The Effect of Organizational Culture on Organizational Performance of Saudi Higher Education: The Mediating Role of Human Resource Development

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Abstract: - Organizational culture is essential to implement organizational policies and strategies. In addition, human resource development (HRM) is critical for the success of any organization. However, most of previous studies have focused on these variables in developed nations. In Saudi Arabia, the number of non-Saudis employed as academic staff is greater than Saudis and these issues are related to organizational culture and HRD. The purpose of this study is to examine the effect of organizational culture on HRD and organizational performance (OP). The study also aims at examining the effect of HRD on OP. The study also discusses the mediating role of HRD between organizational culture and OP. Public universities in Riyadh, Saudi Arabia were chosen as the population of this study. Using a stratified random sampling, 425 responses were collected. The data have been analysed using the Partial Least Square (PLS). This study has found that organizational culture affected the HRD and OP. HRD affected the OP and mediated the effect of organizational culture on OP. The findings of this study could foster a strategic plan for the achievement of HRD and improve the OP of universities.

Key-Words: - Organizational culture, Human resource development, Organizational performance

1 Introduction

As Organizational performance (OP) is one of the widely researched variables in the context of management and human resource (HR). The variable is critical to evaluate and suggest corrective action in handling the organizational processes and activities. The literature of OP is dominated by business organizations which strive to enhance the financial performance. However, the OP from an educational context perspective has been examined by few studies. OP is defined as the achievement of the organizational objectives within specific timeframe and limited resources [1]. Important variables that can be linked to the OP is the organizational culture. Organizational culture has the potential to improve the implementation and the effectiveness of organizational activities [2]. However, previous studies link the practices of organizational culture to the development of employees in business organizations while the link between organizational culture with organizational outcome in higher education remains under researched [3]–[5] and more studies are needed to understand the effect of organizational culture on human development and OP in the context of higher education [6], [7].

Along with organizational culture, human resource development (HRD) is critical to the success of organizations. HRD fosters and supports creativity and innovation in organizations (Gilley et al., 2011), engaging stakeholders and their involvement in the organizational change efforts [9], and high performance organization cannot be achieved without focusing and implementing an effective HRD [10]. It is also important for transforming the organization and creating more effective and creative employees [11]. There is a strong link between HRD initiatives and the outcomes in OP [12]. HRD is defined as a process of developing and utilizing the employees' expertise aiming to improve the individual and organizational outcome [8]. This achievement cannot be done without a proper and effective culture. Previous studies indicated that a supportive organizational culture enables the HRD and increases its effectiveness [13]–[15]. Prior literature indicated that there is a gap in the HRD literature related to learning organizational culture, and a dearth of empirical studies within HRD [16].

Few studies examined the effect of HRD as a mediating variables. For instance, [17], examined the mediating role of HRM between organizational

culture and organizational commitment and found that HRD can mediate the effect of HRM on organizational performance. The enhancement in HRD is critical to improving the performance of organizations. However, previous studies indicated that the HRD has been examined intensively in the context of business organization while studies that pertain to higher education are still limited. In addition, the research on HRD is dominated by western countries while few examined this term in non-western countries [18].

In a non-western country such as the Kingdom of Saudi Arabia, the educational system has been undergoing several changes. Education is seen as a crucial tool for Saudi Arabia's national growth that could foster collaboration and enhance the country's ability to compete with other nations [19]–[21]. Although Saudi Arabia is rich in oil and other natural resources, it is classified as a resource-rich, labour-importing area due to the lack of skilled labour force to meet demand [22]–[24], particularly in the education sector.

The Saudi government has made numerous attempts to employ Saudi citizens and foster national economic development by offering scholarships [25]–[27]. However, there is an increasing need to align HR functions with corporate priorities [28]. Due to the importance of higher education, the government targeted to employ nationals as academic staff in the local universities. However, recent reports of the Ministry of higher education (Ministry of Higher Education) indicated that the number of non-Saudi academic staff in 30 public universities has reached 56% of the academic staff while the Saudis accounted for 46% [29]. A report of the educational committee in the parliament of Saudi Arabia indicates that there is a mismatch between qualified academic staff are needed and between what is available. This increases the need to bring non-Saudis to fill in positions in science, education, literature, and medicine [30]. This situation has created the importance of understanding how human resources are trained, selected, and attained in Saudi Arabia [31]. In addition, the reasons behind this shortage of local academic staff are attributed to several factors such as the organizational culture. In Saudi Arabia, organisational culture is not being deployed effectively especially in the public sector [32] and few studies are related to HRD and organizational culture in the higher education in developing countries [18], [33], [34], and there are a few studies that are related to HRD and organizational culture in the higher education in developing countries.

The purpose of this study is to examine the effect of organizational culture and HRD on organizational performance. The study also aims to examine the mediating role of HRD. This section has introduced the topic of this paper and highlighted the main issue, in the next sections, the literature, research methodology, findings as well as implications and conclusion are discussed.

2 Literature Review
This section discusses the literature on OP and culture along with HRD. It also presents the theoretical background and the development of the conceptual framework and hypotheses.

2.1 Organisational Performance
OP is a multifaceted and dynamic term and it is described by [35] as an organisation actual results or outputs compared to the expected results. Performance can be measured using financial indicators or non-financial indicators or both [36], [37]. OP has been measured differently by researchers. Cotora (2007) discussed the challenges in measuring the performance because it includes intangible such as knowledge and competencies and external factors. [39] pointed out that there are five indices to measure the performance, and these include financial indicators, customers, process, and people development as well as future performance. [40] criticized the use of financial indicators which might not measure the real performance. Therefore, there is a need to include financial and non-financial indicators. Balance Scorecard (BSC) is widely used in evaluating performance. As a result, the elements of BSC were considered in developing the measurement of the OP of this study. These elements of OP include profit making, current growth, and competitive advantage which has been adopted from [41].

2.2 Critical Analysis
A review of related studies to organizational culture, HRD, and OP showed that there is a focus in the literature toward studying these variables in developed countries [16], [18], [50], [42]–[49]. On the other hand, few of the previous reviewed studies have focused on the practices of HRD in developing countries [51]–[53].

In term of industry, the previous studies focused more into business organizations in general [42], [44], [45], [47], [49], or hotels [52], [54] , healthcare [16], [46], [55] manufacturing [56], [57], telecommunication [58], [59] while few has

examined the HRD in the educational sector and in particular the public sector [17], [51]. Previous studies also focused more into the practice of human resource management (HRM) [16], [18], [51], [53], [60] rather than the HRD [43], [44].

In term of the variables of this study, the findings of previous studies are inconclusive. In the study of [56], organizational culture did not affect the knowledge and skills development while the other studies, organizational culture affected the HRM [16], [43], [51]. Further, most of the previous studies examined the effect of organizational culture on variables such as HRM, performance, innovation, safety improvement, learning organization [45], [54], [58], [61]. However, the studies that have examined the link between

organizational culture and HRD are limited [43]. Therefore, there are several gaps, and this paper attempts to fill in these gaps.

2.3 Conceptual Framework
This study addresses these existing gaps by developing a model based on the theory of system and human capital theory. The study proposes that there is a direct link between organizational culture and its components on the organizational performance. In addition, study proposes that the HRD will affect the OP and mediates the effect of organizational culture on OP.
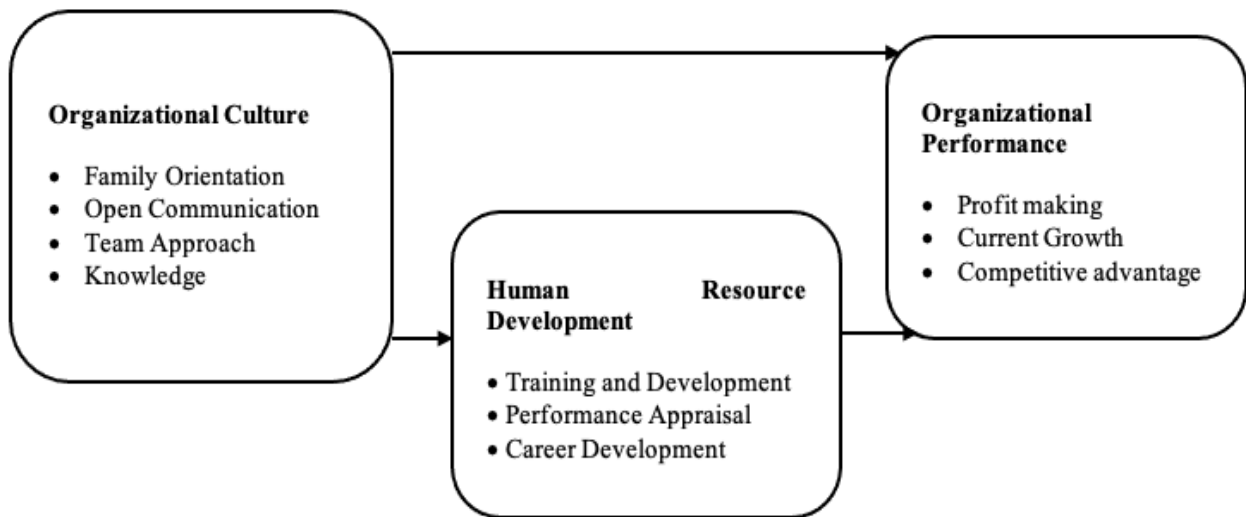

Fig. 1: Conceptual Framework

2.4 Hypothesis Development
This section discusses the direct and mediating effect that are used in this study.

2.4.1 Organizational Culture and OP
Organizational culture is an essential predictor of several individual and organizational outcomes. Several works of literature explore the relationship between organisational cultures on the growth and development of human resources in organizations. Organisational culture brought a strong influence on human resources management due to the possibility and broad structure it offers for the growth of human resources in an organizations [16], [51]. Researchers agreed that organisational culture is associated with several factors of organisational efficacy and effectiveness (Aktaş et al., 2011; Otoo, 2019). It is assumed that an organisation could increase productivity with positive organisational

culture. The culture of organisations has an important function of determining success and failure [54], [63]. Elements of organizational culture such as family orientation [64], [65], open communication [66]–[68], team approach [69], [70], and knowledge [71], [72] were found to have significant effect on the organizational outcomes. Thus, implementing effective organizational culture will have a significant effect on the OP of higher learning organizations in Saudi Arabia.

H1: There is a positive relationship between organizational culture and OP.

H1a: There is a positive relationship between family orientation and OP.

H1b: There is a positive relationship between open communication and OP.

H1c: There is a positive relationship between team approach and OP.

H1d: There is a positive relationship between knowledge and OP.

2.4.2 Organizational Culture and HRM

Osibanjo and Adeniji (2013) agreed that organisational culture influenced HRM. The authors suggested that employees and job seeker should familiarise themselves with organisational culture. New employees were expected to be capable of adapting to cultural practices in organisations to reduce conflicts in working environments, thus improving teamwork and communications among employee and employers [61], [73]. [74] recorded the direct effect of organisational culture on HRM. It was also demonstrated that HRM was influenced by organisational culture, which led to organisational efficiency and productivity. Moreover, [75] highlighted the substantial relationship between organisational culture and HRM and encouraged improved practices in the management strategies. The result of the research by [76] indicated there is a significant influence of organisational culture on HRM. Following these arguments, the following hypothesis is proposed.

H2: There is a positive relationship between organizational culture and HRD.

2.4.3 Human Resource Development and Organisational Performance

HRD has an impact on OP, as demonstrated in the study by [77] which suggested that there is a positive association between HRD and OP. The study of [78] found that HRDs which includes development, job security, and appraisal system were the elements influencing OP. Giauque et al. (2013) found that the effect of HRD on OP is positive. [78] found that HRD activities including training and growth, organisational development, and career development increase OP by enhancing person and group awareness, skills, attitudes, and actions. Furthermore, Otoo et al. (2019) stated that HRD activities such as performance assessment, career growth, and training and development have a substantial impact on organisational success due to their impact on employee performance. Similarly, [77] highlighted that HRD activities such as training, career growth, and performance management affect the development of employee competencies, which increase organisational performance. Based on the above argument, the following hypotheses are proposed:

H3: There is a positive relationship between HRM and OP.

H3a: There is a positive relationship between training and development and OP.

H3b: There is a positive relationship between performance appraisal and OP.

H3c: There is a positive relationship between career development and OP.

2.4.4 Mediating Role of Human Resource Development

HRM is critical to improve the implementation of an effective organizational culture which leads to substantial organizational performance. The mediating role of HRM has been examined in a limited number of studies. For example, [80] pointed out that there is no agreement among researchers regarding the role of HRM in OP and found that HRM has a mediating role between organizational variables and the OP. Similarly, HRM mediated the effect of seasonal and permanent employee contract on employee's commitment [81]. The effect of organizational culture on organizational outcome was found to be mediated by HRM [17]. Thus, this study proposed that HRM will mediate the effect of organizational culture on the OP.

3 Methodology

This study is using the quantitative research design and has collected data using a questionnaire. This approach is preferrable since it allows researchers to collect large amount of data in comparatively shorter time [82]. The target population in the current study is the academician at higher education in Saudi Arabia. The Kingdom of Saudi Arabia reported 80,000 academicians at 25 colleges, 14 private universities, and 30 public universities [31]. However, due to the problem of Saudization and the lack of employment of nationals is more severe in public universities compared to private universities, this study focuses on public universities. The study selected the area of Riyadh because it is the capital of Saudi Arabia and has the largest number of academic staff. In public universities, there are 18,883 academic staff. However, the study focuses on Saudi nationals. Saudi nationals account for 46% of the academic staff. Thus, the population of this study include 8,686 respondents (18,883*46%). [83] suggested that the sample size should be a minimum of 368 for a population of 8,686. To prevent any issues from a small sample size, this study followed the suggestion of previous studies to add additional 30% [84] to account for a low response rate. This has increased the sample size to 478 respondents.

A stratified random sampling approach was employed in this analysis to choose a sample from the population. A stratified random sample was created by dividing the population into strata, followed by the selection of a simple random sample from every stratum [85]. This sampling method has a number of benefits. Compared to a simple random sample of a similar size, this sampling technique could produce a lower bound on estimation error (Richard et al., 2012). The variables of this study were measured using established measurement. Organisational culture was measured using 15 items adopted from Tang et al. (2000). Human resource development was measured using three dimensions, including training development, performance appraisal, and career development. Training and development were adopted from Santos and Stuart (2003) and Singh (2004), performance appraisal adapted from Walker et al. (2011) and Amin and Atta (2013), and career development was adopted from Otoo and Mishra (2018).

Organizational performance was adopted from Bakker et al. (2004). The data was collected by sending emails to the academic staff based on the quota of each university. This has resulted in 429 responses. The response rate of this study is 89.7%. None of the responses has missed any value due to the use of the required function. The outliers were examined by checking the boxplot and this showed the existence of four outliers' values, and they were removed. Data is normally distributed because the value of skewness and kurtosis is less than 2 [86]. Multicollinearity issues were examined by utilizing the value of variation inflation factor (VIF) and tolerance. No collinearity issues were identified.

4 Findings
This section shows the demographics information and the analyses of Smart PLS which include the measurement model and the structural model.

4.1 Demographic Profile
A total of 425 respondents have participated in this study. In terms of the duration of work (year), 75.53% (321) of respondents had worked for less than five years, 24.47% (104) of respondents had worked for five to 10 years. Furthermore, the majority of academicians who responded to the survey are Ph.D. holders (44.24% or 188), 28.71% hold a master's degree (122), and 27.05% are degree holders (115). In terms of the field of study, the majority of 87.53% of the academicians are in the non-science field (372), while 12.47% of them are in the science field (53).

4.2 Measurement Model
The factor loading as well as the reliabilities and the validities of the variables were checked using the outcome of the measurement model. Items from current growth, Table 1 shows the results of assessing the measurement model. It shows that Cronbach's Alpha (CA) and the composite reliability (CR) are larger than 0.70. The average variance extracted (AVE) is greater than 0.50 indicating that the convergent validity is achieved. Further, the discriminant validity is achieved because the value in bold are larger than the row and column. These are in line with the suggestions of [87], [88]. By this, it can be concluded that the measurement model is fit as shown in Table 1.

Table 1. Assessment of Measurement Model

Variables	CA	CR	AVE										
Career Development	0.92	0.94	0.82	0.90									
Competitive Advantage	0.88	0.91	0.69	0.26	0.83								
Current Growth	0.89	0.93	0.82	0.45	0.26	0.90							
Family Orientation	0.95	0.96	0.85	0.44	0.32	0.24	0.92						
Knowledge Management	0.95	0.96	0.91	0.33	0.30	0.27	0.75	0.95					
Open communication	0.92	0.94	0.81	0.40	0.32	0.35	0.83	0.81	0.90				
Performance Appraisal	0.91	0.93	0.79	0.56	0.33	0.51	0.30	0.25	0.32	0.89			
Profit Making	0.92	0.95	0.86	0.52	0.29	0.51	0.34	0.32	0.40	0.48	0.93		
Team Approach	0.88	0.93	0.81	0.36	0.31	0.23	0.87	0.83	0.78	0.28	0.34	0.90	
Training and development	0.92	0.94	0.78	0.55	0.32	0.51	0.32	0.27	0.36	0.72	0.45	0.32	0.88

4.3 Structural Model

The hypotheses are tested in the structural model. However, there are other criteria that can be assessed. The R-square of the model is .459 which indicates that 45.9% of the variation in OP can be explained by organizational culture and HRM. The Q-square showed that the value is greater than zero. Q-square value is 0.180. The F-square for all paths are greater than 0.02 except for the family orientation→ organizational performance, knowledge management → organizational performance, and team approach→ organizational performance. For the result of path coefficient, Figure 2 shows the result of testing the model of this study.
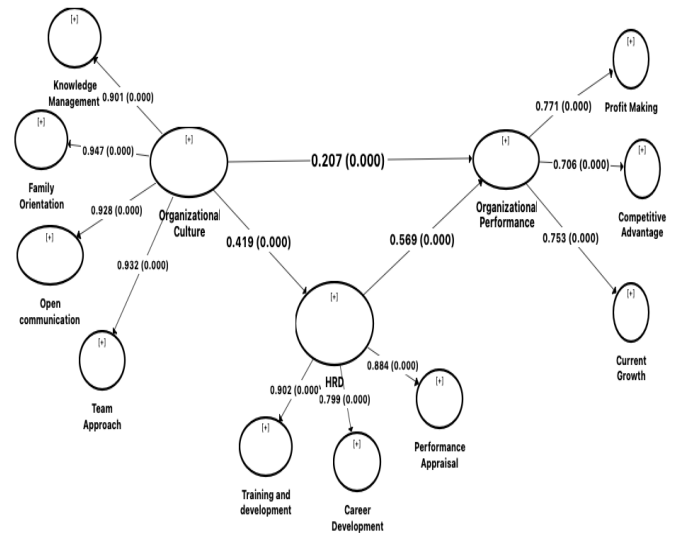

Fig. 2: Structural Model

Table 1 shows the results of the direct and mediating hypotheses. It shows the hypothesis (H), path coefficient (B), standard deviation (Std.), t-value (T), P-value (P).

Table 1. Result of Hypotheses Testing

H	Path	B	Std.	T	P
H1	Organizational Culture -> OP	0.207	0.044	4.683	0.000
H1a	Family Orientation -> OP	-0.111	0.082	1.343	0.180
H1b	Open communication -> OP	0.294	0.069	4.294	0.000
H1c	Team Approach -> OP	0.003	0.074	0.037	0.971
H1d	Knowledge Management -> OP	0.033	0.056	0.594	0.553
H2	Organizational Culture -> HRD	0.419	0.046	9.076	0.000
H3	HRD -> OP	0.569	0.048	11.856	0.000
H3a	Training and development -> OP	0.165	0.050	3.322	0.001
H3b	Performance Appraisal -> OP	0.282	0.050	5.605	0.000
H3c	Career Development -> OP	0.227	0.046	4.911	0.000
H4	Organizational Culture -> HRD -> OP	0.239	0.038	6.216	0.000

The results of hypothesis as shown in Table 1 indicate that the effect of organizational culture on OP is positive and significant (B=0.207, P<0.001). Thus, H1 is supported. For sub hypotheses, H1a is rejected because the P-value is less than 0.180 thus, H1a is rejected and the effect of family orientation on OP is insignificant. Open communication has a significant effect on OP (B=0.294, P<0.001). Thus, H1b is supported. For H1c and H1d, they are rejected because P-value is larger than 0.05. Thus, team approach and knowledge have no effect on OP. For H2, it is accepted because the P-value is less than 0.05. Thus, organizational culture affected the HRD. For H3, the effect of HRM affected the OP because the P-value is less than 0.05. In term of H3a, H3b, and H3c are accepted because the p-value is less than 0.05. Accordingly, the effect of training

and development, performance appraisal, and career development affected the OP.

HRD can play a mediating role between the organizational culture and OP. The direct effect of organizational culture on OP is confirmed to be positive and significant. In addition, the HRD has mediated partially the effect of the organizational culture on OP. HRD mediated partially the effect of organizational culture on OP (Organizational Culture -> HRD -> OP).

5 Discussion

The organisational culture was proposed as a critical factor in this study. It was proposed as affecting the OP and HRD. The findings showed that organizational culture affected the OP and HRM.

This indicates that the organizational culture of the universities in Saudi Arabia is critical in enhancing the HRD and OP. The enhancement in the level of organizational culture will result in a positive increase in the effectiveness of HRD and OP. This will enhance the effectiveness of academic staff in the universities as well as the effectiveness of the universities. This positive effect of organizational culture on HRD could be related to the practices of management and HR of the university to create a friendly, unique atmosphere and to emphasize loyalty and dedication of the academic staff. Previous studies are in line with the findings of this study [16], [51], [53], [62].

The effect of HRD on OP was found to be significant. This could be due to the fact that developing human capital in Saudi universities will have a positive impact on the efficiency and the effectiveness of academic staff which, and this can be reflected on the OP of the universities. Training of academic staff as well as improving their skills and capabilities are critical to improving the level of HRD. Further, a fair process of performance appraisal and effective career guidance are also contributing to the development of HRD among academic staff. These developments are affecting the OP of the universities in Saudi Arabia. The findings in term of the positive effect of HRD on OP is supported by previous studies [8], [10].

The mediating role of HRD between organizational culture and OP is confirmed. This indicates that part of the relationship between the two variables can be explained using HRD. Having effective HRD can foster the culture and enhance the implementation of the organizational policies, plans and strategies which in turn will affect the overall performance of universities in Saudi Arabia. The findings are in agreement with the findings of researchers who found that HRD is a mediating variable ([17], [80], [81]

6 Implications

This research has offered contributions to the theoretical literature in the areas of organisational culture, HRD and OP by providing an empirical research model in these areas. It developed a model to explain the direct association between organisational culture, HRD and organisational performance, and the mediating effect of HRD. The study contributed to the role of HRD as a mediating variable and highlighted its interrelationship with culture and performance. By highlighting the role of HRD and culture in the context of Saudi academic staff and universities, the study contributed to the

literature of emerging economies. All of the proposed relationships were validated by the results of a structural equation modelling method. Few of the previous studies has done so and there is a gap in the literature related to the effect of HRD on performance and this study fills this gap.

Generally, this research recorded the empirical evidence for the theoretical associations highlighted in the research framework. Using the individual constructs involved in this study, the present findings contributed to literature and development of theory, which included (1) establishing the positive influence of organisational culture and HRD; (2) the positive influence of organizational culture and OP; (3) the positive impact HRD on OP; and (4) establishing the mediating role of HRM in the relationship between organisational cultural and OP.

Practically, the study offers important insights and demonstrates a strong understanding of HRD and OP in the Saudi Arabia context of higher education. The results of this study may be useful for assisting the decision-makers and practitioner in designing HRD activities that lead to improved OP. The study has enhanced the understanding among university management regarding the importance of organisational culture in integrating, building, and reconfiguring internal and external competence to manage rapidly evolving environments and create better decisions within the organisation.

Regulatory bodies and management of the university are recommended to gain an understanding of the implication of their commitment to design a holistic HRD to enhance OP, given that practical recommendation was drawn logically from the statistical findings. Following that, this research has provided empirical evidence that organisational culture is significantly related to HRD and OP. Therefore, it is indicated that regulatory authorities and management of university should have stronger awareness regarding designing procedures and approaches that will reduce the issues of HRD and improve its influence on OP.

7 Conclusion

This study examines the effect of organizational culture on HRD and OP. It also discusses the mediating role of HRD. The findings show that the effects of organizational culture on HRD and OP are positive and significant. The effect of HRD on OP is useful and remarkable. The findings also showed that the mediating role of HRD is confirmed between organizational culture and OP.

There are some limitations that should be highlighted. First, this study only examined higher education. Future research is suggested to examine other industries to provide more in-depth results. The current analysis applied the quantitative approach and a single data collection tool, where the questionnaire was the only instrument used to collect data. It is recommended that future studies incorporate quantitative and qualitative approaches and perform an in-depth investigation into HRD, organizational culture and OP in Saudi Arabia.

The survey was conducted using a cross-sectional method, which collected respondents' views at a single point in time. As a result of the cross-sectional existence of this analysis, causal inferences from the population were not possible (Sekaran & Bougie, 2009). Given that the data collection was performed at once, it might not accurately represent the academicians' long-term conduct in Saudi Arabia. Thus, a different approach such as longitudinal is suggested for future work. The study collected data from academic staff working in public universities in Riyadh, Saudi Arabia. Thus, the study is limited to the academic staff in public universities in the capital. Future studies are recommended to examine the perception of non-academic staff or the academic staff in private universities. Further studies are also suggested to enlarge the sample to include more geographical areas in Saudi Arabia or in different countries.

References:

[1] S. Alaaraj, Z. A. Mohamed, and U. S. Ahmad Bustamam, "External Growth Strategies and Organizational Performance in Emerging Markets: The Mediating Role of Inter-Organizational Trust," *Rev. Int. Bus. Strateg.*, vol. 28, no. 2, pp. 206–222, 2018.

[2] E. Sadler-Smith, "Communicating Climate Change Risk and Enabling Pro-Environmental Behavioral Change Through Human Resource Development," *Adv. Dev. Hum. Resour.*, vol. 17, no. 4, pp. 442–459, 2015.

[3] N. Kumari and D. Singh, "Impact of organizational culture on employee performance," *Prabandhan Indian J. Manag.*, vol. 11, no. 6, pp. 53–63, 2018.

[4] T. W. Greer and B. Shuck, "Mounting the New Guard: The Golden Rule as a Basis for Organizational Culture Change in Response to Challenges in Academia," *Adv. Dev. Hum. Resour.*, vol. 22, no. 1, pp. 102–112, 2020.

[5] R. Biloslavo and M. Prevodnik, "Impact of organizational culture on knowledge management in higher education," in *Organizational learning and knowledge: Concepts, methodologies, tools and applications*, IGI Global, 2012, pp. 1721–1748.

[6] K. Rosenbusch and E. Morrison, "The Role of the Academy and HRD in the Changing of the Guard," *Adv. Dev. Hum. Resour.*, vol. 22, no. 1, pp. 3–10, 2020.

[7] R. K. Singh and P. Chaudhary, "Measuring impact of organizational culture on creativity in higher education," *Qual. Assur. Educ.*, 2018.

[8] J. W. Gilley, P. M. Shelton, and A. Gilley, "Developmental leadership: A new perspective for human resource development," *Adv. Dev. Hum. Resour.*, vol. 13, no. 3, pp. 386–405, 2011.

[9] M. Alagaraja, "Mobilizing organizational alignment through strategic human resource development," *Hum. Resour. Dev. Int.*, vol. 16, no. 1, pp. 74–93, 2013.

[10] N. Richman, "Human Resource Management and Human Resource Development: Evolution and Contributions," *Creight. J. Interdiscip. Leadersh.*, vol. 1, no. 2, p. 120, 2015.

[11] D. M. Cosby, "Sustainability program leadership for human resource development professionals: A competency model," *J. Organ. Cult. Commun. Confl.*, vol. 18, no. 2, pp. 76–86, 2014.

[12] K. Schneider, "Transfer of learning in organizations," *Transf. Learn. Organ.*, vol. 9783319020, pp. 1–170, 2014.

[13] R. R. McWhorter, "Exploring the emergence of virtual human resource development," *Adv. Dev. Hum. Resour.*, vol. 12, no. 6, pp. 623–631, 2010.

[14] F. N. K. Otoo, "Human resource development (HRD) practices and banking industry effectiveness: The mediating role of employee competencies," *Eur. J. Train. Dev.*, 2019.

[15] E. Kosmajadi, "The Impact of Human Resources Development and Organizational Culture on Employee Performance," *Budapest Int. Res. Critics Inst. Humanit. Soc. Sci.*, vol. 4, no. 2, pp. 2227–2233, 2021.

[16] E. E. Bennett, "How an Intranet Provides Opportunities for Learning Organizational Culture: Implications for Virtual HRD," *Adv. Dev. Hum. Resour.*, vol. 16, no. 3, pp. 296–319, 2014.

[17] Z. Inanlou and J. Y. Ahn, "The effect of organizational culture on employee commitment: A mediating role of human resource development in Korean firms," *J.*

Appl. Bus. Res., vol. 33, no. 1, pp. 87–94, 2017.

[18] G. G. Wang, J. M. Werner, J. Y. Sun, A. Gilley, and J. W. Gilley, "Means vs ends: theorizing a definition of human resource development," *Pers. Rev.*, vol. 53, no. 2, pp. 177–196, 2017.

[19] B. Alkhayyal, W. Labib, T. Alsulaiman, and A. Abdelhadi, "Analyzing sustainability awareness among higher education faculty members: a case study in Saudi Arabia," *Sustainability*, vol. 11, no. 23, p. 6837, 2019.

[20] M. A. Mukthar and M. M. Sultan, "Big Data analytics for higher education in Saudi Arabia," *Int. J. Comput. Sci. Inf. Secur.*, vol. 15, no. 6, 2017.

[21] O. Alshehri and V. Lally, "Students' Perceptions of the Use of Social Media in Higher Education in Saudi Arabia," *Int. J. Educ. Pedagog. Sci.*, vol. 13, no. 1, pp. 28–31, 2019.

[22] A. Alahmari, "The state of distance education in Saudi Arabia," *Q. Rev. Distance Educ.*, vol. 18, no. 2, pp. 91–98, 2017.

[23] K. D. Rajab, "The effectiveness and potential of E-learning in war zones: An empirical comparison of face-to-face and online education in Saudi Arabia," *IEEE Access*, vol. 6, pp. 6783–6794, 2018.

[24] F. A. Gonaim, "Leadership in Higher Education in Saudi Arabia: Benefits, Constraints and Challenges of Adopting Servant Leadership Model by Department Chairs.," *Int. J. Educ. Pract.*, vol. 7, no. 2, pp. 101–111, 2019.

[25] R. Jaziri and M. S. Miralam, "The impact of crisis and disasters risk management in COVID-19 times: Insights and lessons learned from Saudi Arabia," *Ethics, Med. Public Heal.*, vol. 18, p. 100705, 2021.

[26] R. A. Moussa, "King Abdullah Economic City: The Growth of New Sustainable City in Saudi Arabia," in *New Cities and Community Extensions in Egypt and the Middle East*, Springer, 2019, pp. 51–69.

[27] B. Mitchell and A. Alfuraih, "The Kingdom of Saudi Arabia: Achieving the aspirations of the National Transformation Program 2020 and Saudi vision 2030 through education," *J. Educ. Dev.*, vol. 2, no. 3, p. 36, 2018.

[28] A. Alanazi, "Talent management and its outcomes in Saudi Arabia private corporations," EasyChair, 2018.

[29] Okaz, "Number of non-saudi in public univeristies is higher than Saudis," *Ministry of Higher Education*, 2018. [Online]. Available: https://www.okaz.com.sa/local/na/1673309.

[30] Educational Committee, "Recommendation of the Educational Committee," *Al-Madina*, 2018. [Online]. Available: https://www.al-madina.com/article/592109/.

[31] Edarabia, "Qassim university in saudi recruits 995 professors," *Edarabia*, 2019. [Online]. Available: https://www.edarabia.com/78984/qassim-university-in-saudi-recruits-995-professors/. [Accessed: 05-May-2021].

[32] M. Bin Othayman, A. Meshari, J. Mulyata, and Y. Debrah, "The Challenges Confronting the Delivery of Training and Development Programs in Saudi Arabia: A Critical Review of Research," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 09, p. 1611, 2020.

[33] G. O. Alghamdi and A. M. Alghamdi, "Towards Building Academic Entrepreneurial Programs at Saudi Universities: Predicting Future Jobs in Light of the NEOM Project.," *World J. Educ.*, vol. 10, no. 4, pp. 60–82, 2020.

[34] T. Alzahrani, I. Pena, N. Temesgen, and S. A. Glantz, "Association between electronic cigarette use and myocardial infarction," *Am. J. Prev. Med.*, vol. 55, no. 4, pp. 455–461, 2018.

[35] D. R. Tomal and K. J. Jones, "A comparison of core competencies of women and men leaders in the manufacturing industry," *Coast. Bus. J.*, vol. 14, no. 1, p. 13, 2015.

[36] M. Jazayeri and R. W. Scapens, "The Business Values Scorecard within BAE Systems: The evolution of a performance measurement system," *Br. Account. Rev.*, vol. 40, no. 1, pp. 48–70, 2008.

[37] R. S. Kaplan and D. P. Norton, "Transforming the balanced scorecard from performance measurement to strategic management: Part II," *Accounting Horizons*, vol. 15, no. 2. pp. 147–160, 2001.

[38] L. Cotora, "Managing and measuring the intangibles to tangibles value flows and conversion process: Romanian Space Agency case study," *Meas. Bus. Excell.*, vol. 11, no. 1, pp. 53–60, 2007.

[39] A. C. Maltz, A. J. Shenhar, and R. R. Reilly, "Beyond the balanced scorecard: Refining the search for organizational success measures," *Long Range Plann.*, vol. 36, no. 2, pp. 187–204, 2003.

[40] Gyula, "Analysis of the Impact of the Supply Chain Performance on the," *Ann. Univ. Oradea, Econ. Sci.*, vol. 1, no. 1, pp. 1505–1510, 2013.

[41] A. B. Bakker, E. Demerouti, and W. Verbeke, "Using the job demands- resources model to predict burnout and performance," *Hum. Resour. Manag. Publ. Coop. with Sch. Bus. Adm. Univ. Michigan alliance with Soc. Hum. Resour. Manag.*, vol. 43, no. 1, pp. 83–104, 2004.

[42] C. M. Lindow, S. Stubner, and T. Wulf, "Strategic fit within family firms: The role of family influence and the effect on performance," *J. Fam. Bus. Strateg.*, vol. 1, no. 3, pp. 167–178, 2011.

[43] B. L. Galperin and T. R. Lituchy, "Human Resource Development in Service Firms Across Cultures," *Hum. Resour. Dev. Rev.*, vol. 13, no. 3, pp. 336–368, 2014.

[44] A. E. Ellinger and A. D. Ellinger, "Leveraging human resource development expertise to improve supply chain managers' skills and competencies," *Eur. J. Train. Dev.*, vol. 38, no. 1–2, pp. 118–135, 2014.

[45] W. Satsomboon and O. Pruetipibultham, "Creating an organizational culture of innovation: Case studies of Japanese multinational companies in Thailand," *Hum. Resour. Dev. Int.*, vol. 17, no. 1, pp. 110–120, 2014.

[46] F. Fortanier, A. Muller, and R. van Tulder, "Internationalization and performance: the moderating role of strategic fit," *Reg. Asp. Multinatl. Perform.*, pp. 113–142, 2015.

[47] S. J. Caruso, "A Foundation For Understanding Knowledge Sharing: Organizational Culture, Informal Workplace Learning, Performance Support, And Knowledge Management," *Contemp. Issues Educ. Res.*, vol. 10, no. 1, pp. 45–52, 2017.

[48] T. Rebelo and A. D. Gomes, "Is organizational learning culture a good bet?: An analysis of its impact on organizational profitability and customer satisfaction," *Acad. Rev. Latinoam. Adm.*, vol. 30, no. 3, pp. 328–343, 2017.

[49] K. Moore and M. H. Khan, "Signalling organizational commitment to employability through job advertisements: the communication of HRD practices to young inexperienced job seekers," *Hum. Resour. Dev. Int.*, vol. 23, no. 1, pp. 25–45, 2020.

[50] K. M. Dirani *et al.*, "Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic," *Hum. Resour. Dev. Int.*, vol. 00, no. 00, pp. 380–394, 2020.

[51] A. O. Osibanjo and A. A. Adeniji, "Impact of Organizational Culture on Human Resource Practices: A Study of Selected Nigerian Private Universities," *J. Compet.*, vol. 5, no. 4, pp. 115–133, 2013.

[52] F. N. K. Otoo and M. Mishra, "Influence of human resource development (HRD) practices on hotel industry's performance: The role of employee competencies," *Eur. J. Train. Dev.*, vol. 42, no. 7–8, pp. 435–454, 2018.

[53] F. N. K. Otoo, "Human resource development (HRD) practices and banking industry effectiveness: The mediating role of employee competencies," *Eur. J. Train. Dev.*, vol. 43, no. 3–4, pp. 250–271, 2019.

[54] L. Kesuma *et al.*, "The Effect of Organizational Culture , Quality of Human Resources , Motivation and Discipline on Employee Performance in the Communication and Informatics Department of Agam Regency," vol. 6, no. 1, 2021.

[55] M. Misnaniarti, A. Iriviranty, and D. Ayuningtyas, "Evaluation of Patient Safety Culture and Organizational Culture as a Step in Patient Safety Improvement in a Hospital in Jakarta, Indonesia Evaluation of Patient Safety Culture and Organizational Culture as a Step in Patient Safety Improvement in a Hospit," *Patient Saf Qual Improv*, vol. 4, no. 3, pp. 394–399, 2016.

[56] K. S. Jeon and K. N. Kim, "How do organizational and task factors influence informal learning in the workplace?," *Hum. Resour. Dev. Int.*, vol. 15, no. 2, pp. 209–226, 2012.

[57] F. Trips, "IN- HOUSE ENGLISH COMMUNICATION SKILLS ' NEEDS FOR ENGINEERING WORKPLACE : FEEDBACK FROM," no. August, 2020.

[58] S. Rijal, "The influence of transformational leadership and organizational culture on learning organization: A comparative analysis of the IT sector, Thailand," *J. Adm. Bus. Stud.*, vol. 2, no. 3, pp. 121–129, 2016.

[59] M. S. Khan, P. Saengon, T. Cheungsirakulvit, and K. Kanchanathaveekul, "The moderating effect of strategic fit enhances business performance: Empirical evidence from the telecommunication industry," *Bus. Strateg. Dev.*, no. September, pp. 1–8, 2020.

[60] M. S. Nawaz and F. Pangil, "The relationship between human resource development factors, career growth and turnover intention: The mediating role of organizational commitment," *Manag. Sci. Lett.*, vol. 6, pp. 157–176, 2016.

[61] F. Ariffin, "Organizational Culture, Transformational Leadership, Work

Engagement and Teacher's Performance: Test of a Model," *Int. J. Educ. Res.*, vol. 2, no. 1, pp. 1–14, 2014.

[62] E. Aktaş, I. Çiçek, and M. Kiyak, "The effect of organizational culture on organizational efficiency: The moderating role of organizational environment and CEO values," *Procedia - Soc. Behav. Sci.*, vol. 24, pp. 1560–1573, 2011.

[63] S. Kumar, "Organizational Culture: The Indian Perspective," *IOSR J. Bus. Manag.*, vol. 20, no. 3, pp. 7–12, 2018.

[64] M. A. Bhat and J. A. Shah, "The influence of family culture on performance of family business: An empirical study," *Int. J. Commer. Bus. Manag.*, vol. 2, no. 1, pp. 1–9, 2013.

[65] L. Uhlaner, S. Tan, and J. Meijaard, "Family orientation, strategic orientation and innovation performance in SMEs: A test of lagged effects," in *Proceedings of the 2nd European Conference on Entrepreneurship and Innovation*, 2007, pp. 201–210.

[66] M. Mardi, M. Arief, A. Furinto, and R. Kumaradjaja, "Sustaining organizational performance through organizational ambidexterity by adapting social technology," *J. Knowl. Econ.*, vol. 9, no. 3, pp. 1049–1066, 2018.

[67] U. H. Gondal and M. Shahbaz, "Interdepartmental communication increases organizational performance keeping HRM as a mediating variable," *J. Asian Bus. Strateg.*, vol. 2, no. 6, pp. 127–141, 2012.

[68] C. W. Kibe, "Effects of communication strategies on organizational performance: A case study of Kenya Ports Authority," *Eur. J. Bus. Manag.*, vol. 6, no. 11, pp. 6–10, 2014.

[69] K. Dayaram and L. Fung, "Team performance: Where learning makes the greatest impact," *Res. Pract. HRM*, vol. 20, no. 1, pp. 28–39, 2012.

[70] K. J. McDonagh and R. J. Umbdenstock, "Hospital governing boards: a study of their effectiveness in relation to organizational performance," *J. Healthc. Manag.*, vol. 51, no. 6, p. 377, 2006.

[71] S. Alaarj, Z. Abidin-Mohamed, and U. S. B. A. Bustamam, "Mediating Role of Trust on the Effects of Knowledge Management Capabilities on Organizational Performance," *Procedia - Soc. Behav. Sci.*, vol. 235, pp. 729–738, Nov. 2016.

[72] S. Alaarj, Z. A. Mohamed, and U. S. A. Bustamam, "The Effect of Knowledge Management Capabilities on Performance of

Companies : A Study of Service Sector," *Int. J. Econ. Res.*, vol. 14, no. 15, pp. 457–470, 2017.

[73] Ehsan Gholifar, "Human resource development: Faculty members' psychological empowerment in Iran's colleges," *African J. Bus. Manag.*, vol. 5, no. 31, pp. 12249–12255, 2011.

[74] M. Ghorbanhosseini, "The effect of organizational culture, teamwork and organizational development on organizational commitment: The mediating role of human capital," *Teh. Vjesn.*, vol. 20, no. 6, pp. 1019–1025, 2013.

[75] A. Z. Acar and P. Acar, "Organizational culture types and their effects on organizational performance in Turkish hospitals," *EMAJ Emerg. Mark. J.*, vol. 3, no. 3, pp. 18–31, 2014.

[76] B. Motyl, G. Baronio, S. Uberti, D. Speranza, and S. Filippi, "How will Change the Future Engineers' Skills in the Industry 4.0 Framework? A Questionnaire Survey," *Procedia Manuf.*, vol. 11, no. June, pp. 1501–1509, 2017.

[77] A. Al Nasser and J. Jais, "Human Resources Development Performance Impact On Orgnisational Development Among Academician In Saudi Arabia," *PalArch's J. Archaeol. Egypt/Egyptology*, vol. 17, no. 6, pp. 14164–14175, 2020.

[78] I. Drummond and I. Stone, "Exploring the potential of high performance work systems in SMEs," *Empl. Relations*, 2007.

[79] D. Giauque, S. Anderfuhren-Biget, and F. Varone, "HRM practices, intrinsic motivators, and organizational performance in the public sector," *Public Pers. Manage.*, vol. 42, no. 2, pp. 123–150, 2013.

[80] S. H. Appelbaum, Z. Oulbacha, and B. T. Shapiro, "Enhancing Organizational Performance: The Mediating Role of Human Resource Management," *Int. J. Bus. Appl. Soc. Sci.*, vol. 4, no. 9, pp. 40–46, 2018.

[81] B. S. Ünsal-Akbıyık, "The mediating role of human resource management practices on affective commitment and type of contract," *J. Soc. Sci.*, vol. 8, no. 1, p. 72, 2014.

[82] U. Sekaran and R. Bougie, *Research methods for business: A skill building approach*. john wiley & sons, 2019.

[83] R. V Krejcie and D. W. Morgan, "Determining sample size for research activities," *Educ. Psychol. Meas.*, vol. 30, no. 3, pp. 607–610, 1970.

[84] S. Dolnicar, B. Grün, and F. Leisch, "Increasing sample size compensates for data

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problems in segmentation studies," *J. Bus. Res.*, vol. 69, no. 2, pp. 992–999, 2016.

[85] L. S. Richard, M. William III, O. R Lyman, and G. Kenneth, "Elementary survey sampling." Brooks/Cole, 2012.

[86] J. Pallant, *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge, 2020.

[87] Hair, T. M. Hult, C. M. Ringle, and M. Sarstedt, *A primer on partial least squares structural equation modeling*, 2nd ed. Thousand Oakes, 2017.

[88] P. B. Lowry and J. Gaskin, "Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it," *IEEE Trans. Prof. Commun.*, vol. 57, no. 2, pp. 123–146, 2014.