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## Measurement and Dimensionality of Compensation Satisfaction in Law Enforcement

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## Measurement and Dimensionality of Compensation Satisfaction in Law Enforcement

### Abstract

This research examined the dimensionality of compensation satisfaction for the occupational area of law enforcement by analyzing the factor structure of Henanan and Schwab's (1985) Pay Satisfaction Questionnaire (PSQ). The PSQ is intended to measure four facets of compensation satisfaction: 1) pay level, 2) benefits, 3) pay raises, and 4) pay structure-administration. Previous research showed support for the PSQ level and benefits scales, but yielded equivocal results for the raises and structure-administration scales. Previous research also showed that the factor structure of the PSQ varied by job classification group. The present study, using data from 1189 uniformed law enforcement officers employed by eight different state police or highway patrol organizations, found that a three-factor solution (level, benefits, and structure-administration) represents the appropriate dimensional structure for compensation satisfaction in the occupational area of law enforcement, at least within the domain of the 18 items of the PSQ. These findings are integrated with those of previous research, and implications for research and practice are discussed.

### Keywords

CAHRS, ILR, center, human resource, job, worker, advanced, labor market, satisfaction, employee, work, manage, management, training, HRM, employ, model, industrial relations, labor market, health care, economy, job satisfaction, job performance, productivity, measurement, compensation, law enforcement, pay level, benefit, pay raise, structure-administration scale, research, practice, PSQ

### Comments

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**Measurement and Dimensionality of  
Compensation Satisfaction in Law  
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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research, conferences, and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.

MEASUREMENT AND DIMENSIONALITY OF COMPENSATION

SATISFACTION IN LAW ENFORCEMENT

ABSTRACT

This research examined the dimensionality of compensation satisfaction for the occupational area of law enforcement by analyzing the factor structure of Heneman and Schwab's (1985) Pay Satisfaction Questionnaire (PSQ). The PSQ is intended to measure four facets of compensation satisfaction: 1) pay level, 2) benefits, 3) pay raises, and 4) pay structure-administration. Previous research showed support for the PSQ level and benefits scales, but yielded equivocal results for the raises and structure-administration scales. Previous research also showed that the factor structure of the PSQ varied by job classification group. The present study, using data from 1189 uniformed law enforcement officers employed by eight different state police or highway patrol organizations, found that a three-factor solution (level, benefits, and structure-administration) represents the appropriate dimensional structure for compensation satisfaction in the occupational area of law enforcement, at least within the domain of the 18 items of the PSQ. These findings are integrated with those of previous research, and implications for research and practice are discussed.

Pay satisfaction is an important construct in personnel/human resources management. Compensation administration is one of several primary human resource management activities designed to influence people to join an organization, attend work regularly, perform effectively, and stay employed with the organization (cf. Heneman, Schwab, Fossum & Dyer, 1986; Mahoney, 1982). Not surprisingly, pay satisfaction and the positive and negative consequences associated with pay dissatisfaction have been the subject of considerable research (see reviews by Lawler, 1971; Porter & Steers, 1973; Schwab & Wallace, 1974; Nash & Carroll, 1975; Heneman, 1985). Yet much confusion still exists regarding the antecedents and consequences of pay satisfaction (Milkovich & Newman, 1987).

Heneman (1985) argues that in addition to a general affective feeling about their pay, employees also have specific attitudes toward distinct aspects of financial compensation—that compensation satisfaction is multidimensional. He argues further that this realization should produce more focused, and therefore more useful, research on the causes and consequences of the various facets of compensation satisfaction. Originally, Heneman and Schwab (1985) proposed and tested a five-dimensional structure for compensation satisfaction: 1) level—the individual's current direct wage or salary, 2) benefits—indirect pay to the individual in the form of paid vacations and holidays, insurance, pensions, etc., 3) raises—the individual's changes in pay level, 4) structure—the hierarchical relationships created among pay rates for different jobs within the organization, and 5) administration—the procedures set up to govern the administration of the policies adopted regarding the other four dimensions. They devised a 20-item instrument, the Pay Satisfaction Questionnaire (PSQ),

with a response format similar to that of the Minnesota Satisfaction Questionnaire (each item rated on a 5-point scale from 1 = very dissatisfied to 5 = very satisfied) and administered it to three heterogeneous groups of white collar (managerial/professional/technical) employees (total N = 355). Confirmatory factor analysis of these data failed to produce a simple structure five-factor solution. A subsequent exploratory factor analysis (principal components with varimax rotation) resulted in a four-factor solution using 18 of the original 20 items. The modified PSQ contains the following scales: 1) level (4 items), 2) benefits (4 items), 3) raises (4 items), and 4) structure-administration (6 items). The items are shown in both Tables 2 and 3.

Heneman and Schwab (1985) also collected PSQ data from a sample of 1980 nurses employed throughout the United States. The principal components factor analysis of these data yielded a four-factor solution, but two of the raises items—R9 (my most recent raise) and R11 (the raises I have typically received in the past)—loaded on the level scale, and one of the structure/administration items—S-A14 (information the organization gives about pay issues of concern to me)—loaded on the raises scale. Considering the results from these factor analyses and results pertaining to scale relationships and reliabilities obtained for these two samples, Heneman and Schwab concluded that there is strong support for the notion that compensation satisfaction is multidimensional, strong support for the existence of two specific dimensions—level and benefits, and equivocal support for two other specific dimensions—raises and structure-administration. They called for more research on the PSQ.

To date, three studies have been conducted, only one of which examined

the factor structure of the PSQ. Using a sample of 88 employed part-time MBA students, Ash, Lee and Dreher (1985) found the scales to be internally consistent, but with the exception of the benefits scale, the other three scales were not independent of one another. Similarly, using data from a sample of 324 uniformed law enforcement officers from a single organization, Ash, Dreher and Bretz (1987) reported that the pattern of average interitem correlations was similar to that reported by Heneman and Schwab (1985), and that only the PSQ level and benefits scales exhibited convergent and discriminant validity as well as high internal consistency reliabilities (in the .90's). In addition, one-month test-retest stability estimates were adequate for only the level and benefits scales (in the .70's).

Scarpello, Huber and Vandenberg (in press) examined the impact of contextual variables on the factor structure of the PSQ using data obtained from 1007 employees located in four different plants of a manufacturing firm, and 95 nursing home employees. Factor analyses (principal components with varimax rotation) were performed on the five separate samples, on each of three job classification groups in the manufacturing firm (hourly-paid, salaried non-exempt, and salaried-exempt), and on three hourly-paid unionized groups plus one hourly-paid non-unionized group in the manufacturing firm. Three-factor (level, benefits, and structure-administration) solutions rather than the Heneman-Schwab four-factor solution were obtained for each of the five separate samples and for the three unionized plus the non-unionized hourly-paid groups. Three-factor solutions were also obtained for the hourly-paid and salaried-nonexempt job classification groups, but a four-factor solution was obtained for the salaried-exempt job classification group. Thus, factor solutions varied by

job classification, but not by sample (plant/organization) or by unionization. Scarpello et al. suggest that the measurement of individual job performance plays a larger role in raise allocation and is more subjective for managerial, professional, and high level technical (salaried-exempt) jobs than for lower level hourly-paid and salaried-nonexempt jobs, thereby explaining the emergence of a distinct raises factor in the former but not the latter.

Discussion of some of the specific PSQ item loadings found by Scarpello et al. as compared to those found by Heneman and Schwab is enlightening. The four benefits scale items load invariantly on a single factor, and only that factor, in virtually all 12 analyses reported by Scarpello et al. and the two 18-item analyses reported by Heneman and Schwab. The loadings are virtually always high (in the .70's, .80's, and .90's). Similarly, the four level scale items virtually always load high (in the .70's and .80's) on a single factor and only that factor across all 14 analyses. In addition, two of the raises scale items (R9 my most recent raise, and R11 the raises I have typically received in the past) load on the pay level factor in 13 of the 14 analyses, including the Scarpello et al. salaried-exempt group which yields a raises factor. Only in the Heneman-Schwab managerial/professional/technical sample do these two items load on the raises factor. Scarpello et al. note that these two items are consistent with an outcome frame of reference on the part of respondents (e.g., my raise amount influences my pay level). A raises factor is obtained in only three of these 13 analyses, and only in the Heneman-Schwab managerial/professional/technical sample does this factor consist exclusively of the raises scale items. In both the Heneman-Schwab nurses



sample and the Scarpello et al. salaried-exempt sample, the raises factor is comprised of raises scale items R10 (influence my supervisor has on my pay), R12 (how my raises are determined), and structure-administration item S-A14 (information the organization gives about pay issues of concern to me). In all the manufacturing plant samples items R10 and S-A14 load on the structure-administration factor, while item R12 loads on the level factor (except for the salaried non-exempt job classification group where it loads on the structure-administration factor). Structure-administration items S-A15, S-A17, and S-A18 consistently load on the structure-administration factor in all 13 analyses. Item S-A16 (consistency of the organization's pay policies) loads on both the level and structure-administration factors in the salaried-nonexempt sample and in one of the manufacturing plant samples. Item S-A13 (the organization's pay structure) is problematic in that it loads exclusively on the structure-administration factor in only three of the 12 analyses by Scarpello et al. and the two Heneman-Schwab analyses. In other Scarpello et al. analyses it sometimes loads on level, sometimes fails to load on any factor, and sometimes loads on both structure-administration and level. Later, a number of these loadings will be compared with results from the current study.

The purpose of the present investigation was to study further the dimensionality of compensation satisfaction through the PSQ by examining the factor structures obtained for the PSQ in the occupational area of law enforcement. PSQ data were obtained for samples of uniformed law enforcement officers across all ranks from eight separate state police or highway patrol organizations. Previous research indicated that factor structures were not likely to vary by organization, but that they may vary

as a function of job classification. No data was available that permitted anticipation of factor structure as a function of occupational area.

#### METHOD

As part of a larger study focusing on employee benefits, eight state law enforcement agencies located in the central United States permitted us to administer the PSQ by mail to their individual uniformed members in June of 1986. Survey packets included a cover letter from the top official (Superintendent/Colonel) of the respective organization encouraging participation, a letter from the researchers providing additional information about the study and data collection procedures, a postage-paid return envelope, and a compensation satisfaction questionnaire. A total of 2,925 survey packets were mailed. This sample included all uniformed members of seven of the agencies and a 400 person random sample of one agency. A total of 1,433 questionnaires were returned for an overall response rate of 49%. Complete PSQ and demographic data were obtained for 1,189 respondents, the total sample size for the current study. The primary analyses involved principal components factor analysis with varimax rotation, eigenvalue greater than 1.0, and cutoff loading of .50. This analysis permits direct comparison with the work of Heneman and Schwab (1985) and Scarpello et al. (in press).

#### RESULTS

Distributions from all eight samples are similar in terms of respondent age, education, tenure with the organization, and sex composition (see Table 1). For the total sample, mean age is 38 years, mean years of education is 14, mean organization tenure is 13 years, and 96.4% of the respondents are male.

Table 2 shows the factor analysis results for each of the eight organizations. Three-factor solutions (level, benefits, and structure-administration) were obtained for all eight samples. Similar to previous research, the four benefits scale items load cleanly, invariantly, and uniquely on a single factor in all eight analyses. Also, the four level scale items load cleanly, invariantly, but not exclusively on a single factor in all eight samples. For six of the eight organizations, the level factor includes the four level scale items and two of the raise items (R9 my most recent raise, and R11 the raises I have typically received in the past), and for one of these organizations the level factor also includes a structure-administration scale item (S-A15 pay of other jobs in the organization). One raises scale item (R12 how my raises are determined) and three structure-administration items (S-A14 information the organization gives about pay issues of concern to me, S-A16 consistency of the organization's pay policies, and S-A18 how the organization administers pay) load exclusively on the structure-administration factor in all eight samples. Two structure-administration items (S-A15 pay of other jobs in the organization, and S-A17 differences in pay among jobs in the organization) load exclusively on this factor in all seven of the eight samples. One structure-administration item (S-A13 the organization's pay structure) loads exclusively on the structure-administration factor in six of the eight samples, loads on both this factor and the level factor in one sample, and fails to load on any factor in one sample.

Table 3 shows the results of factor analyses across three job classification groups. From job descriptive information, it was apparent that Troopers and Corporals are the line employees (analogous to the

salaries-nonexempt group in Scarpello et al.) of these law enforcement organizations, that Sergeants are analogous to first-line supervisors or foremen, and that Lieutenants, Captains, Majors, and Colonels constitute management. Hence, three job classification groups were used (Troopers and Corporals, Sergeants, and Lieutenants and above). Unlike the Scarpello et al. results across job classification groups, nearly identical three-factor solutions (level, benefits, and structure-administration) were found for all three job classification groups. With the exception of structure-administration item S-A13 (the organization's pay structure) which loads on both the level factor and the structure-administration factor in the Lieutenants and above classification, and item S-A15 (pay of other jobs in the organization) which fails to load on any factor in the Lieutenants and above classification, the items load identically, invariantly, and exclusively on factors in all three classification groups. The level factor consists of the four level scale items plus raises items R9 (my most recent raise) and R11 (the raises I have typically received in the past). The benefits factor consists of the four benefits scale items. The structure-administration factor consists of the six structure-administration scale items plus two raise items, R10 (influence my supervisor has on my pay) and R12 (how my raises are determined).

Given the consistency of the PSQ item loadings across the eight law enforcement samples (Table 2) and the three job classification samples (Table 3), the three-factor solution indicated in Table 3 appears to be the appropriate dimensional structure for compensation satisfaction in the occupational area of law enforcement, at least within the domain of the 18 items of the PSQ. This solution involves eliminating the raises scale from

the current Heneman and Schwab (1985) version of the PSQ by allocating two of its items to the level scale, and two to the structure-administration scale. Table 4 provides internal consistency and interitem correlation results for both Heneman-Schwab four-factor solution and the three-factor solution obtained in the current study. Reallocation of the raises scale items in this manner eliminates the marginally low internal consistency value of .69 and the unacceptably high scale intercorrelations of .64 (level with raises) and .65 (structure-administration with raises). In the law enforcement three-factor solution the only inappropriately high scale intercorrelation is that between level and structure-administration (.57).

#### DISCUSSION

The weight of the evidence from three factor analytic studies (Heneman & Schwab, 1985; Scarpello et al.; the current study) and two studies pertaining to reliability, stability and independence of the PSQ scales (Ash, Lee & Dreher, 1985; Ash, Dreher & Bretz, 1987) suggests that compensation satisfaction consists of two independent dimensions—pay level and benefits—and a third dimension that is not independent of pay level—structure-administration. These three dimensions appear adequate to explain the majority of systematic variation in employee compensation satisfaction in hourly-paid manufacturing occupations, salaried-nonexempt manufacturing occupations, and all ranks of uniformed law enforcement occupations. There is some evidence to suggest that a fourth dimension—raises—may be necessary or useful for adequately measuring compensation satisfaction in some managerial, professional, and technical occupations. The evidence for separate pay structure and pay administration dimensions as originally suggested by Heneman and Schwab is extremely weak at this time.

Scarpello et al. suggest that a raises factor is found in salaried-exempt samples but not in hourly-paid samples because the supervisor typically has little influence on pay raises and the pay raise process is relatively objective for hourly-paid jobs, whereas the raise determination process is more subjective and dependent on supervisory judgment and discretion for salaried-exempt jobs. Our failure to find a raises factor for the law enforcement management sample seemingly contradicts this explanation. However, we believe that our finding does not contradict the Scarpello et al. explanation, and upon deeper reflection, may actually support it.

Consider the nature of pay systems in most law enforcement (and many other government) organizations. Each job (rank) is assigned to a pay range consisting of a series of steps (different pay rates) on the basis of job evaluation (the relative value of the content of the nature of the work). Pay raises typically consist of 1) an adjustment to the pay range determined by elected officials and somewhat related to increases in cost of living, and 2) a "merit" increase which typically consists of moving to the next higher step within the pay range. Employees on lower steps in the range are eligible for a "merit" step increase each year. Higher steps in the range are often called "longevity steps" because one must be on the immediately lower step for two or three years before being eligible for the "merit" step increase. Employees receive "merit" step increases for which they are eligible if their overall annual performance ratings are "acceptable" or higher. The substantial majority of annual performance ratings are typically "acceptable" or higher. Thus, the majority of employees receive both the range increases and the "merit" step increases which they are

eligible for through sufficient longevity at their current step. This system applies throughout the rank (job) structure of the law enforcement organizations, with the possible exception of the top executive position (Superintendent/Colonel). It appears that the raise determination process in most law enforcement organizations is fairly automatic and largely independent of the supervisor. Therefore, we would not expect to find a raises factor in the law enforcement management sample if the Scarpello et al. explanation is correct.

These findings support the general conclusion of Scarpello et al. that the level, raises and structure-administration items are likely to be sensitive to contextual factors in terms of which dimensions of compensation satisfaction they tap. However, they have implications beyond the Scarpello et al. emphasis on the potential impact of job classification, and suggest that other factors, such as the nature of the pay system and perhaps other noncompensation systems including staffing, training and development, and labor relations, may interact in a compensatory way to influence the nature of compensation satisfaction, in addition to other aspects of job satisfaction (cf. Staw, 1986).

Turning to specific PSQ items, note that raises scale items R9 (my most recent raise) and R11 (the raises I have typically received in the past) load on the level factor in 23 of the 25 factor analyses that have been conducted in three studies, including two of the three samples which yielded a raises factor. It seems clear to us that these should be considered level items because they clearly imply an impact on one's current direct wage or salary. Raises scale item R12 (how my raises are determined) seems to be particularly sensitive to occupational differences. Among the 22 three-

factor solutions it loads on the structure-administration factor in all the law enforcement samples, the nursing home sample, and the salaried-nonexempt manufacturing sample, but loads on the level factor in all the other manufacturing samples. The former indicates a process oriented frame of reference on the part of respondents while the latter implies an outcome frame of reference (cf. Scarpello et al.).

Item S-A13 (the organization's pay structure) is problematic in that it appears to load (or not load) almost at random on either level, structure-administration, or both. This item reflects personnel jargon and is inappropriate for an instrument to be administered to the general public. It has been our experience that our personnel management students do not know what a pay or wage structure is until we teach them. We concur with the Scarpello et al. recommendation that this item be replaced with two items: 1) pay on higher level jobs than mine, and 2) pay on lower level jobs than mine.

In summary, the three-factor solution indicated in Table 3 appears to be the appropriate dimensional structure for compensation satisfaction in the occupational area of law enforcement. In practice, we recommend that PSQ item S-A13 be replaced by the two items listed in the preceding paragraph. We also recommend that both practitioners and researchers continue to examine the factor structure obtained when they use the PSQ due to potential influences of contextual factors on the dimensional structure of compensation satisfaction. We encourage additional research on item or instrument development in this domain. Most importantly, we join other researchers in emphasizing the need to consider and measure compensation satisfaction as a multidimensional construct.



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TABLE 1

Demographic Information for Respondents From Each of Eight  
Law Enforcement Organizations and the Total Sample

	<u>N</u>	<u>Age</u>		<u>Education in Years</u>		<u>Organization Tenure in Years</u>		<u>% Male</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Organization 1	191	40	9	14	2	14	9	96.3
Organization 2	75	34	7	14	2	9	7	97.3
Organization 3	72	39	10	14	2	11	7	95.8
Organization 4	216	39	9	14	2	15	9	99.5
Organization 5	138	39	7	14	2	13	7	97.1
Organization 6	183	35	5	14	2	10	5	98.4
Organization 7	143	38	9	14	2	13	9	93.7
Organization 8	171	38	9	14	2	12	8	91.8
Total Sample	1189	38	9	14	2	13	8	96.4

TABLE 2

Results of Principal Components Analysis Across Eight State Law Enforcement Organizations

PSQ Item	Organization 1 N=191			Organization 2 N=75			Organization 3 N=72			Organization 4 N=216		
	F1	F2	F3	F1	F2	F3	F1	F2	F3	F1	F2	F3
1. My take-home pay (L).....	.84	.23	.17	.21	.84	.08	.87	.29	.02	.83	.19	.20
2. My current salary (L).....	.90	.22	.15	.26	.89	.17	.90	.23	.01	.87	.25	.10
3. My overall level of pay (L)..	.89	.22	.18	.27	.87	.14	.82	.32	.20	.83	.28	.11
4. Size of my current salary (L)	.91	.21	.17	.22	.89	.18	.92	.26	.03	.90	.19	.11
5. My benefit package (B).....	.21	.07	.82	.13	.30	.87	-.02	.07	.93	.16	.10	.87
6. Amount the organization pays toward my benefits (B).....	.16	.12	.85	.22	.05	.74	-.09	.47	.52	.10	.15	.81
7. The value of my benefits (B).	.14	.19	.83	.20	.11	.89	.19	.04	.88	.19	.16	.88
8. The number of benefits I receive (B).....	.08	.16	.91	.19	.16	.89	.03	.07	.92	.15	.13	.93
9. My most recent raise (R).....	.74	.34	.05	.34	.29	.15	.68	.20	.02	.66	.34	.20
10. Influence my supervisor has on my pay (R).....	.12	.55	.19	.45	.19	.03	.22	.21	.31	.21	.37	.26
11. The raises I have typically received in the past (R).....	.73	.24	.18	.53	.19	.21	.75	.30	.19	.61	.39	.19
12. How my raises are determined (R).....	.37	.62	.00	.55	.08	.40	.42	.62	.02	.40	.50	.20
13. The organization's pay structure (S-A).....	.50	.52	.09	.67	.09	.25	.38	.64	.23	.31	.69	.14
14. Information the organization gives about pay issues of concern to me (S-A).....	.23	.58	.13	.61	.04	.02	.20	.71	.17	.31	.63	.08
15. Pay of other jobs in the organization (S-A).....	.28	.61	.06	.57	.29	.14	.23	.64	.17	.09	.65	.09
16. Consistency of the organization's pay policies (S-A).....	.18	.76	.20	.70	.13	.22	.39	.66	.04	.22	.62	.13
17. Differences in pay among jobs in the organization (S-A)....	.22	.72	.06	.71	.33	.15	.21	.80	.09	.11	.75	.06
18. How the organization administers pay (S-A).....	.07	.79	.08	.74	.26	.14	.24	.78	-.02	.20	.55	.05
Eigenvalues of Correlation Matrix	7.71	2.41	1.83	7.17	2.17	1.64	7.60	2.76	1.64	7.33	2.38	1.49
Variance Explained Prior to Rotation.....	42.8%	13.4%	10.2%	39.8%	12.0%	9.1%	42.2%	15.3%	9.1%	40.7%	13.2%	8.3%
Variance Explained After Rotation.	27.4%	21.2%	17.6%	22.0%	20.1%	18.8%	27.1%	22.8%	17.0%	24.2%	19.4%	18.7%

Note: Items corresponding to the Heneman and Schwab PSQ scales are: (L) = Pay Level item, (B) = Benefits item, (R) = Raises item, (S-A) = Structure/Administration item.

Table continued.....

TABLE 2 continued

Results of Principal Components Analysis Across Eight State Law Enforcement Organizations

PSQ Item	Organization 5 N=138			Organization 6 N=183			Organization 7 N=143			Organization 8 N=171		
	F1	F2	F3	F1	F2	F3	F1	F2	F3	F1	F2	F3
1. My take-home pay (L).....	.86	.02	.21	.83	.11	.17	.04	.88	.15	.82	.23	.08
2. My current salary (L).....	.86	.17	.23	.83	.08	.24	.13	.90	.13	.87	.15	.12
3. My overall level of pay (L)..	.79	.27	.21	.80	.28	.25	.26	.87	.14	.86	.17	.22
4. Size of my current salary (L)	.84	.21	.17	.86	.14	.29	.15	.88	.18	.91	.18	.10
5. My benefit package (B).....	.31	.05	.84	.22	.11	.82	.10	.23	.84	.28	.83	.08
6. Amount the organization pays toward my benefits (B).....	.12	.23	.81	.15	.14	.73	.10	.11	.81	.09	.80	.13
7. The value of my benefits (B).	.20	.20	.86	.16	.23	.84	.20	.16	.83	.23	.88	.12
8. The number of benefits I receive (B).....	.28	.26	.81	.15	.20	.85	.12	.15	.87	.22	.88	.14
9. My most recent raise (R).....	.69	.05	.18	.52	.23	-.10	.41	.70	.12	.55	.23	.33
10. Influence my supervisor has on my pay (R).....	.07	.61	.11	.08	.50	.01	.45	.02	.02	.03	-.09	.43
11. The raises I have typically received in the past (R).....	.56	.41	.17	.36	.32	.16	.30	.52	.33	.59	.14	.25
12. How my raises are determined (R).....	.07	.73	.19	.16	.64	.13	.74	.16	.32	.14	.18	.65
13. The organization's pay structure (S-A).....	.45	.48	.18	.30	.65	.06	.74	.39	.07	.49	.00	.50
14. Information the organization gives about pay issues of concern to me (S-A).....	.06	.67	.11	.12	.61	.33	.61	.10	.37	.12	-.03	.57
15. Pay of other jobs in the organization (S-A).....	.52	.36	.13	.18	.56	.12	.79	.07	.06	.15	.31	.42
16. Consistency of the organization's pay policies (S-A).....	.21	.65	.20	.06	.61	.10	.78	.19	.11	.15	.18	.65
17. Differences in pay among jobs in the organization (S-A).....	.41	.49	-.01	.06	.66	.16	.83	.18	.12	.14	.25	.65
18. How the organization administers pay (S-A).....	.25	.58	.10	.14	.66	.14	.75	.29	.06	.18	.17	.73
Eigenvales of Correlation Matrix	7.34	1.83	1.75	6.25	1.92	1.79	7.63	2.42	2.22	6.68	2.05	1.86
Variance Explained Prior to Rotation.....	40.8%	10.2%	9.7%	34.7%	10.7%	9.9%	42.4%	13.5%	12.3%	37.1%	11.4%	10.3%
Variance Explained After Rotation.	25.5%	17.7%	17.5%	19.3%	18.9%	17.2%	25.5%	24.1%	18.3%	23.4%	18.6%	16.9%

Note: Items corresponding to the Heneman and Schwab PSQ scales are: (L) = Pay Level item, (B) = Benefits item, (R) = Raises item, (S-A) = Structure/Administration item.

TABLE 3  
Results of Principal Components Analysis Across Job Classification Groups

PSQ Item	Troopers and Corporals N=699			Sergeants N=195			Lieutenants and Above N=95		
	F1	F2	F3	F1	F2	F3	F1	F2	F3
1. My take-home pay (L).....	.85	.17	.21	.88	.09	.20	.85	.24	.03
2. My current salary (L).....	.89	.20	.18	.89	.18	.20	.89	.22	.10
3. My overall level of pay (L).....	.86	.25	.18	.85	.27	.22	.87	.28	.21
4. Size of my current salary (L).....	.89	.20	.19	.91	.16	.19	.90	.20	.12
5. My benefit package (B).....	.20	.03	.89	.28	.09	.88	.26	.88	.10
6. Amount the organization pays toward my benefits (B).....	.14	.13	.84	.13	.10	.85	.15	.90	.12
7. The value of my benefits (B).....	.18	.10	.90	.14	.15	.90	.28	.89	.13
8. The number of benefits I receive (B).....	.15	.10	.92	.21	.16	.90	.10	.92	.15
9. My most recent raise (R).....	.63	.34	.08	.80	.31	.00	.70	-.07	.05
10. Influence my supervisor has on my pay (R).....	.04	.52	.01	.23	.51	-.07	-.15	.10	.57
11. The raises I have typically received in the past (R).....	.68	.34	.12	.66	.13	.14	.53	.37	.41
12. How my raises are determined (R)..	.26	.65	.08	.23	.63	.13	.16	.13	.68
13. The organization's pay structure (S-A).....	.46	.60	.06	.44	.59	.11	.53	.21	.52
14. Information the organization gives about pay issues of concern to me (S-A).....	.24	.62	.08	.10	.65	.18	.20	.01	.67
15. Pay of other jobs in the organization (S-A).....	.20	.62	.14	.06	.63	.30	.43	.26	.36
16. Consistency of the organization's pay policies (S-A).....	.24	.72	.03	.08	.78	.08	.06	.21	.67
17. Differences in pay among jobs in the organization (S-A).....	.15	.74	.12	.07	.76	.16	.36	.19	.52
18. How the organization administers pay (S-A).....	.15	.73	.05	.17	.69	-.07	.13	-.09	.82
Eigenvalues of Correlation Matrix	7.30	2.69	1.71	7.24	2.50	2.29	7.40	2.32	2.17
Variance Explained Prior to Rotation...	40.6%	14.9%	9.5%	40.2%	13.9%	12.7%	41.1%	12.9%	12.1%
Variance Explained After Rotation.....	25.0%	21.5%	18.7%	26.1%	21.1%	19.4%	26.3%	21.2%	18.5%

Note: Items corresponding to the Heneman and Schwab PSQ scales are: (L) = Pay Level item, (B) = Benefits item, (R) = Raises item, (S-A) = Structure/Administration item.

TABLE 4

PSQ Internal Consistency Coefficients and Interitem Correlations for the Heneman-Schwab Four-Factor Solution v. the Law Enforcement Three-Factor Solution (N=1189)

Heneman-Schwab Four-Factor Solution

<u>PSQ Scale</u>	<u>Pay Level</u>	<u>Benefits</u>	<u>Raises</u>	<u>Structure/ Administration</u>	<u>Alpha</u>	<u>Number of Items</u>
Pay Level.....	(.84)	.39	.64	.51	.95	4
Benefits.....	.34	(.78)	.29	.28	.93	4
Raises.....	.45	.19	(.37)	.65	.69	4
Structure/ Administration...	.36	.19	.34	(.45)	.83	6

Law Enforcement Three-Factor Solution

<u>PSQ Scale</u>	<u>Pay Level</u>	<u>Benefits</u>	<u>Structure/ Administration</u>	<u>Alpha</u>	<u>Number of Items</u>
Pay Level.....	(.72)	.38	.57	.93	6
Benefits.....	.30	(.78)	.28	.93	4
Structure/ Administration...	.34	.18	(.40)	.84	8

Note: Average interitem correlations within scales are shown in the diagonal, average interitem correlations between scales are below the diagonal, and correlations between the scales are shown above the diagonal. All average correlations were computed using r to z' transformations.