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# Dimensionality and Construct Validity of the Perceptions of Organizational Politics Scale (POPS)

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16. Abstract  <b>This study examined the dimensionality and construct validity of Kacmar and Ferris (1991) Perceptions of Organizational Politics Scale (POPS), which is comprised of 3 subscales -- "General Political Behavior," "Going Along to Get Ahead," and "Pay and Promotion." Results of analyses conducted on data collected from 1,297 civilian government employees were inconsistent with a multidimensional factor structure of the POPS. Principal components and confirmatory factor analyses failed to confirm the Kacmar and Ferris 3-factor solution. Rather, the results indicated that the POPS was unidimensional. POPS scores were strongly and inversely related to scores on the Eisenberger, Huntington, Hutchison, and Sowa (1986) Survey of Perceived Organizational Support (SPOS). POPS and SPOS scores were not differentially correlated with other job attitude measures.</b>			
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## DIMENSIONALITY AND CONSTRUCT VALIDITY OF THE PERCEPTIONS OF ORGANIZATIONAL POLITICS SCALE (POPS)

Experiential reality suggests that politics is a pervasive force in organizational life. Despite its anecdotally acknowledged influences on organizational functioning, conceptual and empirical work defining the conceptual parameters of "organizational politics" has received little attention. Early research on perceptions of organizational politics (Gandz & Murray, 1980; Madison, Allen, Porter, Renwick, & Mayes, 1980) has done little to spark interest in this important phenomenon. A key problem has been defining "organizational politics." Kacmar and Ferris (1991) developed the Perceptions of Organizational Politics Scale (POPS) to consist of 3 factors or subscales -- "General Political Behavior," "Going Along to Get Ahead," and "Pay and Promotion."

Kacmar and Ferris (1991) suggested that normative data be collected for the subscales and that the POPS be compared with other scales that measure aspects of organizational climate in order to ascertain its construct validity. One such measure may be the Eisenberger, Huntington, Hutchison, and Sowa (1986) Survey of Perceived Organizational Support (SPOS), which measures employees' perceptions of the degree to which an organization is concerned about the well-being of employees and appreciates their efforts. Perceptions of organizational support may be negatively related to perceptions of organizational politics. Individuals who believe that they are working in a highly political environment may be less likely to perceive that the organization supports them. For example, in situations where employees perceive that promotions are based on whom a person knows, it may be difficult for most employees to believe that the organization is truly interested in their individual welfare.

Other scales that may be conceptually and negatively related to the POPS include measures of aspects of the equal opportunity environment, job satisfaction, and organizational commitment. Individuals who perceive their organization to be unsupportive of equal opportunity may be likely to see their organization as "political" (using their own subjective criteria), also organizations

that support equal opportunity may be more prone to following formal policies. Similarly, the uncertainties created by the appearance of arbitrary decision-making and other associated circumstances in a political environment may have negative effects on job satisfaction and on employee plans to remain a member of the organization (i.e., organizational commitment).

In the present study, we examined the construct validity of the POPS in 3 steps. First, we attempted to replicate the 3-factor structure of the POPS applying the principal components factor analytic procedures used by Kacmar and Ferris (1991). Second, we used confirmatory factor analyses to evaluate the dimensionality of the POPS. Third, we examined the relationships between scores on the POPS and scores on measures of organizational support, equal opportunity, job satisfaction, and organizational commitment. To support the validity of the instrument, it would be necessary to replicate the 3-factor solution, demonstrate convergent validity by identifying significant relationships between the POPS and job attitude measures as suggested above, and establish discriminant validity by different patterns of relationships among the measures. Given the conceptual and practical importance of the measurement of organizational politics, we concurred with Kacmar and Ferris (1991) that further demonstration of the validity of the POPS was necessary prior to empirical use of the scale.

## METHOD

### *Subjects*

The sample was comprised of 1,297 of 2,103 (61.7%) employees of the Federal Aviation Administration who completed the job attitude measures as a part of an employee survey of attitudes about various aspects of their organization. Approximately 39% of the respondents were women, and 20% were minorities. Most employees were between 30 and 49 years old (61.9%), 26.7% were between 50 and 59 years old, while only 7.9% were under 30 and 3.5%

were 60+ years. Respondents were 84.9% non-supervisors, 10.5% supervisors, and 4.6% who identified themselves as managers. About one-half (49.5%) of the respondents reported having completed some college coursework, and over one-third (35.7%) indicated an educational level of 16 or more years. Most had been employed in their current organization for more than 3 years (62.1%), while only 11.9% had less than 1 year of tenure.

### Measures

Organizational political behavior was measured by the POPS, which has 12 items with responses presented on a 5-point, Likert-type scale (1 = "strongly disagree," 2 = "inclined to disagree," 3 = "neither disagree nor agree," 4 = "inclined to agree," 5 = "strongly agree"). Most of the items were coded to result in high scores reflecting greater levels of political behavior. However, the 2 items in the "Pay and Promotion" subscale were coded such that high scores indicated perceived fairness. For this study, the wording was changed slightly for 2 of the items -- from "no place for yes men" to "it is safer to agree with managers than to say what you think is right," and from "pay and promotion policies are not politically applied" to "pay and promotion decisions are consistent with policies." Kacmar and Ferris (1991) reported that the internal reliability for the total scale was .87 but did not report subscale intercorrelations. Characteristics of the POPS scale for the present sample will be discussed in the results section.

The SPOS scale (Eisenberger, Huntington, Hutchison, & Sowa, 1986) used in the present study was comprised of 16 items with the same 5-point, Likert-type scale as for the POPS. This scale measures a general perception employees have concerning the extent to which the organization values their contributions and well-being. Higher scores on the SPOS scale ( $M = 50.49$ ,  $SD = 14.33$ ,  $\alpha = .95$ ) indicate higher levels of support.

The equal opportunity environment, including the perceived commitment of the organization to advancing equal opportunity goals, was measured by the Witt (1991) 4-item equal opportunity

measure ( $M = 12.83$ ,  $SD = 3.87$ ,  $\alpha = .78$ ). Employees responded to the same 5-point, Likert-type response format as with the POPS. High scores on this scale indicate more positive perceptions of equal opportunity norms in the organization.

Job satisfaction was measured by the recently validated (McNichols, Stahl, & Manley, 1978) 4-item Hoppock (1935) job satisfaction scale presented with 5 rather than 7 alternatives to fit on the available answer sheets ( $M = 14.21$ ,  $SD = 2.72$ ,  $\alpha = .79$ ). High scores reflect feelings of high job satisfaction.

The Hrebiniak and Alutto (1972) 4-item instrument ( $M = 13.82$ ,  $SD = 4.07$ ,  $\alpha = .85$ ) was employed to assess organizational commitment. This scale measures the employees' involvement with the organization by assessing employees' propensity to leave the organization as a function of alternative inducements (i.e., continuance commitment). High scores reflect greater commitment.

### Analyses

The first procedure we employed to statistically determine the factor structure of the POPS was the factor analytic method used by Kacmar and Ferris (1991), which involved a principal components analysis with a varimax (orthogonal) rotation. All 12 items were entered in 1 analysis, with the number of factors determined by the criterion of an eigenvalue of greater than 1.0. Next, the 12 items were "forced" into 3 factors, and item loadings were compared to the results obtained by Kacmar and Ferris.

Second, we performed confirmatory factor analyses using LISREL VI (Joreskog & Sorbom, 1986) in which a 3-factor solution corresponding to the Kacmar and Ferris (1991) model was evaluated. Given that the survey items were ordinal variables, the appropriate approach using the LISREL VI program was to analyze the matrix of polychoric correlations using the unweighted least squares (ULS) method. As illustrated by Bernstein and Teng (1989), applying LISREL methodology to ordinal-level or categorical variables using the maximum likeli-

hood (ML) method to analyze a correlation or covariance matrix may incorrectly inflate the number of factors. To check for possible contrasting results, both methods of confirmatory factor analysis were applied.

## RESULTS AND DISCUSSION

The results of 2 principal components analyses are presented in Table 1. Based on the criterion of an eigenvalue of 1.0 or greater, the results of the first analysis indicated that there was only 1 measurable dimension for the set of 12 items. The factor loadings were consistently large with the item loadings ranging from .68 to .86. Also in Table 1 are the results for the 12 items after being forced into 3 factors. One factor accounted for 81% of the explained variance and included the 2 items from the "Pay and Promotion" subscale and 2 items from the "Going Along To Get Ahead" subscale. The items in the "General Political Behavior" subscale loaded similarly to the results reported by Kacmar and Ferris (1991) with the exception of "not speaking up for fear of retaliation," which loaded more highly on the "Going Along to Get Ahead" subscale. The results reported here following the Kacmar and Ferris methodology suggest that: (a) the POPS was unidimensional rather than comprised of 3 factors, and (b) when 3 factors were extracted, many of the items did not load on the expected factor.

Table 2 presents the results of confirmatory factor analyses using the ULS method. The 1-factor solution compared with the 3-factor model had nearly equivalent goodness-of-fit characteristics. Specifically, the goodness-of-fit index (GFI) was .993 for the POPS when hypothesized as being unidimensional, while the GFI was .995 for the POPS model comprised of 3 subscales. Also, the root mean-square residuals (RMS) were .05 in both cases. An important reason for considering the POPS to be unidimensional was shown in the extremely high correlations among the latent factors. These correlations were as follows: "Pay and Promotion" with "General Political Behavior" ( $r = -.85$ ), "Pay and Promotion" with "Going Along to Get Ahead" ( $r = -.94$ ), and "General Political Behavior" with "Going Along to Get Ahead" ( $r = .91$ ).

For the CFA using the ML method, the POPS was evaluated using 2 additional goodness-of-fit indicators -- the normed-fit index (NFI) and the parsimonious-fit index (PFI). The NFI (Bentler & Bonett, 1980) is based on a comparison of the chi square of a hypothesized factor model to the chi-square of a null model in which the items of an instrument are defined as not having a factor structure. The PFI (James, Mulaik, & Brett, 1982) additionally takes into account the ratio of the degrees of freedom of a proposed model compared to the degrees of freedom of the null model. When comparing different factor models, the more acceptable model, is one where the NFI is .90 or higher accompanied by little reduction in parsimony (PFI). As shown in Table 3, the size of the item loadings for the ML method are similar to those using the ULS method, as are the intercorrelations among the factors. The 1-factor solution for the POPS resulted in a NFI of .904 and a PFI of .739, while the 3-factor model represented a NFI of .927 and a PFI of .716. These results illustrate that the improvement in the NFI of the 3-factor model was offset by a reduction in parsimony. This is another indication that political behavior as measured by the POPS was an undifferentiated, global construct for the respondents in this study.

The last 2 items in the POPS regarding "pay and promotions" were reverse coded to be consistent with the other items in the scale. The resultant scale had a mean of 38.22, S.D. of 11.51, and Cronbach's alpha of .93. As shown in Table 4, POPS and SPOS scores were strongly and inversely related ( $r = -.85$ ), and the significant ( $p < .001$ ) correlations of these scales with job satisfaction (POPS:  $r = -.62$  vs. SPOS:  $r = .68$ ), organizational commitment (POPS:  $r = -.58$  vs. SPOS:  $r = .59$ ), and equal opportunity scores (POPS:  $r = -.55$  vs. SPOS:  $r = .55$ ) were of similar magnitudes.

TABLE 1. Principal Components Analyses of the POPS

Item	One Factor	Pay/Promote	3 Factors: General	Go Along
One group always gets their way	.75		.85	
Influential group no one crosses	.76		.82	
Policy changes help only a few	.73		.52	
Some build themselves up by tearing others down	.72		.62	
Favoritism not merit gets people ahead	.86		.54	
Don't speak up for fear of retaliation	.84		.46	.63
Promotions go to top performers (RC)	.77	.82		.21
Rewards come to hard workers (RC)	.78	.79		.24
Encouraged to speak out (RC)	.74			.71
Safer to agree than to say what you think is right	.68			.82
Pay/promotions based solely on merit	-.73	-.75		
Pay/promotion decisions consistent with policies	-.72	-.68		
% of Variance	57.60	57.60	7.90	5.90
Eigenvalue	6.92	6.92	.95	.70
Note: The largest item loadings are shown, as are the item loadings that correspond to the factor structure reported by Kacmar and Ferris (1991). (RC) items are reverse coded.				

TABLE 2. Confirmatory Factor Analysis of the POPS Using the Unweighted Least Squares Method

Item	One Factor	Pay/Promote	3 Factors: General	Go Along
One group always gets their way	.78		.80	
Influential group no one crosses	.78		.80	
Policy changes help only a few	.74		.76	
Some build themselves up by tearing others down	.73		.74	
Favoritism not merit gets people ahead	.89		.91	
Don't speak up for fear of retaliation	.86		.88	
Promotions go to top performers (RC)	.78			.80
Rewards come to hard workers (RC)	.80			.82
Encouraged to speak out (RC)	.75			.77
Safer to agree than to say what you think is right	.68			.70
Pay/promotions based solely on merit	-.74	-.80		
Pay/promotion decisions consistent with policies	-.72	-.78		
Goodness of Fit				
One Factor	.993			
3 factor solution	.995			
Root Mean Square Residual				
One Factor	.05			
3 factor solution	.05			
Note: Factor correlations were: $R_{1,2} = -.85$ ; $R_{1,3} = -.94$ ; $R_{2,3} = .91$ . (RC) items are reverse coded.				



TABLE 3. Confirmatory Factor Analysis of the POPS Using the Maximum Likelihood Method

Item	One Factor	Pay/Promote	3 Factors:		
			General	Go Along	
One group always gets their way	.73		.75		
Influential group no one crosses	.74		.76		
Policy changes help only a few	.70		.71		
Some build themselves up by tearing others down	.70		.71		
Favoritism not merit gets people ahead	.85		.87		
Don't speak up for fear of retaliation	.83		.83		
Promotions go to top performers (RC)	.74			.81	
Rewards come to hard workers (RC)	.76			.82	
Encouraged to speak out (RC)	.71			.71	
Safer to agree than to say what you think is right	.65			.62	
Pay/promotions based solely on merit	-.70	-.77			
Pay/promotion decisions consistent with policies	-.69	-.74			
Model	d.f.	Chi square	GFI	NFI	PFI
Null	66	11,710	.20	---	---
One factor	54	1,128	.87	.904	.739
3 Factors	51	859	.89	.927	.716

Note: Factor correlations were:  $R_{1,2} = -.85$ ;  $R_{1,3} = -.94$ ;  $R_{2,3} = .89$ . (RC) items are reverse coded. GFI = goodness-of-fit index; NFI = normed-fit index; and PFI = parsimonious-fit index.

TABLE 4. Intercorrelation Matrix

	1	2	3	4	5
1. Perceived Organizational Politics	(.93)				
2. Perceived Organizational Support	-.85	(.95)			
3. Equal Opportunity	-.55	.55	(.78)		
4. Job Satisfaction	-.62	.68	.37	(.79)	
5. Organizational Commitment	-.58	.59	.34	.65	(.85)

Note: The coefficients on the diagonal are Cronbach's alpha. All coefficients are significant ( $p < .01$ ).

## CONCLUSIONS

We emphasize 3 caveats before discussing implications. First, the subjects most likely responded to the survey in 1 sitting; thus, these data are subject to common method variance. Second, the employees sampled in the present study may not be representative of other organizations, and replication in private sector and military organizations is needed. Third, 2 of the POPS items were slightly reworded, which may have had some effect on the results.

As Eisenberger, et al.(1986) found that employees form global perceptions of their organization's support, the results of the present study suggest that employees develop overall perceptions of political behavior in their organization. Further more organizational support and



political behavior may represent mirror-images of a singular aspect of employees' views of organizational climate. Additional research could explore the relationship between the POPS and outcome measures such as job performance, absenteeism, and attrition. Until the results of Kacmar and Ferris (1991) are replicated and perhaps specific populations for which it might be valid are identified, we urge caution in: (a) the use and application of the subscales of the POPS, and (b) assuming that the POPS measures a distinct construct.

### References

- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Bernstein, I. H., & Teng, G. (1989). Factoring items and factoring scales are different: Spurious evidence for multidimensionality due to item categorization. *Psychological Bulletin*, 105, 467-477.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Gandz, J., & Murray, V. V. (1980). The experience of workplace politics. *Academy of Management Journal*, 23, 237-251.
- Hoppock, R. (1935). *Job satisfaction*. New York: Harper & Row.
- Hrebiniak, L. G., & Alutto, J. A. (1972). Personal and role-related factors in the development of organizational commitment. *Administrative Science Quarterly*, 17, 555-572.
- James, L. R., Mulaik, S. A., & Brett, J. M. (1982). *Causal analysis: Assumptions, models, and data*. Beverly Hills, CA: Sage.
- Joreskog, K. G., & Sorbom, D. (1986). *LISREL VI: Analysis of linear structural relationships by the maximum likelihood method* (4th edition). Mooresville, IN: Scientific Software.
- Kacmar, K. M., & Ferris, G. R. (1991). Perceptions of organizational politics scale (POPS): Development and construct validation. *Educational and Psychological Measurement*, 51, 193-205.
- Madison, D. L., Allen, R. W., Porter, L. W., Renwick, P. A., & Mayes, B. T. (1980). Organizational politics: An exploration of managers' perceptions. *Human Relations*, 33, 79-100.
- McNichols, C. W., Stahl, M. J., & Manley, T. R. (1978). A validation of Hoppock's job satisfaction measure. *Academy of Management Journal*, 21, 737-742.
- Witt, L. A. (1991). Equal opportunity perceptions and job attitudes. *Journal of Social Psychology*, 131, 431-433.