

The Job-Satisfaction/Life-Satisfaction Relationship: A Review of Empirical Research

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After a brief discussion of the nature and importance of work, this article reviews empirical research that relates satisfaction with work to satisfaction with life. The review covers more than 350 job-satisfaction/life-satisfaction relationships reported in 23 studies that vary widely in terms of the sample, instrumentation, and date of survey. For more than 90% of the cases, the direction of this relationship is positive; and none of the scattered negative relationships is statistically reliable. The magnitude of the reported zero-order relationship between job satisfaction and overall life satisfaction is typically modest, with correlations mostly in the mid-.30's for males and mid-.20's for females. The typical job-satisfaction/life-satisfaction correlation drops to the low teens when specific facets of life satisfaction, such as marital or leisure satisfaction, are used instead of overall life satisfaction. Discussion of these findings focuses on conceptual and methodological concerns at the more general level of the relationship between work and nonwork.

Our major objective in this article is to review results of empirical research relating satisfaction with work to satisfaction with other areas of life. Such a review has several uses. It can help to advance understanding of the consequences of job satisfaction, and it can help in other ways to better our understanding of work in life. As Bailyn and Schein (1976) suggest, for example, putting job satisfaction into the broader context of extrawork

considerations aids interpretation of indicators of the quality of employment that extrawork factors may moderate. Furthermore, the development of sophisticated social reporting systems (cf. Duncan, 1969, Fox, 1974; USDHEW, 1969) clearly must benefit from comprehension of the relations among the indicators on which they draw. And, of course, there are theoretical advances to be expected from, on one hand, integrative analysis of multiple indicators of well-being, and, on the other hand, consideration of the environmental embeddedness of work. Work, as Neff (1968), for one, has pointed out "is a social phenomenon that must be understood in the context of social institutions and structures [p. 4]." Whether conceived as a social role or a social problem, the interactions of work with other spheres of human life and personality therefore warrant careful appraisal. Such an appraisal of work is inherently social-psychological in perspective and should be of special value to social psychologists interested in the world of work.

Although we focus here on data that relates job and life satisfaction, our most general concern is with the work-nonwork relationship—that is, the impact of work on nonwork features of life, and vice versa. From the conclusions suggested by the job-satisfaction/life-satisfaction data, we shall, therefore, extrapolate to certain methodological and conceptual issues in the more general realm of work-nonwork relations.

The job-satisfaction/life-satisfaction relationship provides a convenient empirical index for examining the more general issues of work-nonwork relations. Measures of satisfaction with work, life overall, and specific facets of nonwork life can be thought of as outcroppings of activities and sentiments in different realms of life. The strength of empirical relationships among these outcroppings can provide an index of the strength with which work and nonwork elements of life are related.

In reviewing research on these subjects, it is useful to distinguish between two different forms of life satisfaction measures. Many studies use measures of global life satisfaction; such measures require respondents to integrate their satisfaction with specific facets of life into a global judgment of overall life satisfaction. A typical question used for this purpose is, "Taking everything into consideration, how satisfied are you with life in general at this time?" (Near, Rice, & Hunt, 1978). A different procedure asks respondents to indicate their satisfaction with specific nonwork facets of life such as marriage, family, leisure, or community.

The interpretation of the job-satisfaction/life-satisfaction relationship is somewhat different with each of the two types of measures just described. As work is one facet of overall life, the relationship between job satisfaction and a measure of overall life satisfaction reflects the importance of work as a single factor in all of life. This correlation overstates the strength of the mutual impact of work and nonwork elements of life, because it reflects a part-whole correlation (i.e., work is part of life and therefore part of what is responded to

in a measure of overall life satisfaction). The correlation between job satisfaction and measures of satisfaction with specific facets of nonwork, which is free of part-whole contamination, provides a more conservative index of the strength of the work-nonwork relationship.

Before examining the empirical data on the relationship between job satisfaction and life satisfaction, it is useful to consider briefly some philosophical and ideological views of work.

GENERAL CONCEPTIONS OF WORK

On the general subject of work and life, the frontispiece of *Working* (1974), Studs Terkel's documentary on "what people do all day and how they feel about it," contains this prideful quotation from then-President Richard M. Nixon on the morality of work: "The 'work ethic' [Nixon says] holds that labor is good in itself; that a man or a woman becomes a better person by virtue of the act of working. America's competitive spirit, the 'work ethic' of this people, is alive and well on Labor Day, 1971 [p. ii]."

Now, whether, in fact, the American "competitive spirit" was alive and well in 1971 (or is in 1980) may be debated, and from more than one perspective. Certainly Terkel seems skeptical. But be that as it may, Nixon's statement is nonetheless a simple, cogent expression of a major tenet of American faith: of the classic Calvinist belief in work as the moral crucible of "national character." Work and its doing, Nixon makes clear, makes Americans, if not everyone, what they are as people, fulfilling and enriching their lives by its presence and, by its absence, degrading and impoverishing them spiritually as well as materially.

Walter Neff (1968), in one of the few wide-ranging analyses of work in human affairs, reviews in detail this and other conceptions of work and its meanings, material and moral. He gives special attention to tracing the emergence of the "Protestant ethic" and the Western emphasis on work—especially hard work—as the "path to Godliness," or, at the very least, self-improvement and social status. Aware of modern arguments about work's diminished importance, Neff still views the ability to do it as a major human competence and stresses its importance in human life, quoting, in support of his thesis, Freud on the basic requirements of human existence: viz. "to love and to work."

On the other hand, as one of us has said elsewhere, "persistent Calvinist exhortations to the contrary notwithstanding, work never has had a really good name. For all its greater rectitude, it has not typically been perceived to be as much fun as play, for instance" (Hunt, 1976, p. 113). Thus one might speculate that the Protestant- or Work-Ethic is less fact than interest-serving propaganda designed to render the masses docile in anticipation of their

eventual ascent to Paradise, while wringing the sweat from their brows in the fields and factories. Such was essentially the view of Marx and certain "sociological" commentators, notably Toqueville, who spoke of the alienation of workers from both work and life, whether because of their separation from ownership of the means of production or their failure of personal fulfillment in fractionated, impersonal work environments (see Blauner, 1964).

IMPORTANCE OF WORK

Different as is their epistemology, the two viewpoints we've noted—Nixon's and Marx's—share a sturdy faith in the importance of work as a shaper of human nature. And their faith has some facts going for it. For instance, over two-thirds of the American people apparently would continue working even "if they had money enough;" and this has been a fairly stable figure in National Opinion Research Center surveys done from 1973 through 1976 (U.S. Department of Commerce, 1977, p. 353). In the same vein, a recent Harris survey (reported in *Public Opinion* for March/April, 1978, p. 35) found 69% of its respondents saying that they would miss "the work itself" if they stopped working. To be sure, one may argue that these data simply document how well propaganda on the virtues of working has succeeded and hence demonstrate nothing about the inherent dependence of human well-being, personal identity, or moral stature on work per se. But, even granting this argument, data like these plainly suggest that, in practice, work is an activity of some importance to people, and for reasons not confined to money.

At a more mundane level, the importance of work is reflected by the sheer amount of time most adults devote to it. Documented by Robinson's (1977) recent study of time-use by Americans, work-related activities take a larger share of time than any other general human activity except sleeping.

Based on a variety of data concerning the role of work and motivation to work, Katzell and Yankelovich (1975) concluded that both labor and management representatives feel that "work is important and that pride in work continues to be a strong force [p. 90]." They also concluded that both labor and management feel "people derive much of their satisfaction in life from work [p. 91]." Blauner (1964) expresses similar sentiments in his analysis: "Work remains the single most important life activity for most people in terms of time and energy, and . . . the quality of one's worklife affects the quality of one's leisure, family relations, and basic self-feelings [p. 184]." Beliefs consistent with those expressed by Blauner and by Katzell and Yankelovich are almost universal among researchers interested in the world

of work. As either implicit or explicit assumptions, such sentiments can be found in virtually all textbooks in organizational behavior, industrial sociology, industrial/organizational psychology, and related disciplines concerned with work and the work place.

QUALITY OF WORKING LIFE

In recent years, both policy-makers and social scientists have become interested in developing indicators of the quality of work life. The point of this interest is to provide a means of tracking changes in conditions of work and, hence, of the well-being of a citizenry. The recent book edited by Biderman and Drury (1976) probably is the best single testament to the rationale, method, and present-day substance of the quality-of-working-life movement (see also Davis & Cherns, 1975; Hackman & Suttle, 1977). Biderman and Drury's anthology of papers from the Bureau of Social Science Research Working Group on Indicators of the Quality of Employment, supported by the U.S. Dept. of Commerce, sets analysis of the quality of working life squarely in the context of more general social indicator modeling (see especially the paper by Land, 1976, pp. 3-31; see also Seashore, 1976). Placing quality of employment indicators among indicators of the quality of other life spheres (and of life generally) prompts obvious questions about the interrelations among these indicators. Which is to say again that the research concerning the job-satisfaction/life-satisfaction relationship reviewed in this paper can be fit into the context of the more general relationship between quality of working life and overall quality of life.

The various considerations we have noted all lead to the clear conclusion that work is a vital and important force in human life. To the degree that the empirical relationship between job satisfaction and life satisfaction reflects the strength with which work is related to the rest of life, then we would surely expect such relationships to be strong. But, as we shall see, they are in fact surprisingly weak.

EMPIRICAL STUDIES OF JOB AND LIFE SATISFACTION

For ease of presentation, we divide our review of the empirical literature into two sections: (1) studies relating job satisfaction to global measures of overall life satisfaction; and (2) those relating job satisfaction to measures of satisfaction with some specific domain of nonwork life such as marriage, family, leisure, or community.

Satisfaction With Work and Satisfaction With Life in General

A substantial number of studies have related job satisfaction to a global measure of life satisfaction; these studies are classified below on the basis of the type of statistical analysis used to assess the job-satisfaction/life-satisfaction relationship. Studies using zero-order, multivariate, and moderator analyses of this relationship are reviewed separately.

Zero-Order Analyses

Results from 16 publications assessing the zero-order relationship between satisfaction with work and overall satisfaction with life are summarized in Table 1. For each of these studies, the table describes the sample, the reliability of the measures, the empirical relationship between job and life satisfaction reported, and the statistical significance of the relationship. Note that the last three studies listed in the table used a measure of general life happiness rather than general life satisfaction.

The data in Table 1 are remarkably consistent. All 43 of the relationships from the 16 studies listed are positive; measures of association range from .04 to .58 with a median of .31 and a mean of .31 ($SD = .13$).¹ Of the 40 relationships tested for statistical significance in these studies, or easily testable with the information provided, 33 (83%) are significant at $p < .05$. The results indicate that satisfaction with work is positively, but modestly, correlated with overall life satisfaction.²

Multivariate Analyses

A literature search identified six studies using multivariate analyses to assess the contribution of job satisfaction to the prediction of overall life satisfaction when other variables in the prediction equation are statistically

¹Throughout this article, Fisher's r to Z transformation has been employed when calculating summary statistics for all measures of association such as those presented in Tables 1-3. Using the transformation for measures of association other than Pearson correlations represents some violation of the assumptions underlying the transformation process. However, the utility of the summary statistics in describing trends within the data seemed to warrant such violations, especially when no formal inferential use of the statistics was contemplated.

²Andrews and Withey (1976) used a number of different measures of global life satisfaction. We have reported their results for only "Life #3," their preferred measure. In chapter 5 of their book, they report both zero-order and multivariate analyses based on these other measures of global life satisfaction. Generally, these analyses yield conclusions almost identical to those based on analysis of "Life #3."

controlled. Results from these studies are inconsistent and do not suggest any solid conclusions. Three studies showed that job satisfaction adds relatively little to the prediction of overall life satisfaction (the first survey by Andrews & Withey, 1974, 1976; London, Crandall, & Seals, 1977; Rice, Near, & Hunt, 1979). Three other studies indicated that job satisfaction adds substantially to the prediction of overall life satisfaction (when included with other specific domains of life satisfaction, the second survey by Andrews & Withey, 1974, 1976; Campbell, Converse, & Rodgers, 1976; Hulin, 1969). The findings of each of these studies are summarized below.

Andrews and Withey (1974, 1976). In their first survey, a five-item job-satisfaction scale was one of 30 domain-satisfaction scales used to predict overall life satisfaction. Job satisfaction ranked 28th in terms of its relative contribution to the variance explained in overall life satisfaction (total $R^2 = .55$, job satisfaction = beta = .03). Further analysis showed that the job-satisfaction index added only 2% to the total variance in overall life satisfaction explained by a regression equation based on job satisfaction and 11 other domain-satisfaction measures selected on the basis of policy and statistical considerations.

In a second survey by Andrews and Withey, a single-item job-satisfaction measure proved to be a stronger predictor of overall life satisfaction. In a prediction equation with 27 other variables that yielded an R^2 of .67 with overall life satisfaction, the job satisfaction item had the eighth largest beta weight (beta = .09). In an equation with only 12 selected predictor variables, job satisfaction retained about the same level of predictive power (beta = .10, the sixth highest beta value in this equation).

London et al. (1977). In their secondary analyses of the first Andrews and Withey survey, London et al. examined the relative contributions of job satisfaction (five items) and leisure satisfaction (six items) to the prediction of overall life satisfaction. These two variables combined to yield an R^2 of .23 in predicting overall life satisfaction. Job satisfaction accounted uniquely for 4% of the life-satisfaction variance, and leisure satisfaction accounted uniquely for 14%. The residual variance (i.e., .23 - .14 = .04) presumably reflects joint variance explained by the interaction of the two sets of variables.

Rice et al. (1979). In their reanalysis of data from a western New York household sample first analyzed by Near et al. (1978), Rice et al. examined the unique variance in a single item measure of overall life satisfaction explained by a single-item measure of job satisfaction. In a prediction equation that accounted for 33% of the variance in overall life satisfaction, job satisfaction uniquely contributed only 1%.

TABLE 1
Relationship Between Job Satisfaction and General Life Satisfaction

Reference	Sample	Reliability of Measures		Relationships
		Life Satisfaction	Job Satisfaction	
Wesley (1939) (cited in Brayfield, Wells, & Strate, 1957) Weitz (1952)	211 employed graduates of University of Minnesota	.85 ^c	a	r = .31*
	169 male life insurance agents	.75	a	r = .39*
Kornhauser (1965) Iris & Barrett (1972)	407 auto workers	a	a	tetrachoric r = .58*
	34 first-level supervisors identified by management as a problem group	b	.86 promotions ^f	r = .23
		b	.88 co-workers ^f	r = .04
		b	.87 supervision ^f	r = .40*
		b	.80 pay ^f	r = .46*
		b	.84 work ^f	r = .01
Iris & Barrett (1972)	35 first-level supervisors identified by management as having good morale	b	.86 promotions ^f	r = .36*
		b	.88 co-workers ^f	r = .26
		b	.87 supervision ^f	r = .30
		b	.80 pay ^f	r = .07
		b	.84 work ^f	r = .31
		b	.88 overall	r = .47*
Quinn & Shepard (1974)	National probability sample of 1496 adults	.88	.72 a) facet-free	r = .42*
		.88	.92 b) facet-specific	r = .40*
		.88	.69 1) comfort	r = .28*
		.88	.83 2) challenge	r = .34*
		.88	.70 3) financial rewards	r = .27*
		.88	.66 4) co-workers	r = .27*
		.88	.87 5) resource adequacy	r = .31*
		.88	.76 6) promotions	r = .26*

Andrews & Withey (1974)	National probability sample of 1297 adults	.61	<i>a</i>	Eta = .23*
Andrews & Withey (1974)	National probability sample of 1072 adults	.60-.70	<i>b</i>	Eta = .37*
Andrews & Withey (1976)	Local nonrandom sample of 222 adults	.60-.70	<i>a</i>	Eta = .33*
Andrews & Withey (1976)	2 national probability samples: 1072 adults 1433 adults 1 local nonrandom sample of 222 adults	.60-.70	<i>a</i>	mean Eta = .35*
Campbell, Converse, & Rodgers (1976)	National probability sample of 2147 adults	.89	.59 ^d	<i>r</i> = .42*
Kavanagh & Halpern (1977)	411 university employees	.85 ^c	.78 ^c	<i>r</i> = .31*
		.70 ^c	.89 ^c	<i>r</i> = .51*
				<i>r</i> = .44*
				<i>r</i> = .20*
				<i>r</i> = .21*
London, Crandall, & Seals (1977)	National probability sample of 1297 adults	.61	co-workers ^b	<i>r</i> = .29*
	(same as Andrews & Withey)	.61	work itself ^a	<i>r</i> = .25*
		.61	pay ^b	<i>r</i> = .19*
		.61	conditions ^b	<i>r</i> = .17*
		.61	resources ^b	<i>r</i> = .30*
		<i>b</i>	<i>b</i>	
Near, Rice, & Hunt (1978)	Local probability sample of 1041 adults	<i>a</i>	.78 ^c	time 1 <i>r</i> = .31*
Orpen (1978)	76 South African first-line supervisors	<i>b</i>	<i>b</i>	time 2 <i>r</i> = .24*
Rousseau (1978)	139 employees of electronics firm and radio station	<i>b</i>	<i>b</i>	<i>r</i> = .36*
Stapel (1950)	Representative sample of Dutch adults (<i>N</i> not specified)	<i>b</i>	<i>b</i>	
	(happiness)			

(continued)

TABLE 1 (continued)

Reference	Sample	Reliability of Measures			
		Life Satisfaction	Job Satisfaction	Relationships	
Veroff, Feld, & Gurin (1962)	255 employed married men (subsample of national probability sample of 2460 adults)	<i>b</i>	<i>b</i>	<i>b</i>	
		(happiness)	(happiness)		
Bradburn & Caplovitz (1965)	352 adults males aged (25-49)	<i>b</i>	<i>f</i>		
		(happiness)	(happiness)		
			tau beta = .13		
			<i>Job Satisfaction</i>		
			Low	Med. High No reply	
	happy & fairly happy	5%	23%	68%	4%
	unhappy	27%	27%	27%	19%
			<i>Job Satisfaction</i>		
			Low	Med. High	
	very happy	13%	36%	56%	
	pretty happy	70%	59%	42%	
	not too happy	16%	5%	1%	
			N = 127	N = 153	N = 72

^aReliability not reported.

^bSingle-item, one-time measure, so reliability not calculable.

^cCurrent author didn't report reliability, but previous authors reported reliability of the same measure.

^dCoefficient of test-retest stability.

^eStapel labeled the four categories of job satisfaction as Yes, Fair, No, and Don't Know-No Reply.

^fItem intercorrelations (*Q* coefficients) ranged from .40-.90 for 4-item scale; reliability index not reported for scale total score.

* $p < .05$

Hulin (1969): Factor scores composed of satisfaction with specific facets of job and community were used by Hulin to predict overall life satisfaction. For both males and females, the job-satisfaction factors had fairly high-ranking beta weights (2nd, 3rd, and 4th out of eight variables included in the regression equation for males; 2nd and 4th out of seven variables for females). The total R^2 values in this study were .19 for males and .13 for females. Hulin's findings suggest that job-satisfaction facets can add substantially to community-satisfaction variables in the prediction of general life satisfaction.

Campbell et al. (1976). For this study, 12 variables were employed in a prediction equation that accounted for 54% of the variance in a composite measure of overall well-being. Job satisfaction had a beta weight of .27 in the equation, which was the fifth strongest weight. More powerful predictors were variables such as family life, marriage, financial situation, and housing.

Moderator Analyses

A number of studies have examined the possibility that some third variable can moderate the relationship between job satisfaction and overall life satisfaction. Unfortunately, these studies have focused almost exclusively on sex roles as the moderator. The few studies that have included moderators other than gender are discussed separately following this next discussion of the sex-role variable.

Sex-Role as Moderator. Table 2 summarizes results from eight publications that have presented job-satisfaction/life-satisfaction relationships separately for male and female subgroups. There is considerable consistency in the results of this research. Of the 38 pairs of relationships for males and females presented in Table 2, 25 (66%) indicate that job satisfaction is more strongly related to life satisfaction for males than for females. For males, these measures of association range from .09 to .68 with a median of .34 and a mean of .36 ($SD = .18$). Of the 33 relationships tested for statistical significance, or easily testable from the information provided, 30 (91%) are significant for male subgroups, with $p < .05$. For females, measures of association range from $-.07$ to .57 with a median of .23 and a mean measure of .26 ($SD = .18$); 12 (36%) of the 33 tested, or easily testable, job-satisfaction/life-satisfaction relationships in Table 2 are significant at $p < .05$ for female subgroups.

The Pearson correlation coefficients presented in Table 2 readily lend themselves to further analysis. As shown in the final column of Table 2, the difference between Pearson correlations for male and female subgroups was significant for 3 of the 32 correlation pairs. And all of these significant differences showed stronger correlations for males than for females. Finally, a

Authors & Year	Sample Description	<i>a</i>	<i>Eta</i> = .36*	<i>Eta</i> = .15*
Andrews & Withey (1974)	National probability sample of 1297 adults	.61		
Kavanagh & Halpern (1977)	198 males and 213 females university employees	.70 ^c .85 ^c	Lowest job level <i>r</i> = .34* <i>r</i> = .39* <i>r</i> = .61* <i>r</i> = .68*	<i>r</i> = .23* <i>r</i> = .48* <i>r</i> = .28* <i>r</i> = .57* Middle job level <i>r</i> = .18* <i>r</i> = .44* <i>r</i> = .23* <i>r</i> = .47* Highest job level <i>r</i> = .36* <i>r</i> = .34* <i>r</i> = .23* <i>r</i> = .23
Robinson (1977)	497 male and 637 female employed adults from a larger national urban sample		Total sample <i>r</i> = .49* <i>r</i> = .42* <i>r</i> = .27* <i>r</i> = .21* <i>r</i> = .33	<i>r</i> = .10 <i>r</i> = -.07* <i>r</i> = .45* <i>r</i> = .16 Total sample <i>r</i> = .53* <i>r</i> = .47* <i>r</i> = .34* <i>r</i> = .20* <i>r</i> = .26
Bradburn (1969)	Panel study: Wave I: <i>N</i> = 2787 Wave II: <i>N</i> = 480 Wave III: <i>N</i> = 2163 Wave IV: <i>N</i> = 448 4 communities plus small sample from largest metropolitan areas	.71-.74 ^d (happiness)		All chief wage earners Wave I <i>G</i> = .43 Wave II <i>G</i> = .41 White-collar workers Wave I <i>G</i> = .25 Wave II <i>G</i> = .36

(continued)

TABLE 2 (continued)

Author	Sample	Reliability of Measures		Relationships		r_{1-72}
		Life Satisfaction	Job Satisfaction	Male	Female	
Bradburn (1969) continued				Blue-collar workers		
				Wave I		$G = .35$
				Wave II		$G = .63$
				High-prestige white-collar workers		
				Wave I	$G = .38$	
				Wave II	$G = .39$	
				Low-medium-prestige white collar workers		
				Wave I	$G = .41$	
				Wave II	$G = .53$	
				Medium-high-prestige blue collar workers		
Wave I	$G = .49$					
Wave II	$G = .43$					
Low-prestige blue-collar workers						
Wave I	$G = .46$					
Wave II	$G = .40$					

^aReliability not reported.
^bSingle-item, one-time measure, so reliability not calculable.
^cCurrent authors did not report reliability, but previous authors reported reliability of the same measure.
^dCoefficient of test-retest stability.
^eItem intercorrelations (gamma coefficients) ranged from .41 to .85 for 3-item scale; reliability index not reported for total scale score.
^f $p < .05$

paired sample *t*-test was used to test the significance of the mean difference between the 32 correlation pairs. The mean difference of .12 is significant with $p < .001$, $t = 3.17$, $df = 31$.

Two multivariate analyses, not amenable to the simple format of Table 2, provide further evidence that the job-satisfaction/life-satisfaction relationship is stronger for males than for females. Andrews and Withey (1976) found that job satisfaction added little to the prediction of overall life satisfaction for their entire sample ($\beta = .02$ for job satisfaction in an equation including satisfaction with 11 other domains of life). However, when this regression analysis was repeated on a subsample composed exclusively of employed males, the beta weight increased to .22, the fourth highest beta weight in the equation. In the London et al. (1977) reanalysis of the Andrews and Withey data, it was found that job satisfaction accounted for more variance in overall life satisfaction for males (11%) than for females (2%). Hulin (1969) used factor scores derived from separate factor analyses of male and female responses as predictor variables in separate regression analyses conducted for these two groups. Thus it is not possible here to compare directly the strength of male and female beta weights for each of the job-satisfaction variates and each of the community-satisfaction variates, but at a general level, the results appear similar for males and females.

These different examinations of the data in Table 2, and at least some of the multivariate analyses, lead to the conclusion that the job-satisfaction/life-satisfaction relationship is generally stronger for males than for females. Such results have been interpreted as suggesting that work may play a more important role in the lives of males than in the lives of females (for example, Brayfield, Wells, & Strate, 1957).

Recent sex-role research provides some useful clues for interpreting sex differences of the type reported here. Most sex-role researchers believe that few sex differences in social behavior are the result of biological differences between females and males (e.g., Deaux, 1976; Grady, 1979; Kanter, 1977). Instead, these researchers suggest that sex differences in such behaviors are more often the result of social and organizational factors that are confounded with gender. For example, in contemporary American society, gender is confounded with important variables such as pay, job type and level, anticipatory socialization to work roles, education level, expectations for success, and time spent in household duties. Such variables, rather than any biological differences, are probably responsible for the empirical finding that job and life satisfaction are more strongly correlated for males than for females. Still, such conjecture has not been tested systematically with empirical research. We found only one study that addressed this issue directly; Kavanagh and Halpern (1977) found no sex differences when men and women held jobs of equal levels in an organizational hierarchy. Further

research along these lines is needed to see if the Kavanagh and Halpern findings are replicable and to determine whether other variables confounded with gender might play a similar role.

As an aside, it is interesting to note that the strength of sex differences in the job-satisfaction/life-satisfaction relationship is not clearly related to the date of the study.³ The early, and frequently cited, study by Brayfield et al. (1957) did yield higher correlations for males than females, whereas Kavanagh and Halpern (1977) found no consistent differences between males and females in their recent replication effort. However, Miller's (1941) very early study of university graduates found no sex differences, whereas the more recent studies by Andrews and Withey (1974, 1976) have reported substantial sex differences. These illustrations make it clear that factors other than date of the survey must be considered when trying to ferret out variables responsible for sex-role effect on this relationship.

Moderators Other Than Sex. Only a few studies have examined factors other than sex as moderators of the job-satisfaction/life-satisfaction relationship. Results concerning the joint effects of sex and job level (Kavanagh & Halpern, 1977), sex and occupational prestige (Bradburn, 1969), and sex and marital status (Haavio-Mannila, 1971), summarized in Table 2, represent modest attempts to move in this direction. However, the work by London et al. (1977) is clearly the most systematic effort to go beyond sex in the study of moderator variables. London et al. examined the job-satisfaction/life-satisfaction relationship as moderated by several factors including age, marital status, occupational type, and race. Within each demographic subgroup, defined by stratifying on one of the moderator variables, they calculated the proportion of variance in overall life satisfaction predictable from five job-satisfaction items. Their results showed that job satisfaction predicted larger proportions of overall life-satisfaction variance for respondents in white-collar, high SES, college graduate, white, and older age categories. These results suggest that the job may play a greater role in the lives of certain classes of respondents than for their counterparts in other categories. Further moderator research of this kind could add considerably to our understanding of the relationship between job and life satisfaction by helping to identify conditions associated with variations in the form and magnitude of this relationship.

³*Social Indicators*, 1976, however, concludes (from rather ambiguous evidence we believe) that "work is losing some of its predominance as a factor in the quality of life of most adult men, [but] it is gaining greater influence with respect to the quality of life of adult women" (U.S. Dept. of Commerce, 1977, p. 323).

Satisfaction With Work and Satisfaction With Other Specific Domains of Life

The research reviewed in this section differs from research reviewed earlier in that these studies use measures of some *specific domain* of life satisfaction rather than measures of *overall* life satisfaction. This research, summarized in Table 3, has included measures of satisfaction with such diverse spheres of life as marriage, family, leisure, housing costs, health care, and time use.

The nine studies included in Table 3 reported a total of 248 separate statistical relationships between satisfaction with work and satisfaction with some nonwork facet of life. Of these statistical tests, 88% show positive relationships between job satisfaction and satisfaction with the facet of life examined; 102 of these 217 positive relationships are statistically significant (47%). None of the 31 negative relationships is statistically significant.

The magnitude of the relationships summarized in Table 3 is not high. The largest measure of association is .55, between satisfaction with pay and satisfaction with cost of housing in the smaller of the two-company towns studied by Hulin (1969). The degree of association reported in these studies is generally far more modest, with a median measure of only .14 and a mean of .13 ($SD = .12$).

Hulin (1969) presents the only multivariate analyses of these relationships. He used specific facets of community satisfaction and job satisfaction to predict the criterion of overall job satisfaction (assessed via a scale separate from the job satisfaction facet measures). Community-satisfaction variables showed little power to predict overall job satisfaction for either males or females (beta weights rank 4–8 among eight predictors for males and 3–7 among seven predictors of females).

Summary of Empirical Findings

This review indicates clearly that the zero-order relationship between job satisfaction and life satisfaction is positive in direction but modest in magnitude. Of more than 350 statistical relationships between measures of job and life satisfaction identified, over 90% were positive in direction. And not a single one of the scattered negative relationships reported in this research ever attained conventional levels of statistical significance. The magnitude of correlations between job satisfaction and measures of overall life satisfaction was generally in the mid-.30's for males and mid-.20's for females. In studies that avoided the part-whole correlation problem by using measures of satisfaction with a particular facet of nonwork life, rather than measures of overall satisfaction with life, the strength of the job-satisfaction/life-satisfaction correlations dropped to the low teens.

TABLE 3
Relationship Between Job Satisfaction and Satisfaction with Some Domain of Life

Author	Sample	Job Satisfaction Reliability	Domain and Reliability	Relationship
Bradburn & Caplovitz (1965)	331 men from 4 communities	<i>a</i>	Marital tension index: number of problem areas in marriage (13 presented)	<i>Marital Tension</i> <i>Job Sat. Low Medium High</i> low 28% 33% 42% medium 51% 42% 42% high 21% 25% 16% N = 85 N = 114 N = 132
Kornhauser (1965)	407 auto workers	<i>a</i>	family-home ^a leisure ^a community ^a	Tetrachoric correlations: job satisfaction with: family-home .34 leisure .26 community .32
Hulin (1969)	467 salaried workers in 2 Canadian company towns (results reported separately)	.84 work ^f .80 pay ^e .86 promotions ^f .87 supervision ^e .88 co-workers ^e	14 community characteristics ^b	r = -.12-.28 r = -.21-.55 r = -.17-.33 r = -.22-.36 r = -.29-.36 r = .04-.27
Hulin (1969)	387 salaried male workers in 2 Canadian company towns	job in general ^b	14 community	
Hulin (1969)	80 female	job in general ^b characteristics ^b	14 community	
Bailyn (1970)	200 British couples	<i>b</i>	marriage ^b	r = -.02-.27
Haavio-Mannila (1971)	Probability sample of 412 adults in Helsinki	sat. with work ^b	family ^b leisure ^b spouse ^b	Positive or negative depending on couple's career orientations r = .07-.25 r = .05-.40 r = .11-.22
		sat. with status of work ^b		

$r = .17-.31$
 $r = .03-.28$
 $r = .18 \& .18$
 τ beta = .11

		Sample B		
		Sample A	Sample B	
Veroff, Feld, & Gurin (1962)	255 employed married men (subsample)	b	family ^b	$r = .17-.31$
			leisure ^b	$r = .03-.28$
			spouse ^b	$r = .18 \& .18$
			marriage ^b	τ beta = .11
Iris & Barrett (1972)	69 first-line supervisors in chemical plant, random selection from 2 departments (samples A & B)		.84 work ^c	$r = -.05$
			.80 pay ^c	$r = .34$
			.86 promotions ^c	$r = .20$
			.87 supervisor ^c	$r = .08$
London, Crandall, & Seals (1977)	National probability sample of 1297 adults		.88 co-workers ^c	$r = .24$
			.84 work ^c	$r = -.24$
			.80 pay ^c	$r = .12$
			.86 promotions ^c	$r = .25$
Robinson (1977)	National probability sample of 2147 adults	a	.87 supervisors ^c	$r = -.05$
			.88 co-workers ^c	$r = .26$
			Five facets (co-workers, work itself, benefits physical sur-ings resources) ^b	$r = -.02$
			activities with friends ^b	$r = .13-.28$
			activities with family ^b	$r = .05-.17$
			people seen socially ^b	$r = .13-.25$
			organizations belonged to ^b	$r = .01-.14$
			sports and recreation ^b	$r = .13-.20$
			entertainment ^b	$r = .04-.12$
			satisfaction with spare time ^a	Mean on Time Sat. ^c
				Job Satisfaction Female Male
				(1) complete 2.30 1.92
				(2-3) in-between 2.70 2.51
				(4-7) neutral or dissatisfied 2.78 2.82

^aReliability not reported.

^bSingle-item, one-time measure, so reliability not calculable.

^cCurrent authors did not report reliability, but previous authors reported reliability of the same measure.

^dItem intercorrelations (Q -coefficients) ranged from .40-.90 for 4-item scale; reliability index not reported for scale total score.

^eReverse scaled so low scores indicate high degree of satisfaction.

The results of zero-order analyses of the job-satisfaction/life-satisfaction relationship are thus quite clear; results from multivariate analyses are muddled, however. Some analyses of this type showed that job satisfaction adds substantially to the prediction of overall life satisfaction. Other similar studies suggest that job satisfaction has little unique power to predict life satisfaction. And, collectively, the six studies reporting multivariate analyses differ considerably from one another in terms of the sample, measures of job and life satisfaction they employed, and the particular set of variables included in the prediction equation. Any of these factors could account for the inconsistencies among their results. More multivariate studies, systematically investigating such factors, are needed to determine the power of job satisfaction in predicting life satisfaction. Such analyses should address themselves to working through the confoundings inherent in the relationships among life satisfaction, job satisfaction, and variables describing conditions of work and nonwork.

CONCLUSIONS

The results of studies relating job satisfaction and life satisfaction can be viewed in the light of three rather well-known general hypotheses concerning work-nonwork relations: spillover, compensation, and segmentation. The formulation of these three hypotheses is generally credited to Wilensky (1960), but other researchers have proposed similar ideas.

The *spillover hypothesis* proposes direct coloration of nonwork domains by experience at work, and vice versa. This posited direct relationship between work and nonwork is sometimes referred to as generalization (Seeman, 1967) or an extension (Parker & Smith, 1976).

The *compensation hypothesis* proposes an inverse relationship between work and nonwork spheres of life. From this perspective, it is thought that workers seek experiences and rewards in extrawork activities that are denied to them in work, and vice versa. Parker and Smith (1976) refer to this as the opposition model of work-nonwork relations.

The *segmentation hypothesis* proposes that work and nonwork domains of life are sharply separated from one another without significant mutual influence. There seem to be at least two versions of the segmentation model. As discussed by Dubin (1956, 1973; Dubin, Hedley, & Taveggia, 1976), segmentation has an institutional character and, from the viewpoint of the worker, reflects a nonintentional separation of work and nonwork domains. Seeman (1967), on the other hand, presents a less passive view of segmentation, suggesting that active adjustment by the individual may be required to keep the two domains apart.

The research reviewed above is, on the whole, most consistent with the spillover model. The data indicate that people who are satisfied with work also tend to be satisfied with other specific domains of life and with life overall. Conversely, people who are dissatisfied with work also tend to be dissatisfied with other domains of life and with life overall.

Support for the spillover hypothesis provided by research that relates job satisfaction and life satisfaction is also consistent with empirical research that tests the relationships between other manifestations of work and nonwork. There have been many studies that relate some aspect of work (e.g. occupation, task demands, or social interaction opportunities) to some aspect of nonwork (e.g., leisure activities, distribution of household duties, or social participation). Two recent reviews indicate that the positive relationship predicted by the spillover hypothesis is generally supported by empirical research (Champoux, 1976; Staines, 1977).

Although the direction of the job-satisfaction/life-satisfaction relationship is consistent with the spillover hypothesis, the strength of the observed relationships has been *consistently weaker than one would expect* on the basis of the customary philosophical and ideological presumptions mentioned earlier. Bluntly said, data concerning the relationship between job satisfaction and global measures of overall life satisfaction suggest that work does *not* play a very important role in the total life satisfaction of most adults. And, as reflected by the relationship between job satisfaction and satisfaction with specific facets of nonwork life, the work-nonwork relationship appears to be a generally weak one. Faced with correlations typically in the .20's and .30's, one might even wish to conclude that the segmentation hypothesis is the one best supported by the data. In many contexts, relationships of this low magnitude are routinely interpreted as evidence for the functional independence of two variables.

In response to the surprising empirical weakness of the job-satisfaction/life-satisfaction relationship, several explanatory conjectures come to mind. First, certain methodological shortcomings in the extant research may have misleadingly deflated the strength of the reported relationships. Second, important individual differences may have been overlooked when emphasis was given to examinations of the relationship between job satisfaction and life satisfaction for the typical adult member of society. Third, the job-satisfaction/life-satisfaction relationship may not be a very useful indicator of the relationship between work and nonwork. And, finally, it may be that work and nonwork are not in fact substantially related to one another; the weak job-satisfaction/life-satisfaction relationship may be an accurate reflection of genuine weakness in the more general relationship between work and nonwork. The remainder of this paper considers each of these possibilities in turn.

Methodological Issues

Poor reliability of measurement is the most obvious methodological reservation one might raise in trying to account for the surprisingly weak relationships reported. But the relationship between job and life satisfaction is not consistently stronger in studies using very reliable, multi-item measures of both job and life satisfaction than it is in studies relying on single item measures of these concepts (see Tables 1-3). Furthermore, even if one were to correct these relationships for attenuation due to unreliability of measurement, they would still be much weaker than expected on the basis of nonempirical writings.

Other methodological lapses that might artificially dampen the strength of empirical relationships do not seem relevant to the simple cross-sectional survey designs typically employed in this line of research. And, in fact, the most serious methodological problems with the research in this field suggest that the weak job-satisfaction/life-satisfaction relationships reviewed here may actually be spuriously *high*. All of the studies reviewed rely on two self-report satisfaction measures. These measures are generally collected at one point in time with scales that often use very similar, if not identical, formats. Such procedures can be expected to yield some degree of covariation between responses on the basis of method similarity alone. The obtained level of covariation must, therefore, be judged in light of the baseline level of covariation provided by method variance (see Andrews & Crandall, 1976, for an analysis of this problem specifically as it applies to subjective quality of life measurement). Furthermore, we have already noted that the correlation between job satisfaction and overall life satisfaction may be spuriously high because, at least at a conceptual level, it is a part-whole correlation (Quinn, Staines, & McCullough, 1974).

Disaggregation of Samples

If the unexpectedly weak empirical job-satisfaction/life-satisfaction relationship cannot be dismissed on methodological grounds, perhaps conceptual and analytic difficulties provide an answer to it. Researchers may have been too general in their manner of posing questions and analyzing the relationship between job satisfaction and life satisfaction. Rather than inquiring into the strength of the relationship for the general population, perhaps it is more meaningful to focus on separate subgroups. Different groups of respondents may differ in the strength, and even direction, of the job-satisfaction/life-satisfaction relationship. If this is true, the aggregation of data from complete samples may be quite misleading as to population characteristics and theory alike. Thus far, only gender has been extensively explored as a means of disaggregating the relevant data. Those analyses have

yielded a replicable pattern showing a stronger job-satisfaction/life-satisfaction relationship for males than for females. Effects of other potential moderators on the job-satisfaction/life-satisfaction relationship must be explored more fully before firm theoretical or policy conclusions can be drawn regarding their linkage. This research should seek to determine if there are *any discernible groups* where this relationship is as strong as anticipated on the grounds of the nonempirical writings.

In exploring the personal and situational variables that may influence the strength of the job-satisfaction/life-satisfaction relationship, two related areas of research may provide useful guidance. Both the Central Life Interest inventory (Dubin, 1956) and the Job Involvement scale (Lodahl & Kejner, 1965) are self-report measures of the importance of work in the life of the respondent. As the strength of the job-satisfaction/life-satisfaction correlation also reflects importance of the work role, factors influencing job involvement and centrality of work may also serve to moderate the strength of the job-satisfaction/life-satisfaction correlation. Recent reviews of research using these two measures identify a number of personal and situational factors related to the perceived importance of work (Dubin et al., 1976; Rabbinowitz & Hall, 1977). For example, personal factors indicating endorsement of the Protestant Work-Ethic value system are strongly related to the importance attributed to work, as are situational factors indicative of an enriched job (e.g., challenge, autonomy, opportunities for personal growth). In any search for variables that moderate the strength of the relationship between job satisfaction and life satisfaction, it would be wise to consider the results of research using either of the two scales discussed here.

Other Approaches to Work-Nonwork Relations

Work and nonwork may have important influence on one another even if the empirical relationship between job satisfaction and life satisfaction is weak. The job-satisfaction/life-satisfaction relationship may simply not be a good indicator of larger work-nonwork relations. Satisfaction measures have so many determinants that intercorrelations among various satisfaction measures may provide relatively little information about the nature of the actual interrelationships among the domains represented by such measures. Campbell et al.'s (1976) finding that objective conditions of life were generally weak in their correlations with various measures of satisfaction is consistent with this view. Satisfaction scores are further limited in inferential utility because they are outcome measures. Simply examining the relationship between outcome variables, such as job satisfaction and life satisfaction, does not clarify the processes by which the work and nonwork domains become related (or remain separate). More specifically, the direction of the job-satisfaction/life-satisfaction relationship has been interpreted as being

consistent with predictions of the spillover model of work-nonwork relations. Yet, such findings are necessarily silent regarding any psychological and social processes that may be suggested by that model. Other research approaches may be more useful for analyzing these issues of social psychological process.

Alternative Forms of Adjustment. A process issue particularly high on our own list of priorities concerns the conception of alternative strategies that people employ in adjusting to the often conflicting demands of work and nonwork roles. Among the alternatives possible for this basic problem of psychological adjustment, the three traditional models of spillover, compensation, and segmentation seem inadequate. More likely, there is a greater variety than they imply to the means by which workers come to terms with the demands of their work and nonwork lives. A casual reading of Terkel (1974) alone provides strong support for such an assertion. A major task for researchers in this field is to map systematically the various forms of work-nonwork adjustment that people manifest.

Work on this task of conceptualizing alternative adjustment styles might profitably proceed in the direction of making finer distinctions within the three "traditional" styles of adjustment. Kando and Summers (1971), for instance, distinguished between taking positive action to make up for job shortcomings and taking negative action to remove hostile feelings built up on the job as two different forms of compensation. Similarly, Payton-Miyazaki and Brayfield (1976) identified three types of adjustment that appear to fall under the general category of spillover (instrumental, reciprocal, and integrative).

Another attractive direction for expanding on the conception of adjustment is to move away altogether from the constraints of the three traditional models. Cognitive distortion of work and nonwork demands, or conscious acceptance of the incompatibility of work and nonwork, are two other forms of adjustment that quickly come to mind as alternatives outside the range of the standard models.

As an aid to developing a richer system for describing alternative forms of the work-nonwork adjustment, researchers may find qualitative, clinical strategies of research very useful. Case studies or critical incidents of managing work-nonwork conflicts may provide a good starting point for this task. After building an adequate conceptual scheme on the basis of qualitative observations, more quantitative empirical procedures could be developed to assess the form(s) of adjustment used by a particular individual. With such assessment devices, future research could address questions about the prevalence of alternative styles of adjustment, and the personal and situational factors associated with them (both as predictors and consequences).

More Detailed Specification. In addition to developing a broader view of the range of alternative human-adjustment strategies, it would also be desirable to increase the level of detail with which process issues generally are treated in this context. In their current form, the three traditional hypotheses about work-nonwork linkages do not adequately specify the behavioral processes involved in them. A reading of the accumulated literature gives one the definite impression that the three simplistic hypotheses featured in it have been treated far more seriously than one of Wilkensky's (1960) sophistication ever intended. His total treatment of these notions consisted of a brief example of compensation and spillover. To advance our current conceptual position, then, we must specify much more clearly and completely the motivational forces, time-relevant dynamics, causal relationships, and types of behavior related to distinctive forms of adjustment, and consign "spillover" and "compensation" to the status of casual pretheoretical metaphors, sometimes useful in general discourse, but little else.

Some important insights from recent research may help us move toward the more sophisticated treatment of process suggested above. Of special importance is the work of Kando and Summers (1971) on the form and meaning of actions in the work and nonwork domains. Arguing that it is important to explore the personal meaning of behavior for the individual as well as the objective form of that behavior, they suggest that information on meanings is essential to understanding the processes of human adjustment, which is by its nature subjectively defined. Also noteworthy and likely to be useful in future theoretical efforts are the works of Shepard (1974) and Faunce and Dubin (1975). They have tried to employ the self-concept in their analysis of work and nonwork; and it may well be that the self-concept is the principal means by which work and nonwork aspects of life are related to one another.

Questioning the Importance of Work

To this point, our discussion has focused on explaining the weaknesses of the job-satisfaction/life-satisfaction relationship in light of the assumption that work and nonwork, in reality, are strongly related to one another. Now, in this final section, we must consider directly whether that assumption is warranted. Is work related in any important fashion to the rest of life?

If one adopts the view that work and nonwork are segmented components of life, as Dubin and Seeman suggest, the weak job-satisfaction/life-satisfaction relationship that we have observed is neither surprising nor particularly difficult to explain. The weak inherent relationship between work and nonwork is reflected accurately in the weakness of the job-satisfaction/life-satisfaction correlations. The theoretical problem is solved by definition.

A segmentation view of work and nonwork relations has serious policy implications, however, for the choices of strategies for improving the quality of life. Most efforts to improve the quality of work life assume (implicitly or explicitly) that work is an important component of life and that improvements in work life will carry strong weight in improving life overall. But if work and nonwork are segmented rather than strongly related, this particular justification for improving quality of work life becomes at least suspect.

Although the present review indicates clearly that the empirical job-satisfaction/life-satisfaction relationship is weak for aggregated samples, we are not ready yet, however, to conclude that work-nonwork relations are so trivial a matter that it lacks policy or theoretical implications. Before accepting such a judgment, we would first wish to see the results of research conducted along the lines suggested at different points in this article. Should that research continue to yield results as weak as the extant data on the job-satisfaction/life-satisfaction relationship, it would only then become truly awkward to insist on the assumption that work and nonwork aspects of life are strongly related. Thus our current position is that the philosophical, logical, and theoretical arguments in support of such an assumption remain compelling even if its current support is weak. We are prepared, however, to discover that such assumptions reflect an "elitist" and nonrepresentative special case of human social life. Work may play a crucial role in the personal lives of those authors who praise or damn its importance in society, but only a minor role for the more typical members of society.

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