (AVE) of each construct was higher than 50, and not accessed the value of composite reliability, according to that, the convergent validity is confirmed for this model.

Table (1) Overall reliability, factor loadings of indicators and validity of the all constructs.

Construct and Indicators	Loading	CR	AVE	MSV
<u>Training and development</u>				
Managers initiate and provide various kinds of training and development for their employees.	.77			
Employees will normally go through ongoing training programmes.	.75			
Our university has good mentoring system to support new hires.	.74	0.848	0.529	0.432
The university provides training focused on team-building and teamwork skills training.	.67			
Managers provide specialized training and development for their employees.	.70			
<u>Service Quality</u>				
Reliability				
When the lecturer promises to do something by a certain time, He/she does so.	.842			
When I have problem, the lecturer is sympathetic and reassuring.	.854			
The lecturer is dependable.	.911			
The lecturer provides series at the time he/she promised to do so.	.919			
The lecturer keeps their work accurately.	.923			
Empathy				
The lecturer tells exactly which series will be preformed	.938			
I resave prompt series from the lecturer	.960			
The lecturer is always willing to help others	.960			
The lecturer responds to another request prompt even if he/she is too busy	.906	816	0.527	0.432
Assurance				
I can trust the lecturer	.889			
I feel safe in my transactions with the lecturer	.809			
The lecturer is polite	.901			
I get adequate support from the lecturer to do my job	.903			
Responsiveness				
The lecturer gives me individual attention	.962			
The lecturer gives me personal attention	.978			
The lecturer knows my needs	.894			
The lecturer has my best interests at heart	.944			
The lecturer has operating hours convenient to all their customers	.894			

Discriminant validity of this model also assessed as shown in table (), discriminant validity in this model measured as suggested by Fornell and Larcker (1981), discriminant validity should be measured through the comparison between square root of average variance extracted with the correlation between the variables. the result of this model shown that, the correlation between the variables should be less than the square root AVE, which conformed discriminant validity of this model (Hair, Black, Babin & Anderson, 2019; Malhotra & Dash, 2016). table () shown discriminant validity of this model.

Table (2) Discriminant validity

	Training	Service Quality
Training	0.727	
Service Quality	0.658***	0.726

Hypothesis Testing and Result

Structural equation model was used to test the hypotheses of the study, it tests the effect of training and development on service quality (reliability, responsiveness, assurance, and empathy), and whether this investigation is different when employees separated into sub-groups, in accordance with their age and qualifications. model fit indices show an excellent fit according to Gaskin, & Lim () in of the Structural equation model which the χ^2 statistic was 512.634, $df= 225$ (CMINDF =2.27, $p <0.000$), CFI=0.96, TLI =0.956, RMSEA =0.066. These indices showed excellent model fit of this model.

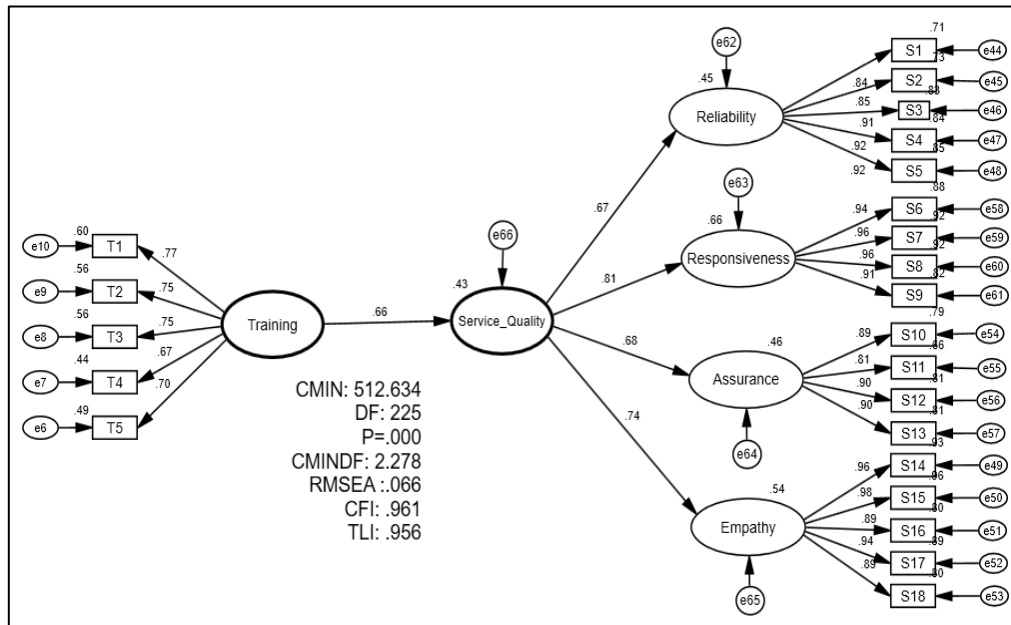


Figure (1) Structural equation model

The result of standardized regression estimation of the model which provided in the Table 2, for testing the direct effect of training and development on higher education service quality. Standardised path coefficients $\beta = .66$, $t = 7.44$, $p = .000$, this result of the hypotheses that investigate the effect of training and development on service quality was supported, the result of this hypothesis shown in table 2.

Table (3) Standardized Regression Estimation

	Estimate		Standard Error	t-value (C.R)	P Value	Result
	USD	SD				
T&D → SQ	0.45	0.66	0.061	7.44	0.000	Supported

*Note: T&D= Training and Development. SQ= Service Quality. USD= Unstandardized. SD= Standardised

However, for this investigation of the effect of training and development on service quality, the employees were separated into sub-groups, in accordance with their age and qualifications. to investigate for which group the training and development is much important and has higher effect on service quality. the result that obtained from the standardised regression estimation shown in the Table (4) which revealed that, Standardised path coefficients for the effect of training for younger employees on-service quality was ($\beta = .55$, $t = 4.00$, $p = .000$), while Standardised path coefficients for the effect of training and development for older employees on service quality was ($\beta = .72$, $t = 6.23$, $p = .000$). this result shown the effect of training and development on service quality was much higher for the older employees. However, Standardised path coefficients for the effect of training and development for less educated employees on-service quality was ($\beta = .76$, $t = 6.613$, $p = .000$), while Standardised path coefficients for the effect of training for better educated employees on service quality was ($\beta = .47$, $t = 3.696$, $p = .000$).

Table (4) Standardised Regression Estimation for sub-group according to age and qualifications

	Estimate		S Error	t-value (C.R)	P Value	Result
	USD	SD				
T&D for younger employees→ SQ	0.45	0.55	.111	4.00	.000	Supported
T&D for older employees→ SQ	0.45	0.72	.085	6.23	.000	Supported
T&D for less educated employees → SQ	0.52	0.76	0.079	6.613	.000	Supported
T&D for better educated → SQ	0.34	0.47	.092	3.696	.000	Supported

Note: T&D= Training and Development. SQ= Service Quality. USD= Unstandardized. SD= Standardised

Furthermore, results of hypotheses 4a and b, shown in table (5), the size different of the effect of training on service quality between the subgroups (younger /older employees, less/ better educated employee), the result shown that, there is insignificant different of the effect of training on service quality in higher education relevant to subgroup of employee (younger and older employees), due to P-Value for difference is (0.183) which is above the cut-off P-value (0.05). while size different of the effect of training on service quality according in subgroups (less/ better educated employee), shown that, there is significant different of the effect of training on service quality relevant to subgroup of employee (less/ better educated employee), due to P-Value for difference is (0.005). The effect of training on service quality is stronger for better educated.

Table (5) the different effect of training in service quality through according to subgroups (age and education)

Path Name	Younger/less Ed Beta	Older/ better Beta	Difference in Betas	P-Value for difference	Interpretation
T&D → SQ	0.477***	0.589***	-0.112	0.183	There is no difference of the effect of training and development in service quality relevant to age of employees.
T&D → SQ	0.403***	0.633***	-0.231	0.005	The effect of training and development on service quality is stronger for better educated.

*** p < 0.001

Discussion

The hypothesis for this study addresses the direct relationship between training and development and higher education service quality. The results from this hypothesis suggest that training and development has a direct and positive effect on service quality. Specifically, the training provided by the university served to enhance the skills and abilities of the employees, which in turn led to good service quality. Furthermore, when an employee views the training and development provided by the university as a supportive gesture, this training can have a positive effect on service quality, through the social exchange mechanism. Put plainly, when the university invests in its employees, by providing them with training and development to enhance their knowledge and skills, the employees will be inclined to reciprocate with greater effort, to ensure good service quality. The findings from this study are consistent with the basic principle of the social exchange theory, which states that, when a person voluntarily performs a favour for another, he/she expects to receive some form of return in the future (Blau, 1964; Gould-Williams & Davies, 2005; Al-refaei et al, 2019).

However, regarding to the sub-group of employees revealed that, all hypotheses of sub-group were supported, that means, there is positive impact of training on service quality relevant for younger and older employees, and there is positive impact of training on service quality relevant for less and better educated employees. the employees view that, the training that provided by an organization is important for their personnel development, and employees understanding that as support from their organization, and reciprocate that by performed a good service quality. However, this result is different with previous result of the study by Grund & Titz (2021) which found that, there is no relationship between training and development and employees’ attitudes for younger and better education. In addition, the result of the study revealed that, there is

insignificant different of the effect of training and development on service quality in higher education relevant to subgroup of employee (younger and older employees), while the effect of training and development on service quality is stronger for better educated. This results are different with previous result of the study by Grund & Titz (2021) which found that, the effect of training on employee's attitudes not supported.

The findings from this study also indicate that the strengthening of relationship, between the university and its employees, led to an improvement in the service quality provided to the customer. The employees' positive perception of the university, favourably affects the customers' perception regarding service quality. These findings are consistent with those attained in previous studies conducted by Schneider and Bowen (1985), Gazzoli, Hancer and Kim (2013), Oh and Kim (2017), Al-refaei et al, (2019), Grund & Titz (2021), Shen and Tang (2018), as well as Dhar (2015). The relationship between the university, and its employees, develops when the university takes the initiative to provide its employees with training and development and development. This will serve to improve their knowledge, skills and abilities, to enhance their performance in the workplace. In response to the support extended by the university, the employees will be inclined to put extra effort into delivering good service quality.

Conclusion

This study presented empirical evidence, to verify that in the context of higher education, training and development has an effect on service quality. The training and development provided by an organization enhances the knowledge, skills and abilities of its employees. In response to this gesture from the organization, employees will put greater effort into the delivery of good service quality, thus promoting a positive perception among customers. An organization that values the efforts of its employees, and invests in them, will be benefited with positive employee attitudes and behaviours, which can consequently result in a high level of service quality.

This study serves to make clear the relationship between training and development and organizational performance, particularly in the area of service quality. Empirical evidence is presented, to portray the social mechanism involved, in the relationship between training and development and service quality, in the context of higher education. In a situation where employees perceive the provision of training as a gesture of support from the organization, they will be inclined to respond with the delivery of a high level of service quality, to benefit the organization. Consequently, this will have a positive impact on the customers' perception of service quality.

Study limitations and suggestions for future work

The sample for this study derives from one specific industry, namely, the Aden University, a public university in Yemen. As such, the findings attained cannot be generalized to cover other industries. Only the type of service, provided by employees in the higher education industry, was investigated. However, we are of the opinion, that this investigation can be replicated to cover a variety of services. Future undertakings in this area can include investigations on the effects of mediation variables (such as employee attitudes and behaviours), on the relationship between training and development and service quality.

References

1. Alatyoush, A. S., & Salem, S. F. (2020). Antecedents of Job Performance and The Mediating Role of Satisfaction Among Employees of Oil and Gas Industry. *Journal of Critical Reviews*, 7(11), 3136-3151.
2. Alharthy, A. A. H., & Marni, N. B. (2020). The Impact of Training on The Performance of Human Resources in The Department of Education and Knowledge in The Emirate of Abu Dhabi. *Journal Of Critical Reviews*, 7(15), 4949-4959.
3. Al-Refaei, A. H., Zumrah, A. & Alshuhumi, S. (2019). The Effect of Organizational Commitment on Higher Education Services Quality. *E-Journal on Integration of Knowledge (7th edition)*.
4. Al-Refaei, A. H., Zumrah, A. B., Alsamawi, M. A., & Alshuhumi, S. R. (2019). A Multi-Group Analysis of the Effect of Organizational Commitment on Higher Education Services Quality. *Journal of business society*, 3(10), 40-48.
5. Alshaibani, E., & Bakir, A. (2017). A Reading in Cross-Cultural Service Encounter: Exploring the Relationship Between Cultural Intelligence, Employee Performance and Service Quality. *Tourism and Hospitality Research*, 17(3), 249-263.
6. Armstrong, M., & Brown, D. (2019). Strategic Human Resource Management: Back to the future? A literature reviews. Institute for Employment Studies (IES) & Chartered Institute of Personnel and Development (CIPD).
7. Awang, Z. (2012). Structural equation modeling using AMOS graphic. Penerbit Universiti Teknologi MARA.
8. Baiomy, A. E. The Relationship between Service Quality Dimensions and Behavioral Intentions in the Egyptian Hotel Industry. *International Tourism and Hospitality Journal*, 4(1), 1-20.
9. Bambale, S. A., Ghani, M. B. A., & Ado, A. B. (2020). How Service Quality Affects Customer Satisfaction: A Study of Malaysian Electric Train Service (ETS). *Journal of International Business and Management*, 3(2), 01-07.
10. Bartel, A. P. (1994). Productivity Gains from The Implementation of Employee Training Programs. *Industrial Relations: a journal of economy and society*, 33(4), 411-425.
11. Beigi, M., & Shirmohammadi, M. (2011). Effects of an emotional intelligence training program on service quality of bank branches. *Managing Service Quality*, 21(5), 552-567.
12. Blau, P. M. (1964). *Exchange and power in social life*. New Brunswick.
13. Chevalier, S., Fouquereau, E., Bénichoux, F., & Colombat, P. (2019). Beyond working conditions, psychosocial predictors of job satisfaction, and work engagement among French dentists and dental assistants. *Journal of Applied Biobehavioral Research*, 24(1), e12152.
14. Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2001). Perceived Supervisor Support: Contributions to Perceived Organizational Support and Employee Retention. *Journal of applied psychology*, 87(3), 565.
15. Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of marketing research*, 18(1), 39-50.
16. Ganesan, M. (2020). Training And Its Impact on The Attitude of Employees of It Companies in Chennai. *Journal of Critical Reviews*, 7(1), 154-158.
17. Gaskin, J. & Lim, J. (2016), "Model Fit Measures", AMOS Plugin.
18. Gazzoli, G., Hancer, M., & Kim, B. P. (2013). Explaining Why Employee-Customer Orientation Influences Customers' Perceptions of The Service Encounter. *Journal of Service Management*. 24(4), 382-400.
19. Gould-Williams, J., & Davies, F. (2005). Using Social Exchange Theory to Predict the Effects of HRM Practice on Employee Outcomes. *Public Management Review*, 7(1),1-24.
20. Grund, C. (2013). Job preferences as revealed by employee-initiated job changes. *The International Journal of Human Resource Management*, 24(15), 2825-2850.
21. Grund, C., & Titz, K. (2021). Affective commitment through further training: the roles of firm provision and employee participation. *Review of Managerial Science*, 1-32.
22. Hair, J.F., Black. W.C., Babin. B.J., Anderson. R. E. (2019). *Multivariate data analysis*. (8 Ed). Cengage Learning EMEA.
23. Ibrahim, A. A., & Dahie, A. M. (2016). The impact of training and development on employee performance (united bottling company case study) in Mogadishu-Somalia. *International Journal of Multidisciplinary Research*, 2(10), 45-50.
24. Ibrahim, H. M. H. (2020). Training of Hotel Personnel and its impact on the level of Service delivery in Jordanian Hotels. *Journal of Critical Reviews*, 7(11), 2020.

25. Ismael, NB, Othman, BJ, Gardi, B., Hamza, PA, Sorguli, S., Aziz, HM, Ahmed, SA, Sabir, BY, Ali, BJ, Anwar, G.(2021). The Role of Training and Development on Organizational effectiveness. *International Journal of Engineering, Business and Management*, 5(3), 15-24.
26. Jaakkola, E., Helkkula, A., & Aarikka-Stenroos, L. (2015). Understanding and Advancing Service Experience Co-creation. *Journal of Service Management*. 26(2).
27. Kirimi, R. N., & Maende, C. (2019). Training and Development Techniques and Employee Performance in the Ministry of Labour and Social Protection, Nairobi City County, Kenya. *International Journal of Current Aspects*, 3(II), 131-144.
28. Kooij, D. T., Jansen, P. G., Dijkers, J. S., & De Lange, A. H. (2010). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behavior*, 31(8), 1111-1136.
29. Liao, H., & Chuang, A. (2004). A Multilevel Investigation of Factors Influencing Employee Service Performance and Customer Outcomes. *Academy of Management Journal*, 47(1), 41–58.
30. Liao, H., Toya, K., Lepak, D. P., & Hong, Y. (2009). Do They See Eye to Eye? Management and Employee Perspectives of High-Performance Work Systems and Influence Processes on Service Quality. *Journal of applied psychology*, 94(2), 371.
31. Malhotra, N. K., & Dash, S. (2016). *Marketing Research: An Applied Orientation*. Pearson Education, Inc., publishing as Prentice Hall.
32. Malhotra, N., & Mukherjee, A. (2004). The Relative Influence of Organisational Commitment and Job Satisfaction on Service Quality of Customer-Contact Employees in Banking Call Centres. *Journal of services Marketing*. 18(3), 162-174.
33. Mondy, R. W., & Martocchio, J. J. (2016). *Human Resource Management, Global Edition*. England, Pearson Education Limited, hal: 25, 26, 37.
34. Narayana, B.L. (2012). *Human Resource Management Practices and Employee Performance in Indira Gandhi National Open University (IGNOU)*. (Ph. D thesis). Jawaharlal Nehru Technological University Kukatpally. Hyderabad India.
35. Noe, R. A. (2021). *Employee training and development*. McGraw-Hill Education. (8th ed).
36. Oh, H., & Kim, K. (2017). Customer Satisfaction, Service Quality, and Customer Value: Years 2000-2015. *International Journal of Contemporary Hospitality Management*. 29 (1), 2-29.
37. Parasuraman, a, Zeithaml, V. a, & Berry, L. L. (1988). SERQUAL: A Multiple-Item scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing (Vol. 64, p. 28)*.
38. Pariseau, S. E., & McDaniel, J. R. (1997). Assessing Service Quality in Schools of Business. *International journal of quality & reliability management*.
39. Raub, S., & Liao, H. (2012). Doing the Right Thing Without Being Told: Joint Effects of Initiative Climate and General Self-Efficacy on Employee Proactive Customer Service Performance. *Journal of Applied Psychology*, 97(3), 651.
40. Samat, N., Ramayah, T., & Saad, N. M. (2006). TQM Practices, Service Quality, and Market Orientation. *Management Research News*. 29(11), 713-728.
41. Schneider, B., & Bowen, D. E. (1985). Employee and Customer Perceptions of Service in Banks: Replication and Extension. *Journal of applied Psychology*, 70(3), 423.
42. Schneider, B., Parkington, J., & Buxton, V. (1980). Employee and Customer Perceptions of Service in Banks. *Administrative Science Quarterly*, 25(2), 252–267.
43. Schneider, B., White, S. S., & Paul, M. C. (1998). Linking Service Climate and Customer Perceptions of Service Quality: Tests of A Causal Model. *Journal of applied Psychology*, 83(2), 150.
44. Shaheen, A., Naqvi, S. M. H., & Khan, M. A. (2013). Employees Training and Organizational Performance: Mediation by Employees Performance. *Interdisciplinary Journal of Contemporary Research in Business*, 5(4), 490–503.
45. Shen, J., & Tang, C. (2018). How does training improve customer service quality? The roles of transfer of training and job satisfaction. *European management journal*, 36(6), 708-716.
46. Tharenou, P., Saks, A. M., & Moore, C. (2007). A review and critique of research on training and organizational-level outcomes. *Human resource management review*, 17(3), 251-273.
47. Trivellas, P., & Dargenidou, D. (2009). Organisational Culture, Job Satisfaction and Higher Education Service Quality. *The TQM Journal*, 21(4), 382–399.
48. Van Nguyen, N. (2020). Solutions To Improve the Quality of Part-Time Educational Service by Tra Vinh University, Vietnam. *Journal of Critical Reviews*, 7(6), 1041-1046.
49. Wirtz, J., & Lovelock, C. (2016). *Services Marketing: People, Technology*. World Scientific Publishing Company. Co. Inc., USA.
50. Zeithaml, V., Bitner, M. J., & Gremler, D. D. (2017). *Services Marketing. McGraw-Hill series in marketing*. (7th ed.).