

The Age and Job Satisfaction Relationship: Does Its Shape and Strength Still Evade Us?

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Many investigations have examined the relationship between age and job satisfaction. However, various types of relationships have been reported across studies: positive linear, negative linear, U-shaped, inverted U-shaped or inverted J-shaped, or no significant relations. Such conflicting results have left the true nature of the relationship unresolved. The present study used a large national probability sample of workers (N = 1,095) to investigate the shape and strength of the age–job satisfaction relationship. Results indicated a significant but weak positive linear age–job satisfaction relationship. That is, age failed to explain a substantial proportion of linear variance in our job satisfaction measure. This indicates that age, as a chronological variable, is not a viable predictor of job satisfaction. Future research attempting to explain age differences in job satisfaction should instead focus its attention on other more pertinent psychological variables associated with the underlying aging process.

OVER the past four decades, numerous investigators have examined the relationship between age and job satisfaction. The results of this research have been very contradictory, with researchers reporting five different types of relationships: positive linear (e.g., Hulin & Smith, 1965; Hunt & Saul, 1975), negative linear (e.g., Muchinsky, 1978), U-shaped (e.g., Clark, Oswald, & Warr, 1996; Herzberg, Mausner, Peterson, & Capwell, 1957; Warr, 1992), inverted U-shaped or inverted J-shaped (e.g., Saleh & Otis, 1964), and no significant relations (e.g., Ronen, 1978; White & Spector, 1987).

Rhodes (1983), in a comprehensive qualitative literature review, found that the age–job satisfaction relationship was best represented by a positive linear relationship. Although this relationship was revealed in most studies, the strength of the relationship was small, with correlations falling between .10 and .20 (Warr, 1994). Brush, Moch, and Pooyan (1987) conducted a meta-analysis in an attempt to estimate the population parameter representing the relationship. Results showed a mean correlation coefficient of .22 for the relation between age and job satisfaction. However, further analysis demonstrated that organization type (e.g., manufacturing, service, government) moderated the association. Individual parameters varied between organization types by as much as .14, which suggests the age–job satisfaction relationship is not stable across organization types. Sterns, Marsh, and McDaniel (1995) conducted a subsequent meta-analysis examining the age–job satisfaction relationship that included a larger number of studies than the previous meta-analytic investigation (48 vs 19 coefficients). Their results demonstrated that the relationship between age and job satisfaction was positive but very small in magnitude ($\rho = .07$). In addition, occupation type moderated the age–job satisfaction relationship; coefficients for occupations ranged by .17 (from $-.01$ to $.16$).

The outcomes of these two meta-analyses have both an important similarity and a difference between them. First,

the results are similar in finding some type of organizational grouping (by organization or occupation type) moderating the age and job satisfaction relationship. Though the categories used as moderators differ by name, both reveal some organizational element influencing the association by a substantial magnitude. Conversely, the results of the two studies contrast each other by finding differing strengths of the relationship. While Brush and colleagues (1987) found a moderate relationship ($\rho = .22$), Sterns and associates' (1995) results showed a much weaker association ($\rho = .07$).

Although the meta-analyses just described provide important information about the strength of the age and job satisfaction relationship, they are not capable of distinguishing the actual shape of it. Meta-analysis utilizes linear correlation coefficients from past studies as data points; therefore, an analyst is unable to identify any nonlinear relationships. In other words, nonlinear relations could be evident within data sets, but the meta-analysis only explains the proportion of the variance that is linear. Consequently, meta-analytic results may not truly represent the strength of the relationship if nonlinear relations are evident. Thus, both meta-analytic studies reviewed here may not have substantially advanced our knowledge about the strength of the age–job satisfaction relationship as its shape has been left undetermined.

In order to fulfill this missing link, recent investigations have attempted to determine the form of the age–job satisfaction relationship (Clark et al., 1996; Kacmar & Ferris, 1989; Warr, 1992). Although these research efforts had the potential to provide vital information concerning both the shape and strength of the relationship, each study had various methodological problems that inherently limit the usefulness of their conclusions. For example, Kacmar and Ferris (1989) found significant nonlinear variance evident for extrinsic satisfaction, but not for intrinsic satisfaction. However, the results of this study may be questioned because of

two factors. First, a small sample size ($N = 81$) was used, which increases random sampling error. Second, the participants used were employed in a single occupation within one organization (i.e., nurses from one hospital). Their results therefore may have been influenced by occupation- and organization-specific variables. In any case, both factors may have ultimately contributed to biases in their conclusions.

In a similar study, Warr (1992) examined the relationship between age and occupational well-being. This investigation had the advantage of using a large sample of British adults ($N = 1,686$) who were employed across three occupational levels. The results suggested that there was a U-shaped (i.e., nonlinear) pattern present in the relationship. However, three orthogonal axes usually represent the occupational well-being construct, but the study only measured and analyzed two. The "pleasure" axis, which Warr stated "is often tapped through scales of general satisfaction" (p. 39), happened to be the particular dimension not considered in this study. Therefore, it can be argued that the construct of job satisfaction was not appropriately operationalized. This type of measurement problem undoubtedly limits the viability of the results regarding the nature of the age–job satisfaction relationship.

More recently, Clark and colleagues (1996) attempted to determine the shape of the age–job satisfaction relationship using another large sample ($N = 5,192$) of British employees. Results of this investigation indicated that the age–job satisfaction relationship is U-shaped. Although this study used a sample that was characteristic of the working population, a potential problem remains with its measurement of the different facets of job satisfaction. Each facet considered within this investigation was measured via single-item measures. Single-item measures have a tendency to be unreliable, which raises questions concerning how well the facets of job satisfaction were actually measured. Moreover, the construct validity of the facets of job satisfaction could also be questioned as scale unreliability can also affect what specific construct is being measured. In essence, how do we know what or how well an item is measuring a construct if there is no statistical index to gauge it by (e.g., internal consistency estimates or factor loadings)?

Overall, it seems that recent attempts to determine the shape of the age–job satisfaction relationship have methodological limitations curtailing the legitimacy of their conclusions. Hence, the actual shape of this relationship has not been established convincingly; therefore, it still remains to be determined through empirical means. The purpose of the present investigation is to determine both the shape and strength of the age–job satisfaction relationship. This investigation used a large, national probability sample of persons employed across representative occupational classes. These sample characteristics alleviated the problems of organization-specific and unknown occupation-specific moderators of the age and job satisfaction relationship. In addition, we also sought to explore systematically occupation specific moderators of the age–job satisfaction relationship.

METHOD

Sample

The 1977 Quality of Employment Survey, in which inter-

views were conducted across 48 states, was used as a data source for analysis. This survey was sponsored by the U.S. Department of Labor and carried out by the Survey Research Center of the University of Michigan (Ann Arbor). Individual interviews were conducted with a national probability sample of persons 16 years of age or older who were employed for at least 20 hours per week.

A total of 1,515 interviews were initially conducted, but only 1,095 cases were used for total scale observation due to missing data points in individual cases. Our sample ($N = 1,095$) contained 63% men and 37% women; 89% of the sample was White, 8% was African American, and 3% was labeled as other. The sample was divided into five age categories: 16–25 years (24%); 26–35 years (31%); 36–45 years (17%); 46–55 years (16%); and 56 years or older (12%).

Measure

A job satisfaction inventory was constructed from selected items on the 1977 Quality of Employment Survey. An exploratory factor analysis was conducted on these items using principal components analysis with a promax rotation. Five factors of job satisfaction were selected utilizing Kaiser's criterion (Bryant & Yarnold, 1995): Coworker Satisfaction, Supervisor Satisfaction, Pay Satisfaction, Promotion Satisfaction, and Work Satisfaction.

The identification of these five factors by the exploratory factor analysis provided the basis for constructing five corresponding subscales of job satisfaction. Internal consistency reliability estimates (Cronbach's alpha) calculated for each subscale were: Coworker Satisfaction = .79 (4 items); Supervisor Satisfaction = .88 (5 items); Pay Satisfaction = .65 (3 items); Promotion Satisfaction = .77 (3 items); and Work Satisfaction = .73 (4 items). Furthermore, we also calculated a composite score across subscales to represent a measure of overall job satisfaction (Cronbach's alpha = .89) because job satisfaction has typically been conceptualized as the sum of all the facets of this construct (Locke, 1976).

Data Analysis

A polynomial regression analysis was used to determine the form and the strength of the age–job satisfaction relationship (Kacmar & Ferris, 1989). This statistical technique allowed us to test whether the relationship was linear, U-shaped, inverted U-shaped, S-shaped, or without relation by entering age, age², and age³ into the equation. Namely, for the overall job satisfaction scale and each subscale, the individual age terms were entered into the regression equation at different steps to observe which term explained a significant proportion of variance. The particular relationship existing between age and the job satisfaction scales would be dictated by the results in the following manner.

First, linearity would be indicated if age accounted for a significant amount of variance and the other terms did not provide significant increments in explained variance. Second, a curvilinear relationship would be denoted if age² or age³ further explained a significant amount of variance. Specifically, if the increment in explained variance was significant when age² was entered at the second step, the positive or negative slope coefficient would suggest a U-shaped relation or an inverted U-shaped relation, respectively. Fur-

ther, if a significant increment in explained variance existed when the last variable, age³, was entered into the equation at the last step, a curve with two arches (S-shaped) would be indicated. Finally, no relation between age and job satisfaction would be implied if the amount of variance explained by each age term was nonsignificant.

It has been argued that tenure is a proxy variable for age and should be controlled for during statistical analyses because tenure tends to be highly correlated with age (Doering, Rhodes, & Shuster, 1983). However, the partialing of tenure leaves an age residual of unknown meaning. Nevertheless, given that there is some history in this literature of controlling for tenure, we conducted two sets of analyses, one controlling for tenure and one without, to examine whether the age–job satisfaction relationship varied between analyses.

The two sets of regression analyses were completed across eleven occupation categories and for the five occupation categories that had more than 100 cases. Individual analyses were not completed for the six occupation categories with fewer than 100 cases due to low statistical power. The five occupation categories were: (a) professional, technical, and kindred workers (e.g., accountants, librarians, dentists); (b) clerical and kindred workers (e.g., mail carriers, cashiers, secretaries); (c) craftsmen and kindred workers (e.g., tailors, mechanics, tile setters); (d) operatives, except transportation (e.g., welders, dyers, asbestos workers); and (e) service workers, except private household workers (e.g., food service workers, bailiffs, barbers). One set of analyses controlled for tenure and the other set did not. When tenure was controlled, the tenure variable was entered into the equation at the first step, followed by age, age², and age³ in Steps 2, 3, and 4, respectively. In the analyses where tenure was not controlled, age, age², and age³ were entered into the equation in Steps 1, 2, and 3, respectively.

RESULTS

Table 1 reports the means, standard deviations, and intercorrelations of age, age², age³, tenure, overall job satisfaction, and the job satisfaction subscales. As one would expect, the intercorrelations between age, age², age³ and tenure are all statistically significant. In addition, all four measures are related to overall job satisfaction. Finally, all of the job satisfaction subscales are highly correlated with overall job satisfaction and moderately correlated with each other.

The first set of polynomial regression analyses was conducted for overall job satisfaction and for each subscale across all occupations and for each of the five job categories. This set of analyses was employed to determine shape and strength of the relationship between age and job satisfaction by entering age at the first step, age² at the second step, and age³ at the third step. Table 2 displays the sample size, the change in R² for each step in the analysis, and the magnitude and shape of the age–job satisfaction relationship for each separate analysis. The following categories were used to describe the magnitude of variance explained: zero = .00; weak = .01–.24; moderate = .25–.49; and strong = .50–1.00. As indicated in the table, the relationship between age and overall job satisfaction appears to be weak and linear across all occupations. The analyses conducted across all occupations for the relationship between age and facets of job satisfaction were mixed. Three of the five subscales (i.e., Coworker, Supervisor, and Promotion Satisfaction) demonstrated no relationship with age, but the two others did show weak relationships with age. Specifically, analysis showed that age had an inverted U- or inverted J-shaped relationship with Pay Satisfaction and a positive linear relationship with Work Satisfaction.

Considering that the age–job satisfaction relationship may be occupation-specific, this set of analyses also included a hierarchical regression analysis for the five occupational categories. Results of the analyses for each occupation are also shown in Table 2. As was the case across all occupations, the relationship between age and job satisfaction for professional and technical workers was very weak and linear; however, no relationship was found between age and overall job satisfaction for the other four job categories. No relationship was found between age and two of the job satisfaction subscales (Coworker and Supervisor Satisfaction) for all five separate occupational categories. A relationship between age and pay satisfaction was found for the craftsmen and kindred workers job category. The relationship was similar to that found over all occupations: it was weak and inverted U- or inverted J-shaped. Only one occupation category, operatives (except transportation), was found to have a relationship between age and Promotion Satisfaction. The relationship between age and Promotion Satisfaction was weak and S-shaped. Finally, all but one of the five occupations, craftsmen and kindred workers, had a weak and positive linear relationship between age and Work Satisfaction.

Table 1. Means, Standard Deviations, and Intercorrelations of Age, Age², Age³, Tenure, Overall Job Satisfaction, and the Job Satisfaction Subscales Across All Occupations (*N* = 1,095)

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age	36.51	13.13	—									
2. Age ²	1505.50	1068.15	0.99**	—								
3. Age ³	68799.00	71510.00	0.95**	0.99**	—							
4. Tenure	4.99	1.87	0.50**	0.47**	0.44**	—						
5. Overall Satisfaction	59.16	10.97	0.09**	0.09**	0.09**	0.06*	—					
6. Coworker Satisfaction	12.65	2.52	0.02	0.02	0.03	0.00	0.73**	—				
7. Supervisor Satisfaction	15.47	3.82	0.00	0.01	0.01	-0.05	0.79**	0.57**	—			
8. Promotion Satisfaction	7.48	2.60	0.00	0.01	0.01	-0.05	0.79**	0.51**	0.57**	—		
9. Pay Satisfaction	8.09	2.20	0.10**	0.09**	0.07*	0.20**	0.62**	0.30**	0.30**	0.43**	—	
10. Work Satisfaction	15.47	3.69	0.20**	0.19**	0.18**	0.15**	0.73**	0.34**	0.35**	0.45**	0.43**	—

*Statistically significant at $\alpha = .05$; **statistically significant at $\alpha = .01$.

Table 2. Hierarchical Regression of Age on Job Satisfaction (Over All Occupations and by Occupation)

Job Satisfaction	<i>N</i>	Age ΔR^2	Age ² ΔR^2	Age ³ ΔR^2	Magnitude	Shape
All Occupations						
Overall	1095	.0085**	.0001	.0014	Weak	Positive Linear
Scales						
Coworker	1253	.0017	.0001	.0001	Zero	N/A
Supervisor	1234	.0002	.0011	.0001	Zero	N/A
Pay	1220	.0087**	.0062**	.0007	Weak	Inverted U or J
Promotion	1179	.0001	.0009	.0028	Zero	N/A
Work	1246	.0399**	.0012	.0000	Weak	Positive Linear
Professional and Technical Workers						
Overall	196	.0196*	.0152	.0000	Weak	Positive Linear
Scales						
Coworker	232	.0038	.0030	.0007	Zero	N/A
Supervisor	227	.0078	.0119	.0054	Zero	N/A
Pay	226	.0105	.0000	.0049	Zero	N/A
Promotion	209	.0036	.0089	.0001	Zero	N/A
Work	227	.0227*	.0041	.0012	Weak	Positive Linear
Clerical and Kindred Workers						
Overall	171	.0031	.0012	.0012	Zero	N/A
Scales						
Coworker	206	.0001	.0058	.0006	Zero	N/A
Supervisor	203	.0002	.0002	.0002	Zero	N/A
Pay	195	.0163	.0084	.0026	Zero	N/A
Promotion	187	.0017	.0058	.0051	Zero	N/A
Work	206	.0427**	.0003	.0005	Weak	Positive Linear
Craftsmen and Kindred Workers						
Overall	174	.0053	.0020	.0002	Zero	N/A
Scales						
Coworker	189	.0084	.0094	.0002	Zero	N/A
Supervisor	190	.0016	.0142	.0002	Zero	N/A
Pay	189	.0031	.0279*	.0013	Weak	Inverted U or J
Promotion	184	.0001	.0106	.0028	Zero	N/A
Work	191	.0159	.0060	.0020	Zero	N/A
Operatives (Except Transportation)						
Overall	153	.0115	.0020	.0068	Zero	N/A
Scales						
Coworker	171	.0001	.0000	.0022	Zero	N/A
Supervisor	169	.0000	.0002	.0013	Zero	N/A
Pay	170	.0028	.0056	.0026	Zero	N/A
Promotion	165	.0001	.0173	.0264*	Weak	S-shaped
Work	173	.0784**	.0014	.0079	Moderate	Positive Linear
Service Workers (Except Private Household)						
Overall	136	.0077	.0001	.0004	Zero	N/A
Scales						
Coworker	150	.0043	.0038	.0037	Zero	N/A
Supervisor	150	.0004	.0015	.0018	Zero	N/A
Pay	146	.0111	.0074	.0008	Zero	N/A
Promotion	142	.0149	.0070	.0034	Zero	N/A
Work	152	.0301*	.0013	.0051	Weak	Positive Linear

Notes: *N* indicates sample size. Age ΔR^2 indicates change in R^2 when Age is entered first into the equation. Age² ΔR^2 indicates change in R^2 when Age² is entered next into the equation. Age³ ΔR^2 indicates the change in R^2 when Age³ is entered into the equation last. *Magnitude* indicates the correlational strength of statistically significant relationships: Weak = .01–.24; Moderate = .25–.49; Strong = .50–1.0; Zero = any relationship that failed to reach significance. *Shape* indicates the form of the relationship: Positive Linear, Negative Linear, U-shaped, Inverted U or J, S-shaped, and not applicable (N/A).

*Statistically significant at $\alpha = .05$; ** statistically significant at $\alpha = .01$.

A second set of polynomial regression analyses was also conducted for overall job satisfaction and for each of the subscales across all occupations and for each of the five job categories. This series of analyses was completed because some researchers may argue that age is confounded with tenure (e.g., Kacmar & Ferris, 1989). Each equation in this set of analyses was similar to the first set of analyses except that tenure was added into the equation at the first step in order to control for tenure. At the second step, age was added into the equation. At the third step, age² was added into the equation. Finally, age³ was added into the equation at the fourth step. Table 3 displays the sample size, the change in R^2 for each step in the analysis, and the magnitude and shape of the age–job satisfaction relationship while controlling for tenure. As shown in the table, the pattern of relationships between age and job satisfaction when controlling for tenure is almost identical to that found in the first set of analyses. The relationship appears to be very weak and positive linear across all occupations. Again, the Coworker Satisfaction, Supervisor Satisfaction, and Promotion Satisfaction scales demonstrated no relationship with age. In addition, when controlling for tenure the relationship between age and Pay Satisfaction disappears. This suggests the relationship between age and Pay Satisfaction found in the first set of analyses can be accounted for by tenure alone. Finally, a weak and positive linear relationship was found between age and Work Satisfaction.

The set of analyses indicating the relationship between age and job satisfaction for each of the five occupations while controlling for tenure is also shown in Table 3. When we controlled for tenure, the relationship between age and job satisfaction disappears for professional and technical occupations. Again, no relationship was found between age and overall job satisfaction for the other four job categories. Congruent with the first set of analyses, no relationship was found between age and two of the job satisfaction scales—Coworker and Supervisor Satisfaction—for all five separate occupational categories. A weak and inverted U- or J-shaped relationship between age and Pay Satisfaction was found for craftsmen and kindred workers. A weak and S-shaped relationship was also found between age and Promotion Satisfaction for operatives (except transportation). Finally, two of the five occupations had a weak and positive linear relationship between age and Work Satisfaction; however, when controlling for tenure, the relationship between age and Work Satisfaction disappears for professional and technical workers and service workers.

DISCUSSION

Although substantial research has been directed toward finding the shape and magnitude of the age–job satisfaction relationship, no definitive results have yet been established that provide a general consensus on this topic. Past investigations attempting to resolve this dilemma have reported many different types of relationships: positive linear, negative linear, U-shaped, inverted U-shaped or inverted J-shaped, and no significant relations. Such disparate results produced over the years have only left researchers confused about the true form and strength of the age–job satisfaction relationship.

The primary goal of this investigation was to determine the shape and strength of the relationship between age and job satisfaction. Our study had the benefit of having a large, national probability sample of persons employed across a variety of occupational classes. This allowed us to examine the age–job satisfaction relationship across eleven major occupation categories and within five of those same categories. Thus, we were able to circumvent the problems of occupation-specific and organization-specific variance. In addition, we believe that our large sample size permitted us to minimize the effect of random sampling error on our findings.

Whereas the results of both sets of our analyses (i.e., controlling and not controlling for tenure) are almost identical, the following discussion is pertinent to all of the outcomes of our data analyses. Contrary to the results of some investigations discussed previously (i.e., Clark et al., 1996; Kacmar & Ferris, 1989; Warr, 1992), the results of this study demonstrate that the shape of the age and overall job satisfaction relationship is positive linear. However, a critical point is that the association is particularly weak. This conclusion also holds for the relationship between age and the specific job satisfaction subscales. As with overall job satisfaction, all of the statistically significant relationships were weak and most were positive linear for each subscale. Such a positive linear form of the age–job satisfaction relationship is consistent with a number of earlier findings (e.g., Hulin & Smith, 1965; Hunt & Saul, 1975) and a comprehensive literature review (Rhodes, 1983).

Although some may argue that the age–job satisfaction relationship may be occupation-specific, our results demonstrate that in four of the five occupational categories we examined the relationship is nonexistent. The one occupational category (i.e., professional and technical workers) that shows a statistically significant age–job satisfaction relationship demonstrated only a weak positive linear association. In addition, the age–job satisfaction relationship within each occupation category for each of the five satisfaction subscales is also nonexistent or almost always extremely small and positive linear.

Conclusion

Overall, our findings particularly coincide with the meta-analysis of Sterns and colleagues (1995) showing a small linear relation between age and job satisfaction ($r = .09$, $\rho = .07$, respectively), but differ from those of the Brush and associates (1987) study ($\rho = .22$). We suspect that our results parallel the outcomes of Sterns rather than Brush for at least two reasons. First, compared to Brush, Sterns used more than twice the number of correlation coefficients within the analysis, giving Sterns approximately four times the total sample size. Second, the Sterns group gathered data from a wide variety of sources; Brush and his collaborators only used one data source. The combination of these two features probably gave the Sterns investigation a sample that was more representative of the working population. In this respect, the Sterns data were probably more similar to ours, which had the vantage of being collected from a more nationally representative sample. Overall, our results showed that the Sterns study outcomes were probably not biased due to the neglect of nonlinear variance, because

Table 3. Hierarchical Regression of Age on Job Satisfaction (Over All Occupations and by Occupation) Controlling for Tenure

Job Satisfaction	<i>N</i>	Tenure ΔR^2	Age ΔR^2	Age ² ΔR^2	Age ³ ΔR^2	Magnitude	Shape
All Occupations							
Overall	1095	.0036*	.0052*	.0001	.0015	Weak	Positive Linear
Scales							
Coworker	1253	.0000	.0020	.0010	.0001	Zero	N/A
Supervisor	1234	.0027	.0020	.0005	.0001	Zero	N/A
Pay	1220	.0410**	.0000	.0024	.0012	Zero	N/A
Promotion	1179	.0030	.0009	.0026	.0118	Zero	N/A
Work	1246	.0183**	.0234**	.0004	.0000	Weak	Positive Linear
Professional and Technical Workers							
Overall	196	.0082	.0126	.0183	.0001	Zero	N/A
Scales							
Coworker	232	.0010	.0028	.0034	.0006	Zero	N/A
Supervisor	227	.0003	.0080	.0114	.0054	Zero	N/A
Pay	226	.0314**	.0008	.0011	.0060	Zero	N/A
Promotion	209	.0083	.0120	.0043	.0000	Zero	N/A
Work	227	.0224*	.0089	.0074	.0010	Zero	N/A
Clerical and Kindred Workers							
Overall	171	.0012	.0019	.0012	.0012	Zero	N/A
Scales							
Coworker	206	.0039	.0031	.0050	.0010	Zero	N/A
Supervisor	203	.0076	.0051	.0006	.0000	Zero	N/A
Pay	195	.0947**	.0036	.0061	.0003	Zero	N/A
Promotion	187	.0049	.0000	.0050	.0045	Zero	N/A
Work	206	.0161	.0268*	.0003	.0004	Weak	Positive Linear
Craftsmen and Kindred Workers							
Overall	174	.0002	.0084	.0012	.0001	Zero	N/A
Scales							
Coworker	189	.0004	.0132	.0066	.0002	Zero	N/A
Supervisor	190	.0039	.0002	.0121	.0002	Zero	N/A
Pay	189	.0157	.0000	.0223*	.0014	Weak	Inverted U or J
Promotion	184	.0208*	.0092	.0044	.0025	Zero	N/A
Work	191	.0094	.0084	.0047	.0019	Zero	N/A
Operatives (Except Transportation)							
Overall	153	.0063	.0057	.0025	.0059	Zero	N/A
Scales							
Coworker	171	.0002	.0003	.0002	.0022	Zero	N/A
Supervisor	169	.0004	.0001	.0004	.0004	Zero	N/A
Pay	170	.0058	.0002	.0077	.0024	Zero	N/A
Promotion	165	.0027	.0024	.0151	.0259*	Weak	S-shaped
Work	173	.0132	.0665**	.0010	.0079	Moderate	Positive Linear
Service Workers (Except Private Household)							
Overall	136	.0005	.0076	.0000	.0004	Zero	N/A
Scales							
Coworker	150	.0073	.0011	.0039	.0036	Zero	N/A
Supervisor	150	.0120	.0046	.0013	.0017	Zero	N/A
Pay	146	.0588**	.0000	.0069	.0009	Zero	N/A
Promotion	142	.0033	.0116	.0070	.0034	Zero	N/A
Work	152	.0007	.0076	.0000	.0004	Zero	N/A

Notes: *N* indicates sample size. *Tenure* ΔR^2 indicates change in R^2 when Tenure is entered first into the equation. *Age* ΔR^2 indicates change in R^2 when Age is entered second into the equation. *Age*² ΔR^2 indicates change in R^2 when Age² is entered third into the equation. *Age*³ ΔR^2 indicates the change in R^2 when Age³ is entered into the equation last. *Magnitude* indicates the correlational strength of statistically significant relationships: Weak = .01–.24; Moderate = .25–.49; Strong = .50–1.0; Zero = any relationship that failed to reach significance. *Shape* indicates the form of the relationship: Positive Linear, Negative Linear, U-shaped, Inverted U or J, S-shaped, and not applicable (N/A).

*Statistically significant at $\alpha = .05$; **statistically significant at $\alpha = .01$.

nonlinear relations accounted for no significant amount of variance in our study.

Taken together, these findings lead us to conclude that there is a positive linear relationship between age and job satisfaction, albeit a weak association. We believe that our results, along with other similar meta-analytic findings (Sterns et al., 1995), provide strong evidence concerning the shape and the strength of the relationship. However, it could be argued that the outcomes of this study might reflect the specific sample assessed some 20 years ago. The relationship may have altered due to historical or cohort changes since that point in time. Nevertheless, future research should direct its efforts away from using age as a proxy variable for the more complex processes underlying the process of aging. Aging is a multifaceted process that should not be represented in simple terms of chronology alone, because changes are brought on by various physiological, social, and psychological factors (Warr, 1994). Thus, the psychological mechanisms that accompany aging need to be properly identified in order to enhance the prediction of job satisfaction based on age. Such research should allow investigators to find more definitive (and thus stronger) relations between variables associated with the "aging process" and job satisfaction.

ACKNOWLEDGMENTS

The authors acknowledge the helpful comments and suggestions of Dr. Paul Levy and three anonymous reviewers. Address correspondence to David Bernal, Department of Psychology, University of Akron, Akron, OH 44325-4301. E-mail: bernal@uakron.edu

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Received September 22, 1997

Accepted April 8, 1998

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