

Employee Performance at Workplace: Conceptual Model and Empirical Validation

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Abstract

The present study explores the concomitant areas for extending the scope of employee performance as a major domain of human resource (HR) effectiveness. We have interviewed researchers and corporate practitioners regarding their understanding of performance at workplace. On the basis of literature and feedback from academicians and industry professionals, a conceptual framework along with 42-item instrument on employee performance was proposed for empirical validation. The instrument obtained empirical views from experts on its proposed dimensions and statements. The initial analysis of content validity ratio (CVR) of the instrument had resulted in 38 items having CVR value of 0.49 and above with 75 percent acceptability from expert analysis. The retained items were taken for field survey. In total, 361 executives from Indian manufacturing and service organizations responded to the 38-item employee performance scale. Exploratory factor analysis revealed three distinct factors of employee performance that constitute the new scale: task performance, adaptive performance, and contextual performance (TAC). Reliability study on the sample reported significant internal consistency on the total scale ($\alpha = 0.80$) along with the three subscales (α ranging from 0.80 to 0.91). The prescribed framework offers an inclusive understanding of the nature and subtleties of employee performance. It is proposed that, HR managers and organizational behavior (OB) practitioners must use the insights from the explored factors to create and maintain a better work environment. In applied perspective, the proposed instrument and its corresponding findings are expected to provide insights for designing organization-specific policies for improving employee performance.

Keywords

Task performance, adaptive performance, contextual performance, India

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Introduction

Improvement of productivity is a central issue in present-day organizations. Productivity through job performance stands as a widely researched domain in literature of organizational behavior (OB) and human resource (HR) development (Bommer et al., 1995; Lawler, & Worley, 2006; Schiemann, 2009). Job performance as in the form of *performance assessment and management* is an essential part of effective HR management and it is a most sought-after developmental intervention in HR portfolio (Bateman, & Snell, 2007; Fay, & Luhrmann, 2004; Hellriegel et al., 2004). The term “employee performance” signifies individual’s work achievement after exerting required effort on the job which is associated through getting a meaningful work, engaged profile, and compassionate colleagues/employers around (Hellriegel, Jackson, & Slocum, 1999; Karakas, 2010). In order to utilize HR fully and augment organizational success, effective employee performance management system is imperative for a business organization. The performance-driven objective is expected to be aligned with the organizational policies so that the entire process moves away from being event-driven to become more strategic and a people-centric perspective (Jena, & Pradhan, 2014; London, 2003; Mone, & London, 2009).

Why do some organizations perform better than others and get listed as most preferred employer of the year? Earlier findings have suggested for deploying lucrative incentive schemes for motivating the employees toward meaningful job participation (Friedman, & Sunder, 1994; Roth, 1995; Smith, 1991; Sprinkle, 2000). At the same time, there are sufficient pragmatic evidences showing that financial offers have varying effects and may not be of much significance for escalating employee performance (Bonner et al., 2001; Camerer, & Hogarth, 1999; Gupta, & Shaw, 2014). This is due to the changing nature of work and rise of knowledge workers in post-globalization, which has defied the familiar views of individual work performance (Frese, & Fay, 2001; Ilgen & Pulakos, 1999). The question that arises over here is, if monetary incentives are incongruent on one’s effort and performance, then what are the other associated behavioral factors that influence enhancing employee performance. At the same time, with the changing organizational requirements, the ability to adapt stands as one of an important measure to assimilate in performance. Unfortunately, little efforts have been made to verify those subdued variables together empirically. One of the reasons may be that performance is a difficult concept to outline and measure.

The fundamental supposition of organizational psychology is that individual role and organizational goals are expected to be interdependent (Pfeffer, & Salancik, 1978). However, there is scarce attention on understanding their intra and interpersonal behavioral silos upon which members of the organization assesses its effectiveness. Therefore, it needs a shift of focus from fixed task-centric attitude to a wider cognizance on addressing varied roles of present-day organizations that influences employee performance (Fried, Levi, & Laurence, 2008; Ilgen, & Hollenbeck, 1991; Morgeson, & Humphrey, 2008). This suggests for conducting a rigorous research through clearly defining the measure of employee performance and developing appropriate instrument that can validate the underlying factors of the construct. To unfold this research gap, the present research article is structured in following sequences. We have reviewed literature on job performance and its different facets explored so far. Second, we have interviewed academicians and corporate practitioners across India regarding their understanding on the present state of employee performance at workplace. Finally, on the basis of the literature, feedback from academics and industry professionals, a heuristic framework was developed through placing relative importance on three performance components (i.e., task, adaptive, and contextual performance). Keeping these dimensions into account, a scale on employee performance was developed in form of a questionnaire. The proposed questionnaire has obtained empirical views from experts on its dimensions and statements. An exploratory factor analysis (EFA) along with the reliability and validity of the instrument was carried out.

The present study fine-tunes and provides a better understanding on the behavioral factors that influences employee performance. In applied perspective, the proposed instrument and its corresponding findings are expected to provide insights for designing organization-specific policies for improving employee performance.

Dimensions of Employee Performance

Performance is a multicomponent concept and on the fundamental level one can distinguish the process aspect of performance, that is, behavioral engagements from an expected outcome (Borman, & Motowidlo, 1993; Campbell et al., 1993; Roe, 1999). The behavior over here denotes the action people exhibit to accomplish a work, whereas the outcome aspect states about the consequence of individual's job behavior (Campbell, 1990). Apparently, in a workplace, the behavioral engagement and expected outcome are related to each other (Borman, & Motowidlo, 1993), but the comprehensive overlap between both the constructs are not evident yet, as the expected outcome is influenced by factors such as motivation and cognitive abilities than the behavioral aspect. Performance in the form of *task performance* comprises of job explicit behaviors which includes fundamental job responsibilities assigned as a part of job description. Task performance requires more cognitive ability and is primarily facilitated through task knowledge (requisite technical knowledge or principles to ensure job performance and having an ability to handle multiple assignments), task skill (application of technical knowledge to accomplish task successfully without much supervision), and task habits (an innate ability to respond to assigned jobs that either facilitate or impede the performance) (Conway, 1999). Therefore, the primary antecedents of task performance are the ability to do the job and prior experience. In an organizational context, task performance is a contractual understanding between a manager and a subordinate to accomplish an assigned task. Entrusted task performance is broken into two segments: technical-administrative task performance and leadership task performance. The expected job performance comprising of planning, organizing, and administering the day-to-day work through one's technical ability, business judgment and so on are called as technical-administrative task performance. Leadership task performance is labeled through setting strategic goals, upholding the necessary performance standards, motivating and directing subordinates to accomplish the job through encouragement, recognition, and constructive criticisms (Borman, & Brush, 1993; Tripathy, 2014). Borman, and Motowidlo (1997) defined job performance in the context of task performance as "effectiveness with which job occupants execute their assigned tasks, that realizes the fulfillment of organization's vision while rewarding organization and individual proportionately." Werner (1994) has synthesized the earlier propositions of task performance through relating it to organizational formal reward stating as "the demonstrated skill and behavior that influences the direct production of goods or service, or any kind of activities that provides indirect supports to organization's core technical processes."

An individual's ability to acclimatize and provide necessary support to the job profile in a dynamic work situation is referred to as *adaptive performance* (Hesketh, & Neal, 1999). Earlier studies have found that once the employees derive a certain amount of perfection in their assigned tasks, they try to adapt their attitude and behavior to the varied requirements of their job roles (Huang et al., 2014; Pulakos et al., 2000). An effective adaptive performance necessitates employees' ability to efficiently deal with volatile work circumstances (Baard, Rench, & Kozlowski, 2014), for example, technological transformations, changes in one's core job assignment, restructuring of organization and so on. Evolutions of various new occupations as an offshoot of technological innovation need employees to engage in fresh learning and get oneself adaptable with changes in an efficient manner (Griffin, Parker, & Mason, 2010; Hollenbeck, LePine, & Ilgen, 1996). The employees are also expected to adjust their interpersonal behavior in such

changed circumstances to work successfully with a wide range of peers and subordinates. In the context of wholesome work performance, Griffin, Neal, and Parker (2007) cited that job proficiency may aid for task performance, but adaptability and proactiveness to one's job role is important to address uncertain business environments.

Along with the task and adaptability, efforts have been carried out toward ascertaining the significance of non-job components of performance to create a better workplace (Austin, & Villanova, 1992; Viswesvaran, & Ones, 2000). Industrial psychologists have referred such non-job components as organizational citizenship behavior (OCB) or contextual performance that refers to voluntary actions of employees (Bateman, & Organ, 1983) that benefit employers intangibly. *Contextual performance* is a kind of prosocial behavior demonstrated by individuals in a work set-up. Such behaviors are expected of an employee but they are not overtly mentioned in one's job description. These kind of unstated expectations are called prosocial behavior or extra role behavior. Brief, and Motowidlo (1986) defined it as a

behavior that is (i) accomplished by a member of an organization, (ii) which is directed towards an individual, group, or organization with whom the member interacts while carrying out his or her organizational role, and (iii) finally such behavior is performed with the intention of encouraging the betterment of individual, group, or organization towards which it is directed.

Supporting the aforesaid ideology, many prominent researchers in this field have advocated that expected job performance carries two vital dimensions; one as the work required by an organization concomitant to one's role and the other one as the discretionary work behavior (LePine, Erez, & Johnson, 2002; Van Dyne, & Lepine, 1998). Impressing on the importance of voluntary work behavior or nontask performance, later psychologists have coined it as contextual performance which connotes helping others to adapt with the varied job roles (Borman, & Motowidlo, 1993, 1997; Motowidlo, & Van Scotter, 1994; Motowidlo, Borman, & Schmit, 1997). Bergeron (2007) recommends that contextual performance should consist of multiple "subdimensions" such as teamwork, allegiance, and determination.

It is believed that an engaged employee works with a sense of passion which leads to translation into not only high performance but extra role behavior as well (Kahn, 1990). The contextual performance is elaborated on the ground of "feeling and viewpoint" that employee embraces about their colleagues, which is termed as esprit-de-corps (teamspirit). A kind of fellow feeling gets intensified through teamspirit, wherein employees are able to share their issues and problems willingly and freely with each other within the organization (Jaworski, & Kohli, 1993). Esprit-de-corps is an excellent endeavor for deriving organizational success (Jones et al., 2007; William, Swee-Lim, & Cesar, 2005) and earlier researchers in this context have advocated that growth in teamspirit within an organization results in better employee performance and a happier workplace (Alie, Beam, & Carey, 1998; Boyt, Lusch, & Naylor, 2001; Cohen, & Bailey, 1999). Contextual performance is a kind of attitude like volunteering for extra work, helping others in solving difficult task, upholding enthusiasm at work, cooperating with others at the time of need, sharing critical resources and information for organizational development, abiding by the prescribed rules and regulations, and supporting organizational decisions for a better change (Coleman, & Borman, 2000; Motowidlo, & Schmit, 1999). This kind of behavior contributes for creating a stimulating culture and climate of the organization which aids in achieving individual productivity and organizational effectiveness. For selecting and inducting the right personnel in organizations, introducing personality tests and group discussion for measuring a prospective candidate's ability for contextual performance along with the efficiency tests (ability and experience tests) to measure their task performance is proposed.

Several frameworks and taxonomies have been developed in the last 15 years, keeping these aspects in mind, to measure employee performance. Table 1 identifies approaches to work performance and lists the key constructs.

Table 1. Identification of Key Constructs on Employee Performance

Authors	Aspects of Employee Performance
Kennedy, Laskk, & Burns (2001)	Work role empowerment, Behavior toward customers, and Teamwork
Borman et al. (2001)	Conscientious initiative and Personal and organizational support
McCook (2002)	Perceived effort, Satisfaction with coworkers, and Opportunity for reward
Johnson (2003)	Job performance and Contextual performance
Parker, Williams, & Turner (2006)	Proactive work behavior; Problem-solving, and Idea implementation
Griffin et al. (2007)	Individual task proficiency, Individual task adaptivity, Individual task proactivity, Team member task proficiency, Team member task adaptivity, Team member task proactivity, Organizational task proficiency, Organizational task adaptivity, and Organizational task proactivity
Schepers (2011)	Work performance and Disciplined effort
Audrey, & Patrice (2012)	Creativity, Reactivity in the face of difficulties, Interpersonal adaptableness, Training efforts, and Handling work related stress
Koopmans, Berhnaards, Hildebrandt, Vet, & Berk (2014)	Task performance, Contextual performance, and Counterproductive work behavior

Source: Authors' findings.

It is understood from all these earlier studies that performance contains a cluster of behaviors that results from one's technical knowledge (knowledge of specifics in one's area of expertise), skill and adaptability (knowing the process to perform and executing it according to circumstances), and interpersonal relations (building teamspirit, allegiance, and interconnectedness). It is expected that these kinds of behaviors explained in bits and pieces by earlier models may lead to distal organizational outcomes in the form of productivity enhancement, customer satisfactions, organizational development and growth and so on. Given the increased importance to task and contextual and adaptive performance, more empirical research is warranted. A triarchy model covering the expected distal outcomes of employee performance is proposed in Figure 1.

Development of the Scale

In the development of a parsimonious scale to assess employee performance, we have followed psychometric theory in scale development process (Gerbing, & Anderson, 1988; Nunnally, & Berstein, 1994). The first step we have taken is to examine the available literature and the associated scales on organizational performance, job performance, or employee performance. Content analysis of the available transcripts has resulted in nine different factors which are found to be related with the construct of employee performance. The factors are job role behavior, conscientious initiative, disciplined effort, dealing with uncertain and unpredictable work situation, interpersonal adaptability, handling emergencies and crises, proactivity, citizenship performance, and satisfaction with coworkers. The 42 items that correspond to our proposed dimensions were developed observing these factors. The developed items were then classified and conceptually grouped into three distinct

dimensions: task performance (e.g., “I use to maintain high standard of work”), adaptive performance (e.g., “I use to keep myself updated with new skills and knowledge that help me to quickly adapt to changes in my core jobs”), and contextual performance (e.g., “I use to guide my new colleagues beyond my job purview”). These dimensions along with their corresponding statements were cross-checked through discussion with subject experts and HR practitioners who are familiar with performance measurement and management. Since one of our objectives was to develop a measure that can be used in a variety of workplace settings, we have tried to eliminate jargons and complex terms defining the dimensions and its underlying statements.

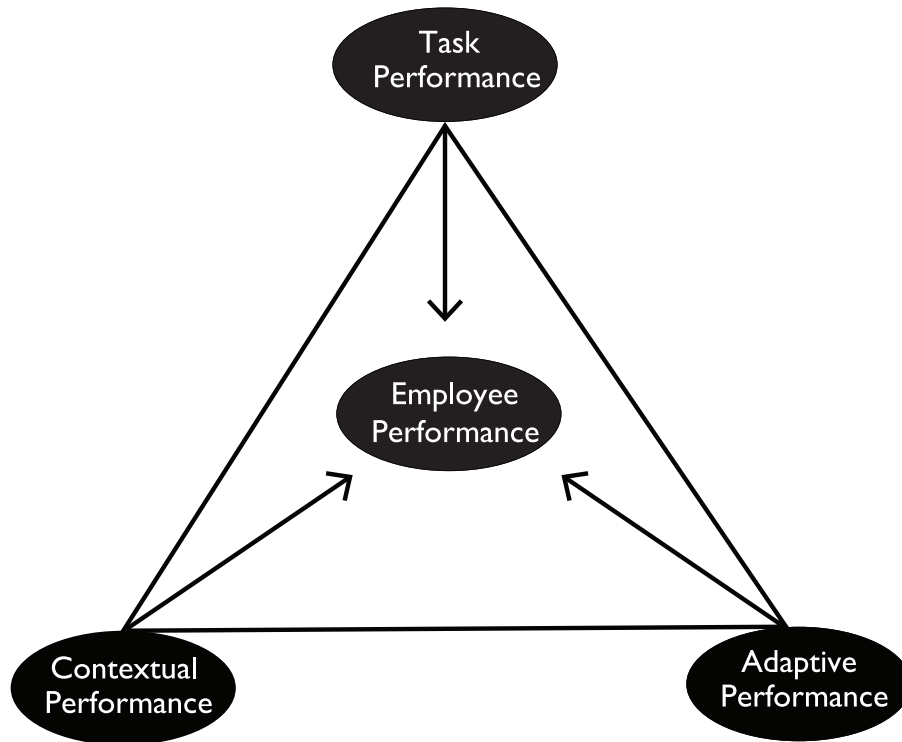


Figure 1. The Triarchy Model of Employee Performance

Source: Authors' own work.

The initial 42-item pools reviewed by subject matter experts, academicians, and senior HR practitioners are to ensure content validity. Primarily, they have been asked to evaluate the instrument through examining its representativeness, comprehensiveness, and clarity (Miles, & Huberman, 1994). To facilitate their judgments, the items were categorized under their nominated domain, and operational definitions of the dimensions were provided for their understanding. The content experts were requested to specify the degree to which they identify each individual item as a representative of the subdimensions and dimension as a whole. This was carried out by circling the most appropriate number for each statement in a 5-point rating scale.

To assess the content expert judgments identified for our proposed items, we have carried out content validity ratio (CVR) proposed by Lawshe (1975). This was calculated in the following way:

$$\text{CVR} = \frac{-n_e(N/2)}{N/2}$$

where n_e is the sum of members specifying an item as “essential,” and N is the total number of experts who participated in the survey to examine the comprehensiveness and clarity of the items and dimensions of a proposed scale. Lawshe (1975) has prescribed the thumb rule for achieving the minimum CVR value of 0.49 from 15 expert members for considering an item as a component of a scale. As an outcome of our analysis on employee performance dimensions, four items were discarded due to disagreement among experts and finally 38 items with their corresponding three dimensions were retained in the scale having 75 percent of agreement among experts with a CVR value higher than 0.49 for further analysis.

Exploratory Study

The aim of our research is to test and validate a new measurement tool on employee performance. Therefore, a pilot study of the 38 items retained through CVR was carried out. The purpose of the pilot study is to derive the extent to which the proposed scale provides data sufficiency and satisfies the objective of the research (Hunt, Sparkman, & Wilcox, 1982). Earlier research findings have proposed an ideal sample size of 150 observations for obtaining an accurate result through EFA as long as its item’s inter-correlations are reasonably strong (Guadagnoli, & Velicer, 1988; Hinkin, 1995).

For this study, we have used convenience and snowball sampling for obtaining a good amount of sample size from professionals employed in Indian manufacturing and service industries. To increase the diversity of our survey, we have solicited through google survey, LinkedIn, personal e-mails, and have also requested our known respondents to forward the survey solicitation email to their contacts who are executives employed in our desired organizations. After one and half month, we received 391 responses. Item missing cases were deleted. In total, 361 cases were finally used for statistical analysis. Summary of sample data with different sources and its demographic features of the sample populations are provided in Tables 2 and 3.

Table 2. Summary of Sample Data with Different Sources

Type of Source	No. of Respondents (%)
1. Google survey	128 (32.1)
2. LinkedIn	57 (12.2)
3. Personal e-mails	44 (12.2)
4. Personal Survey during office hours	132 (33.5)

Source: Authors’ calculations using primary data.

Table 3. Summary of Sample Characteristics

Demographic Characteristics Sample (%)
1. Gender
Male 82.51%
Female 17.49%

(Table 3 Continued)

(Table 3 Continued)

Demographic Characteristics Sample (%)	
2. Total Years of Experience	
Less than 5 years	13.66%
5 years–15 years	62.02%
15 years or more	24.32%
3. Managerial Level	
Junior	49.18%
Middle	28.69%
Senior	22.13%
4. Organization	
Public sector establishments	67.76%
Private sector establishments	32.24%

Source: Authors' calculations using primary data.

Results

The measurement model after CVR of employee performance comprised three latent dimensions with their corresponding indicators: task performance (12 indicators), adaptive performance (12 indicators), and contextual performance (14 indicators). We have used SPSS 20.0 platform for conducting EFA. This has been aided through principal component extraction and varimax rotation primarily to assess internal consistency of the scale as a whole and the dimensional weightage of the construct (Costello & Osborne, 2005; Fabrigar et al., 1999). Hair et al. (2006) recommend that the number of factors may be decided through looking into (a) the percentage of explained variance, (b) its corresponding eigenvalues, and finally, (c) interpretability of the factor structure. The items with their highest loadings are supposed to be retained. The findings of EFA representing respective factor loadings of each dimension are provided in Table 4.

Table 4. Results of Principal Component Analysis with Varimax Rotation (N = 361): Exploratory Factor Analysis

Scale Items	Factors (KMO = .876) Factor loadings		
	1	2	3
Task Performance			
TP9: I use to maintain high standard of work.	.774		
TP14: I am capable of handling my assignments without much supervision.	.734		
TP11: I am very passionate about my work.	.731		
TP10: I know I can handle multiple assignments for achieving organizational goals.	.707		
TP8: I use to complete my assignments on time.	.648		
TP12: My colleagues believe I am a high performer in my organization	.619		
Adaptive Performance			
API1: I use to perform well to mobilize collective intelligence for effective team work.		.857	

(Table 4 Continued)

(Table 4 Continued)

Scale Items	Factors (KMO = .876) Factor loadings		
	1	2	3
AP3: I could manage change in my job very well whenever the situation demands.		.847	
AP9: I can handle effectively my work team in the face of change.		.805	
AP6: I always believe that mutual understanding can lead to a viable solution in organization.		.763	
AP8: I use to lose my temper when faced with criticism from my team members. (R)		.749	
AP2: I am very comfortable with job flexibility.		.687	
AP12: I use to cope well with organizational changes from time to time.		.612	
Contextual Performance			
CP5: I used to extend help to my co-workers when asked or needed.			.896
CP1: I love to handle extra responsibilities.			.833
CP8: I extend my sympathy and empathy to my co-workers when they are in trouble.			.752
CP4: I actively participate in group discussions and work meetings.			.746
CP7: I use to praise my co-workers for their good work.			.735
CP2: I derive lot of satisfaction nurturing others in organization.			.716
CP3: I use to share knowledge and ideas among my team members.			.705
CP6: I use to maintain good coordination among fellow workers.			.687
CP10: I use to guide new colleagues beyond my job purview.			.676
CP11: I communicate effectively with my colleagues for problem solving and decision making.			.578
Variance explained by dimension (%)	12.30	16.67	23.54
Total variance explained (%)		52.53	
Sphericity Bartlet Test		4161.25	
df		300	
Sign.		.000	

Source: Authors' calculations using primary data.

Notes: (R) signifies as: reverse scored item; KMO (Kaiser-Mayer-Olkin).

The rotated factor loading matrix derived from our analysis was closely examined. While deducing the rotated factor pattern, items with factor loading of 0.50 or greater need to be considered as a part of the proposed dimension (Moore, & Benbasat, 1991). Using this criterion, we have examined the rotated pattern matrix of the employee performance dimensions. Initially, the principal component analysis had yielded four factors; with few of the statements being cross-loaded on multiple factors, for example, "I can very well adapt to changes in my core job roles" (component of adaptive performance) was deleted due to overlapping among the components. Some of the statements have been eliminated as they

have got loading with less than 0.50, for example, “good work is always rewarded in my organization” (component of task performance), “I am considered to be workaholic for my organization” (component of task performance), and “I like challenging task at work” (component of contextual performance). Therefore, indicators with highest loading were retained and those which did not affect the content validity were deleted. The resulting analysis yielded three factors with 23 indicators and accounted for 52.5 percent of the variance (see Table 4). Table 5 reported the item total correlation of the scale, wherein the prescribed threshold for adjusted item total correlation for the retained item of the scale was found to be more than 0.30 and hence, supporting item-internal consistency (De Vellis, 2003). Table 6 states the psychometric property of the finalized scale along with its underlying dimensions. Interitem correlations are found within the range of 0.21 to 0.39, with its corresponding r-square from 0.26–0.43. This provides sufficient evidence of adequate convergent validity of employee performance scale (EPS). To reconfirm the convergent validity of the scale, we have followed the following thresholds: standardized loading needs to be greater than 0.50 for all the dimensions (values with 0.70 are excellent) and average variance extracted (AVE) is expected to be more than 0.50 (Hair et al., 2010). The findings of our analysis met the prescribed criteria having the composite reliability (CR) value for each factor as greater than 0.70 (TP = 0.86, AP = 0.91, and CP = 0.94; see Table 7). The AVE value for each dimension was found to be more than 0.50 suggesting that EPS indicates adequate convergent validity. For measuring the discriminant validity, we have followed the recommendations of Hair et al. (2010). The dimensions of our proposed scale show sufficient evidence of discriminant validity, wherein maximum shared variance (MSV) and average shared variance (ASV) values were found to be less than the computed AVE, and the square root of AVE was higher than the interconstruct correlation values (see Table 7).

Table 5. Item Total Correlations of EPS

Items	Item Total Correlations
TP9	0.41
TP14	0.38
TP11	0.46
TP10	0.44
TP8	0.41
TP12	0.39
AP11	0.44
AP3	0.44
AP6	0.42
AP8	0.36
AP2	0.34
AP12	0.41
CP5	0.48
CP1	0.45
CP8	0.42
CP4	0.41
CP7	0.33

(Table 5 Continued)

(Table 5 Continued)

Items	Item Total Correlations
CP2	0.47
CP3	0.45
CP6	0.41
CP10	0.39
CPII	0.41

Source: Authors' calculations using primary data.

Table 6. Psychometric Properties of Finalized EPS

Variables	Mean	SD	r	R ²	α (Dimension Wise)	α (Total Scale)
TP			0.80			
TP9	3.95	0.58	0.39			
TP14	3.78	0.62	0.42			
TP11	3.77	0.60	0.34			
TP10	3.91	0.64	0.29	0.34		
TP8	3.83	0.57	0.26			
TP12	3.88	0.58	0.35			
AP			0.88			
APII	4.03	0.56	0.38			
AP3	3.82	0.68	0.31			
AP9	3.84	0.71	0.33	0.43		0.80
AP6	3.86	0.63	0.28			
AP8	3.80	0.72	0.36			
AP2	3.89	0.69	0.29			
API2	3.90	0.59	0.21			
CP			0.91			
CP5	3.88	0.62	0.38			
CPI	3.78	0.70	0.31			
CP8	3.64	0.71	0.33			
CP4	3.92	0.57	0.27			
CP7	3.78	0.72	0.31			
CP2	3.75	0.68	0.24	0.26		
CP3	3.73	0.56	0.24			
CP6	3.93	0.66	0.31			
CP10	3.67	0.64	0.31			
CPII	3.85	0.58	0.28			

Source: Authors' calculations using primary data.

Table 7. Convergent and Discriminant Validity among the Dimensions of EPS

Dimensions	CR	AVE	MSV	ASV	TP	AP	CP
TP	0.86	0.69	0.33	0.34	0.76		
AP	0.91	0.76	0.37	0.34	0.59	0.68	
CP	0.94	0.72	0.33	0.35	0.66	0.69	0.71

Source: Authors' calculations using primary data.

Notes: CR: composite reliability; AVE: average variance extracted; MSV: maximum shared variance; ASV: average shared variance; TP: task performance; AP: adaptive performance; CP: contextual performance.

The interdimensional correlations among the three dimensions of employee performance are reported in Table 8. Additionally, reliability findings through Cronbach's alpha were found to be satisfactory for individual dimensions (ranging from 0.80 to 0.91) with the total scale of 0.80. This is above the prescribed level of 0.70 as suggested by Nunnally (1978).

Table 8. Mean and SD and Interdimensional Correlation of Employee Performance

Dimension	Mean	SD	1	2	3
TP	4.09	0.56	1		
AP	3.95	0.61	0.68**	1	
CP	4.14	0.56	0.73**	0.61**	1

Source: Authors' calculations using primary data.

Note: **Correlation is significant at the 0.01 level (2-tailed).

The EFA and psychometric property assessment of the dimensions were followed by testing through a structural model linking the proposed three dimensions of employee performance. Structural equation modeling (SEM) is a kind of confirmatory approach to analyze a structural model and is considered as a multivariate statistical methodology. Multiple interrelated dependence relationships are accommodated in a single SEM (Hair et al., 2006) allowing the researcher to model complex relationships that are not possible with other multivariate techniques. AMOS 20.0 was used for the analysis. We have used maximum likelihood estimation methods with the input for each analysis by understanding the covariance matrix of the items. The absolute goodness-of-fit of the models were evaluated using absolute and relative indices (Jöreskog, & Sörbom, 1993). The absolute goodness-of-fit indices (GFI) were studied through considering (a) the χ^2 goodness-of-fit statistic, (b) the root mean square error of approximation (RMSEA), (c) the GFI, and (d) the adjusted goodness-of-fit index (AGFI). The loading coefficients of all the observed indicators on the hypothesized employee performance dimensions were found to be significant at 0.1 levels. The fit indices of each dimension are stated in Table 9. All the values derived from the analysis were found to fall in an ideal fit zone.

Table 9. Fit-indices for the Dimensions of Employee Performance

Sl.No.	Factors of Employee Performance	No. of Indicators	GFI	AGFI	CFI	NFI	RMSEA
1	TP	6	0.942	0.975	0.968	0.954	0.066
2	AP	7	0.978	0.954	0.988	0.978	0.058
3	CP	10	0.956	0.929	0.977	0.960	0.059

Source: Authors' calculations using primary data.

Note: NFI (Normed Fit Index).

The full model has attained an acceptable model fit at $\chi^2 = 362.128$, $df = 225$, $p = 0.00$, (Comparative Fit Index) $CFI = 0.964$, and $RMSEA = 0.041$. Hence, the proposed three factors of employee performance are independently validated and the model fit is reported with unstandardized path coefficients. As seen in Figure 2, the measures indicated very good fit having indicators at high values with its corresponding residual error values being small. The indicators and its corresponding dimension support the representation of employee performance as a second order model. We may conclude that EPS can be characterized as a three dimensional construct comprising of TAC.

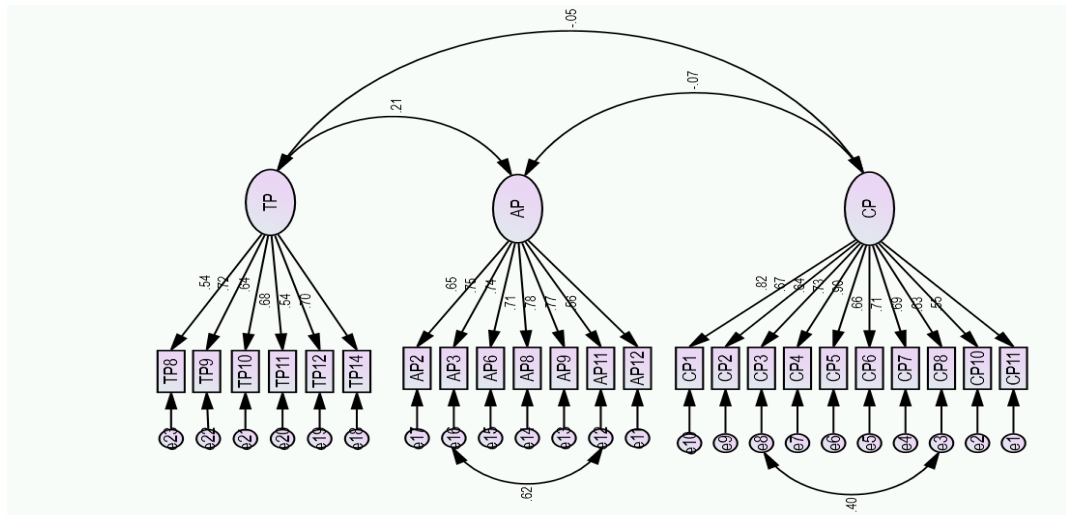


Figure 2. The final model with unstandardized path coefficient

Source: Authors' calculations using primary data.

Note: *** $p = 0.001$.

The study reveals positive associations between the demographic variables (age, gender, years of experience in present organization, managerial levels) and employee performance. The standardized canonical discriminant function coefficients (see Table 10) revealed that years of experience in the present organization irrespective of what kinds of organizations are the best predictor of employee performance having the coefficient of 0.81 followed by age with coefficient value of 0.77, managerial levels (0.67), and gender (0.21).

Table 10. Standardized Canonical Discriminant Function Coefficient of Demographic Variables on EPS

Demographic Profiles	Coefficient Values
Age	0.77
Gender	0.21
Years of Experience	0.81
Managerial Levels	0.67

Discussion, Limitations, and Scope for Future Research

The study has used rigorous research methods to present some of the foremost empirical data in placing the extrapolative validity on the proposed dimensions of employee performance. The instrument has developed a measure of employee performance which was validated in the context of Indian manufacturing and service industries. There has been sparse empirical research carried out for developing a measure on employee performance. We have tried to develop a tool on performance management through assimilating the literature available in the subject and by consulting domain experts. The accepted procedures for development of an instrument were followed. The article carries a number of implications and research directions for academicians and business practitioner for investigating the influence of employee performance on deriving HR effectiveness. The prescribed framework offers an all-inclusive understanding of the nature and subtleties of employee performance and the causes for enhancing employee performance. It is proposed that, HR managers and OB practitioners must use the insights from the explored factors to create and maintain a better work environment.

EPS is a comprehensive, and easy to administer psychometric measure that embraces much potential for use in OB and HR research and practice. However, construct validity is an important impediment for development of a scientific scale of this nature. Construct validity basically accrues over time and through many studies. The scale requires further fine-tuning in order to increase its level of reliability and ability to elucidate the variance associated with the constructs they measure in different contexts. Future research is warranted to examine, with randomly selected sample, the generalizability and validity of the model. It is also proposed to cross-validate the instrument in different cultures with multiple methods that include views from immediate superiors, focused group discussion with peer groups' and one-to-one employee interviews. To develop a sound and testable theory on the construct of employee performance, the moderators, mediators, and other associated variables need to be identified by future researchers to extend its scope and coverage.

References

- Alie, R.E., Beam, H., & Carey, T.A. (1998). The use of teams in an undergraduate management program. *Journal of Management Education*, 22(6), 707–719.
- Audrey, C.V., & Patrice, R. (2012). Adaptive performance: A new scale to measure individual performance in organizations. *Canadian Journal of Administrative Sciences*, 29(2), 280–293.
- Austin, J.T., & Villanova, P. (1992). The criterion problem: 1917–1992. *Journal of Applied Psychology*, 77(1), 836–874.
- Baard, S.K., Rench, T.A., & Kozlowski, S.W.J. (2014). Performance adaptation: A theoretical integration and review. *Journal of Management*, 40(2), 48–99.
- Bateman, T.S., & Organ, D.W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee “citizenship.” *Academy of Management Journal*, 26(1), 587–595.
- Bateman, T.S., & Snell, S.A. (2007). *Management: Leading & collaborating in a competitive world*. Boston: McGraw-Hill.
- Bergeron, D.M. (2007). The potential paradox of organizational citizenship behavior: Good citizens at what cost? *Academy of Management Review*, 32(4), 1078–1096.
- Bommer, W.H., Johnson, J.L., Rich, G.A., Podsakoff, P.M., & MacKenzie, S.B. (1995). On the interchangeability of objective and subjective measures of employee performance. *Personnel Psychology*, 48(1), 587–605.
- Bonner, S.E., Hastie, R., Young, S.M., Hesford, J., & Gigone, D. (2001). *Effects of monetary incentives on the performance of a cognitive task: The moderating role of skill*. (Working Paper). University of Southern California. Los Angeles, California.
- Borman, W.C., & Brush, D.H. (1993). More progress toward a taxonomy of managerial performance requirements. *Human Performance*, 6(1), 1–21.

- Borman, W.C., & Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. Borman (Eds), *Personnel selection in organizations* (pp. 71–98). New York: Jossey-Bass.
- . (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*(2), 99–109.
- Borman, W.C., Buck, D.E., Hanson, M.A., Motowidlo, S.J., Stark, S., & Drasgow, F. (2001). An examination of the comparative reliability, validity, and accuracy of performance ratings made using computerized adaptive rating scales. *Journal of Applied Psychology*, *86*(2), 965–973.
- Boyt, T., Lusch, R.F., & Naylor, G. (2001). The role of professionalism in determining job satisfaction in professional services: A study of marketing researchers. *Journal of Service Research*, *3*(4), 321–330.
- Brief, A.P., & Motowidlo, S.J. (1986). Prosocial organizational behaviors. *Academy of Management Review*, *11*(1), 710–725.
- Camerer, C.F., & Hogarth, R.M. (1999). The effects of financial incentives in experiments: A review and capital-labor-production framework. *Journal of Risk and Uncertainty*, *19*(4), 7–42.
- Campbell, J.P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M.D. Dunnette & L.M. Hough (Eds), *Handbook of industrial and organizational psychology* (pp. 687–732). Palo Alto, CA: Consulting Psychologists Press.
- Campbell, J.P., McCloy, R.A., Oppler, S.H., & Sager, C.E. (1993). A theory of performance. In C.W. Schmitt & W.C.A. Borman (Eds), *Personnel selection in organizations* (pp. 35–70). San Francisco, CA: Jossey Bass.
- Cohen, S.G., & Bailey, D.E. (1999). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, *23*(3), 239–290.
- Coleman, V.I., & Borman, W.C. (2000). Investigating the underlying structure of the citizenship performance domain. *Human Resource Management Review*, *10*(2), 24–44.
- Conway, J.M. (1999). Distinguishing contextual performance from task performance for managerial jobs. *Journal of Applied Psychology*, *84*(3), 3–13.
- Costello, A.B., & Osborne, J.W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment*, *10*(2), 1–9.
- De Vellis, R. (2003). *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Fabrigar, L.R., Wegener, D.T., MacCallum, R.C., & Strahan, E.J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, *4*(3), 272–299.
- Fay, D., & Luhrmann, H. (2004). Current themes in organizational change. *European Journal of Work and Organizational Psychology*, *13*(2), 113–119.
- Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. In B.M. Staw & R.L. Sutton (Eds), *Research in organizational behavior* (pp. 133–187). Greenwich, CT: JAI Press.
- Friedman, D., & Sunder, S. (1994). *Experimental methods: A primer for economists*. New York: Cambridge University Press.
- Fried, Y., Levi, A.S., & Laurence, G. (2008). Motivation and job design in the new world of work. In C. Cooper & C. Cartwright (Eds), *The Oxford handbook of personnel psychology* (pp. 586–611). Oxford: Oxford University Press.
- Gerbing, D.W., & Anderson, J.C. (1993). Monte Carlo evaluations of goodness-of-fit indices for structural equation models. In K.A. Bollen & J.S. Long (Eds), *Testing structural equation models* (pp. 40–65). CA: SAGE Publications Inc.
- . (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, *25*(2), 186–192.
- Griffin, M., Parker, S., & Mason, C. (2010). Leader vision and the development of adaptive and proactive performance: A longitudinal study. *Journal of Applied Psychology*, *95*(3), 174–182.
- Griffin, M.A., Neal, A., & Parker, S.K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, *50*(2), 327–347.
- Gupta, N., & Shaw, J.D. (2014). Employee compensation: The neglected area of HRM research. *Human Resource Management Review*, *24*(1), 1–4.
- Guadagnoli, E., & Velicer, W.F. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin*, *103*(1), 265–275.

- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice-Hall Inc.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hellriegel, D., Jackson, S.E., & Slocum, J.W. (1999). *Management* (8th ed.). Cincinnati, Ohio: South-Western College.
- Hellriegel, D., Jackson, S.E., Slocum, J., Staudé, G., Amos, T., Klopper, H.B. Louw, L., Louw, M., Oosthuizen, T., Perks, S., Staude, G., & Zindiwe, S. (2004). *Management*. Cape Town, South Africa: Oxford University Press.
- Hesketh, B., & Neal, A. (1999). Technology and performance. In D.R. Ilgen & E.D. Pulakos (Eds), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 21–55). San Francisco, CA: Jossey-Bass.
- Hinkin, T.R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967–988.
- Hollenbeck, J.R., LePine, J.A., & Ilgen, D.R. (1996). Adapting to roles in decision making teams. In K.R. Murphy (Ed.), *Individual differences and behavior in organizations*. San Francisco, CA: Jossey-Bass.
- Huang, J.L., Ryan, A.M., Zabel, K.L., & Palmer, A. (2014). Personality and adaptive performance at work: A meta-analytic investigation. *Journal of Applied Psychology*, 99(2), 162–179.
- Hunt, S.D., Sparkman, R.D. Jr. and Wilcox, J.B. (1982). The Pretest in Survey Research: Issues and Preliminary Findings. *Journal of Marketing Research*, 19 (May), 269–73.
- Ilgen, D.R., & Hollenbeck, J.R. (1991). The structures of work: Job design and roles. In Dunnette M.D., Hough L.M., (Eds), *Handbook of industrial and organizational psychology* (pp. 165– 207). Palo Alto, CA: Consulting Psychologists Press.
- Ilgen, D.R., & Pulakos, E.D. (1999). Employee performance in today's organizations. In D.R. Ilgen & E.D. Pulakos (Eds), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 21–55). San Francisco, CA: Jossey-Bass.
- Jaworski, B.J., & Kohli, A.K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(3), 53–70.
- Jena, L.K., & Pradhan, R.K. (2014). Deliverables towards HR Sustainability: A conceptual Review. *European Journal of Business Management*, 6(23), 95–102.
- Jöreskog, K., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Chicago, IL: Scientific Software International Inc.
- Jones, A., Richard, B., Paul, D., Sloane, K., & Peter, F. (2007). Effectiveness of teambuilding in organization. *Journal of Management*, 5(3), 35–37.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(1), 692–724.
- Karakas, F. (2010). Spirituality and performance in organizations: A literature review. *Journal of Business Ethics*, 94(1), 89–106.
- Kennedy, K.N., Lassk, F.G., & Burns, M.B. (2001). A scale assessing team-based job performance in a customer-oriented environment. *Journal of Quality Management*, 6(1), 257–273.
- Koopmans, L., Berhnaards, C.M., Hildebrandt, V.H., Vet, H.C.W., & Berk, A.J. (2014). Construct validity of the individual work performance questionnaire. *Journal of Occupational and Environmental Medicine*, 56(3), 154–171.
- Lawler, E.E., & Worley, C.G. (2006). *Built to change: How to achieve sustained organizational effectiveness*. New York: Wiley.
- Lawshe, C.H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(2), 563–575.
- LePine, J.A., Erez, A., & Johnson, D.E. (2002). The nature of dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87(1), 52–65.
- London, M. (2003). *Job feedback: Giving, seeking and using feedback for performance improvement* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Mone, E.M., & London, M. (2009). *Employee engagement through effective performance management: A manager's guide*. New York: Routledge.

- McCook, K.D. (2002). *Performance management system in organizations* (Unpublished doctoral dissertation). Baton Rouge, LA, US: Louisiana State University and Agricultural and Mechanical College.
- Miles, M.B., & Huberman, M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Beverly Hills, CA: SAGE Publications.
- Moore, G.C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3), 173–191.
- Morgeson, F.P., & Humphrey, S.E. (2008). Job and team design: Toward a more integrative conceptualization of work design. In J. Martocchio (Ed.), *Research in personnel and human resource management* (pp. 39–92). Bingley: Emerald Group Publishing.
- Motowidlo, S.J., & Schmit, M.J. (1999). *Performance assessment in unique jobs*. In D.R. Ilgen & E.D. Pulakos (Eds), *The changing nature of performance* (pp. 56–86). San Francisco, CA: Jossey-Bass.
- Motowidlo, S.J., & Van Scotter, J.R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79(2), 475–480.
- Motowidlo, S.J., Borman, W.C., & Schmit, M.J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10(1), 71–83.
- Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Nunnally, J.C., Jr, & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill Book Company.
- Parker, S.K., Williams, H.M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91(3), 636–652.
- Pfeffer, J., & Salancik, G.R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Roe, R.A. (1999). Work performance: A multiple regulation perspective. In C.L. Cooper & I.T. Robertson (Eds), *International review of industrial and organizational psychology* (pp. 231–335). Chichester: Wiley Publishers.
- Roth, A.E. (1995). Introduction to experimental economics. In A.E. Roth & J.H. Kagel (Eds), *The handbook of experimental economics* (pp. 103–109). Princeton, NJ: Princeton University Press.
- Schepers, J.M. (2011). The construction and evaluation of a generic work performance questionnaire for use with administrative and operational staff. *SA Journal of Industrial Psychology*, 34(1), 10–22.
- Schepers, J., Jong, A.D., Ruyter, K.D., & Wetzels, M. (2011). Fields of gold: Perceived efficacy in virtual teams of field service employees. *Journal of Service Research*, 14(3), 372–389.
- Schiemann, W.A. (2009). Aligning performance management with organizational strategy, values and goals. In J.W. Smither & M. London (Eds), *Performance management: Putting research into action*. San Francisco, CA: Jossey-Bass.
- Smith, V.L. (1991). Rational choice: The contrast between economics and psychology. *Journal of Political Economy*, 99(2), 877–897.
- Sprinkle, G.B. (2000). The effect of incentive contracts on learning and performance. *The Accounting Review*, 75(1), 299–326.
- Tripathy, S.P. (2014). Impact of motivation on job performance of contractual staff in Devi Ahilya University Indore (M.P.). *Paripex-Indian Journal of Research*, 3(5), 1–5.
- Viswesvaran, C., & Ones, D.S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, 8(4), 216–226.
- Werner, J. (1994). Dimensions that make a difference: Examining the impact of in-role and extra-role behaviors on supervisory ratings. *Journal of Applied Psychology*, 79(3), 98–107.
- William, D.R., Swee-Lim, C., & Cesar, M. (2005). Job insecurity spill over to key account management: Negative effects on performance, effectiveness, adaptiveness, and esprit de corps. *Journal of Business and Psychology*, 19(4), 483–503.