



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

OCTOBER 2016, VOLUME 4, ISSUE 4, 1 - 16

E-ISSN NO: 2289 – 4489

DEVELOPING A MODEL OF WORK PERFORMANCE SYSTEM AND INSTITUTIONAL PERFORMANCE FOR STRATEGIC HUMAN RESOURCE MANAGEMENT IN THE MINISTRY OF EDUCATION, OMAN

Saleh Hamood Nasser AL-Sinawi¹, Chua Yan Piaw² (PhD)
& Abdul Rahman Idris³ (PhD)

[1] Institute of Graduate Studies,
University of Malaya
MALAYSIA

[2] Institute of Educational
Leadership, University of Malaya
MALAYSIA

[3] Faculty of Education,
University of Malaya, MALAYSIA

Corresponding Author:
University of Malaya, MALAYSIA
Email: sinawi104@hotmail.com

ABSTRACT

This study investigates the relationship between work performance system, which includes staffing, training, involvement, compensation, performance appraisal, caring, and institutional performance among institutions of higher learning in the Sultanate of Oman. The research is explanatory in nature in which the sample consists of 531 general managers, assistant general managers and other high ranking administrators from the Ministry of Education of Oman. An adapted questionnaire was used for data collection and it contained 88 items purposely constructed to assess work performance system, mediator variables and institutional performance. Hypothesized relationships between work performance system, institutional performance and the mediators were then tested by using Structural Equation Modeling with AMOS. Results of the analysis revealed that work performance system is significantly and positively related to institutional performance. Moreover, the results also showed that out of five variables, four played a significant role in mediating between work performance systems (WPS) and institutional performance (IP). This study found that work performance system affects institutional performance in two different ways, one through concern for customers (CC) and service performance (SP), and the other through concern for employees (CE) and helping behavior of employees (HP). Customers' knowledge (CK) was also found to indirectly affect institutional performance through its impact on service performance. Therefore, the mediation model of the present study can be used to holistically comprehend how strategic human resource management could be implemented in enhancing human resource management in Oman. The model derived from this study can be used for enhancing institutional performance in the context of strategic human resource management.

Keywords: Work Performance System, institutional performance, Structural Equation Modeling, Strategic Human Resource Management, Education, Oman.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

INTRODUCTION

Strategic management is more ubiquitous in the private sector since the concept was first developed, and interest in using strategic management in the public sector to enhance managerial performance has dramatically increased in the 1980s and 1990s (Smith, 1994). Since the 1980s, a series of transformations and reforms were implemented in the public sector, as a result of increased awareness on the importance of quality in the public sector. Strategic human resource management has been defined as the planned pattern of human resource (i.e., workforce) and human resource management (i.e., functional) deployments and activities intended to enable the organization to meet organizational goals and objectives (Mansour, Zaei, Yarahmadzahi, & Abtin, 2013; McMahan, Virick, & Wright, 1999; Wright & McMahan, 1992).

Theorists and empirical researchers have argued whether strategic human resource should always be positively related to firm performance. The relationship between human resource practices in strategic management and institutional performance has been well-documented and researched (Brown, 2004, 2005). It was hypothesized that some strategic human resource practices, if implemented in the organization, would enhance employee morale, facilitate their skills and eventually lead to enhanced organization performance, productivity, job satisfaction, better decision making and lower employee turnover (Becker & Huselid, 1998; Wright & Boswell, 2002). The nature and the number of these practices differ from one study to another depending on the researchers' ideology and their paradigm; however, some practices have consistently been reported as having significant impacts on organizational efficiency and effectiveness.

According to the universalistic theorists (Delery & Doty, 1996), there is a universal set of human resource best practices that can enhance firm performance and facilitate employees' psychological factors to rigorously involve in the job which consequently facilitate organizational performance (Lau & Ngo, 2004). On the other hand, contingency scholars hold different points of view and argue that the assumptions underlying the human resource management strategy-performance link are applicable only to high external fit conditions, termed the "best fit" school (Bamberger & Meshoulam, 2000). Interestingly, numerous empirical studies suggest that employee behavior largely depends on how employees interpret features and characteristics of the work environment and organization climate (Armstrong, 2009; Baird & Meshoulam, 1988; Boxall, 1996; Huselid, 1995; Karami, Analoui & Cusworth, 2004; Pfeffer, 1998; Salanova, Agut, & Peiro, 2005; Wright, Gardner, Moynihan, & Allen, 2005). It was also found that work environment and organization climate have a strong linkage with organizational performance, employees' commitment, motivation and productivity. Thus, it is firmly believed and empirically supported that work performance system practice in organizations contribute to institutional performance, enhanced employee morale, increased loyalty which consequently contribute to organizational competitiveness and achievement.

However, this study is designed to investigate how work performance system affects institutional performance directly and indirectly through the effects of mediator variables. The proposed hypotheses for this study are formulated as follows:

H₁: There is a relationship between work performance system (WPS) and institutional performance (IP) of higher institution applicable to the population of higher education institutions in the Sultanate of Oman.

H₀₁: The hypothesized model of the relationships between work performance system (WPS) and institutional performance (IP) of higher institution is not applicable to the population of higher education institutions in the Sultanate of Oman.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

H₂: Concern for customers (CC), concern for employees (CE), helping behavior (HP) and service performance (SP) mediate the relationship between work performance system and institutional performance in the Sultanate of Oman.

H₀₂: Concern for customers (CC), concern for employees (CE), helping behavior (HP) and service performance (SP) do not mediate the relationships between work performance system and institutional performance in the Sultanate of Oman.

The model of this study, widely used in the business domain, is adapted from Chuang and Liao (2010). Although the model is widely used in management and business paradigms, it is also suitable for investigating similar situations in other areas such as institutional performance settings. The conceptual model proposed that performance system that consists of staffing, training, involvement, performance, compensation, and caring (Chuang & Liao (2010) relates to concern for customers and concern for employees. It states that performance work system has direct effect on institutional performance. Moreover, it is strongly believed that concern for customer affects service performance, and concern for employees enhances helping behavior while both service performance and helping behavior directly affect institutional performance. Interestingly, while customer knowledge has indirect effect on institutional performance through service performance, it has no direct impact on institutional performance. On the other hand, the endogenous variable, which is institutional performance, consisted of three distinctive sub-dimensions, namely, planning, management and development and training. The conceptual framework of this study is presented in Figure 1.

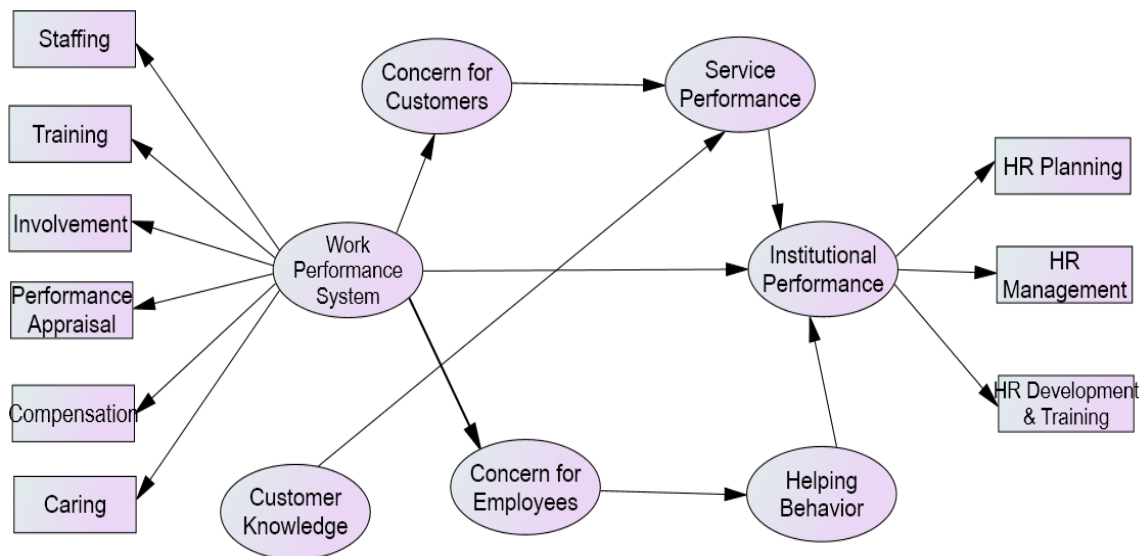


Figure 1. The Conceptual Framework (hypothesized model) of the Study (source: Chuang & Liao, 2010)

Thus, this study attempts to investigate the relationships between work performance system (WPS) and institutional performance (IP) of higher institution in the Sultanate of Oman.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

Additionally, the study also tries to examine the role of mediator variables such as concern for customers (CC), concern for employees (CE), helping behavior (HP) and service performance (SP) in corporation effects between work performance system and institutional performance.

BACKGROUND OF STUDY

The Omani Ministry of Education has spent a huge amount of money to design eight strategic plans and strategic management as an organizational process; however, little is known about the effect of this program. In other words, although the Omani Government is trying to promote the standard of service delivery across the public administration, the services are still below international standards. Most educational institutions run on a routine, often without objective and achievable plan of development. Any development efforts are usually piecemeal approaches. What is important is absorbing the basic spirit of the movement – the concept of strategic management in education and techniques and strategies of its management on a continuing basis.

Unfortunately, many people in the Omani Ministry of Education are unaware of principles of strategic management and how to make it workable in order to achieve organizational goals and objectives (Ministry of Education, 2004). It is firmly believed that without strictly implementing organization strategic management and dynamically choosing its elements it would be difficult for any organization to achieve its ultimate objective and maintain its existence for long.

This study was conducted on higher managers and staff in the Ministry of Education in the Sultanate of Oman. The Ministry of Education is divided into 11 districts which are also further divided into Directorate General of Human Resource Department. Furthermore, every district has its own directorate general of education at state level which manages the educational system in the Sultanate. The human resource department is administered by the undersecretary for educational planning and human resources department; it consists of three distinctive sections, namely Directorate General of Human Resources Development, Directorate General of Planning and Quality Control and Directorate General of Educational Evaluation. This research study focused on the Directorate General of Human Resources Development which has departments in every district of the Sultanate. The overall population of the Human Resource Development including employees at district level is 1948, both male and female employees.

The researcher selected the sample size from each of these directorates in addition to the Ministry of Education to have a representative sample and give each district equal opportunity to be part of the research so the findings can be generalized without biasness. Since the issue of gender is often strongly present in research practices the researcher tried to balance the equation between male and female participants in selecting sample size.

METHODOLOGY

Research Design

This research employed the survey method and tests an adapted model using Structural Equation Modeling to investigate strategic management and its relationship with human resource practices and institution performance. According to Frey, Botan, and Kreps (2000), and Brody and Stone (1989), the survey method for evaluating research is based on the idea of obtaining information about experiences and feelings of the subjects with regard to services or products in order to evaluate effectiveness. The study employs the quantitative research method as a design intended to ensure objectivity, generalizability and reliability (Frey et al., 2000).



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

The quantitative research method is a technique in which participants are selected randomly from the study population in an unbiased manner. It provides a more complete picture of the issue being studied including the target audience and the effectiveness of the program itself, to help identify the strengths and weaknesses that could not be achieved if only one method were used, and add meaning and detail to the study.

The researcher adapted Chuang and Liao's (2010) model. The model is considered to be comprehensive compared to other available models especially in strategic human resource management. The theoretical model was initially used and tested on firms; however, it is believed due to the nature and degree of similarities of strategic human resource management across different domains, this model can be replicated in institutions of higher learning.

Furthermore, structural equation modeling (SEM) is used and suited to carry out this research project basically because of its enormous statistical power to find and confirm joint relationship between variables not directly observed but are inferred by other observable and measurable variables. The ultimate objective for using SEM in research is to depict the pattern of a series of inter-correlated dependent relationships simultaneously among a set of latent constructs, each measured by one or more manifest variables.

Population and Sampling Technique

The population of this study comprised all the employees of the Directorate of Human Resource in the Ministry of Education in the Sultanate of Oman. The Omani Ministry of Education as previously highlighted is divided into 11 districts which are also further divided into Directorate General of Human Resource Department. Every district has its own directorate general of education at state level which manages the educational system in the Sultanate. The estimated population was 1948 from which sampling was drawn. A total number of 901 participants were randomly selected (116 males and 785 females) representing 46% of the population.

Instrument

The instrument of this study contained 88 items and was constructed to assess work performance system, mediator variables and institutional performance respectively. A total of 67 items were adapted from Chuang and Liao (2010) to measure performance work system construct and the model mediator variables.

The questionnaire consisted of eleven sub dimensions, namely; staffing, training, involvement in decision making, performance appraisal, compensation, caring, customer knowledge, concern for customer, concern for employee, service performance and helping behavior. In addition, the institutional performance questionnaire had 21 items, a self-constructed scale and was modified based on the constructive comments from the experts. This questionnaire also covered three distinctive factors, namely HR planning, HR Management and HR Training and development. Firstly, Cronbach's alpha was used to test the internal consistency of the scale. It was reported that in exception of involvement dimension which had a reliability coefficient of .61, the other subscales displayed a high internal consistency ($\geq .92$). After experts' comments in which some modifications were performed such as deletions and changes, such as what Marsh (1994) called jingle (scale with the same label assessing similar constructs) or jangle (scale with different labels assessing different constructs), eventually, 21 out of 27 items remained. The reliability of the remaining items was also investigated and the values of the internal consistency of the scale ranged between .88 to .94 indicating high reliability and suitability for use in research activities.

Since the original dataset contained the data type string depicting the responses captured based on a Likert scale that ranged from strongly disagree to strongly agree it needed to be converted to a numeric data type ranging from 1 for strongly disagree to 11 for strongly agree in order to facilitate the SEM using AMOS package.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

The researcher used 11 scales to give respondents varied opportunity to choose from various alternative which consequently increased the scale reliability. Variety in response is playing a significant role in reliability analysis. When there are many options for the respondents and they answered variably that would increase the value of the reliability. Therefore, the researcher employed this scale (1-11) to give respondents a variety of options and to obtain high scores of reliability.

Data Collection Procedures

The instrument of this study was written in English language but since the target group are Arabic native speakers, many of whom lacked English language proficiency, it was translated into the Arabic Language. Initially, the original version of the items were translated from English to Arabic language by authorized translation experts and then translated from Arabic back to English language (back to back translation). More precisely, the back to back translation method guarantees that the meaning in the original version of the questionnaire is not lost in translation. The researcher also examined the face validity of the scale, by selecting five respondents from the target population; this exercise was to identify any confusing, ambiguous, complex and incomprehensible questionnaire items. The five respondents were asked to identify and underline any ambiguous or incomprehensible word or sentence in the items. Adjustments and corrections were then made to ensure that all the items were clear, simple and understandable.

The instrument consists of two sections. The first section elicited the demographic characteristics of respondents and personal details such as gender, highest educational qualification, experience, and current position. The second section consists of items relating to attributes the researcher intends to measure. This section has 88 items and 14 distinctive factors as highlighted in Table 1. Both sections are combined in the form of a final questionnaire with a short letter to the respondents about the aims of the study. The internal consistency of the instrument was tested using Cronbach's alpha and it was found to range between $\alpha = .89$ to $.87$ (Chua, 2014; Hair et al., 1998).

Data Analysis

Many statistical methods were used to achieve the ultimate objectives of this study; these methods ranged between descriptive analysis, which was used to analyze the demographic variables, and structural equation modeling to test the work performance system (WPS) and institutional performance (IP) of the higher institution model. However, before these statistical methods were used, psychometric properties of the adopted instrument were tested via validity and reliability.

Validity and Reliability of the Questionnaire

Several types of reliability tests exist but the most commonly used one is Cronbach's alpha, which measures the internal consistency of an instrument. There are many types of validity; one of them is criterion validity. This type of validity is the best and most accurate one to decide whether the instrument measures precisely the phenomenon it purports to measure. It can be done by the specialists, external examiners, psychologists and experts in the area. The researcher received five expert validations from the Faculty of Education and Ministry of Education in Oman, on the self-developed and adapted instrument. Changes were made based on the suggestions and recommendations made by the experts.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

It is worth mentioning that the questionnaire items were translated into the Arabic Language since the respondents were Arabs from Oman, and many of them were not proficient in the English language. Initially, the original version of the items were translated from English to Arabic language by authorized translation experts and then translated from Arabic back to English language (Back to back translation). The researcher used this method as recommended by many researchers to ensure that the contents of the original version of the questionnaire were completely transferred to the translated version. More precisely, the back to back translated method guarantees that the meanings of the original version of the questionnaire are not lost in translation. The researcher also examined the face validity of the scale, by selecting five respondents from the target-population. The main objective of examining the face validity is to identify any confusing, ambiguous, complex and incomprehensible items in the questionnaire. The researcher asked five selected respondents to identify and underline any ambiguous or incomprehensible word or sentence in the items. Adjustments and corrections were made after the exercise to ensure that all the items are clear, simple and understandable.

The instrument consists of two sections. The first section consists of items relating to the demographic characteristics of respondents and personal details such as, gender, and highest educational qualification, experience, and current position. The second section consists of items relating to attributes the researcher intends to measure. This section has 88 items and fourteen distinctive factors as highlighted in Table 1. Both sections are combined in the form of a final questionnaire with a short letter to the respondents about the aims of the study.

Instrument reliability was tested using Cronbach's alpha and the researcher found that internal consistency of each item is very high. The internal consistencies of the items ranged between $\alpha = .89$ to $.87$ (Hair et al., 1998).

RESULTS

Descriptive Analysis of the Background of Respondents

The results shows that the majority of the respondents participating in this study are male (61.2%, $n = 325$) while 38.8% ($n = 206$) are females. This imbalance in the number of sample size across gender is a reflection of the real situation in the Sultanate of Oman Ministry of Education, where males outnumber their female counterparts. As for the participants' level of experience, the majority of them (24.7%, $n = 131$) have between 16 – 20 years of experience, followed by 24.1% ($n = 128$) who have 11 – 15 years of experience. Moreover, the analysis also suggests that 18.5% of the participants ($n = 98$) have between 21 to 25 years, of experience, 12.4% ($n = 66$) have between 1 to 5 years of experience, while 12.4% ($n = 66$) have between 6 to 10 years of experience. However, only 7.9% ($n = 42$) of the respondents have more than 26 years of experience.

Table 1
Descriptive Analysis of the Background of Respondents

Variables	Categories	n	%
Gender	Males	325	62.2
	Females	206	38.8
Experience	1-5	66	12.4
	6-10	66	12.4
	11-15	131	24.7



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

	16-20	128	24.1
	21-25	98	18.5
	26 and above	42	7.9
Occupation	General Manager	2	.4
	Assistant General Manager	4	.8
	Manager	14	2.6
	Assistant Manager	20	3.8
	Head of Department (HOD)	49	9.2
	Employee	442	83.2
Age	20-25 years	17	3.2
	26-30 years	66	12.4
	31-35 years	129	24.3
	36-40 years	163	30.7
	41-45 years	114	21.5
	46-50 years	33	6.2
	51 and above	9	1.7
Qualification	Diploma	91	17.1
	Bachelor Degree	270	50.8
	Higher Diploma	44	8.3
	Masters	97	18.3
	Ph.D	29	5.5

Procedures for Confirmatory Factor Analysis

In order to answer the research questions and test the hypothesis, a proposed research model was tested. The researcher tested the model and modified it based on the results of goodness of fit indices. A good model is determined based on the criteria shown in the following Table 2:

Table 2
Model Fit Criteria

Index	Model fits the data
Chi-square	$p > .05$
CFI	$\geq .90$
RMSEA	$< .08$
Ratio (Chi-square /df)	< 5.0

Source: Kline (2011).

Note. when the sample size is > 200 the result of Chi-square is not reliable. Hence, the Chi-square result is not taken into consideration for model- fit analysis.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

Confirmatory Factor Analysis (CFA)

This analysis starts with the use of structural equation modeling techniques. A measurement model is proposed for each construct of the Structural Model of this study to examine the appropriateness of the measurement before proceeding to the structural model based on suggestions of practitioners and statisticians (Hair et al., 1998; Schumacker & Lomax, 2010). Hair et al. (1998) suggested that researchers should verify the reliability of items especially when summated scales are used as the manifest or predictor in the Structural model. Therefore, the researcher carried out a series of confirmatory factors (measurement model) on each of the two constructs in this study; they are work performance system, and institution performance.

Confirmatory Factor Analysis for Work Performance System Model

The first measurement model was run on the work performance system construct using Moment Structure (AMOS) a user-friendly program, version 20 (Arbuckle & Wothke, 1995-1999). This construct contains six distinctive factors; they are staffing, training, involvement, performance appraisal, compensation and caring. Then Maximum Likelihood method was used to assess the overall fitness of the model. This application tests the hypothesis that high performance work system is a multidimensional construct.

The researcher used the summated scale of these factors. As presented in Figure 2, the items of each component are combined. Hence, the measurement model is performed on summated scale to investigate the scale appropriateness. The Maximum Likelihood estimation is also used to generate estimates of parameters in the measurement model (Kline, 2011). As carried out in the previous measurement model, the overall model fitness was determined by examining the numbers of indices. The chi-square was $\chi^2 = .000$, $df = 1$, $p = .990$. This result suggests that the model perfectly fit the data. Moreover, the result of generated indices also indicates that the model is perfect. These indices that exceed the threshold of .90, i.e. the CFI = 1.00 and RMSEA = .000. The CMIN/DF was .000, indicating that the model is well fit since the number is well below the recommended value of 5 (refer to Figure 2).



Chi-square = .000
Df = 1
p = .990
CFI = 1.000
RMSEA = .000
Ratio (ChiSq/df) = .000

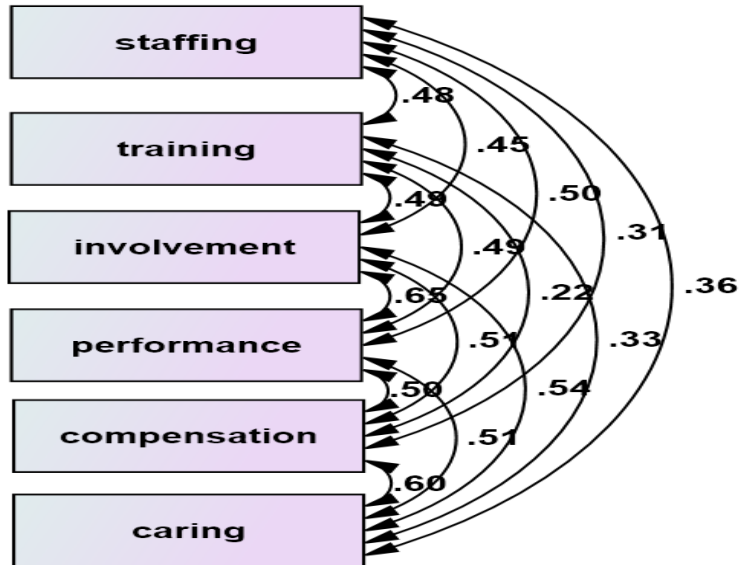


Figure 2. Inter-correlation among the Six Dimensions of Work Performance System Summated Scale

This analysis indicates that there are six underlying factors of work performance system such as staffing, training, involvement in decision making, performance appraisal, compensation, and caring. According to this analysis, the items of factors are highly loaded into their respective factors. Furthermore, the confirmatory factor analysis also replicates the result of previous studies which suggested that the underlying factors of works performance system are six. Additionally, the items are significantly loaded on their respective factors indicating that the construct validity of the model holds. Also, the correlation among the factors suggests that the convergent and discriminant validity are maintained since the correlation among the items is relatively high and any sign of multicollinearity problem is not observed.

Confirmatory Factor Analysis for Institution Performance

The construct contains three distinctive factors, namely planning, management, and development and training. The first factor (HR planning) consists five items, HR management contains seven items while HR development and training consists of nine items. A number of indices were examined to determine the overall model fit. The Chi-Square is $\chi^2 = 729.864$, $df = 181$, $p < .001$. As indicated earlier (Table 1) due to the sensitivity of chi-square especially when sample size is high (Kline 2011), the researcher relied on other indices to determine model fit. The result in Figure 3 generates fit indices exceeding the recommended critical value, i.e. CFI= .949 and RMSEA = .076.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

The value of CMIN/DF is 4.032, indicating that the model is well fit since this is well below the maximum recommended value of 5 (refer to Figure 3).

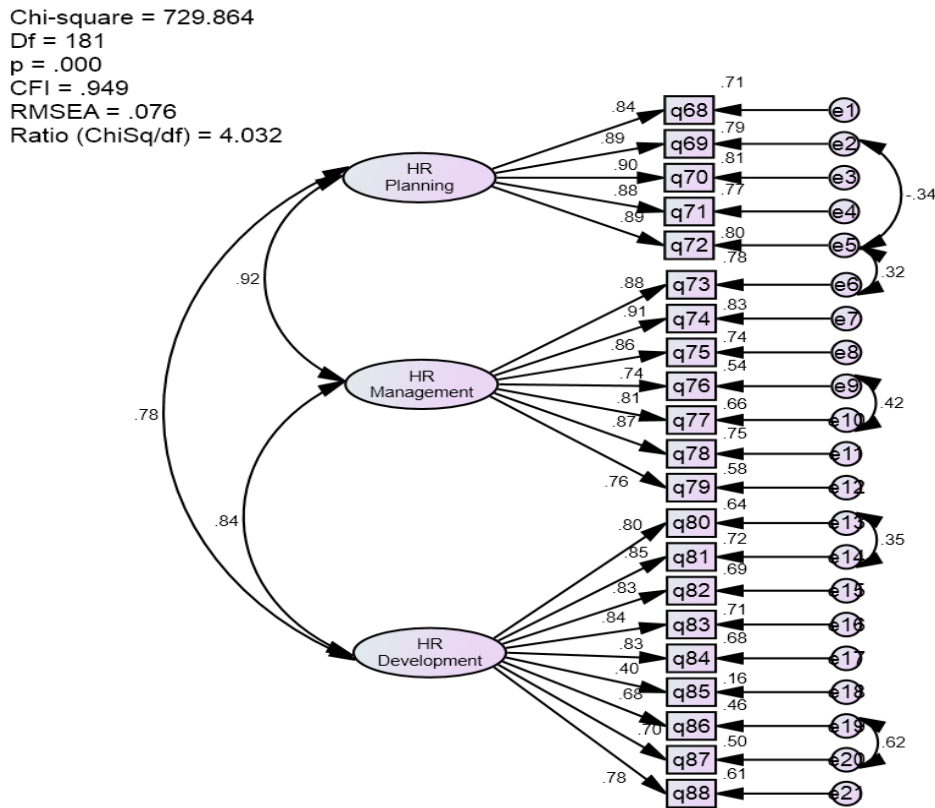


Figure 3. Measurement Model Institutional Performance and its Sub-Dimensions.

The result shows that the items of these factors are significantly loaded as expected. This indicates that the construct validity is achieved suggesting that institutional performance in human resource management has three factors. The convergent and discriminant validity is also achieved since items are significantly high loaded into their respective factors but without multicollinearity problem.

Confirmatory Factor Analysis for Mediator Variables

The researcher employed a summated scale. As presented in Figure 4, items of each component are combined and summated. Therefore, the measurement model was performed to examine the mediator variables after having been summated. The Maximum Likelihood estimation was also used to generate estimate of parameters in the measurement model. As carried out with the previous measurement model, the numbers of indices were examined to determine the overall model fit. The result of this analysis indicates perfect fit. The chi-square is $\chi^2 = .000$, $df = 1$, $p = .998$.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

The generated fit indices also proved perfect fit given the value of CFI = 1.00 and RMSEA = .00. The value of CMIN/DF is .00, indicating that the model is perfectly fit since the number is well below the maximum recommended value of 5 (refer to figure 4). The analysis finds five distinctive factors for mediator variables which are (CC), (CE), (SP), (CK) and (HP). The analysis shows that the goodness of fit indexes are above the recommended values, suggesting that the model does fit. Interestingly, the convergent and discriminant validity is also maintained since correlations among the factors are reasonable high and there is no problem of multicollinearity in the scale.

Chi-square = .000
Df = 1
p = .998
CFI = 1.000
RMSEA = .000
Ratio (ChiSq/df) = .000

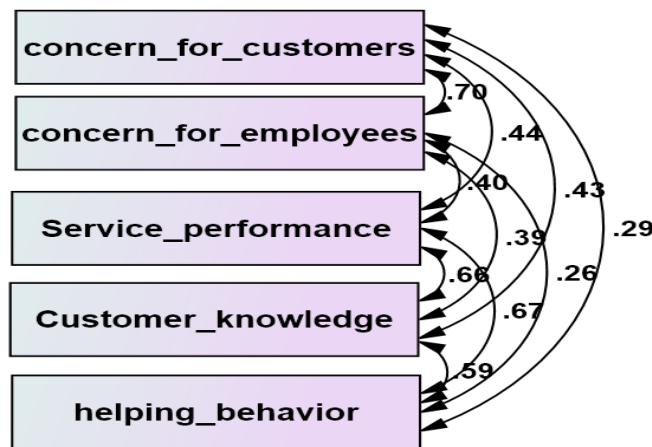


Figure 4: Summated Scale for Mediator Variables.

Full Hypothesized Model

The Structural Equation Modeling technique was used as the main statistical tool to test the main hypotheses proposed in this study. As suggested by Hair et al. (1998), the proposed conceptual framework was modelled in a recursive manner to avoid problems associated with statistical identification. This is more so for the present empirical data that is cross-sectional in nature. As previously mentioned, this section is to test the relationship between exogenous and endogenous variables without introducing the mediator variables. The aim is to investigate the nature, the magnitude and the direction of the relationship before the parctical and full hypothesized model are tested. There are a total of 47 indicators contained in this structural model. Each indicator is connected to the underlying theoretical construct in a reflective manner. As previously highlighted, some of these indicators were fixed so the model could be identified. The structural relationships between latent constructs represented by single headed straight arrows are specified according to the hypotheses established.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

The results also indicate that the model fit the data well (RMSEA = .061; CFI = .908; ratio =2.95). It means that the model can significantly be applied to the population of this study. The result of analysis in Figure 5 indicates substantial direct relationship between work performance system and institution performance ($\beta = .72, p < .001$). This finding suggests that if an institution were to adopt the work performance system this would facilitate its performance. Furthermore, the research also suggests that mediator variables play a significant role in mediating the relationship between work performance system and institutional performance. According to the finding, adaptation of work performance system leads to concern for employees ($\beta = .69, p < .001$) which also enhances employees' helping behavior ($\beta = .20, p < .001$) and consequently promote institutional performance ($\beta = .11, p < .001$). Similarly, work performance system boosts concern for customers' habit ($\beta = .83, p < .001$) leading to service performance ($\beta = .24, p < .001$) and consequently better institutional performance ($\beta = .08, p < .05$). According to these findings, mediator variables play an important role in mediating effects of work performance system to institutional performance.

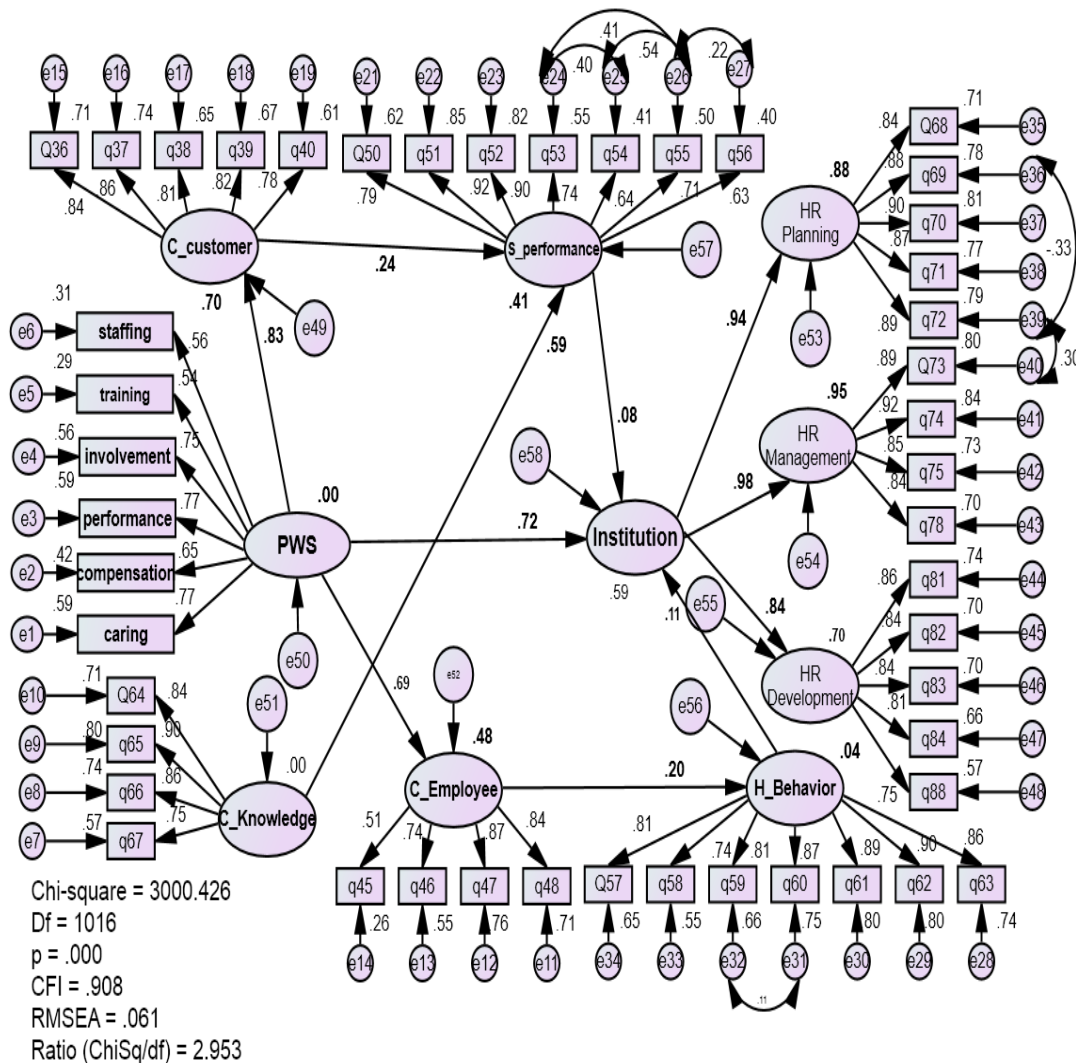


Figure 5. Model of the study.



DISCUSSION AND CONCLUSION

The results of this study contribute in various ways to investigate the effect of work performance system on institutional performance. Firstly, the hypothesized model of the relationships between work performance system and institutional performance of higher institution is applicable to the population of higher institutions in the Sultanate of Oman. It supports both theoretically and statistically that staffing, training, involvement performance appraisal, compensation and caring (Chuang & Liao, 2010) are parts of distinctive factors of work performance system, as was found in previous studies. Secondly, the variables (CC), (CP), (SP) and (HP) significantly mediate the relationships between work performance system and institutional performance. However, it has been consistently reported that training, involvement, performance appraisal, compensation and caring have significant impacts on organizational efficiency and effectiveness (Huselid, 1995; Pfeffer, 1998).

The confirmatory factor analysis indicates six underlying factors of work performance system namely staffing, training, involvement in decision making, performance appraisal, compensation, and caring. The confirmatory factor analysis indicates that there are three distinctive factors for institutional performance, which are HR planning, HR management and HR development and training. The study suggests that four mediator variables such as CP, CC, SP, and HP play a pivotal role in mediating between work performance system and institutional performance. This study confirms that this model establishes the influence of Work Performance System significantly on Institutional Performance, which is in total disagreement with the study by Chuang and Liao (2010), while the importance of mediators in both studies are concurrent.

This study concludes with deriving five sub-models. The models are depicted in Table 3.

Table 3

Five Sub-models of PWS and Mediator Variables

Sub-model 1: Institutional Performance = .72 PWS + .11 HB + .08 SP. ($R^2 = .59$)

Sub-model 2: Service Performance = .24 CC + .59 CK ($R^2 = .41$)

Sub-model 3: Helping Behavior = .20 CE ($R^2 = .04$)

Sub-model 4: Concern for Employee = .69 PWS ($R^2 = .69$)

Sub-model 5: Concern for Customer = .83 PWS ($R^2 = .70$)

Note. PWS = Work performance system; HB = Helping Behavior; CC = Concern for Employee; CK = Customer knowledge; CE = Concern for Employee.

The result of analysis indicates that the whole model fits the data perfectly. It indicates that the whole model and the five sub-models derived from this study can be referred in enhancing institutional performance for strategic human resource management in the Ministry of Education, Oman.

REFERENCES

Arbuckle, J. L., & Wothke, W. (1995-1999). *AMOS 4.0 User's Guide*. Chicago, IL: Smallwaters Corporation.

Armstrong, M. (2009). *Armstrong's handbook of human resource management practice*. London, UK: Kogan Page.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

- Baird, L., & Meshoulam, I. (1988). Managing two fits of strategic human resource management. *Academy of Management Review*, 13(1), 116–128.
- Bamberger, P., & Meshoulam, H. (2000). *Human resource strategy: Formulation, implementation and impact*. Beverly Hills, CA: Sage.
- Becker, B. E., & Huselid, M. A. (1998). Performance work systems and firm performance: A synthesis of research and managerial implications. In G. R. Ferris (Ed.), *Research in personnel and human resource management*, vol. 16. (pp. 53–101). Stamford, CT: JAI Press.
- Boxall, P. F. (1996). The strategic HRM debate and the resource-based view of the firm. *Human Resource Management Journal*, 6(3), 59-75.
- Brody, E. W., & Stone, G. C. (1989). *Public relations research*. New York, NY: Praeger.
- Brown, P. (2004). Strategic capability development in the higher education sector. *International Journal of Educational Management*, 18(17), 436-445.
- Brown, P. (2005). The evolving role of strategic management development. *The Journal of Management Development*, 24(3), 209-222.
- Chua, Y. P. (2014). *Statistical research continued: Test regression, factor analysis and SEM analysis* (5th ed.). Shah Alam, Malaysia: McGraw-Hill Education
- Chuang, C., & Liao, H. (2010). Strategic human resources management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology*, 63(1), 153-196.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Test of universalistic, contingency and configurational predictions. *Academy of Management Journal*, 39(4), 802-835.
- Frey, L. R., Botan, C. H., & Kreps, G. L. (2000). *Investigating communication: An introduction to research methods*. Boston, MA: Allyn & Bacon.
- Hair, F., Anderson, E., Tatham, L., & Black, C. (1998). *Multivariate data analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635-672.
- Karami, A., Analoui, F., & Cusworth, J. (2004). Strategic human resource management and resource-based approach: The evidence from British manufacturing industry. *Management Research News*, 27(6), 50-68.
- Kline, R. B. (2011). *Principles and practice of structural equation modelling* (3rd ed.). New York, NY: Guilford Press.
- Lau, C., & Ngo, H. (2004). The HR system, organizational culture and product innovation. *International Business Review*, 13(6), 685-703.



MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

- Mansour, Zaei, E., Yarahmadzahi, M. H., & Abtin, A. (2013). Strategic management practices in the local authorities: Factors associated with adoption of strategic management practices in the local authorities. *Interdisciplinary Journal of Contemporary Research in Business*, 5(3), 739-744.
- Marsh, H. W. (1994). Sport motivation orientations: Beware of jingle-jangle fallacies. *Journal of Sport and Exercise Psychology*, 16(3), 365-380.
- McMahan, G. C., Virick, M., & Wright, P. M. (1999). Alternative theoretical perspectives for strategic human resource management revisited: Progress, problems, and prospects. In P. Wright, L. Dyer, J. Boudreau & G. Milkovich (Eds.), *Research in personnel and human resources management: Strategic human resource management in the 21st century, Supplement 4* (pp. 99–122). Greenwich, CT: JAI Press.
- Ministry of Education. (2004). *Education in the Sultanate of Oman: Preparing our students for tomorrow*. Muscat, Oman: Author.
- Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Boston, MA: Harvard Business School Press.
- Salanova, M., Agut, S., & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customers' loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217-1227.
- Schumacker, E., & Lomax, G. (2010). *A beginner's guide to structural equation modelling*. Mahwah, NJ: Erlbaum.
- Smith, R. J. (1994). *Strategic management and planning in the public sector*. Harlow, UK: Longman.
- Wright, P. M., & Boswell, W. R. (2002). Desegregating HRM: a review and synthesis of micro and macro human resource management research. *Journal of Management*, 28(3), 247-276.
- Wright, P., Gardner, T., Moynihan, L., & Allen, M. (2005). The relationship between HR practices and firm performance: Examining causal order. *Personnel Psychology Journal*, 58(2), 409-446.
- Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295-320.