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Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey[1]

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The development of the Job Satisfaction Survey (JSS), a nine-subscale measure of employee job satisfaction applicable specifically to human service, public, and nonprofit sector organizations, is described. The item selection, item analysis, and determination of the final 36-item scale are also described, and data on reliability and validity and the instrument's norms are summarized. Included are a multitrait-multimethod analysis of the JSS and the Job Descriptive Index (JDI), factor analysis of the JSS, and scale intercorrelations. Correlation of JSS scores with criteria of employee perceptions and behaviors for multiple samples were consistent with findings involving other satisfaction scales and with findings from the private sector. The strongest correlations were with perceptions of the job and supervisor, intention of quitting, and organizational commitment. More modest correlations were found with salary, age, level, absenteeism, and turnover.

Job satisfaction of employees is a topic that has received considerable attention by researchers and practitioners alike. Locke (1976) has calculated that at least 3,350 articles had been written on the topic by 1972. Extending his calculations to 1985 yields an estimate of 4,793. In all of these writings, relatively little can be found about the human service employee. Sarata in 1974 was able to find fewer than 20 studies concerned with human services, mostly with nurses. Several years later Dehlinger and Perlman (1978) could find only a few others and called human service employees "industry's forgotten

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staff," at least as far as their job satisfaction is concerned. During the late 1970s interest in human service workers' job satisfaction began to increase with research concerned with comparisons to industrial workers (e.g., Cherniss & Egnatios, 1978; Frontz, 1978; Zaharia & Baumeister, 1979) and causes of satisfaction (e.g., Dorr, Honea, & Pozner, 1980; Folkins, O'Reilly, Roberts, & Miller, 1977; Sarata, 1977; Spector & Marlowe, 1983).

Despite the increased attention to job satisfaction in human service organizations, generalizations must still be made from industrial findings in many areas. Norms for existing job satisfaction scales do not reflect human services, making it impossible to compare a given human service organization to human service organizations in general. Cherniss and Egnatios (1978) and Zaharia and Baumeister (1979) using the Job Descriptive Index, JDI (Smith, Kendall, & Hulin, 1969), and Frontz (1978) using the Minnesota Satisfaction Questionnaire (Weiss, Davis, England, & Lofquist, 1967) found lower satisfaction in their human service samples than the norms of the instruments, but it is difficult to know how typical these results might be. Furthermore, with many variables studied in industrial organizations, it is unclear how well results generalize to human services. For example, it is a widely held conclusion based on available evidence that job satisfaction is not consistently associated with job performance (e.g., Locke, 1976; Vroom, 1964). In human services, however, there is evidence that satisfaction is associated with employee performance (Wiggins & Moody, 1983) and client outcomes (Buffum & Konick, 1982; Schwartz & Will, 1961). It is indeed possible that findings with other variables will also be found to differ with human services.

To fill the need for an instrument for human services, a new job satisfaction instrument, the Job Satisfaction Survey (JSS) was developed. This scale measures nine aspects of job satisfaction, which were chosen from a review of the literature on job satisfaction dimensions. It was designed specifically for human service, public, and nonprofit sector organizations, although it may be applicable to others as well. Although an existing scale might have been used in this research, a new scale was developed for three reasons. First, it was intended that the content of the items should be applicable specifically to human services. Most existing scales were developed in other types of organizations, and some items may not be directly applicable. The current author has encountered difficulties of this type with the widely used JDI, a problem also noted by Buffum and Konick (1982). Second, the scale was intended to cover the major aspects of job satisfaction, with subscales that were clearly distinct in their content. Existing scales did not adequately cover all the areas of interest; for example, the JDI covers five that are included in the JSS but fails to cover four others. Finally the length of the scale was a concern, and it was decided to keep the JSS under 40 items.

The development of the JSS was predicated on the theoretical position that job satisfaction represents an affective or attitudinal reaction to a job.

In the literature, job satisfaction is typically referred to as an emotional-affective response to a job or specific aspects of a job (Locke, 1976; Smith et al., 1969). Smith et al. postulated that satisfaction with various job aspects are derived from a cognitive process of comparing the existing job aspect with an individual's frame of reference. Locke (1976) distinguished three major approaches to the causes of job attitudes. They can derive from discrepancies between what the job offers and what the person expects, from the degree to which jobs fulfill individual needs, or from the degree to which individual values (desires or wants) are fulfilled. Regardless of the exact causal mechanism, job attitudes arise from an interaction certain aspects of jobs should lead to satisfaction of particular job aspects. For example, level of pay should be related to satisfaction with pay, job scope should be related to satisfaction with the job itself.

The attitudinal nature of satisfaction implies that an individual would tend to approach (or stay with) a satisfying job and avoid (or quit) a dissatisfying job. In the general attitudinal literature, attitudes have shown to relate to behavior, although correlations are typically modest. Withdrawal behavior, turnover and absenteeism, and withdrawal intentions are expected to correlate with satisfaction (Hom, Katerberg, & Hulin, 1979) and in fact do, as shown in research described below.

In the current research, job satisfaction was assumed to represent a cluster of evaluative feelings about the job, and the JSS was designed to measure them individually. It was also designed to give an overall attitude score as a combination of individual facets. Although it is not universally accepted that the overall attitude about a job is a combination of specific aspect attitudes, there is considerable empirical evidence that a linear combination of satisfaction aspects is an adequate overall satisfaction measure (Aldag & Brief, 1978; Quinn & Mangione, 1973; Wanous & Lawler, 1972).

This paper discusses the development of the JSS, including evidence for reliability and validity, provides norms for the instrument across 19 human service samples, and summarizes correlations of job satisfaction with other variables, which have been found in the literature to relate to job satisfaction. These variables include turnover (see reviews by Mobley, Griffeth, Hand, & Meglino, 1979; Porter & Steers, 1973), intentions of quitting the job (Kraut, 1975; Michaels & Spector, 1982; Mobley et al., 1979), perceived job characteristics (Hackman & Lawler, 1971; Hackman & Oldham, 1975), leadership style, specifically consideration (Downey, Sheridan, & Slocum, 1975), and absenteeism (Porter & Steers, 1973), although there is some controversy about absenteeism (Nicholson, Brown, & Chadwick-Jones, 1976). Personal characteristics also have been shown to relate to job satisfaction, but relationships have been weak and variable (Seashore & Taber, 1975). Age (Ronen, 1978), pay (Lawler, 1971), and organizational level (Locke & Whiting, 1974; Porter, 1961) are all included.

The remainder of this paper summarizes the research that has been done with the JSS in human service organizations. Additional work that has been done in other types of organizations is not discussed, with one exception. A multitrait–multimethod analysis with the JDI, conducted on a municipal public works sample is described briefly. Discussed as a single sample are administrations to 19 samples representing several dozen human service organizations. Several thousand employees in the public and nonprofit sectors participated in a large-scale study of job satisfaction with the JSS.

METHOD

Subjects

The primary data summarized in this paper were collected from 3,148 respondents who constituted 19 separate samples. Due to missing data (e.g., 8.8% of respondents omitted 1 or more JSS items) sample sizes varied across analyses, as will be indicated. Each sample represented a single study or administration of the JSS, usually in combination with other instruments. Several samples represented multiple organizations, and three pairs of samples were taken from the same organizations, between 12 and 18 months apart. Employees were all from human service, public, and nonprofit sector organizations, including community mental health centers, state psychiatric hospitals, state social service departments, and nursing homes. They represented all levels from administrators and department managers to line and support personnel, including nurses, mental health counselors, social workers, clerks, secretaries, trainers, research specialists, and maintenance personnel. Table I summarizes the size, response rate, organizational type and source of each sample. Table II indicates the additional variables collected from each sample.

One additional nonhuman service sample is presented to indicate discriminant and convergent validity. This sample consisted of 101 municipal public works employees. Both the JSS and JDI were administered to this sample.

Measures

Organizational Commitment. Commitment to the organization was measured with the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979). This instrument is a 15-item summated rating scale that measures an employee's commitment to the organization. For half the

Table I. Description of Samples

Sample	*n*	Description	Source	Return rate
1	241	State welfare office	Michaels, 1983	67
2	92	Public health department	Michaels, 1983	67
3	205	Mental health facility (state)	Michaels, 1983	67
4	42	State juvenile detention department	Michaels, 1983	67
5	73	Food-stamp office	Michaels, 1983	67
6	788	State social service office	Michaels, 1983	67
7	83	Mental health clinic (nonprofit)	Michaels, 1980	n/a
8	124	Mental health clinic (nonprofit)	Michaels & Spector, 1982	67
9	86	Mental health clinic (nonprofit)	Author	62
10	157	Mental health facility (state)	Author	71
11	80	Mental health clinic (nonprofit)	Spector & Michaels, 1983	49
12	116	State welfare office	Michaels, 1979	n/a
13	32	Mental health clinic (nonprofit)	Author	64
14	93	Mental health facility (state)	Author	42
15	94	Mental health conference	Weinberg & Marlowe, 1983	63
16	193	State psychiatric hospital	Marlowe & Weinberg, 1983	100
17	485	Nursing homes	Nelson, Mullins, Weiner, & Busciglio, 1983	100
18	63	Mental health clinic (nonprofit)	Author	63
19	101	Mental health clinic (nonprofit)	Author	63
Total	3,148			

sample only two items from the scale were used. High scores represent high commitment.

Job Characteristics. The Job Diagnostic Survey (JDS; Hackman & Oldham, 1975) measures perceived characteristics of jobs. Six subscales were used including Skill Variety, Task Identity, Task Significance, Autonomy, Feedback from the Job, Feedback from Agents, and the composite Motivation Potential Score. High Scores on each of these subscales represent high levels of that characteristic.

Leader Behavior. The Leader Behavior Description Questionnaire (LBDQ; Stogdill, 1963) was used to measure perceptions of supervisory consideration. This subscale contains 10 descriptive statements, which indicate the level of supervisory concern with employee feelings and welfare. High scores represent high levels of consideration.

Employee Withdrawal. Employee withdrawal was measured as turnover, intentions of quitting the job, and absenteeism. Intention of quitting was assessed with one question, "How often have you seriously considered quitting your present job?" Responses were made on a 6-point scale ranging from "never" (coded 1) to "extremely often" (coded 6). In two samples, individual turnover or actual quitting was measured as well. Absenteeism was

Table II. Summary of Variables Correlated with JSS by Sample

Variable	Samples[a]
Skill variety	3, 6, 9, 14
Task identity	3, 6, 9, 14
Task significance	3, 6, 9, 14
Autonomy	3, 6, 9, 14, 15
Feedback from the job	3, 6, 9, 14
Feedback from agents	3, 6, 9, 14
MPS	3, 6, 9, 14
Age	1-6, 8, 11, 12
Level	7-11, 14, 15, 17, 18, 19
Absenteeism	1-6, 9, 14
Salary	7, 8, 11
Commitment	7, 8, 14, 19
LBDQ	7, 8, 19
Intent to quit	1-14, 18, 19
Turnover	8, 11

[a]See Table I.

assessed in two ways, by self-report or organizational records. In all cases, number of days absent in a specified time period was measured, since these were the only data available in the records of participating organization.

Personal Characteristics. Three personal characteristics were measured including age (in years), annual salary (in dollars), and level in the organization (1 = nonsupervisor, 2 = supervisor). Each of these were gathered with a single self-report question.

Procedure

Data from all samples were collected with typical organizational survey procedures, except one of the samples which was collected in a training workshop. The remaining samples were from surveys of employee attitudes conducted at work settings. In most cases questionnaires were distributed to employees through interoffice mail, by supervisors, or at staff meetings. Employees returned them to the researchers by interoffice mail, by placing them in a central collection box, or by having the researchers collect them in person. Several of the samples were collected by students or colleagues for their own research and are acknowledged in Table I.

For the samples in which objective turnover or absenteeism was assessed, the last four digits of the subject's social security number was requested. These partial social security numbers were matched to absence and turnover records within a specified time period. All subjects were informed of the research purpose to which the data and partial social security numbers would be used.

RESULTS

Initial Development and Item Selections

The development of the JSS proceeded using attitude scale construction techniques for summated (Likert) rating scales. First, the domain of interest was defined. To accomplish this, a literature review was conducted including studies of job satisfaction dimensions. Many of these studies were factor analyses of existing or ad hoc instruments to determine the underlying dimensions of satisfaction. Others were conceptual analyses of satisfaction facets. From each study a list of dimensions was made and the nine most common and conceptually meaningful (to the author) were chosen for the scale. It was felt that these nine items adequately sample the domain of job satisfaction so that a combined score (sum of all subscales) would yield a good measure of overall satisfaction. These included satisfaction with pay, promotional opportunities, fringe benefits, contingent rewards (appreciation and recognition), supervision, co-workers, nature of work itself, communication, and work conditions. Items were written to tap each of the nine dimensions. Some dimensions had more items than others because the areas varied in specificity and breadth. A total of 74 items were compiled for inclusion in the first version of the scale.

It was decided to use the summated rating scale format with six agree-disagree response choices: disagree very much, disagree moderately, disagree slightly, agree slightly, agree moderately, and agree very much. These response choice intervals were approximately equal psychologically according to the scale values generated by Spector (1976) and were scored from 1 to 6, respectively. Approximately half of the items were written in a positively worded direction and about half in a negatively worded direction. Each item was an evaluative statement, agreement with which would indicate either a positive or negative attitude about the job.

The initial item pool was administered to a small pilot sample of 49 employees of a community mental health center in the southeastern United States. Part-whole correlations were calculated for each item with its subscale. Those items were retained that had a part-whole of at least .45. This left 34 items with no more than 4 per subscale; 2 additional items were written to equalize the items per subscale at 4 each, and this became the final scale.

All subscales remained as conceptualized originally, except for work conditions. This subscale originally contained the most items and included both physical conditions, such as equipment and the physical environment, and operational conditions, such as rules, procedures, and red tape. Only the latter items were retained and this subscale was renamed Operational Procedures. The JSS is contained in the Appendix.

Reliability and Norms

Internal consistency reliability (coefficient alpha) was computed for each subscale and the total scale on a sample of 2,870 (see Table III), and each was above the .50 minimum suggested by Nunnally (1967). All but two were over .70 and the total scale was .91. Mean interitem correlations are also shown in the table. Part-whole correlations were all acceptable ($r > .26$).

A test-retest reliability estimate for the JSS was available from one relatively small sample. JSS scores were calculated on the same 43 individuals, who were represented in Samples 8 and 11 (see Table I), 18 months apart. Correlation coefficients between subscales at both points in time (see Table III) were surprisingly high, considering the long time span and many changes in the organization (reorganization, layoffs, and new top administration). They ranged from .37 to .74 for the subscales and was .71 for the entire scale. Of course the test-retest reliabilities of this scale would be expected to be considerably higher with a shorter span and with fewer intervening organizational changes and events.

Table III also contains the means and standard deviations from 3,067 human service employees who completed the scale. For these calculations a single missing item within a subscale was replaced by the mean of responses to the remaining three items. These statistics are the norms for the instrument, based on employees from several dozen organizations in the southeastern United States.

Table III. Means, Standard Deviations, and Reliabilities for the JSS

Subscale	Mean	*SD*	Mean interitem correlation	Coefficient alpha	Test-retest reliability
Pay	10.5	5.1	43	75	45
Promotion	11.5	5.1	40	73	62
Supervision	19.9	4.6	53	82	55
Benefits	13.1	5.0	40	73	37
Contingent rewards	13.4	5.1	44	76	59
Operating procedures	12.5	4.6	29	62	74
Co-workers	18.8	3.7	33	60	64
Nature of work	19.2	4.4	50	78	54
Communication	14.0	5.0	38	71	65
Total satisfaction	133.1	27.9	21	91	71
n	3,067	3,067	2,870	2,870	43

Table IV. Multitrait-Multimethod Matrix for JSS and JDI Subscales[a]

Scale	1	2	3	4	7	6	7	8	9	10
JDI										
1. Work										
2. Pay	27									
3. Promotion	47	25								
4. Supervision	31	23	31							
5. Co-workers	37	30	37	28						
JSS										
6. Work	66	24	32	24	23					
7. Pay	33	62	51	34	30	29				
8. Promotion	34	31	77	27	34	20	61			
9. Supervision	25	27	26	80	24	22	34	28		
10. Co-workers	32	18	30	26	61	25	20	25	30	
Benefits	28	29	35	07	17	21	49	46	01	19
Contingent rewards	34	37	57	45	43	28	58	58	46	47
Operating procedures	07	-08	14	-14	05	00	15	17	-22	15
Communication	40	20	50	38	45	37	40	40	37	55

[a] $n = 102$, $r > .19$ for $p < .05$.

Discriminant and Convergent Validity

The major evidence for discriminant and convergent validities was provided by a multitrait-multimethod analysis of the JSS and JDI. Table IV summarizes the intercorrelations of the JSS and JDI subscales, with the multitrait-multimethod matrix at the top, and the correlations between the five common subscales and additional JSS subscales at the bottom.

As can be seen in the table, the results meet all four criteria of Campbell and Fiske (1959). First, the validity correlations between equivalent subscales from both instruments (underlined) were significantly larger than zero and of reasonable magnitude, .61 to .80. Second, these values were all higher than correlations between noncorresponding subscales across instruments, shown in the hetero-trait, hetero-method triangles. Third, the validity correlations were all higher than the intercorrelations among subscales within each instrument, as shown in the hetero-trait, mono-method triangles. Finally, the pattern of interrelationships among subscales for both instruments were reasonably consistent, with all but one correlation from each instrument rang-

Table V. Intercorrelations Among Subscales[a]

Subscale	1	2	3	4	5	6	7	8
1. Pay								
2. Promotion	.53							
3. Supervision	.19	.25						
4. Benefits	.45	.36	.10					
5. Contingent rewards	.54	.58	.46	.38				
6. Operating procedures	.31	.31	.17	.29	.46			
7. Co-workers	.19	.23	.42	.16	.39	.22		
8. Nature of work	.25	.32	.31	.20	.47	.30	.32	
9. Communication	.40	.45	.39	.30	.59	.44	.42	.43

[a] n = 3,067. All are significant at $p < .001$.

ing from .20 to .37. In addition, the validity correlations were all higher than relationships between each common subscale and the additional JSS subscales.

If the JSS does indeed measure conceptually distinct facets of job satisfaction, which is implied by discriminant validity, one would expect small to moderate correlations among the subscales. These correlations ranged from .11 to .59 with a median correlation of .35 (see Table V).

The individual items of the JSS were factor analyzed using principal components witth varimax rotation (oblique rotation was also used and yielded similar results). Nine eigenvalues were greater than 1.0, encouraging since there are nine subscales in the instrument. All nine were rotated to determine if the empirically derived factors were similar to the conceptual facets. There were eight interpretable factors, so an eight-factor rotation was performed. The eight factors matched perfectly eight of the subscales (each factor comprised all four subscale items) with Contingent Rewards items splitting evenly between supervision and pay factors. Two items, which related to rewards in general, loaded with Pay items, and two items, which related to recognition and appreciation, loaded with Supervision items. These results are suggestive of convergent validity in that the individual items, which can be considered alternate measures of their own subscale construct, clustered (loaded) more highly with other items measuring the same construct than different constructs. The one exception was the Contingent Reward items which did not form a distinct factor. Unfortunately, adding them to the pay and supervision subscales, as suggested by the factor analysis, actually had little effect on the internal consistency of the scales.

Relationships With Other Variables

JSS data have been collected with several other scales and variables that are shown in the literature to relate to satisfaction with samples other than human service. These tests, then, are tests of the generalizability of these results to human services. Included here is a summary of the relationship between JSS and employee characteristics, perceived job and supervisor characteristics, commitment, absenteeism, and turnover. Since data were available from several samples for each criterion variable, a variation of the Hunter, Schmidt, and Jackson (1982) meta-analysis procedure for combining correlations was used. Presented in Table VI are the magnitude and statistical significance for weighted mean correlations between JSS and each criterion, the number of samples providing correlation data, the total sample size and the U statistic, a measure of correlation homogeneity. This statistic is distributed approximately as chi square and indicates for set of correlations if one or more differs from the others significantly. A nonsignificant U suggests that correlation variation among samples is due to sampling error. A significant U might be caused by artifacts, such as range restriction in some samples, intersample variation in reliability, or by moderator variables.

Employee Characteristics. Age was found to relate to Total Satisfaction ($r = .16$) and was most highly related to Nature of Work and Pay ($r = .24$, .21, respectively). There was little intersample variation in these correlations that could not be accounted for totally by measurement error. These were for Communication and Total Satisfaction.

There were small but significant relationships between Level and Pay, Promotion, and Nature of Work, and most other scales, although in seven cases there was significant variation among correlations. For these subscales, satisfaction was associated with higher organizational levels. However, for Operating Procedures the relationship was reversed, with nonsupervisors being more satisfied.

Salary was significantly related to Pay and Operating Procedures, and in both cases there were nonsignificant U statistics. The direction of relationship, however, was opposite with high pay being associated with high scores on Pay and low scores on Operating Procedures.

Leadership. It was expected that supervisory consideration would be most strongly related to Supervision and Contingent Rewards, which are under control of supervisors. The data presented in Table VI supported this contention. Across three samples the consideration subscale of the LBDQ was significantly correlated with Supervision ($r = .70$) and Contingent Rewards ($r = .42$). It was related to all but one of the other subscales but with smaller correlation coefficients. For all but Supervision the correlations were homogeneous across samples.

Turnover. In 16 samples intention of quitting the job was assessed. In all samples there were significant correlations between Total Satisfaction and at least some of the subscales. In fact, every subscale was significantly related to intention in most samples. Mean correlations for the subscales ranged from -.16 for Benefits to -.36 for Contingent Rewards. The mean correlation between Total Satisfaction and intention was -.41. In all cases high satisfaction was associated with low intent. In no case were there homogeneous correlations across samples.

Total satisfaction was related to actual turnover, although the magnitude of correlation was not particularly large (.20). There were small but statistically significant correlations with Contingent Rewards, Co-workers, Promotion, and Supervision. All were homogeneous across samples.

Organizational Commitment Questionnaire. The OCQ was administered in five samples and was correlated with all JSS subscales. The correlations were homogeneous across samples for three of the scales. Commitment was most strongly related to Communication, Nature of Work, and Contingent Rewards.

Perceived Job Characteristics. Data on perceived job characteristics were gathered in five samples. It was expected that those characteristics involving the job tasks themselves (Skill Variety, Task Identity, Task Significance, Autonomy, and Feedback from the Job) would show the strongest relationship with Nature of Work. Feedback from Agents would be most strongly related to Supervisor and Contingent Rewards, because the supervisor is the most likely source of this type of feedback and contingent rewards are given by supervisors for good work, certainly a form of feedback.

The JSS results supported these hypotheses. Of all subscales Nature of Work was correlated most strongly with task related characteristics and with the composite MPS. Feedback from Agents was most highly correlated with Supervision (r = .52) and Contingent Rewards (r = .55). Overall the six job characteristics were related to other job satisfaction subscales and Total Satisfaction, although the magnitude and frequencies of significance differed greatly among the subscales. Homogeneity of samples occurred for most of the analyses.

Absenteeism. Absenteeism data were available from eight samples, six self-report and two objective measures. As can be seen, there were few significant correlations and those were quite small. The results for most of the subscales were homogeneous. Of particular note is the homogeneous correlation of -.12 for Total Satisfaction. The negative correlations suggested that high satisfaction was associated with low absenteeism.

DISCUSSION

The Job Satisfaction Survey was developed in human service, public, and nonprofit organizations to measure the major dimensions of job satisfaction. Through an analysis of the literature of job dimensions, nine subscales were created to represent the satisfaction domain. Reliability data suggest that the total scale and subscales have reasonable internal consistency, and the limited test–retest data indicate good reliability over time. In fact, these data collected 18 months apart, spanning a period of many changes and disruptions (a new top administrative staff, reorganization, and layoffs), showed remarkable consistency in job satisfaction.

The multitrait–multimethod analysis, intercorrelations among the subscales, and results of the factor analyses provided evidence for discriminant and convergent validity. That employees were able to hold varying attitudes about different aspects of the job was strong evidence for the multidimensionality of job satisfaction. The factor analysis supported the relative independence of eight subscales of the JSS. Contingent Rewards split evenly between Supervision and Pay. Although all three scales had reasonable internal consistency, Contingent Rewards seemed to tap aspects of the other two. It may well be that appreciation and recognition are seen by employees as aspects of supervision and general contingent rewards as monetary.

The analyses relating the JSS to other variables showed good comparability of human service and nonhuman service employee reactions. Consistent with the literature, the JSS was most strongly correlated with perceptual and attitudinal variables. The strongest relationships were with intention of quitting the job, commitment to the organization, perceived job characteristics, and perceptions of the supervisor. Relationships with personal characteristics were more modest and with absenteeism were quite small. Of particular interest was that the small mean correlation of total satisfaction and absenteeism was based on homogeneous samples. A small population value for this correlation produces just the situation found here and in the literature of a sometimes significant and sometimes nonsignificant correlation.

The heterogeneity of results with some criterion variables, particularly level, intention of quitting, and commitment, suggested the possibility of moderators. That is, there were possibly organizational variables that accounted for many of these inconsistent results. Although not presented here in detail, there were considerable interorganizational differences concerning which specific subscales correlated with other variables. For example, intention of quitting was most strongly related to Contingent Rewards and least strongly related to Supervision in Sample 8, but in Sample 7, Supervision had the strongest correlation and Co-workers had the smallest. For the most

Table VI. Summary of Meta-Analyses Relating JSS Scales to Criteria

Variables	No. of samples		Pay	Promotion	Supervision	Benefits	Contingent rewards	Operating procedures	Co-workers	Nature of work	Communication	Total satisfaction
Skill variety	4	*r*	.00	.14[a]	.03	.07	.12[a]	−.16[a]	.09	.36[a]	.17[a]	.14[a]
		n	318	313	318	318	319	318	320	320	319	319
		U	0.44	1.84	5.96	0.32	1.70	1.43	0.75	23.92[a]	3.21	3.85
Task identity	4	*r*	.13[a]	.13[a]	.17[a]	.14[a]	.27[a]	.18[a]	.31[a]	.32[a]	.22[a]	.31[a]
		n	314	310	315	314	315	315	316	316	316	316
		U	14.37[a]	5.05	3.26	1.94	6.48	7.38	1.16	2.28	7.07	5.29
Task significance	4	*r*	.05	.18[a]	.04	−.02	.16[a]	−.04	.00	.47[a]	.15[a]	.17[a]
		n	318	314	318	318	319	318	320	320	319	319
		U	2.04	3.81	5.00	1.07	4.16	0.80	.8.44	7.32	4.42	4.97
Autonomy	5	*r*	.13[a]	.19[a]	.18[a]	.11[a]	.24[a]	.04	.20[a]	.39[a]	.24[a]	.29[a]
		n	401	398	403	400	404	404	405	405	405	405
		U	4.87	0.18	7.63	2.62	5.94	9.86[a]	1.09	12.30[a]	6.12	4.48
Feedback from the job	4	*r*	.17[a]	.23[a]	.15[a]	.14[a]	.33[a]	.09	.18[a]	.43[a]	.31[a]	.35[a]
		n	317	313	317	317	318	317	319	319	318	318
		U	0.81	0.62	3.45	4.01	2.74	7.65	6.25	1.54	5.31	2.25
Feedback from agents	4	*r*	.15[a]	.36[a]	.52[a]	.18[a]	.55[a]	.18[a]	.35[a]	.30[a]	.39[a]	.52[a]
		n	319	314	319	319	320	319	321	321	320	320
		U	1.16	1.55	1.93	1.25	2.21	0.79	1.98	8.30[a]	12.00[a]	3.75
MPS	4	*r*	.17[a]	.26[a]	.21[a]	.15[a]	.35[a]	.10	.12[a]	.51[a]	.33[a]	.40[a]
		n	313	309	314	313	314	314	315	315	315	315
		U	5.42	2.58	4.07	1.11	8.88[a]	8.14[a]	23.92[a]	5.35	8.76[a]	4.46

Age	9	*r*	.21[a]	.04	.00	.09[a]	.09[a]	.04	.12[a]	.24[a]	.08[a]	.16[a]
		n	1696	1695	1693	1692	1696	1695	1696	1696	1697	1693
		U	13.51	13.41	4.50	7.78	7.52	6.22	10.45	14.41	16.40[a]	16.15[a]
Level	10	*r*	−.19[a]	−.15[a]	−.03	−.09[a]	−.09[a]	.14[a]	.00	−.11[a]	−.07[a]	−.10[a]
		n	1320	1306	1313	1315	1317	1323	1324	1326	1323	1320
		U	8.58[a]	27.01[a]	19.40[a]	10.65	20.31[a]	30.23[a]	23.70[a]	32.49[a]	15.16	21.43[a]
Absentee-ism	8	*r*	−.09[a]	−.14[a]	−.08[a]	−.04	−.08[a]	−.03	−.04	−.10[a]	−.09[a]	−.12[a]
		n	1352	1351	1349	1348	1352	1352	1352	1352	1352	1351
		U	6.41	9.61	8.64	4.52	4.45	5.14	4.09	8.49	3.19	3.70
Salary	3	*r*	.17[a]	.11	−.05	.08	.08	−.22[a]	−.10	.03	−.01	.02
		n	259	259	259	259	259	259	259	259	259	259
		U	2.00	1.50	7.74[a]	0.18	0.10	1.39	1.53	3.03	0.77	0.96
Commit-ment	4	*r*	.23[a]	.28[a]	.24[a]	.22	.37[a]	.21[a]	.20[a]	.40[a]	.40[a]	.45[a]
		n	383	382	384	383	383	384	384	384	384	384
		U	8.26[a]	16.71[a]	4.98	9.09[a]	23.70[a]	2.99	0.48	9.22[a]	8.22[a]	23.67[a]
LBDQ	3	*r*	.20[a]	.30[a]	.70[a]	.12	.42[a]	.13[a]	.30[a]	.25[a]	.34[a]	.47[a]
		n	287	287	287	287	287	287	287	287	287	287
		U	.33	1.64	13.75[a]	3.52	1.77	0.25	0.36	0.38	0.01	3.70
Intent to quit	16	*r*	−.26[a]	−.29[a]	−.24[a]	−.16[a]	−.36[a]	−.21[a]	−.23[a]	−.32[a]	−.25[a]	−.41[a]
		n	2224	2218	2221	2220	2225	2223	2226	2226	2224	2219
		U	47.82[a]	52.45[a]	74.65[a]	37.81[a]	141.26[a]	38.60[a]	65.54[a]	144.48[a]	55.50[a]	169.25[a]
Turnover	2	*r*	.11	.15[a]	.14[a]	.02	.19[a]	.10	.19[a]	.12	.09	.20[a]
		n	189	189	189	189	189	189	189	189	189	189
		U	3.65	0.12	0.91	0.07	0.00	0.65	1.71	0.16	0.00	0.08

[a] $p < .05$.

part, each sample had its own pattern of results. An apparent conclusion is that idiosyncratic characteristics of organizations and their staffs moderated the relationships between job satisfaction and other variables. Although many might consider it self-evident, it bears mentioning that job satisfaction and its effects are the result of complex interactions between individuals and organizations. Thus, interactive models and hypotheses might prove useful in explaining the causes and effects of job satisfaction, at least as it relates to some behaviors.

Overall the results summarized here with the JSS present evidence for the scale's reliability and construct validity. It was developed, normed, and validated on human service personnel, making it of specific applicability to human services. The correlations of job satisfaction with other employee variables were consistent with findings in the literature based in most cases on nonhuman service employees. Even job characteristics results, originally of concern with factory workers, are consistent. The JSS seems to be a reasonable satisfaction scale for human service employees. Furthermore, satisfaction results with the variables explored here seem to generalize to human services.

APPENDIX

Items of the Job Satisfaction Survey

Item No.	Subscale[a]	Wording direction	Item
1	1	+	I feel I am being paid a fair amount for the work I do.
2	2	−	There is really too little chance for promotion on my job.
3	3	+	My supervisor is quite competent in doing his/her job.
4	4	−	I am not satisfied with the benefits I receive.

5	5	+	When I do a good job, I receive the recognition for it that I should receive.
6	6	–	Many of our rules and procedures make doing a good job difficult.
7	7	+	I like the people I work with.
8	8	–	I sometimes feel my job is meaningless.
9	9	+	Communications seem good within this organization.
10	1	–	Raises are too few and far between.
11	2	+	Those who do well on the job stand a fair chance of being promoted.
12	3	–	My supervisor is unfair to me.
13	4	+	The benefits we receive are as good as most other organizations offer.
14	5	–	I do not feel that the work I do is appreciated.
15	6	+	My efforts to do a good job are seldom blocked by red tape.
16	7	–	I find I have to work harder at my job than I should because of the incompetence of people I work with.
17	8	+	I like doing the things I do at work.
18	9	–	The goals of this organization are not clear to me.

19	1	–	I feel unappreciated by the organization when I think about what they pay me.
20	2	+	People get ahead as fast here as they do in other places.
21	3	–	My supervisor shows too little interest in the feelings of subordinates.
22	4	+	The benefit package we have is equitable.
23	5	–	There are few rewards for those who work here.
24	6	–	I have too much to do at work.
25	7	+	I enjoy my co-workers.
26	9	–	I often feel that I do not know what is going on with the organization.
27	8	+	I feel a sense of pride in doing my job.
28	1	+	I feel satisfied with my chances for salary increases.
29	4	–	There are benefits we do not have which we should have.
30	3	+	I like my supervisor.
31	6	–	I have too much paperwork.
32	5	–	I don't feel my efforts are rewarded the way they should be.

33	2	+	I am satisfied with my chances for promotion.
34	7	−	There is too much bickering and fighting at work.
35	8	+	My job is enjoyable.
36	9	−	Work assignments are often not fully explained.

[a]Subscale numbers refer to order in Tables II-IV. Response choices are scored as 1 = disagree very much, 2 = disagree moderately, 3 = disagree slightly, 4 = agree slightly, 5 = agree moderately, 6 = agree very much. All items with wording directions marked − should be reverse scored.

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