The Mediating Effects of Perceived Employee Development on the Relationships between Performance Appraisal and Job Performance in Public Universities of Khyber Pakhtunkhwa, Pakistan

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ABSTRACT

The purpose of this study is to see if the empirical data from the public universities of Khyber Pakhtunkhwa, Pakistan validate the theoretical base regarding the subject association. The researcher has searched the literature to provide strong theoretical base to be tested through empirical evidence. The study used 295 responses collected from 16 public universities in the province with about 35 00 population for analysis. Structural Equation Modeling (SEM) was used to evaluate the model. The quantitative results validate the theoretical base of direct positive association between the variables. The study also revealed that the quality of performance appraisal has significance for promoting individuals' development perceptions. This study provides some tips to decision makers in better understanding such relationships that affect employees’ performance. The paper carries discussion about the methodology used in the paper, limitations of the research and recommendations for possible future research.

Keywords: Performance Appraisal, Employee Development, Job Performance,

1. INTRODUCTION

Creating a positive image in the current competitive market has become an overt objective of any organization. This has many manifestations and has become very tricky and challenging. Higher levels of efficiency and productivity are more demanding among them. However, they can be affected if and only management enhances the quality of its inputs (performance appraisal system and employee development opportunities) to enable the employees to increase their output (performance). Researchers (Gould-Williams, 2003; Harley, 2002; Tessema & Soetens, 2006; Wright, Gardner, & Moynihan, 2003) have extensively recognized the centrality of effective human resource management practices. Boswell and Boudreau (2002) consider performance appraisal one of the most important human resource practices. That is why Fletcher (2002) considers it the most heavily researched area in workforce behaviour.

The success of any HR intervention in organization is heavily dependent on employees’ perception of that intervention. For example, Leigh, Lucas, and Woodman (1988) believe that employees’ job satisfaction is affected by their perception of the broader organizational environment more than their personal role in the organization; Lee and Bruvold (2003) opine that employees demonstrate higher level of commitment when they perceive that performance appraisal is associative with employee development; Jawahar (2005) contends that satisfaction in performance appraisal is positively associated with job satisfaction and commitment and negatively associated with intention to quit; Harter, Schmidt, and Hayes (2002) find positive association between development and retention. All these underscore the need for research concerning how employees perceive the performance appraisal system and how the element of development affects employees' attitudes and behaviors.

Research is plenty regarding the issue of employee development from various perspectives, the focus of these studies have been towards developed countries on the one hand and has been done by industrial organizational
and occupational psychologists (Mueller, Wallace, & Price, 1992) on the other hand. The amount of research to test the human resource-performance association with employee behaviour in developing countries like Pakistan is very scarce (Shahzad, Bashir, & Ramay, 2008). And that is why Aycan, et al. (2000) termed Pakistan as 'under-researched' country in the field of human resource management practices. There is a need to see whether the theoretical base available in literature also holds empirically in the developing countries like Pakistan. The present study has been an endeavour to addresses this research gap.

2. LITERATURE REVIEW

No one can deny the importance of human resource in the overall success of any organization. Researchers are unanimous in acknowledging the fact that this resource can become an exclusives source of competitive advantage if it fulfils four basic requirements: a) individual performance be a source of added value to the organization's output; b) individuals’ skills are required to be rare; c) they are required not to be replicated easily; and d) technological advances cannot be substitutes for them. These four requirements are further subject to an organization’s own approach of capitalizing on this potential source of profitability. Bailey (1993) complains about the underutilization of human potential in organizations because employees have generally been found performing below their maximum potential.

Performance appraisal “is one of the most important processes in human resource management, because it has a great effect on both the financial and program components of any organization” (Jafari, Bourouni, & Amiri, 2009, p. 94). It helps both the employee and the organization in achieving mutual goals. It enables the employee to evaluate his/her progress towards personal or organizational goals and provides a chance to management to the apply the human touch—putting people first—and signaling its care for the employees (Cadwell, 1994). Therefore, it is very important that how this activity is handled.

Researchers have defined performance appraisal according to its role and place in organizational setting. Commonly it has been called a structured and formal interaction between an appraiser and an appraisee as a periodic interview that usually concentrates on the appraisee’s job performance with the purpose to identify strengths and weaknesses as well as opportunities for improvement and skills development. It is a process of reviewing and assigning value to an individual’s performance (Worley, 2003) and serves to measure and improve performance (Waldman, Bass, & Einstein, 1987). Through this process management arrives at objective personnel decisions (Robbins & Bergman, 2000). It may facilitate or hinder the development of core competencies which are vital for an organization’s competitive strategy (Ubeda & Santos, 2007). Cardy and Dobbins (1994) consider it a process of identifying, gauging observing, and developing employees’ performance in organisations.

Performance appraisal has been widely accepted as a strategic and valuable intervention in organizational success. Rasch (2004) considers it the main factor in this success during the twentieth century. This activity is indispensable because making judgments about people with whom we work and about ourselves is an inbuilt human tendency. However, this tendency is neither perfect nor acceptable to everyone. Researchers ascribe this to human divergences and inaccuracies in understanding of others and how to dispense off this role successfully or to the faulty design, inaccurate rating format and appraiser’s resistance of judging others.

To sum up, it can be said that the system has a long history of mixed reaction. Soltani, Van Der Meer, and Williams (2005) acknowledge that developing such appraisal system which is successful and effective in evaluating an employee’s performance and accounting for his/her contribution in organization and also meets the organizational context requirements is an arduous and uphill task. Appraisals are neither generic nor be transposed from one organization to another easily (Boice & Kleiner, 1997). Therefore, it is recommended that the activity be designed and administered in such a way that could match organizational requirements. Such “HR policies and practices that enhance personal growth and motivate the workforce would secure a durable employee-employer relationship via social exchange process, which brings a win-win situation that benefits both parties in the long run” (Foong-ming, 2008, p. 15).
3. EMPLOYEE DEVELOPMENT

Development is a combination of formal education, employee’s interactions, job experiences, employee’s personality and his/her potential and abilities that help him/her perform effectively in the current or future job in organizations (Hollenbeck, Gerhart, Wright, & Noe, 1996). It is considered a joint and collaborative effort of the organization and the employees with the aim to enrich employees’ attitudes, experiences, knowledge, skills, and abilities to improve their effectiveness. It is a collaborative activity and needs to be a balanced approach that caters for an individual's career needs and goals and the organization's requirements. As both the parties are benefited from it, they are required to realize their respective responsibilities to achieve their mutual goals. However, researchers (Haskell, 1993; Maurer & Tarulli, 1996) recommend organizations should play a more proactive role in providing support and promoting development opportunities.

The significance of employee development in organizational setting has extensively been recognized. Organization that makes investments in its workforce signals its commitment regarding its approach to its workforce growth. This, in return, engenders motivation and promotes greater teamwork and cooperation. When employees start believing that organizations are sincere to provide development opportunities for them, they will definitely reciprocate (Georgellis & Lange, 2007; Lee & Bruvold, 2003).

4. EMPLOYEE DEVELOPMENT AND PERFORMANCE APPRAISAL

Performance appraisal is a multifaceted HR activity. It can either be used for personnel management or growth, self-improvement, and development or for both purposes (Mills & Hyle, 1999). However, a host of researchers (Bernardin & Beatty, 1984; DeNisi, Cafferty, & Meglino, 1984; Zedeck & Cascio, 1982) are against the notion of using this activity for both the purposes. They believe that in such circumstances the activity would fail to provide proper feedback to employees regarding their strengths and weaknesses and where development is required.

Campbell and Lee (1988) believe that if certain constraints like cognitive constraints, informational constraints, affective constraints, and self and appraiser’s evaluation discrepancy are kept at minimum levels, appraisals could be used as a developmental tool. Raymond and Liegh recommend employers to have a well-designed performance management system if they are serious about training and development. However, there are some inhibitors that negatively affect the system in achieving its goal of employee development. They are: appraiser’s impartiality (Wilson & Western, 2001); appraiser’s subjectivity (Barge, 1989); lack of mutual trust and respect (George, 1986); employee’s noninvolvement in the formulation of training and development recommendations and his/her own lack of motivation (Wilson & Western, 2001); and indifference and apathy. Adair (1983) believe that when appraisals are considered annual activities and are not followed by recommended actions from both the employee and the organization they are destined to degenerate into empty rituals. It requires to be made clear that all sorts of appraisals are not fit to achieve the end of employee development.

5. PERFORMANCE APPRAISAL AND JOB PERFORMANCE

Organizations have always been found busy in devising strategies which could ensure greater quality productivity. This endeavour has always been accompanied by the corresponding concern: how to affect it in a way that could be focused and effective for the organisation, and motivating and constructive for each employee. With the increasing acknowledgement of people as an organization’s best asset there is a desire to find ways to increase employee contribution to the organisation with better understanding of how effective human resource systems operate. Though (Balzer & Sulsky, 1990) complained that performance appraisal did not receive due attention in regard to its perception from an employee point of view because most research has...
been centered in psychometric and accuracy aspect in the performance appraisal process, it has been realized that if an organisation can recruit and retain the right employees, develop them through training and skill acquisition, then a positive change in the output that increases the efficiency and effectiveness of the individual in the system can be affected which can be used as a competitive advantage to drive the organisation forward. Therefore, it is not surprising that the relationship between HRM practices and employee and organizational performance has attracted considerable attention over the past decade (Rao, Ganesh, & Sriram).

Keeping in view the importance of the intervention, performance appraisal is conducted as a means to enhance the job performance of each individual employee and as a mean to improvement of the organizational effectiveness and overall operation of the organization. It is further designed to reinforce the “team management” approach and validate management’s commitment to a mutually supportive environment. The appraisal process is designed to gather vital information and measurements about staff activities and organization’s operations useful to management’s purpose in bettering the employees output, working conditions, their morale, and inner workings of the organization as a whole.

Meta-analysis conducted by Kluger and DeNisi (1996) on possible link between performance appraisal/feedback and performance improvement concluded that it has mixed effects on performance. There is a definite link between performance appraisal and the desire to improve performance of the employees. Individual performance is affected by a number of variables that include personality, values, attitudes and ability of the individual which, in combination, affect their perceptions and motivation, and ultimately influence individual performance. If an employee is having problems meeting his/her goals, supervisor is supposed to take steps during the appraisal to help improve performance. Cascio (1998) believes that performance appraisal is a process that improves employee’s work performance by helping them realize and use their full potential in carrying out the organization’s missions. One important function of performance appraisals is to encourage and guide improved employee performance (Latham & Wexley, 1993). Because employees generally want to succeed on their jobs and in their careers (Scarpello, Ledvinka, & Bergmann, 1995). They want to know what is expected of them and how well they meet those expectations. This can be accomplished through supervisors who spell out clear expectations of performance. And when an employee feels that someone is helping him/her to improve and develop, there is no need to tell him/her, response comes out naturally. This is how employees begin to feel safe and this in turn brings about the change in behaviour that both the employees and the employer want.

The findings of performance appraisal has since long been used as tools to improve performance (Rasch, 2004). Prowse and Prowse (2009) believe that if the end is service improvement then performance appraisals require a wider approach to enhanced work design and motivation to develop and enhance employee job satisfaction. It is, therefore, suggested that supervisors should use performance appraisal as employee development tool and get them motivated. This focused approach to each individual’s training and/or developmental need, managers help employees enhance their job skills and become more effective and productive.

An organization that wants to remain in the market, definitely realizes that quality service/product is its very lifeline. This underscores an increasing emphasis on efficient and effective performance from each individual. The quality of an employee’s output is subject to the quality of the input that the organization induces the employee to put in.

To conclude, organizations generally want to survive, so are the employees. An employee is primarily a social entity but works in an organization. Organizational culture affects and be affected by change in his/her behaviour and attitude. On the basis of the above discussion the following model (Figure 1) followed by research hypotheses will be put to validation with the empirical data from Public Universities in the Khyber Pakhtunkhwa, Pakistan.

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Insert Figure 1 here
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5.1 Research Hypotheses

Hypothesis 1: The greater the element of employee development in the performance appraisal, the greater the level of perceived employee development.

Hypothesis 2: Employee development will be positively related to job performance.

Hypothesis 3: Perceptions of employee development will mediate the relationships between performance appraisal and job performance.

6. Research Method

For the study, data was collected from public universities of Khyber Pakhtunkhwa, Pakistan, through a questionnaire. As per the official website of the Higher Education Commission, Pakistan, there are 14 universities and 20 degree awarding institutes having nearly 35,000 faculty members, the population for the study (see annexure). Stratified random sampling technique was used. The questionnaire, with a covering letter ensuring the confidentiality and explaining purpose of the study, was personally administered. Respondents were requested to record their own perceptions of the appraisal system. To validate the theories through empirical data structural equation modeling technique, also known as confirmatory factor analysis, was used, being the most appropriate means to confirm the theory. Using statistical software SPSS and Amos, I have derived the research findings.

6.1 Measure

To know the responses of the respondents on the constructs of interest I have used three scales in the study:

Performance appraisal: Performance appraisal has five items. They are: 'performance appraisal is perceived as a structured, formal and highly valued HR intervention', 'perceived as a systematic search of employee's potential for development', 'perceived essential for employee's growth and development', 'central and critical in my career', 'the process tracks my performance during my service here'.

Employee development perception: Employee development has five items. They are: 'university developmental efforts have improved my self-awareness, competencies, and employability', 'I have made sufficient progress to achieve my career goals', 'university management has provided me with adequate resources needed for my development', 'employee development is perceived in a positive way', 'employee development decisions are made in an unbiased manner'.

Job performance: Job performance has also five items. They are: 'I have improved my performance during my service', 'university's support has helped me in improving my performance', 'faculty appraisal helped me to improve my performance', 'through appraisal management gathers vital information about staff activities which can help in improving faculty output', 'university’s environment is conducive for performance improvement'. All three constructs were measured through a 5-item scale for each construct employing a 5-point Likert response scales ranging from (1) 'strongly disagree' to (5) 'strongly agree'.

The demographic information about the respondents includes university ID, age, gender, and designation.

7. Results

Data was collected through a questionnaire. A total of 343 questionnaires out of the 600, were received. Only 295 questionnaires were found suitable for analysis. This constituted a response rate of 49%. The reliability estimates of the constructs have been provided in Table I. Among the respondents there were 215 males, 61 females, and 19 did not mention their gender. Majority of the respondents were found young (n=161), followed by middle age (n=69), and then the last category (n=21), while the rest did not mention their age. Similarly, in terms of designation, there were 147 Lecturers, 104 Assistant Professors, 7 Associate Professors, 21 Professors, and 16 Others. Table I below provides the detail about the constructs. The results show that all the three constructs do not have a very high Mean score on the scale. However, Job Performance demonstrates comparatively high score on the mean. Similarly, standard deviation for all the constructs demonstrates normality. The results validate the relationships.
To assess the suitability of measurement model for all the three constructs confirmatory factor analysis (CFA) was used. A number of goodness of fit statistics, like Chi-square, Goodness-of-fit Index (GFI), Comparative Fit Index (CFI), Root Mean Square Residual (RMSR), and Root Mean Square Error of Approximation (RMSEA) were employed.

7.1 CFA for Performance Appraisal
The measurement model for this construct is a single factor model that has five indicators. The initial results did not demonstrate an overall good fit. Chi-square value of 34.88 with 5 degrees of freedom was statistically significant at $p < 0.00$. The fit statistics ($GFI = 0.95; CFI = 0.94; RMR = 0.04$) are supporting the adequacy of the model. However, the value for RMSEA (0.14) is very high (the cutoff value suggested by Hair, Anderson, Tatham, and Black, (2006) in this regard should range between 0.05 and 0.08). Thus, the model was re-examined in the light of recommendation of the modification index. The error of the APRL-5 indicator was found highly correlated with indicator 2, 3, and 4. Consequently, indicator 5 was dropped. Table II provides the final results of the analysis for performance appraisal with four indicators.

7.2 CFA for Employee Development
The measurement model for employee development is a single factor model that has five indicators. The results demonstrate an overall good fit and support the adequacy of the model. Table III provides the final results of the analysis for the construct of employee development.

7.3 CFA for Job Performance
The measurement model for job performance is also a single factor model that has five indicators. The results demonstrate an overall good fit and support the adequacy of the model. Table IV provides the final results of the analysis for the construct of job performance.

7.4 CFA for the Measurement Model
After presenting CFA for each construct estimates for the overall model fit using maximum likelihood method are presented below. The values for the mentioned goodness-of-fit indices demonstrated the adequacy of the overall measurement model. The chi-square value of 174.01 with 74 degrees of freedom was statistically significant at $p < 0.00$. Other fit statistics are presented below.

Fit Statistics

\[
\begin{align*}
\text{Chi-square} &= 178.41 \ (df = 73, \ p = 0.00) \\
GFI &= 0.92, \ CFI = 0.94 \\
RMR &= 0.04 \\
RMSEA &= 0.07 \\
ECVI &= 0.80 \\
ECVI \ for \ Saturated \ Model &= 0.71 \\
ECVI \ for \ Independence \ Model &= 5.80 
\end{align*}
\]

Note: *All $t$-value were significant at $p < .05$
Note: The smaller value for ECVI exhibit greater potential for replication (Byrne, 1998).
7.5 **Structural Model**

In confirmatory factor analysis it is required that besides measurement model structural model also needs analysis. The latter depicts the links between the latent variables and is the regression part of the model. This model specifies the direct and indirect effects of the latent variables in the model (Byrne, 1998). Figure 2 presents the theoretical structural model along with measurement model.

![Insert Figure 2 here]

7.5.1 Theoretical Structural Model

Figure 3 below illustrates standardized path coefficients for the theoretical structural model. The t-values of all the path coefficients were statistically significant at p < 0.001. There was a non-significant difference between the theoretical model and measurement model. When there is a non-significant difference, this is a demonstration of proving the true relationships among the latent variables (Anderson & Gerbing, 1988). The value of chi-square for the theoretical model was 185.30 with 76 df; and the value of chi-square for the measurement model was 178.41 with 73 df (Table V). The difference in the chi square values between the two models was 6.89 with 3 df. The critical value with 3 df is 7.82 at p = 0.05. Therefore, this difference in the chi-square test indicated that the theoretical model achieved an acceptable fit to the data.

Insert Figure 3 here

Insert Table V here

8. **DISCUSSION ON THE RESEARCH FINDINGS**

The importance of performance appraisal as human management intervention that affects workers behavior (Murphy & Cleveland, 1995), plays a major role in determining employee attitudes (Fletcher & Williams, 1996) and has widely been accepted (Redman, 1993). Therefore, investment in and recognition of employees are regarded as organizational care and appreciation of employees (Foong-ming, 2008). It has been found that this activity has always been connected with some definite organizational purpose(s). Researchers have been busy in investigating predictive role in determining employee attitudes towards their job, appraiser/ supervisor, (Prince & Lawler, 1986; Williams, DeNisi, Blencoe, & Cafferty, 1985) and their perception of the very appraisal process (Boswell & Boudreau, 1997). Going through the relevant literature the study has found a theoretical rationale behind the associative relationship between performance appraisal and employee development.

Change is indispensible. The challenge is to make this change focused both for the employee and for the organization. Therefore, Balzer and Sulsky (1990) believe that organizations should recruit and retain the right employees, develop them through training and skill acquisition to affect a positive change in the output that increases the efficiency and effectiveness of the individual employee in the system. It is not surprising, therefore, that the link between HRM practices and employee and organizational performance has attracted considerable attention over the past decade (Rao, et al.). In the light of the literature on the subject it can be concluded that the outcomes of performance appraisal depend on the intention of the management and perceptions of the employee.

9. **HYPOTHESES TESTING**

Structural equation modeling (SEM) technique was used to test the hypotheses of the study. Path analysis was conducted to see the effects of the independent variable. In this study performance appraisal was the independent (exogenous) variable; and employee development and job performance were the dependent (endogenous) variables. Relationships among these three variables were hypothesized. To analyze these relationships test of overall path model and individual tests were conducted. Model estimation procedures for
simultaneous equations were used to test the hypothesized model. The results are summarized and presented in table VI.

**Hypothesis 1:** The greater the element of employee development in the performance appraisal, the greater the level of perceived employee development.

This hypothesis was supposed to investigate the association between the exogenous variable (performance appraisal) and the endogenous variable (perceptions of employee development). Since the value (0.6) of standardized path coefficient and the $t$-value (6.94) were both significant, therefore the data supported the hypothesis.

**Hypothesis 2:** Employee development will be positively related to job performance.

This hypothesis was supposed to investigate the association between the employee’s perceptions of development and his/her job performance. Here again the value (0.7) of standardized path coefficient and the $t$-value (7.2) were both significant, therefore the data strongly supported the hypothesis.

**Hypothesis 3:** Perceptions of employee development will mediate the relationships between performance appraisal and job performance.

Hypothesis 3 was supposed to look into the mediating effect of employee development. For this purpose a comparison between the model with mediating role and the model without mediating role of employee’s development perceptions was undertaken. The two models (see Figure 4) were compared through a chi-square difference test. The chi-square value for the former model was 185.30 with 76 degrees of freedom. Other values were: (RMSEA = 0.07; Standardized RMR = 0.05; GFI= 0.91; CFI= 0.93). But the chi-square value for the latter model was 238.98 with 75 degrees of freedom. Similarly, other values were: (RMSEA = 0.09; Standardized RMR = 0.11; GFI = 0.90; CFI = 0.90). The difference calculated in the values of chi-square between the models was 53.68 with 1 degree of freedom. At the same time other fit statistics of the former model are more close to the cut-off values as compared to the latter model. This significant difference between the two models indicated that the model with mediating role is better than the model that did not have the mediating role. Therefore, it can be concluded that performance appraisal affects employees’ job performance through its effects on employee development. Therefore, this hypothesis is also supported.

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Insert Figure 4 here

Insert Table VI here

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10. **RECOMMENDATIONS FOR FUTURE RESEARCH**

It is presumed that the current article provides some conceptual clarification about employee development vis-à-vis performance appraisal. It is also presumed that the current article would possibly increase the level of understanding the antecedents and consequences of employee development perceptions in quantitative terms. Future research should concentrate on the qualitative side of the issue to have a deep insight about the association. Besides, research can also be undertaken on perceived organizational support and organizational citizenship behavior. There is also greater likelihood that such studies be carried out in other organizational settings.

11. **RESEARCH LIMITATIONS**

The plethora of literature available on performance appraisal bespeaks the cruciality of the intervention. At the same time it is highly complex and multi-dimensional. Here the scope has, firstly, been limited only to one aspect—the mediating effects of perceived employee development on the relationships between performance
appraisal and job performance. Second restriction is the drawing of conclusion on the basis of sample data and not the whole population. The third restriction is an individual’s perceptions recorded and collected through questionnaire. Furthermore, the study is about faculty members in the Public Universities of Khyber Pakhtunkhwa, the results need to be circumscribed to its very domain. Again it is a social science research which is based on a researcher’s perspective and cannot be deemed something absolute. The researcher has drawn the conclusions in the light of the data analysis. Therefore, the conclusions be treated as a researcher’s contribution in this field and be accepted with all the shortcomings of a researcher’s perspective.

12. CONCLUSIONS
This study was carried out with the purpose to study the available literature and to develop a model which could be tested to examine the mediating role of employee development between performance appraisal and job performance. The results provided insight into the association. The study also supported the mediating role of employee development perceptions. The study, with the help of empirical evidence, indicated that there is great relationship between performance appraisal and employees' development perceptions. Therefore, it is believed that the results of this study would serve as a beacon light for the policy makers in better understanding the value of this intervention.

Though the target population of the current study was faculty members of public universities in Khyber Pakhtunkhwa, the results could be helpful in other public sector offices/organizations as public sector organizations throughout the country share somewhat the same organizational culture. If this is looked at seriously, there is greater likelihood that this would serve two broad and far reaching organizational purposes: increase the acceptability of the intervention; and improved output.

BIBLIOGRAPHY


**ANNEXURE**

*Names of Universities and Degree Awarding Institutes in the Khyber Pakhtunkhwa*

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**Degree Awarding Institutes Name**

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Figure 1: Hypothesized Research Model of Performance Appraisal, Employee Development, and Job Performance

Note: X1, X2, ………, Y10: observed variables or indicators

Figure 2: Theoretical Structural Model

Figure 3: Standardized path coefficients for the theoretical structural model
Figure 4: Comparing the two models
Table I. Descriptive Statistics and Reliability Estimates (N=295)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Appraisal</td>
<td>3.66</td>
<td>0.75</td>
<td>0.85</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>P.Aprl-1</td>
<td>3.57</td>
<td>1.05</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>P.Aprl-2</td>
<td>3.65</td>
<td>0.91</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>P.Aprl-3</td>
<td>3.63</td>
<td>0.94</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>P.Aprl-4</td>
<td>3.78</td>
<td>0.88</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>P.Aprl-5</td>
<td>3.68</td>
<td>0.91</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Employee Development</td>
<td>3.34</td>
<td>0.74</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.Dev-1</td>
<td>3.55</td>
<td>1.11</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>E.Dev-2</td>
<td>3.74</td>
<td>0.94</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>E.Dev-3</td>
<td>3.17</td>
<td>1.07</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>E.Dev-4</td>
<td>3.45</td>
<td>0.98</td>
<td>1.00</td>
<td>5.00</td>
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</tr>
<tr>
<td>E.Dev-5</td>
<td>3.25</td>
<td>1.02</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Job Performance</td>
<td>3.71</td>
<td>0.73</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J.Prfce-1</td>
<td>4.05</td>
<td>0.82</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>J.Prfce-2</td>
<td>3.70</td>
<td>0.98</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>J.Prfce-3</td>
<td>3.62</td>
<td>0.97</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>J.Prfce-4</td>
<td>3.54</td>
<td>0.91</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>J.Prfce-5</td>
<td>3.65</td>
<td>0.92</td>
<td>1.00</td>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

Table II Confirmatory Factor Analysis for Performance Appraisal

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely Standardized Loadings*</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. Aprl-1</td>
<td>0.72</td>
<td>0.75</td>
<td>0.05</td>
</tr>
<tr>
<td>P. Aprl-2</td>
<td>0.87</td>
<td>0.69</td>
<td>0.04</td>
</tr>
<tr>
<td>P. Aprl-3</td>
<td>0.71</td>
<td>0.73</td>
<td>0.05</td>
</tr>
<tr>
<td>P. Aprl-4</td>
<td>0.53</td>
<td>0.80</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Fit Statistics

Chi-square = 4.48 (df = 2, p = 0.10)
GFI = 0.99, CFI = 0.99
Standardized RMR = 0.02
RMSEA = 0.06

Note: *All t-value were significant at p < .05
### Table III: Confirmatory Factor Analysis for Employee Development

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely Standardized Loadings*</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Dev-1</td>
<td>0.77</td>
<td>0.70</td>
<td>0.05</td>
</tr>
<tr>
<td>E. Dev-2</td>
<td>0.66</td>
<td>0.73</td>
<td>0.05</td>
</tr>
<tr>
<td>E. Dev-3</td>
<td>0.56</td>
<td>0.75</td>
<td>0.06</td>
</tr>
<tr>
<td>E. Dev-4</td>
<td>0.72</td>
<td>0.71</td>
<td>0.05</td>
</tr>
<tr>
<td>E. Dev-5</td>
<td>0.48</td>
<td>0.77</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**Fit Statistics**

\[
\text{Chi-square} = 12.29 \ (df = 5, \ p = 0.03) \\
\text{GFI} = 0.98, \ \text{CFI} = 0.98 \\
\text{RMR} = 0.03 \\
\text{RMSEA} = 0.07
\]

Note: *All t-value were significant at \( p < .05 \)

### Table IV: Confirmatory Factor Analysis for Job Performance

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Completely Standardized Loadings*</th>
<th>Indicator Reliability</th>
<th>Error Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Perfce-1</td>
<td>0.59</td>
<td>0.84</td>
<td>0.04</td>
</tr>
<tr>
<td>J. Perfce-2</td>
<td>0.81</td>
<td>0.79</td>
<td>0.04</td>
</tr>
<tr>
<td>J. Perfce-3</td>
<td>0.81</td>
<td>0.80</td>
<td>0.04</td>
</tr>
<tr>
<td>J. Perfce-4</td>
<td>0.72</td>
<td>0.82</td>
<td>0.04</td>
</tr>
<tr>
<td>J. Perfce-5</td>
<td>0.68</td>
<td>0.82</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**Fit Statistics**

\[
\text{Chi-square} = 17.80 \ (df = 5, \ p = 0.003) \\
\text{GFI} = 0.98, \ \text{CFI} = 0.98 \\
\text{RMR} = 0.02 \\
\text{RMSEA} = 0.07
\]

Note: *All t-value were significant at \( p < .05 \)
<table>
<thead>
<tr>
<th>Model</th>
<th>Chi-square*</th>
<th>Df</th>
<th>RMSEA</th>
<th>Standardized RMR</th>
<th>GFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Model</td>
<td>383.34</td>
<td>77</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Measurement Model</td>
<td>178.41</td>
<td>73</td>
<td>0.07</td>
<td>0.04</td>
<td>0.92</td>
<td>0.94</td>
</tr>
<tr>
<td>Theoretical Model</td>
<td>185.30</td>
<td>76</td>
<td>0.07</td>
<td>0.05</td>
<td>0.91</td>
<td>0.93</td>
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</tbody>
</table>

R² for the Endogenous Latent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Development</td>
<td>0.60</td>
</tr>
<tr>
<td>Job Performance</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Note: * All chi-square tests were significant at p<.001

Table V Goodness-of-Fit for the Models

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 The greater the element of employee development in the performance appraisal, the greater the level of perceived employee development.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Employee development will be positively related to job performance.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Perceptions of employee development will mediate the relationships between performance appraisal and job performance.</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Table VI Summary of Hypotheses Testing