

The Generic Job Satisfaction Scale: Scale Development and Its Correlates

Scott Macdonald
Peter MacIntyre

ABSTRACT. A scale on job satisfaction was developed, which could be used in a wide range of occupational groups. An initial item pool of 44 items thought to be aspects of job satisfaction was completed by a sample of 885 Ontario working adults in a wide range of occupations. Factor analysis was conducted on the items and a set of 10 items was defined on one factor. Cronbach's alpha for these items was .77. Average scores on the scales were not significantly different between males and females and among six major occupational groups. The scale was significantly related to workplace factors such as job stress, boredom, isolation and danger of illness or injury. *[Article copies available from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: getinfo@haworth.com]*

Job satisfaction is one of the most enduring yet elusive constructs used in the study of industrial relations (Locke, 1976; Yuzuk, 1961). For years researchers have attempted to define and measure the concept of job satisfaction; however, the scales developed to date could be improved. In particular, there is a need for a valid and reliable scale that is short and easily administered in the workplace. Furthermore, the scale should be relevant to a wide variety of oc-

Scott Macdonald, PhD, is Scientist, Addiction Research Foundation, 100 Col-
lip Circle, Suite 200, London, Ontario N6A 5B9. Peter MacIntyre, PhD, is Profes-
sor, Department of Psychology, University College of Cape Breton, P. O. Box
5300, Sydney, Nova Scotia B1P 6L2.

The authors are indebted to Samantha Wells for her useful comments on drafts of this paper.

cupations. A key advantage of a scale, applicable to almost any job, is that norms can be developed that will allow individuals to assess how satisfied they are in relation to others, and employers to determine the relative satisfaction of their employees.

In order to clarify the meaning of "job satisfaction" it is useful to differentiate it from employee morale. The two concepts are very closely related, and some authors treat them as synonymous; however, job satisfaction, as Locke (1976) describes, differs from employee morale in two respects. Firstly, job satisfaction refers to a single individual and his/her job situation, whereas employee morale focuses more on how an employee relates to a sense of common (or group) purpose within an organization. Secondly, job satisfaction more appropriately addresses past and present situations, while morale addresses feelings about the future.

The value of a job satisfaction scale cannot be understated due to its high correlations with important job outcomes. Job-related outcomes such as job involvement (Elloy & Terpening, 1992), stress (Ramanathan, 1991), turnover (Gregson, 1990; Steers & Stone, 1988) and employee attendance (Steers & Stone, 1988) have been associated with satisfaction. Age and job status also have been found to be positively correlated with job satisfaction in some studies (Fournet, Distefano & Pryer, 1966; Rhodes, 1983). These results may be somewhat confounded by the tendency of older workers to move into higher status jobs.

As shown by the concepts included in existing job satisfaction scales (see Table 1), a substantial degree of agreement exists among researchers regarding the characteristics of job satisfaction (Cross, 1973; Yuzuk, 1961; Hackman & Oldman, 1975; Scarpello & Campbell, 1983; Khaleque & Rahman, 1987). For instance, pay, relations with co-workers, supervisors, and job security have been viewed as important components of satisfaction. The most important limitation of prior studies, however, is the type of samples that were used for scale development. Sometimes the sample sizes were small, such as in the Khaleque and Rahman (1987) or Scarpello and Campbell (1983) studies. In other studies, the samples were larger, but drawn from limited population frames. For example, Cross (1973) studied workers from four manufacturing plants, Hackman and Oldham (1975) examined employees from seven industrial and

TABLE 1. Major Characteristics of Job Satisfaction Identified by Researchers

Author	Cross (1973)	Hackman & Oldham (1975)	Khaleque & Rahman (1987)	Scarpello & Campbell (1983)	Smith et al. (1969)	Yuzuk (1961)
Major Characteristics	<ol style="list-style-type: none"> 1. Firm as a whole 2. Pay 3. Promotion 4. Job itself 5. Supervisor 6. Co-workers 	<ol style="list-style-type: none"> 1. Job security 2. Pay 3. Social 4. Supervisory 5. Growth 	<ol style="list-style-type: none"> 1. Co-workers 2. Hours 3. Work environment 4. Recognition 5. Security 6. Desired job 7. Autonomy 8. Benefits 9. Promotion 10. Supervision 	<ol style="list-style-type: none"> 1. Nature of work 2. Control over work 3. Quality of physical environment 4. Supervisor 5. Co-worker 6. Job reward 	<ol style="list-style-type: none"> 1. Work 2. Pay 3. Promotions 4. Supervision 5. Co-workers 	<ol style="list-style-type: none"> 1. Communication 2. Hours of work 3. Fellow employees 4. Recognition 5. Work conditions 6. Supervisor 7. Other evaluation and descriptive factors

TABLE 1 (continued)

Author	Cross (1973)	Hackman & Oldham (1975)	Khaleque & Rahman (1987)	Scarpello & Campbell (1983)	Smith et al. (1969)	Yuzuk (1961)
Number of items on the scale	48	25	3/4 hour interviews	over 100	Rankings by employees of job aspects in terms of importance. No scale was developed.	72
Sample	431 workers from 4 manufacturing plants	658 employees at 7 industrial and service organizations	185 employees from two research and development companies	65 unspecified employees	1,560 workers in jute factories from Bangladesh	267 students, 80 farmers, 80 male bank employees

service organizations, and Khalequell and Rahman (1987) focused on jute workers in Bangladesh. While the study results are generalizable to the populations from which the samples were drawn, they likely have less generalizability to wider employee groups.

Therefore, the validity of existing scales must be established in different employee groups because issues related to job satisfaction may vary from group to group. People tend to migrate to jobs that have intrinsic characteristics that are consistent with their own job priorities or personalities (Barrick & Mount, 1991; Tett, Jackson & Rothstein, 1991). For example, people interested in becoming a real estate salesperson likely are motivated by job independence, meeting a variety of people and receiving incremental monetary rewards from their efforts. By contrast, those attracted to jobs in research likely have less desire to meet people and value a more steady income. Although there are differences among occupational groups in terms of values in their jobs, the purpose of the scale examined in this paper is to determine generic or common aspects of job satisfaction that could be applied to all occupations. This approach will lead to the development of a scale with greater utility in the workplace than existing scales.

There appear to be two main approaches to research on the topic: one that examines the facets of job satisfaction and the other that examines the general level of satisfaction. The facets approach attempts to determine and measure the most relevant dimensions of job satisfaction. This has been the most widely used approach and several scales have been designed to measure the specific facets of job satisfaction (Bell & Weaver, 1983; Smith, Kendall & Hulin, 1969; Gregson, 1990; Yuzuk, 1961). Characteristics of the job such as pay, promotion, supervision, working conditions and relationships with co-workers have been shown to be components of job satisfaction (Cherniss & Kane, 1987; Bell & Weaver, 1987; Hackman & Oldham, 1975). The more general approach examines levels of satisfaction regardless of their source. Some researchers have suggested that the facets approach and the general approach yield indices of job satisfaction that have low correlations with each other (Scarpello & Campbell, 1983). However, most studies suggest that facets are merely components of a larger, more general factor, some of which may correlate more highly with the general factor than

others (Cross, 1973). It can be concluded that the facets approach better examines the *structure* of satisfaction whereas the general approach better examines the overall *levels* of satisfaction.

One disadvantage of the facet approach is the high number of items used to compose a scale, since each of the selected facets must be measured with several items. Many facet approach scales have over 100 items, which could take over an hour for the respondent to complete. This may be far too long for many workplace applications. In contrast, some authors have simply assessed job satisfaction by using the question "Are you satisfied at work?" (Cross, 1973; Elloy & Terpening, 1992). However, the inclusion of the major facets of job satisfaction, or at least a multiple item measure, is often recommended to increase validity. The scale developed in this study has only 10 items which means it can be easily and quickly administered and has a sufficient number of items to determine its reliability.

The purpose of this study is to develop of a brief but generic scale of job satisfaction by using the facet and general approach. An initial item pool of 44 variables thought to be aspects of job satisfaction was examined using factor analysis to obtain a smaller set of items to form a scale. The validity of the new scale was tested by examining the correlates of job satisfaction both within and outside the workplace.

METHOD

In 1992, a survey was conducted on characteristics of people's jobs and how they relate to alcohol and drug use. The results presented in this paper relate to the development of a job satisfaction scale.

Sample Selection

The sample used in this study was obtained from telephone directories for regions across Ontario. Systematic sampling was used to select cases from telephone directories. First, for each telephone directory, the number of cases to be selected was proportioned to the population in each area. Second, the sampling interval was determined by dividing the number of pages in each

book by the number of cases to be sampled from each region. A random number table was used to obtain the initial number, or random start, for each telephone book. A total of 3,300 cases was sampled using this method.

Questionnaire Distribution and Collection

Questionnaires were mailed to 3,300 Ontario households in June and July of 1992. Enclosed with the questionnaire was a letter describing the purpose of the study and a self-addressed stamped envelope. The subjects received a follow-up telephone call encouraging them to participate in the survey. Respondents were asked not to place their names on questionnaires so that information obtained from the questionnaires would remain completely anonymous.

The Response Rate

From the 3,300 questionnaires sent out, 355 were judged ineligible to participate in the study. During telephone follow-up calls, ineligible questionnaire recipients informed our callers that the questionnaire was not relevant to their situations. Letters and post-cards were also received from questionnaire recipients indicating why they could not participate in the study. Individuals were ineligible to participate because they had retired (181), they were not working outside the home (75), they had language difficulties (41), the questionnaire recipient was deceased (32), and other reasons (26). The questionnaire was not received by 477 people. Mail-out packages were returned because the occupant had moved (185), the address was incomplete (161), or the address was unknown (48). For 83 cases, it was unclear as to why the packages had been returned because no information indicating the reason for their return was provided on the packages. It is likely that they were not delivered for the same reasons discussed above (i.e., moved, incomplete address, or unknown address). Excluding ineligible cases, 2,468 were eligible to participate. Of these, 885 completed the questionnaire, resulting in a response rate of 35.9%. Mail surveys often produce response rates in this range, especially when the questionnaire is lengthy.

Variables

The items in the scale focused on the employee's feelings or reactions towards aspects of their jobs. Structural characteristics of the job (i.e., actual value of wages, status, autonomy, etc.) were not considered to be as important in determining employee job satisfaction as the reactions of employees to those characteristics. For example, two employees with the same job and rate of pay likely have different opinions about the fairness of their wages and correspondingly may have different levels of job satisfaction. Therefore, an important psychological element in determining job satisfaction is the reaction to the characteristics of the job.

The initial item selection was conducted by reviewing the literature on job satisfaction and writing items that addressed major facets of jobs that have been found to be related to job satisfaction. As well, employees from various settings were asked to describe the characteristics of jobs that were important to them and items were written to represent these concepts. This approach produced an initial pool of 44 items. Each item had 5-point Likert response categories from strongly agree to strongly disagree. Other variables included in the study were occupation, gender, age, personal problems, and various items measuring general affect and health.

DEMOGRAPHIC CHARACTERISTICS

Occupation. Three questions addressed the respondent's exact occupation which, using Statistics Canada criteria, were coded into six broad groupings: (1) Managerial, Administrative; (2) Professional Occupations; (3) Clerical and related occupations; (4) Sales; (5) Service; (6) Processing, Machining, Product Fabricating, Construction, Transport, Equipment.

Gender and Age. Respondents were also asked to indicate their gender and age.

Workplace Affect. A series of 14 items examined various affective characteristics of the workplace:

Shift Work: Respondents were asked to indicate the shifts that they usually work. These were recoded into a di-

chotomous variable representing those working primarily during the day versus those doing shift work.

- Boredom: Two items assessed the degree to which the respondent felt isolated and alone on the job.
- Danger: Two items assessed the degree to which respondents felt that their work was dangerous.
- Control: Three items assessed to degree to which respondents had control over their work.
- Job Security: Two items measured the degree to which respondents felt that their job was secure (i.e., they were not in jeopardy of losing it).

Specific Personal Problems. A series of eight items with Likert response categories addressed the degree to which respondents experienced personal problems pertaining to control over one's health, amount of sleep, worry, financial difficulties, counselling needs for children, marriage, or individual legal difficulties.

General Affect and Health. The items measuring general affect and health were:

- Sleep: In the last month, how often did you have trouble getting to sleep or staying awake?
- Worn out: In the past month, how often were you worn out at the end of your work day (or shift) to the extent that you did not really enjoy your time away from work?
- Health: In general, compared to other persons your age would you say that your health is good?
- Happy: In general would you say that you are happy?
- Life Stress: Would you describe your life as stressful?

RESULTS

Factor Analysis

Factor analyses were conducted on the items from the initial item pool. A set of 12 items consistently defined the first factor in proce-

dures that extracted two, three, four, and five factors using both Principal Components and Maximum Likelihood extraction methods, as well as both VARIMAX (orthogonal) and OBLIMIN (oblique) rotations. These procedures were followed to ensure that the factors were stable across extraction and rotation methods. The first factor was consistently defined by the same set of variables. When a three factor solution was produced, the first factor remained intact while the second factor broke into two components. Similarly, when four and five factor solutions were produced, only the first factor remained intact. Thus, the first extracted factor was considered to be robust across extraction methods, as recommended by Harris (1967), and therefore a reliable measure of a single construct. Two items were subsequently dropped because they appeared to be nearly identical with two other variables and did not significantly add to the reliability or validity of the scale.

A description of the remaining 10 items that defined the first factor are shown in Table 2 along with their factor loadings obtained from a principal components analysis. All of the loadings were above the traditional cut-off value of .30. Table 2 also presents

TABLE 2. Item Properties

Loading	Mean	Std Dev	Label
.46	4.17	.86	I get along with supervisors
.43	3.22	1.27	All my talents and skills are used
.77	3.98	.94	I feel good about my job
.70	3.27	1.19	I receive recognition for a job well done
.61	3.67	1.09	I feel good about working at this company
.57	3.44	1.00	I feel close to the people at work
.64	3.61	1.09	I feel secure about my job
.59	2.97	1.27	I believe management is concerned about me
.52	3.41	1.12	On the whole, I believe work is good for my physical health
.50	3.68	1.10	My wages are good
Number of Cases = 787			

the item means and standard deviations. The Chronbach's alpha reliability for this scale ($\alpha = .77$) was acceptable. The diversity of item themes likely reduced the reliability coefficient. However, a diversity of items is consistent with the intent to include the relevant facets of job satisfaction.

Effects of Age, Occupational Type, and Gender

The potential influence of age, occupation type, and gender on the universal scale of job satisfaction were examined. A t-test revealed no significant difference between males and females. A one-way ANOVA revealed no significant differences among the six occupational groups. However, a significant effect was found for age group ($p < .001$). Post hoc tests (Tukey's HSD) revealed that the oldest group was significantly more satisfied than all of the others and no other significant differences were found. These findings indicate that similar levels of job satisfaction are experienced for males and females and in most occupational and age groups.

Workplace Variables

Correlations were computed between the scale scores and variables representing characteristics of the job and measures of workplace affect. Low, but significant, correlations were obtained with measures of income, hours worked, and occupational prestige. Much higher correlations were obtained for measures of workplace affect: feeling isolated, feeling in control of one's work, perceived danger of illness or injury, feeling bored, and the perception of job security. The differences in the magnitudes of these correlations may be taken as evidence that structural properties of the job may be less important in job satisfaction than are the affective reactions to the job. For example, the scale includes the item "my wages are good," but this does not correlate highly with the actual value of those wages. Therefore, perception appears to be the key concept when measuring job satisfaction.

Shift work may reduce satisfaction. To investigate this possibility, a t-test was performed on two groups: individuals who work primarily during the day versus those who work other shifts. A

significant difference in job satisfaction was observed ($p < .01$). Those who perform shift work were less satisfied than those people who work regular hours.

Variables Outside the Workplace

The job satisfaction scale was significantly correlated with variables measuring factors outside the workplace as well (see Table 3). The strongest correlates of job satisfaction were: degree of overall happiness, feeling worn out, and extent of sleeping problems. High levels of satisfaction were related to being happy, not feeling worried, and sleeping well. These correlation coefficients might be seen as support for the hypothesis that job satisfaction influences home life and (potentially) vice versa.

Correlations were also computed with variables representing affective reactions to life in general. All of the variables included in this analysis correlate significantly with job satisfaction, including feeling worn out, having sleeping problems, feeling stress in one's life, and feeling healthy. The highest correlation was observed between job satisfaction and perhaps the most general measure of affectivity, "I feel happy" ($r^2 = .37$).

In addition to these general reactions, more specific personal problems were correlated with job satisfaction. The scale shows small but significant correlations with all eight of the problems and the highest correlations are observed for the items measuring the tendency to worry, to get enough sleep, and to have control over one's health.

These results, coupled with those observed for variables within the workplace, support the validity of the scale and demonstrate the potentially pervasive effects of satisfaction with one's job.

Practical Application of the Scale in the Workplace

Appendix A shows the scale items, response categories and an explanation of how to interpret scores for the scale. Employees circle the number corresponding to their degree of agreement for each item, and add all the numbers together to form a composite job satisfaction score. Norms, or percentile ratings are provided in order that individuals can assess how their job satisfaction relates to oth-

TABLE 3. Statistically Significant ($p < .05$) Correlations of Job Satisfaction with Variables Inside and Outside the Workplace

Variables	Correlation Coefficients
Characteristics of the Job	
Income	.19
# of hours worked	.10
Blishen (prestige)	.13
Workplace Affect	
Isolated	-.54
Control	.31
Danger	-.19
Boredom	-.41
Job security	.57
General Affective Reactions	
Happiness	.37
Healthy	.14
Life stress	-.15
Sleep problems	-.19
Feeling worn out	-.26
Personal Problems	
Control over health	.23
Get enough sleep	.25
Worry about things	-.27
No money left before Pay Day	-.17
Children need counselling	-.12
Marriage is in trouble	-.11
Legal difficulties	-.08
Desire counselling	-.19

ers. Finally, some characteristics related to job satisfaction are provided, based on the results reported here.

DISCUSSION

The objective of this study was to introduce a scale of job satisfaction relevant to a wide range of occupational groups. The sample used in this study was obtained from a wide variety of employees. Therefore, the scale should have relevance to practically any occupation. The fact that no significant differences in scale averages were found among the occupational groups or between males and females indicates that the scale has relevance in a variety of employment settings without separate norms for each group. Furthermore, overall scale means were consistent for those between the ages of 20 and 60.

A second goal was to create a short scale (10 items) so that its length would not be a deterrent for practical applications in the workplace and future research. For this reason it was necessary to measure the various facets of job satisfaction with single items in order to cover the widest possible domain. The results of this study indicate that this combination of the facets approach and the general approach can be successful because the model of job satisfaction presented here focuses on the reaction to events rather than the events themselves. Analysis showed that objective characteristics of a job account for only a small percentage of the variance in job satisfaction. On the other hand, psychological reaction to the job (such as isolation or boredom) was strongly associated with job satisfaction and accounted for a substantial portion of its variance. An additional advantage of this type of model is that although idiosyncrasies in the individual or the workplace exist, the focus remains on the respondent's evaluation of his/her satisfaction with that job. However, this scale could be further improved by applying appropriate weights according to the level of importance respondents place on each facet, as suggested by Rice et al. (1991).

Results show that the generic job satisfaction scale is related to variables external to the workplace. It is likely that job and life satisfaction influence each other and the nature of that influence may change from time to time. A crisis at work may cause disrupt-

tion at home and later a crisis at home might cause disruption at work. However, Chacko (1983) does suggest that aspects of the job influence home life more than home life influences the job. If this is the case, then measures of job satisfaction may have implications well beyond the workplace.

REFERENCES

- Barrick, M.R., & Mount, M.K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Bell, R.C., & Weaver, J.R. (1987). The dimensionality and scaling of job satisfaction: An internal validation of the Worker Opinion Survey. *Journal of Occupational Psychology*, 60, 147-155.
- Chacko, T.I. (1983). Job and life satisfaction: A causal analysis of their relationships. *Academy of Management Journal*, 26, 163-169.
- Cherniss, C., & Kane, J.S. (1987). Public sector professionals: Job characteristics, satisfaction, and aspirations for intrinsic fulfillment through work. *Human Relations*, 40, 125-136.
- Cross, D. (1973). The worker opinion survey: A measure of shop-floor satisfaction. *Occupational Psychology*, 47, 193-208.
- Elloy, D.F., & Terpening, W.D. (1992). An empirical distinction between job involvement and work involvement: Some additional evidence. *Canadian Journal of Business Science*, 24 (4), 465-478.
- Fournet, G.D., Distefano, M.K., & Pryer, M.W. (1966). Job satisfaction and mental health. *Personnel Psychology*, 19, 165-183.
- Gregson, T. (1990). Measuring job satisfaction with a multiple-choice format of the job descriptives index. *Psychological Reports*, 66, 787-793.
- Hackman, J.R., & Oldham, G.R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159-170.
- Harris, C.W. (1967). On factors and factor scores. *Psychometrika*, 32, 363-379.
- Khaleque, A., & Rahman, M.A. (1987). Perceived importance of job facets and overall job satisfaction of industrial workers. *Human Relations*, 40, 401-416.
- Locke, E.A. (1976). The nature and causes of job satisfaction. In M.D. Donnette (ed.), *Handbook of industrial and organizational psychology*. Chicago, IL: Rand McNally.
- Ramanathan, C.S. (1991). Stress and job satisfaction: Implications for occupational social work. *Employee Assistance Quarterly*, 6 (2), 27-39.
- Rhodes, S.R. (1983). Age-related differences in work attitudes and behavior: A review and conceptual analysis. *Psychological Bulletin*, 93, 328-367.
- Rice, R.W., Gentile, D.A., & McFarlin, D.B. (1991). Facet importance and job satisfaction. *Journal of Applied Psychology*, 76 (1), 31-39.
- Scarpello, V., & Campbell, J.P. (1983). Job satisfaction: Are all the parts there? *Personnel Psychology*, 36, 577-600.

- Smith, P.C., Kendall, L.M., & Hulin, C.L. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.
- Steers, R.M., & Sone, T. (1988). Absenteeism and turnover. In G.R. Ferris & K.M. Rowland (Eds.) *Human resources management: Perspectives and issues*. Boston: Allyn and Bacon.
- Tett, R.P., Jackson, D.N., & Rothstein, M. (1991). Personality measures as predictors of job performance. A meta-analytic review. *Personnel Psychology*, 44, 703-742.
- Yuzuk, R.P. (1961). *The assessment of employee morale: A comparison of two measures*. Columbus, OH: Ohio State University.

APPENDIX A

Job Satisfaction Scale

For each statement, please circle the number to indicate your degree of agreement.

	Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
I receive recognition for a job well done	1	2	3	4	5
I feel close to the people at work	1	2	3	4	5
I feel good about working at this company	1	2	3	4	5
I feel secure about my job	1	2	3	4	5
I believe management is concerned about me	1	2	3	4	5
On the whole, I believe work is good for my physical health	1	2	3	4	5
My wages are good	1	2	3	4	5
All my talents and skills are used at work	1	2	3	4	5
I get along with my supervisors	1	2	3	4	5
I feel good about my job	1	2	3	4	5

Add scores. Interpretation: 42-50—very high; 39-41—high; 32-38—average, 27-31—low, 10-26—very low. This scale is most accurate for employees between the ages of 25 and 60. Those under 25 tend to have lower job satisfaction and those 60 and over have higher job satisfaction. The scale works equally well for males and females from all occupations. Characteristics of high scorers—few sleeping problems, happy in personal life, don't feel worn out at end of day, don't desire counselling and rarely worry. Job satisfaction reflects how happy you are with your job. Job satisfaction can be improved by either changing one's attitude towards the job or changing to a new job environment.