

Meta-perspective Performance Measurement Scale- Review and Validity Check For Employees of An Indian Organization

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INTRODUCTION

Personality and behavior are the manifestation of one's self identity. Most people in the world have strong sense of self, frequently referred to as one's self identity. Self identity is the view on one's own self, created and maintained over a time through inter and intrapersonal experiences (Schelenker, 1986). Self identity forms through introspection and contemplation of oneself, or from the disclosure (may be through showing one-self to be particular type of person publicly or privately). Self identity is a sensitive component of one's behavior. It gets impacted by the other people or individual reactions. This impact is referred to as inter experience dyad (Kenny and Albright, 1987). One's self-identity is 'how one sees oneself i.e. -my view of myself (Kacmar and et.al. 2006). The identity that results from actions in response to experience of another's action is known as meta-perspective (Kenny Albright, 1987; Patterson Churnhill, Farag, and Borden, 1992 in Kacmar, 2006). At the same time, by applying a behavioral logic, we can say that one's meta-perspective is not formed by the impact of others' actions on oneself; because an individual can never be sure that he or she knows whether/why others are acting in response to him or her. Instead, an individual understands actions based on his or her own perception. An individual continues to react to other's behaviors based on false assumptions of why the behaviors were enacted. These false assumptions can lead to less than effective communication, experience and warmth.

Scholars theorized that one's identity influences how a person behaves and therefore how he or she is perceived by external others (Albert and Whetton, 1985; Ashfort Mael, 1989 in Kacmar and et.al.). The essence of the theory is that we all form our personal identity in an effort to answer the question 'who am I? '. While we answer this question through our behavior and actions, the behavior and actions are usually influenced by cognitive dissonance; hence we implement behaviors that confirm to our self defined identities. These self defined identities may get diluted while we consider the formal relations and social relationships. This dilution may create perceptual congruence and sometimes, it may create in-congruency. Perceptual congruency of self identity (other's action in response to self identity) may lead to the formation of positive meta-perspective and in-congruency may lead to negative meta-perspectives i.e. dysfunctional aspects in organizational environment.

NEED FOR VALIDITY CHECK TO THE KACMAR AND ET.AL.'S MODEL

Meta-perspective formation in the context of employees of an organization was first delved by Kacmar and et.al (2006). They developed meta-perspectives performance measurement tool by applying the multi dimensional item response theory. They identified eight meta-perspective items. They discovered the three underlying dimensions of eight meta-perspective items: - (i) work ethics dimensions; (ii) self perception of one's supervisors on work products; (iii) self perception of one's supervisors thoughts on self regulation. This model is a generic model for measuring meta-perspective performance with several advantages and disadvantages as reported by the work of Kacmar and et.al (2006). In the section 'direction of future research', it is suggested that the construct validity of meta-perspective scale is examined through convergent and discriminant validity; it is also suggested that validity should be checked in different work environments. Based on suggestions, the researcher of the present paper fixed the target to test the reliability of original items of Kacmar and et.al. (2006).

PURPOSE OF THE STUDY

This research is a first step towards better understanding the occurrence of meta-perspectives within an Insurance Corporation of India. Therefore, the authors undertook the initial task of checking the validity of an existing scale and added contents fit for measuring meta-perspective performance of employees in organizational setting

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of LIC. The reason behind this undertaking is that the original scale by Kacmer and et.al (2006) was prepared in the United States and there is a need to check its validity to apply it the Indian corporate environment.

Although there are many different organizational issues of LIC in which meta-perspectives can be applied, the authors of the present paper selected the issue of performance rating of employees. As reported by the co-author (who is an employee of the organization), after understanding the novel and emerging approach on meta-perspective, he reported that this issue is one of the most critical aspects of human resources that insurance organizations are facing today.

INCLUSION OF ITEMS - PRELIMINARY CHECK

To check the issue of meta-perspective performance; initially, one round of interview and discussion was conducted with five senior managers, five senior supervisors, and five experienced clerks. To start the discussion with the focus group on meta-perspective performance, the generic performance items were introduced in the model of Kacmar and et.al; secondly, referent focus of the items was studied. After discussion, we modified the generic performance items. These items are those skills that are needed for insurance business; they are product or service knowledge, communication, organization, and interpersonal skills (Ofili, 2002). Six items in addition to eight items were inserted as suggested by the discussion. These six additional items are –

- i. Willingness to upgrade the job knowledge;
- ii. Ability to acquire the skills needed to perform;
- iii. Sufficiency of technical knowledge to perform job on time;
- iv. Communication skills;
- v. Readiness to take a new assignment if it is assigned;
- vi. Spirit in maintaining standards with 'zero-defects'.

Items were quantified through a five point Likert Scale, for example - 'Maybe my boss thinks that I try to do things better at work' (Strongly Agree- 5, Disagree-1). Thus, the scale contained fourteen items prior to empirical validation and final check.

THE SAMPLE

A survey questionnaire was administered to a sample of 200 employees of the two divisions of LIC located in North East India. The managers, supervisors, and clerks of 10 branches of two divisions were considered for this study. A total of 150 usable questionnaires were returned from a total of thirty managers, forty seven supervisors, and seventy three clerks. Considering the sample structure of non- sampling responses, the authors decided to use the data for final items, dimension selection and reliability check of scale.

ANALYSIS

For selection of latent items and dimensions for the modified scale, the statistical tool -factors analysis is a plausible tool. To proceed towards factor analysis, one has to cross another stage i.e. reliability of contents and items for such a modified instrument. Therefore, usable responses were processed for reliability check and factor analysis with the help of SPSS-12. We applied reliability analysis for 14 items for the sample N=150. In analyzing reliability, we analyzed the concordance (Kendal's W) to examine agreement level of ranking of the items across cases. In this analysis, the rank of items (total -14) across the sample (N=150) were assessed through the concordance means agreement of responses to the respective items.

For examining reliability of scale for different employee groups, separate tests were conducted and reliability co-efficient for three groups of employees were compared.

DIMENSION'S STRUCTURE

From the reliability analysis of the overall scale and contents of the scale for the sample (N=150), the reliability co-efficient i.e. Cronbach Alpha = 0.8733 of modified scale where total items =14. The value of Cronbach Alpha and standardized item Alpha indicated a high reliability of the whole scale with internal dimensions because items are perfectly reliable and measure the same thing (true score), then coefficient alpha is near to 1 (Statsoft, 2002-08). To understand component structure of latent dimensions, principal component analysis and varimax rotation applied factor analysis were conducted. Inter correlation of items (in appendix) is a part of the result of factor analysis (dimension discovery), and explains that all factors are highly correlated. The factors were rotated for 11 iterations that converged to the rotational process and extracted 4 principal components (appendix, table-

2) factor loading. Highly converged items and items having high cross loading in one dimension and lightly in other factors were observed for critical interpretation.

The first dimension was loaded by six (6) items; they are 2, 6, 8, 9, 10, and 11. The second dimension was loaded by five items namely 5, 7, 12, 13, and 14. The third dimension was loaded by two items; they are 1 and 3. Based on the examination of factor loading and Eigen value, inclusion of item 4- 'I am confident enough to face work related challenges' emerged as the single itemed dimension that needed to be re-evaluated (in appendix, table-2). The basic ground is that though this item is heavily loaded, but may not be correlated with the rest of the items. An analysis was required to examine the anti- image of item-4 on the whole scale.

VERIFICATION OF ITEM'S ANTI-IMAGE

Item no-4 is a single itemed dimension of meta-perspective performance. The researchers guessed that this item might have an anti- image i.e. this particular item may not have a relationship with other factors and the researchers, for a second time, deployed factor analysis technique to check the anti-image of this item. Anti-image matrices contain correlations (in the table-3).

Table-3
Anti-image Correlation Matrices (AICM)

Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	.607													
2		.536												
3			.374*											
4				.556										
5					.629									
6						.819								
7							.708							
8								.670						
9									.752					
10										.661				
11											.573			
12												.783		
13													.670	
14														.713

The correlation for item number-3 indicates that the correlation is not due to the common factors because of small value, and it indicated that the variable is relatively free of unexplained correlations. Most or all values other than item-3 off the diagonal are above 0.5, which implies that the variables seem to fit with the structure of other variables. Since the AICM for item-3 is less than 0.5, hence item-3 is considered for dropping. Item number-3, whose value $0.374 < 0.5$ is excluded from the total 14 items ($14-1=13$).

ACCOMMODATING ITEMS

After dropping item-3, factor analysis was applied for the rest items ($14-1=13$). This operation extracted four principal dimensions (through the principal components analysis subject to the Varimax Rotation and Kaiser Normalization (table-4)). The rotation was converged to the 4 dimensions for which results of eight iterations were required.

As many as four dimensions underlie the responses to 13 meta-perspective items. A substantive interpretation of the dimensions was found to underlie the thirteen meta-perspective items, which clearly supported a four dimensional structure. Dimension-1 (items through 8,9,10, 2, 6, and 11) refers to the general self perception of one's superior thinking of one's job knowledge and ability to acquire it. The meta-perspective items are 'willingness to upgrade one's job knowledge', 'requirement of less monitoring for the work', 'try to do more than what is asked', 'quality of work done', 'one's technical knowledge to complete the tasks'.

The second dimension consists of three items (through 12, 7, 13) and reflects the self perception of one's thoughts on possession of habit, readiness and communication. The third dimension (item- 5 and 14) is the reflection of one's self perception as a performer. It is explained by self -perception of oneself as a performer, who tries to get

Table-4

Items	Statement	Dimension-1	Dimension-2	Dimension-3	Dimension-4
	Reliability (Cronbach Alpha)	0.8616	0.8002	0.7699	0.5236
	Standardized Item Alpha	0.8600	0.8004	0.7701	0.5365
	Initial Eigen Value (% of Variance)	40.046%	14.805%	0.068%	7.884%
9	willing to upgrade my job knowledge	.866			
8	he/she never has to monitor me	.803			
10	can quickly acquire the skills needed to perform the job done.	.773			
2	try to do more than what is asked	.653			
6	never disappointed him/her by the quality of work done.	.637			
11	have sufficient technical knowledge to do the job.	.550			
12	have good communication skills to serve in this section/branch.		.806		
7	my work habit is excellent		.716		
13	have a feeling of readiness to accept assignments.		.625		
5	always try to get things done on time.			.861	
14	I am a good performer.			.796	
1	always try to do things better at work.				.832
4	I am confident enough to face work related challenges.				.625
Extraction Method: Principal Component Analysis (PCA); Rotation Method: Varimax with Kaiser Normalization; Rotation converged in 8 iterations.					

things done on time. The fourth dimension consists of two dimensions (item- 1 and 4), that reflects a person's perception of his confidence to face work related challenges and at the same time, one's work ethics.

The factor inclusion analysis may fabricate a new scale after orderly arrangement of items as per the loadings (final scale).

COMPARISON OF RELIABILITY (FINAL SCALE)

To confirm applicability and reliability of the scale, further testing is required because of 'multiple perspectives on score reliability and how they may affect research practice' (Dimitrov, 2002). Authors again tested the reliability of 13 items (scale) for employee groups - managers, supervisors, and clerks to compare the reliability of items.

Table-5

	Sample	Statistics for Scale			Intra-class Correlation co-efficient		For Items	Reliability co-efficient (Cronbach Alpha)
		Mean	Variance Deviation	Std.	Single Measure ICC (SMICC)	Average Measure ICC (AMICC)		
Manager	30	28.433	68.1851	8.2574	.3626	.8808	13	.8808
Supervisor	47	12.3404	114.6642	10.7081	.2970	.8460	13	.8470
Clerks	73	10.8904	65.3489	8.0839	.1679	.7240	13	.7240

The reliability tests were conducted on different samples for 13 items of the scale. The test results (table-5) revealed single measure intra-class correlation co-efficient (SMICC) and average measure intra-class correlation co-efficient (AMICC) with reliability co-efficient. The value of SMICC explains inter item correlation co-efficient for single respondents- SMICC= .3626 for manager; SMICC=.2970 for supervisors; for clerks SMIC= .1679. For managers, item correlations are quite stronger than that of supervisors and clerks.

The AMICC values explain average correlation of whole items of the scale=13 for whole group i.e. for managers (sample=30), supervisors (sample=47), and clerks (sample= 73). The AMICC for managers is .8808 = Cronbach Alpha = .8808 that explains the high reliability of total items of the scale for measuring meta-perspective performance of managerial cadre. In a similar way, AMICC value= Cronbach Alpha for both groups (supervisors and clerks) also explains the reliability of the total 13 items. Similarly, the reliability of dimensions is also compared among the managers, supervisors, clerks (table-6).

Reliability of first dimension (6 items in table -2) explains sophistication of applicability among all groups of respondents. The reliability co-efficient of second dimension consists of 3 items and also explains that the three items are sophisticated for all groups of respondents. The third dimension consists of two items of which reliability co-efficient explains sophistication for managers, and clerks, but does not explain sophistication for supervisors

Table-6
Comparison of Dimension's Reliability

Item	Tested Scale Items for the Employee Groups	Sample	For Items	Reliability co-efficient
Dimension -1	Manager	30	6	.7842
	Supervisor	47		.8837
	Clerks	73		.7702
Dimension-2	Manager	30	3	.5471
	Supervisor	47		.8030
	Clerks	73		.7611
Dimension-3	Manager	30	2	.8996
	Supervisor	47		.1559*
	Clerks	73		.8879
Dimension-4	Manager	30	2	.6198
	Supervisor	47		.7627
	Clerks	73		.6997

which needs a separate test. The reliability co-efficient of dimension -4 reveals sophisticated results for all groups of respondents.

RESULTS

Strength of tests is increasing the contribution of the present study to the management literature. First, the meta-perspective performance assessment is rare in the Indian context. It is an important first step for empirical testing and development of meta-perspective in the Indian environment. This study confirms that items of original Kacmar's model of meta-perspective performances will not be applicable in the context of work environment in India. Secondly, the study confirms the need for a refined model (in appendix-items after anti-image analysis) of meta-perspective in the context of Indian organizations. This study is an initial step in empirical testing of social relation model in the context of human resource management in general and performance appraisal, especially within the Indian organizational environment.

DIRECTIONS FOR FUTURE RESEARCH

Despite the strength of this study, three steps for continued research on this area appear warranted. First, though the data were collected from a gigantic organization, but still, it is a single source data, and the output may not be generalized. The data collected from multiple sources with more numbers of respondents may be a good start for further replication. While doing so, it is required to determine how the findings would report if the same is conducted in any other work environment in India. Following the replication of the study, the next step would be to examine the construct validity of meta-perspective scale through convergent and discriminant validity for other work environments. Developing the test hypotheses regarding the antecedents and outcome accuracy of the meta-perspective model in the context of other work environments in India will be proactive for popularizing the meta-perspectives model. Based on prior theoretical work in this area, empirical testing of performance based model that incorporates meta-perspectives may provide a researcher with several insights on the self identity, behavior and attribution of employees in the Indian environment. Meta-perspectives can be applied in leader member exchange and in upward feedback (360 degree) modeling and related research.

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Table-1
Inter Item Correlation matrix

Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1.000													
2	.363	1.000												
3	.470	.430	1.000											
4	.367	.425	.045	1.000										
5	.349	.021	.482	.071	1.000									
6	.297	.464	.062	.443	.284	1.000								
7	.153	.104	.192	.267	.410	.369	1.000							
8	.246	.647	.198	.281	.263	.588	.386	1.000						
9	.051	.541	.122	.271	.262	.690	.326	.644	1.000					
10	.005	.412	.162	.063	.181	.410	.110	.500	.637	1.000				
11	.049	.242	.324	.348	.357	.487	.347	.426	.579	.325	1.000			
12	.249	.209	.158	.365	.212	.419	.551	.269	.447	.239	.374	1.000		
13	.331	.201	.425	.368	.445	.399	.583	.121	.284	.322	.275	.600	1.000	
14	.301	.052	.223	.318	.626	.475	.443	.142	.293	.333	.315	.335	.712	1.000

Table-2
Construct and Item Reliability after Anti Image Analysis-Meta-Perspectives Performance

Item	Statement	Dimension 1	Dimension 2	Dimension 3	Dimension 4
	Reliability (Cronbach Alpha)	.8626.	.8298	.6387	X
	Standardized Item Alpha	.8600	.8288	.6397	X
	Concordance (W)	.0208	.0449	.0445	X
	Eigen value	38.411	14.048	10.273	8.791
1	Maybe my boss thinks that I always try to do things better at work.			.718	
2	Maybe my boss thinks that I always try to do more than what is asked.	.633			
3	Maybe my boss thinks that I always try to work hard.			.862	
4	Maybe my boss thinks that I am confident enough to face work related challenges.				.809#
5	Maybe my boss thinks that I always try to get things done on time.		.637		
6	Maybe my boss thinks that I never disappointed him/her by the quality of work done.	.640			
7	Maybe my boss thinks that my work habits are excellent.		.719		
8	Maybe my boss thinks that he/she never has to monitor me.	.798			
9	Maybe my boss thinks that I am willing to upgrade my job knowledge.	.880			
10	Maybe my boss thinks that I can quickly acquire the skills needed to complete the tasks.	.771			
11	Maybe my boss thinks that I have sufficient technical knowledge to do the job.	.579			
12	Maybe my boss thinks that I have good communication skills to serve in this section/branch.		.606		
13	Maybe my boss thinks that I have a feeling of readiness to accept any task that is assigned to me.		.803		
14	Maybe my boss thinks that I am a good performer.		.808		

Extraction Method: Principal Component Analysis (PCA); Rotation Method: Varimax with Kaiser Normalization; Kaiser Meyer Oklin Measures of Sample Adequacy= 0.646; Bertlett Test of Sphericity= 1333.548 (df=99, Sig.= 0.000); Rotation converged in 11 iterations.

FINAL SCALE

Items selected after anti-image analysis

Dimension-1 : Self perception Regarding one's job knowledge and ability to acquire skills-

- Maybe my boss thinks that I am willing to upgrade my job knowledge.
- Maybe my boss thinks that he/she never has to monitor me.

(Contd. on page 53)

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(Contd. from page 32)

- iii. Maybe my boss thinks that I can quickly acquire the skills needed to perform the tasks assigned to me.
- iv. Maybe my boss thinks that I always try to do more than what is asked.
- v. Maybe my boss thinks that I never disappoint him/her by the quality of work done.
- vi. Maybe my boss thinks that I have sufficient technical knowledge to do the job.

Dimension-2: Self perception Regarding one's possession of habit and communication-

- i. Maybe my boss thinks that I have good communication skills to serve in this section/branch.
- ii. Maybe my boss thinks that my work habits are excellent.
- iii. Maybe my boss thinks that I have a feeling of readiness to accept assignments that have been allotted to me.

Dimension-3: Self perception of one's thoughts on as a performer

- i. Maybe my boss thinks that I always try to get things done on time.
- ii. Maybe my boss thinks that I am a good performer.

Dimension-4: One's confidence to face work related challenges and at the same time one's work ethics

- i. Maybe my boss thinks that I always try to do things better at work.
- ii. Maybe my boss thinks that I am confident enough to face work related challenges.

(Contd. from page 38)

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