

The Contribution of Job and Leisure Satisfaction to Quality of Life

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This study examines the relationships between job and leisure satisfaction and their contributions to the perception of quality of life. The data were collected from a national probability sample of 1,297 adult Americans interviewed in May 1972. The magnitude of the correlations between job and leisure satisfaction measures was low; however, both accounted for meaningful variation in perceived quality of life for the total sample. Separate analyses for demographic subgroups were also performed. They indicated that job satisfaction and leisure satisfaction contributed relatively little to the life quality of minorities and other often "disadvantaged" subgroups compared to "advantaged" workers. Implications of the results for the application of motivational strategies in the work setting are discussed.

Recently, interest in the quality of work life has been stimulated by claims of widespread worker dissatisfaction (e.g., see *Work in America*, 1973). There is now an emerging trend to identify and improve job characteristics that contribute to the quality of work life (Davis & Cherns, 1975a, 1975b; Hackman & Suttle, 1977; Walton, 1973). This interest in the quality of work life is in keeping with a growing concern for general quality of life both among researchers (e.g., Campbell, 1976; Campbell, Converse, & Rogers, 1976; Land, 1971) and in the political arena (e.g., Environmental Protection Agency, 1973; Executive Office of the President, 1973). This article begins to integrate the research on quality of work life and general quality of life. Specifically, the contributions of facets of job and leisure satisfaction to quality of life are examined.

Research on quality of life encourages a broader view of the individual than that tra-

ditionally taken by industrial/organizational psychologists. This view suggests that job satisfaction and attitudes toward work cannot be understood in isolation (e.g., Bass & Bass, 1976). One important aspect of life quality that may be important to work and has been generally overlooked by psychologists is leisure.

The relationship between work and leisure has been investigated, often with the assumption that work experience affects leisure patterns. The results of this approach have been conflicting (cf. Dubin, 1956, 1973; Kornhauser, 1965; Meissner, 1971; Shepard, 1974). Another approach is to look at the relative contributions of work and leisure satisfaction to overall quality of life. A few studies have found that the relationships between job, leisure, and life satisfaction are moderated by demographic characteristics. In a study of British workers, Willmott (1971) found that far more manual workers (61%) than upper level staff (14%) reported that they derived satisfaction from only their leisure. In a Canadian sample, Hulin (1969) found that the relation of both job and recreation items to life satisfaction was moderated by sex, with lower relationships occurring for women than men. Among Finnish respondents, Haavio-Mannila (1971) reported that work satisfaction was less related to overall life satisfaction than leisure satisfaction for

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unmarried, employed men compared to other subgroups. The current study extends previous research by examining the contributions of job and leisure satisfaction to quality of life in a national sample and for a wide variety of demographic subgroups.

Method

Sample

The data were obtained from a national probability sample of structured interviews conducted in May 1972 by the Survey Research Center of the University of Michigan (Andrews & Withey, 1975). Different analyses of these data have been conducted by Andrews and Withey (1974, 1976), Andrews and Crandall (1976), and Crandall (1976). The sample consisted of 1,297 American adults 18 years of age or older (but data included married people of any age), living in noninstitutional dwelling units in the 48 coterminous states. Comparisons of the survey respondents with distributions obtained from the census indicated that the data from the survey closely represented the American adult population with respect to age, sex, and race (Andrews & Withey, 1974).

Survey

The data used here are 7 demographic items and 13 perceptual items measuring feelings about aspects of leisure, work, and life as a whole. The job items were written to tap the major distinct factors of job satisfaction identified by Quinn, Staines, and McCullough (1974; see Table 1 for a list of the items used). Respondents described their feelings about each item on a 7-point scale ranging from 1 (delighted) to 7 (terrible). The index of perceived overall quality of life was the arithmetic mean of the responses to the question "How do you feel about your life as a whole?" which was asked twice during the interview. This repeated question was separated by about 15 minutes of intervening interview material focusing on quality of life issues. The intercorrelation was .61.

Data are available to support the reliability and validity of the responses to the items in the survey. Andrews and Withey (1974) reported that the relationships among items in the May 1972 survey were highly similar to the relationships among the same items measured in a November 1972 survey (see Andrews & Withey, 1975). Crandall (1976) demonstrated that there are significant correlations with peer ratings for some of these items, showing external validity. Further evidence is summarized in Andrews and Withey (1976) and in Andrews and Crandall (1976).

Analyses

The intercorrelations among the job and leisure items were examined to indicate the extent of multi-

collinearity among the items as a set of predictors. Multiple regression analyses were used to investigate the contribution of job and leisure satisfaction to quality of life. The unique contribution each item made to quality of life was assessed by the increase in variance (squared multiple correlation) accounted for in quality of life when the item was added to the regression equation following the inclusion of all other items. The resulting proportions of unique variance were evaluated by the *F* test presented by Cohen and Cohen (1975, p. 135). This procedure follows the recommendations of Darlington (1968) and Cohen and Cohen (1975, pp. 95-96) for assessing unique contributions of multicollinear independent variables to a dependent variable.

Similar analyses were conducted to determine the unique contribution to quality of life of the five job satisfaction items taken as a whole and the six leisure items taken as a whole. Specifically, the squared multiple correlation derived from including only the leisure items in the regression equation was subtracted from the squared multiple correlation derived from including all the satisfaction items in the equation to determine the unique variation due to the indexes of job satisfaction. The reverse procedure was used to determine the unique contribution of the leisure items to quality of life.

To examine potential moderators of the job, leisure, and life satisfaction relationships, the analyses described above were performed for each of 19 demographically defined subgroups. These subgroups were formed on the basis of sex (male, female); race (black, white); age (16-29 years, 30-49 years, 50-65 years); marital status (married, never married, and divorced, widowed, or separated); education (0-11 grades of school, high school graduate, some college, college degree); socioeconomic status, which was a combination of income and education (low, middle, high); and work group (blue-collar, white-collar). The blue-collar group included individuals who were craftsmen, foremen, industrial workers, members of service occupations, and farmers. Professionals, managers, the self-employed, clerical workers, and salespeople were included in the white-collar category.

Results

Table 1 presents the means, standard deviations, and intercorrelations of the job, leisure, and quality of life variables for the total sample. The respondents were most satisfied with the things they do with their families and the people they see socially. They expressed the most dissatisfaction with recreational facilities, entertainment, and job pay, fringe benefits, and security. Although statistically significant in many cases, most differences in mean satisfaction between items were not large enough to be practically significant.

Table 1
Relationships Between Job and Leisure Satisfaction and Quality of Life

Item	<i>M</i>	<i>SD</i>	<i>N</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. The people you work with—your co-workers.	2.44	1.09	723	—											
2. The work you do on your job—the work itself.	2.40	1.13	743	.48	—										
3. The pay and fringe benefits you get, and security of your job.	3.05	1.48	730	.24	.31	—									
4. What it is like where you work—the physical surroundings, the hours, and the amount of work you are asked to do.	2.84	1.24	729	.47	.43	.36	—								
5. What you have available for doing your job—I mean, equipment, good supervision, and so on.	2.73	1.24	733	.40	.34	.41	.40	—							
6. The things you do and the times you have with your friends.	2.46	1.13	1277	.28	.21	.17	.17	.13	—						
7. The things you and your family do together.	2.19	1.10	1225	.14	.17	.15	.05*	.08	.27	—					
8. The people you see socially.	2.21	.92	1265	.25	.17	.16	.13	.17	.35	.25	—				
9. The organizations you belong to.	2.48	1.24	818	.11	.14	.04*	.01*	.08	.28	.23	.33	—			
10. The sports and recreation facilities you yourself use, or would like to use—I mean things like parks, bowling alleys, beaches.	3.16	1.64	1144	.19	.18	.20	.16	.13	.23	.19	.16	.19	—		
11. The entertainment you get from tv, radio, movies, and local events and places.	3.48	1.29	1266	.12	.06	.07	.06	.04	.15	.05	.11	.14	.09	—	
12. Quality of life.	2.59	1.09	1297	.21	.29	.25	.19	.17	.32	.37	.20	.20	.21	.11	—
Beta weights for each item predicting quality of life.				.00	.14	.10	.03	.02	.17	.26	-.01	.05	.06	.04	—
Unique variation				.000	.013*	.008*	.000	.000	.022*	.05*	.000	.002	.003	.002	—

Note. All correlations, unless otherwise indicated, are significant at the $p < .05$ level. A low mean value indicates higher satisfaction.

* Nonsignificant.

* $p < .01$.

The intercorrelations among the job satisfaction items ranged from .24 to .48, with a median of .40. The intercorrelations among the leisure items ranged from .05 to .37, with a median of .20. The intercorrelations between the job and leisure items ranged from .01 to .28, with a median of .14. Given the large sample size, statistical significance is less meaningful than practical significance. Because the maximum intercorrelation among the job and leisure items accounted for only 8% of the variance, the two sets of variables are functionally independent. Andrews and Crandall (1976) estimated this percentage as about the level of covariation expected in these data due to the common method of data collection. This supports a segmentation hypothesis suggesting that job and leisure

attitudes are relatively independent (Dubin, 1973).

The correlations between the life quality index and the specific satisfaction items appear in Table 1 along with the results of the regression analysis for the total sample. The statistical significance of the proportions of unique variance contributed by an item was used as the criterion for a meaningful contribution of each item to quality of life.

Considering the total sample, the set of job and leisure items taken together accounted for 25% of the variance in quality of life ($R = .50$). The satisfaction items that contributed significant unique variance were things done with family, things done with friends, the work itself, pay, fringe benefits, and security. The job satisfaction items as a group ac-

Table 2

Summary of Regression Analyses for the Contribution of All Job and Leisure Satisfaction Items to Quality of Life

Subgroup	<i>n</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	All job ^a	All leisure ^a
Total sample	1297	.50**	.25	.23	.043**	.136**
Males	547	.52**	.27	.24	.112**	.062**
Females	750	.51**	.26	.22	.020	.206**
Whites	1165	.56**	.31	.29	.052**	.159**
Blacks	115	.38	.14	-.20	.013	.109
Ages 16-29	358	.49**	.24	.16	.048	.126**
Ages 30-49	450	.61**	.37	.34	.106**	.151**
Ages 50-65	269	.58**	.34	.26	.089**	.170**
Married	890	.54**	.29	.27	.058**	.147**
Divorced, widowed, or separated	246	.52	.27	.12	.056	.163
Never married	160	.55*	.31	.16	.107	.168
0-11th grade	424	.53**	.28	.18	.083	.110
High school graduate	307	.53**	.28	.21	.030	.194**
Some college	358	.46**	.22	.16	.015	.135**
College graduate	190	.75**	.56	.50	.286**	.212**
Low socioeconomic status	337	.52	.27	.10	.070	.112
Mid socioeconomic status	268	.58**	.34	.25	.059	.200**
High socioeconomic status	408	.63**	.40	.37	.141**	.161**
White-collar workers	404	.55**	.30	.27	.063**	.169**
Blue-collar workers	349	.43**	.19	.13	.035	.091**

^a Proportion of unique variance accounted for.

* $p < .05$.

** $p < .01$.

counted for a unique 4.3% of the variance in quality of life, whereas the leisure items taken as a group accounted for a unique 13.6% of the variance in quality of life (see Table 2).

For reasons of space, a complete list of subgroup means is not presented here.¹ Overall, the differences were not large. A comparison of mean differences indicated that reported quality of life was lowest for respondents who were divorced, widowed, or separated ($M = 2.90$), black ($M = 2.87$) and never married ($M = 2.89$; the higher the scale value the lower the satisfaction). Quality of life was highest for those who were high in socioeconomic status ($M = 2.40$), married ($M = 2.45$), and those who had a college education ($M = 2.45$). Leisure satisfaction, based upon an average of the leisure items, was lowest for those in the mid socioeconomic status group ($M = 2.71$) and highest for those in the oldest age group ($M = 2.46$). The average of the job items was lowest for blue-collar workers ($M = 2.77$) and highest for those with some college ($M = 2.60$) and those who were

divorced, widowed, or separated ($M = 2.60$). Although these mean differences are significant ($p < .01$), practically they are not large. However, the relative contributions of job and leisure satisfaction to quality of life reflected in the correlations do differ between subgroups.

A summary of the regression analyses by subgroup is presented in Table 2. This includes the multiple correlation, squared multiple correlation, and squared multiple correlation adjusted for attenuation for each subgroup, derived from the regression of quality of life on all items. Also included are the proportions of unique variance in quality of life accounted for by the job items as a group and the leisure items as a group.

The highest proportions of variance in quality of life predicted by the job and leisure items taken together were found for college graduates (56%), the high socioeconomic status group (40%), and those 30-49 years of

¹ Interested readers may obtain these data by writing to the first author.

age (37%). The lowest proportions of variance were obtained for blue-collar workers (19%) and blacks (14%).

Both the job items, taken as a group, and the leisure items, taken as a group, contributed significant unique variance to the quality of life for the following subgroups: males, whites, ages 30-49 and 50-65 years, married persons, college graduates, those in the high socioeconomic status group, and white-collar workers. The job satisfaction items did not make a significant contribution to quality of life for the remaining subgroups. The leisure satisfaction items but not the job items made a significant unique contribution to the quality of life of females, those 16-29 years old, those with a high school education or some college, individuals classified in the mid socioeconomic status group, and blue-collar workers. Neither the job nor leisure satisfaction items were important to the quality of life of blacks, those who were not married at the time of the survey (either never married, divorced, widowed, or separated), individuals who did not go beyond the 11th grade, and those classified in the low socioeconomic status group.

The beta weights and proportions of unique variance for each item derived from the regression of quality of life on all the items were also examined for each subgroup (see Footnote 1). Considering the job satisfaction items first, satisfaction with co-workers was important (i.e., uniquely related) to the life quality of college graduates and high socioeconomic status individuals. Satisfaction with the work itself was important to the life quality of males, whites, married persons, white-collar workers, individuals between the ages of 30 and 49, the high socioeconomic status group, and college graduates. Satisfaction with pay and fringe benefits was significant for males, individuals in the 30-49 and 50-65 age groups, those who did not go beyond the 11th grade, those who were never married, and white-collar workers. Satisfaction with resources available for doing the job and satisfaction with what the job is like were not uniquely related to life quality for any subgroup or the total sample.

Considering the leisure-related items, satis-

faction with things done with friends was uniquely related to quality of life for all subgroups except blacks, blue-collar workers, individuals between the ages of 50 and 65 years, respondents who were divorced, widowed, or separated, those who did not go beyond the 11th grade, individuals with some college, and the low and mid socioeconomic status groups. Satisfaction with things done with family was relevant to all except males, blacks, blue-collar workers, individuals who never married or were divorced, widowed, or separated, and those in the low socioeconomic status group. Satisfaction with organizations belonged to was important to the quality of life of people in the 16- to 29-year-old group and blue-collar workers. Satisfaction with sports and recreational facilities was important only to those between the ages of 30 and 49 years. Satisfaction with entertainment was important to college graduates and to those who were married.

Discussion

Data collected from a 1972 national probability sample (see Andrews & Withey, 1975) demonstrated that job satisfaction and satisfaction with leisure activities contribute independently to individuals' assessments of their quality of life. Furthermore, people seem to segment their experiences so that the feelings derived from work and leisure are basically unrelated. Overall, leisure items were better predictors of quality of life than job-related items. Satisfaction with things done with family and things done with friends contributed the most unique variance to quality of life compared to the other leisure items. Satisfaction derived from the work itself and from pay, fringe benefits, and security were the most relevant job items in predicting life quality.

Both the job items, taken as a group, and the leisure items, taken as a group, contributed significant unique variance to the life quality of advantaged groups such as white-collar workers, married persons, and those in the high socioeconomic status group. Neither job nor leisure satisfaction was important to the life quality of relatively disadvantaged

groups such as blacks and those in the low socioeconomic status group. Satisfaction with other aspects of life (e.g., religion, health, living environment, etc.) may be more important to the quality of life of these individuals. Leisure satisfaction but not job satisfaction contributed uniquely to the quality of life of people whose life-styles may not be dominated by work activity—females, 16- to 29-year-olds, individuals with a high school diploma or some college, the mid socioeconomic status group, and blue-collar workers. Subgroup analyses of the contribution of the individual satisfaction items to quality of life demonstrated that some leisure and job satisfaction items were of particular importance to the life quality of some subgroups and not others. For example, satisfaction with co-workers was uniquely reflected in the quality of life of college graduates and those in the high socioeconomic status group. The life quality of blue-collar workers and younger persons (16–29 years old) was sensitive to satisfaction with the organizations to which they belonged.

One question is whether subgroup differences in the contributions of leisure and job satisfaction to quality of life are also reflected in subgroup differences in mean quality of life. This does not seem to be the case, since all group differences in mean work, leisure, and life satisfaction were small.

Several limitations of this study must be recognized. First, the results are limited to those leisure and job items included in the survey. Other items might have led to different findings with respect to the importance of work and leisure. In addition, all the respondents in the analyses involving job satisfaction were employed. Job-related variables may also be important for those without jobs. The lack of continuous and successful work experience that epitomizes marginal workers (Porter, 1973) may severely limit the life satisfaction of these individuals. Furthermore, housewives in the present sample were not asked job satisfaction questions. In future research, these individuals could be asked to report their feelings about their employment status.

The results of this study demonstrate that

non-job-related variables can be more important to a full life than job satisfaction for many subgroups of the population. Redesigning a job or improving the task environment may have little effect on worker behaviors if satisfaction with job conditions does not contribute to quality of life. Therefore, organizations should consider the relative importance of job satisfaction to quality of life when evaluating which subgroups may be most responsive to such motivational strategies as job enrichment, the 4-day work week, flexitime, and employer-sponsored recreation before investing in them. Similarly, those responsible for the development and implementation of leisure services (e.g., park and recreation systems) should consider the relative importance of leisure satisfaction to quality of life when predicting usage of leisure facilities or interest in leisure activities.

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