

Why and When Are the Self-Employed More Satisfied with Their Work?

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Analysis confirms that the self-employed are more satisfied with their jobs because their work provides more autonomy, flexibility, and skill utilization and greater job security. These underlying mechanisms have been stable over the last 30 years and are not due simply to personality differences. The self-employed job satisfaction advantage is relatively small or nonexistent among managers and members of the established professions—occupations where organizational workers have relatively high autonomy and skill utilization.

WHY, AND UNDER WHAT CIRCUMSTANCES, IS IT MORE SATISFYING TO be self-employed rather than work for an organization? For several reasons, these questions are becoming more important. Self-employment is a common mode of organization for entrepreneurial activities and is common among contingent workers and subcontractors. The incidence of self-employment has been increasing over the last quarter century, and if trends toward flexible, more focused organizations continue, self-employment is likely to become even more prevalent.¹

The effect of self-employment on psychological health is a controversial issue, since there are strong but conflicting messages about the nature of self-employed work and how it affects individuals. Politicians and entrepreneurship advocates frequently portray self-employment as the route to independence and personal growth.² Many U.S. workers view

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¹ Survey data verify the increasing incidence of self-employment. The proportion of the workforce that was self-employed increased from 8.7 percent in 1975 to 11.0 percent in 1994 (Bregger 1996). The absolute number of self-employed workers increased by 81 percent in this period (from 7.2 million to 13.1 million).

² See, for example, the pronouncements of U.S. Presidents Thomas Jefferson, Abraham Lincoln, and Ronald Reagan in Steinmetz and Wright (1989).

self-employment favorably (Steinmetz and Wright 1989). Indirect support for the relatively positive effects of self-employment can be found in the work of critics of modern industrial bureaucracies, such as Argyris (1957), Blauner (1964), and Braverman (1974). According to these authors, the strict division of labor and hierarchical controls that characterize work organizations leave workers with little scope for developing valued skills and exercising control over their work. Since the self-employed are not similarly constrained, they are, by implication, more satisfied.

There are, however, other indications that self-employment may not be so rewarding. While the self-employed may be free from direct supervision, the small size of their businesses means that they have little discretion as to how they do their work (Roemer 1982). Given high rates of small business failure, the self-employed may have less secure jobs. Moreover, not all organizational workers are subject to the strictures of the machine bureaucracy. Contemporary management practices, such as those promoting intrapreneurship (Pinchot 1985), employee empowerment, and job enrichment are likely to have contributed to more rewarding work environments. Consequently, as Eden (1973) argued, the way that self-employment affects job satisfaction must be resolved empirically.

It may, however, be more interesting to ask why and under what circumstances the self-employed are more (or less) satisfied with their jobs. Suppose, consistent with available evidence, that the self-employed are more satisfied. Is this because self-employed jobs are more autonomous and challenging? Does the opportunity for greater skill utilization play a role? Are the supposedly negative effects of job insecurity small or non-existent? Could the positive effect of self-employment on job satisfaction be stronger for some types of work and weaker for others?

Previous Research

Representative U.S. samples generally show that self-employed are, on average, more satisfied with their jobs than the organizationally employed (Eden 1975; Katz 1993; Weaver and Franz 1992). However, relatively little is known about why this difference exists.

Eden (1975), using the 1969 Quality of Working Conditions Survey, found significant differences in how the organizationally employed and the self-employed perceived their work. Self-employed jobs had more enriching job requirements, more autonomy, and required longer hours and more irregular schedules. Eden's finding that the effect of self-employment decreased after controlling for autonomy implies that some of the greater satisfaction of the self-employed is due to greater job autonomy. When

many job attributes entered into a regression-type model, the estimated effect of self-employment on job satisfaction became negative.

Extending Eden's methodology to the 1977 Quality of Employment Survey, Katz (1993) found that when similar measures of job attributes and working conditions were controlled for, the self-employment regression coefficient remained positive. Because he was concerned with assessing changes over time in the net effects of self-employment on job satisfaction, Katz did not provide estimates of the way the various factors contributed to the job-satisfaction difference.

Results from smaller, nonrepresentative samples suggest that the size of the job satisfaction difference could be affected by a variety of factors and could vary across occupations. Buttner's (1992) comparison of employed managers and self-employed entrepreneurs found the self-employed to be less satisfied with their jobs. Kaldenberg and Becker (1992) found that self-employed dentists had greater job satisfaction, reporting a better fit between desired and actual working hours. British (Chay 1993) and Australian studies (VandenHeuvel and Wooden 1997) report little overall difference in the job satisfaction of self- and organizationally employed.

Explaining Differences in Job Satisfaction Between the Self- and Organizationally Employed

This study views the determination of job satisfaction from a *situationist* perspective (Schneider, Gunnarson, and Wheeler 1992), where an individual's job satisfaction is a result of cognitive evaluation of his or her work situation, notably task requirements and aspects of the work environment. Job-satisfaction differences between the self- and organizationally employed will be the outcome of differences between the two groups in the factors affecting job satisfaction and of the ways that these factors influence job satisfaction. Accordingly, hypotheses explaining how self-employment differs from organizational employment in ways that make the self-employed more or less satisfied comprise two elements. First, there is a proposition as to how a situational characteristic affects job satisfaction. The vast amount of job-satisfaction research over the last 30 years (Arvey, Carter, and Buerkley 1991; Locke 1976; Stone 1986) helps identify major determinants. Second, there is an argument stating how the self- and organizationally employed differ with respect to the job-satisfaction determinant and, consequently, how the difference in the determinant contributes to the job-satisfaction difference.

Job characteristics and work environment. A positive association between job satisfaction and *task autonomy and task variety* has been verified in many tests of the effects of job scope and challenge on job satisfaction (see, e.g., Hackman and Oldham 1975; O'Brien 1986; Stone 1986). Self-employment is expected to provide greater task autonomy (Eden 1975). Moreover, since self-employment in a line of work is likely to present additional job requirements, such as those related to managing a business, and does not impose the task-specialization characteristic of organizational work, the self-employed should have greater task variety.

Hypothesis 1: Because the self-employed have greater task autonomy, they will be more satisfied with their jobs.

Hypothesis 2: Because the self-employed have greater task variety, they will be more satisfied with their jobs.

A related aspect of work autonomy involves the *flexibility* with which individuals can rearrange their work schedules (e.g., time of day or week worked) in order to meet their needs. Workers with more flexible schedules are likely to view their jobs more favorably, since flexibility will facilitate satisfaction of needs in the nonwork environment (Loscocco and Roschelle 1991). Since typical self-employed persons should be less constrained by the need to coordinate with coworkers and organizational work routines, they will have more flexible work schedules.

Hypothesis 3: Because the self-employed have more flexible work schedules, they will be more satisfied with their jobs.

There is evidence that overeducation or constraints on the use of skills leads to lower job satisfaction as individuals find their jobs to lack challenge and they become frustrated with their inability to use valued skills (Kalleberg and Sorenson 1973; Burris 1983; O'Brien 1986). It is expected that there will be less skill underutilization by the self-employed. The self-employed can essentially choose a line of work that uses the skills that they possess and wish to use. In any event, once self-employed, they should be in a better position to design jobs in ways that will most effectively *utilize their skills*.

Hypothesis 4: Because the self-employed are more likely to fully utilize their skills, they will be more satisfied in their jobs.

Theory and evidence suggest that individuals with *fewer alternative job opportunities* view their current jobs more favorably, since the lack of demand for their work contributions elsewhere in the market causes them to lower their expectations about the appropriate levels of job rewards (Agho, Mueller, and Price 1993; Hulin, Roznowski, and Hachiya 1985). To the extent that the self-employed have more of their financial and emotional resources committed to their current business (Thompson, Kopelman, and Schriesheim 1992), they are likely to see fewer alternatives in their market environment. A lack of recent experience as an employee might reduce their opportunities in organizational employment, and alternative business opportunities will be restricted to the extent that their investments are specific to the existing business and are not transferable to a new venture.

Hypothesis 5: Because they are more likely to see a shortage of alternative jobs available, the self-employed will tend to be more satisfied in their jobs.

The individual's evaluation of his or her job will depend on how much they feel their current position is at risk, with job satisfaction being greater for those individuals who feel *secure against job loss*. While there is little direct evidence regarding the propensity of the self-employed to view their positions to be at risk, it is commonly presumed that self-employed positions are at greater risk (Brenner 1987; Mandel 1996). The entrepreneurial stress literature often highlights the prospect of business failure as a major characteristic of self-employment (Buttner 1992; Thompson, Kopelman, and Schriesheim 1992), and workforce survey data show a higher rate of departure from self-employed jobs (Schiller and Crewson 1997).

Hypothesis 6: Because they perceive their jobs to be less secure, self-employed will tend to be less satisfied with their jobs.

Occupational differences. Self-employed jobs are very heterogeneous, encompassing such diverse vocations as professional practice, street-corner vending, and personal services.³ Since task requirements and work environment are likely to vary considerably with the type of work, the job

³The occupational diversity of the self-employed is illustrated by Aronson's (1991) tabulations showing that 15 percent of male self-employed were in professional/technical occupations, 15 percent were managers, 20 percent were in sales, 30 percent were in craft and related occupations, and 8.5 percent were operators. Among female self-employed, slightly higher proportions were in professional/technical and sales occupations and a much lower proportion in craft and related occupations.

satisfaction experienced by a self-employed person will vary with his or her occupation. The degree to which conditions are conducive to job satisfaction among the organizationally employed is also likely to vary across occupations. Notably, while it often may be true that organizational employment reduces autonomy, flexibility, and the degree to which individuals have control over their work, it might not be true in all cases. Managerial and professional occupations are two likely exceptions.

Managerial work in an organization can involve a great deal of autonomy. In the case of top management, the salaried manager may have more discretion than a self-employed manager. As part of a larger organization, salaried managers may have more resources available to them and greater scope for delegating routine tasks to others. While lower-level organizational managers will be subject to the controls of superordinate managers, they often enjoy considerable discretion in how they do their jobs (Mintzberg 1973). The self-employed manager may encounter less satisfying job conditions. Since they are alone or have few employees, they are likely to have less scope for delegating routine tasks and may be particularly susceptible to the strain of having a large personal stake at risk in their business.⁴

Hypothesis 7: The job-satisfaction difference between the self-employed and organizationally employed in managerial occupations will be smaller than the job-satisfaction difference between the self-employed and organizationally employed in other occupations.

There are two conflicting schools of thought regarding the effects of employment mode on professional work. According to the deprofessionalization thesis (Huag 1973; Oppenheimer 1973), the hierarchical controls and division-of-labor characteristic of an industrial bureaucracy reduce the autonomy and skill requirements of professionals. Professionals who remain self-employed should be more satisfied with their jobs than their organizationally employed counterparts who cede control to managers and more of their tasks to subprofessionals.

⁴The idea that self-employed workers in the managerial category have much larger stakes in their business can be confirmed from tabulations from Michigan Panel Study of Income Dynamics (1995), which shows that self-employed managers had an average of \$247,000 of their own or family members' funds at stake in their business, compared with an average of \$31,000 for all other occupations. Professionals had the next highest personal and/or family financial investment (\$48,000). According to the Quality of Employment Survey (1977), 80 percent of nonfarm self-employed who were classified as managers employed others, whereas only 19 percent of the nonmanagerial self-employed employed others.

There are, however, countervailing forces that, for some professions, could cause the positive effects of self-employment on job satisfaction to be small or nonexistent. First, as Abbott (1988) points out, routinization of the tasks performed by organizationally employed professionals often involves the delegation of more mundane tasks to subprofessionals, leaving the professional with the more challenging tasks. Second, some professions have been able to retain considerable control over their work regardless of where the work is performed and preserve substantive autonomy within organizations (Friedson 1984, 1994). These include established professions, such as doctors, lawyers, and dentists, where professionals themselves exert control over professional entry through training and certification procedures.

Hypothesis 8: The job-satisfaction difference between the self-employed and organizationally employed in the established professions will be smaller than job-satisfaction difference between the self-employed and organizationally employed in other occupations.

Analysis of the Effects of Job Characteristics and Work Environment on Job-Satisfaction Differences

Data and samples. Three cross-sectional data sets are used to test hypotheses 1 through 6 regarding the effects of work environment and task characteristics. The first is the 1977 Quality of Employment Survey (QES), a representative survey of the U.S. civilian workforce conducted by the Institute for Social Research at the University of Michigan (Quinn and Staines 1979), which also was used by Katz (1993). While over 20 years old, the QES data are useful for this analysis because no subsequent survey provides an equally rich array of job characteristics. Elimination of farm-sector workers and workers younger than 18 and older than 64 years of age produced 1316 usable observations (154 self-employed and 1162 organizationally employed). Farm workers were excluded because of the likelihood that their work has properties that make it difficult to compare with jobs in other areas. Farm-sector employment has been declining steadily for the last century, and psychological rewards from farming are closely connected to factors (the pleasures and trials of life on the land, for example) that may not be reflected in the work-characteristics variables. The second data source is the 1997 National Study of the Changing Work Force (NSCWF) conducted by Lou Harris and Associates under the auspices of the Families and Work Institute. This data set, which also is

used to test hypotheses 7 and 8, yielded 3253 usable observations (564 self-employed and 2689 organizationally employed) provides some of the same content as the QES. The third data set is drawn from the General Social Survey (GSS) for the years 1989 to 1996. While the GSS has little information about task characteristics, it provides data on perceptions of job security and job-market opportunities. Similar secondary sampling procedures yielded 4618 observations (575 self-employed and 4043 organizationally employed). Use of the NSCWF and the GSS provides checks on the stability of the findings over time.

Method. In order to analyze how differences in job, work environment, and other characteristics contribute to job-satisfaction differences, I adapt a method that has been used to decompose between-group earnings differences (Oaxaca 1973; Brown and Corcoran 1997). Suppose that the determination of job satisfaction S can be represented by the regression $S = \sum_k \beta_k X_k + \varepsilon_k$, where β_k is a regression coefficient, X_k is the k th determinant, and ε_k is a random error. The contribution of the self/organizational employed difference in the k th job-satisfaction determinant to the self/organizationally employed difference in job satisfaction is given by $\hat{\beta}_k (\bar{X}_{ks} - \bar{X}_{ko})$, the product of the sensitivity of job satisfaction to X_k and the difference between the self-employed and organizationally employed on the k th determinant. Translating this amount into a percentage of the overall difference of the average job satisfaction, that is, $\hat{\beta}_k [(\bar{X}_{ks} - \bar{X}_{ko})/(\bar{S}_s - \bar{S}_o)] \cdot 100$ provides an estimate of the contribution of the k th determinant to the job-satisfaction difference.

This study provides alternative estimates based on job-satisfaction models estimated, respectively, from the organizationally employed, self-employed, and combined samples. Separate estimates of the organizationally employed and self-employed models provide information about differences in the way that self- and organizationally employed workers determine job satisfaction.⁵ In addition to the job- and work-characteristics variables, demographic variables capturing worker's age, sex, and educational attainment and an income or earnings variable are included in each model.⁶

⁵ Except for Cooper and Artz (1995), there has been little, if any, research interest in the determinants of the job satisfaction of the self-employed.

⁶ The role of demographic characteristics in explaining job satisfaction is subject to debate. Job satisfaction has been found to be greater among older workers and more educated workers (Kalleberg and Loscocco 1983; Arvey, Carter, and Buerkley 1991). Some analysts, for example, Arvey, Carter and Buerkley (1991) argue that correlations between job satisfaction and variables such as age, education and gender occur because the demographic characteristics are correlated with attributes of job and work environment.

Analysis of QES data. Measures. The job-satisfaction measure ($\alpha = 0.77$) is the mean of five facet-free items capturing on a five-point scale the respondents' general evaluation of their jobs (e.g., "All in all, how satisfied would you say you are with your job?"). Five measures of task characteristics, from the Task Characteristics Module of the Michigan Organizational Assessment Package, adapted from the Job Diagnostic Survey (Hackman and Oldham 1975), are included. Autonomy ($\alpha = 0.78$) is the mean of six items capturing the freedom that an incumbent has in determining how he or she does his or her job (e.g., "It is basically my responsibility to decide how my job gets done."). Variety ($\alpha = 0.77$) is the mean of six items measuring skill variety (e.g., "I get to do a number of different things on my job.").

Two four-point scales measure work-schedule flexibility. The first captures responses to "How hard is it for you to take time off during your work day to take care of personal or family matters?" The second captures responses to "How hard do you think it would be to get the hours you begin and end work changed permanently if you wanted them changed?"

Skill utilization is measured by a dummy variable, *unused skills*, that equals unity when the respondent answered "yes" to "Do you have some skills from your experience and training that you would like to be using in your work but cannot use on your present job?" Job-market alternatives are measured by *perceived job shortage*, a dummy variable equal to unity if the respondent answered "yes" to "Would you say there is a shortage of workers in this (geographic) area who have your experience, training, and skills?" Job security is measured by *job loss likelihood*, a four-point scale capturing the response to "How likely it is that during the next couple of years you will lose your present job and have to look for another job?"

Results. The difference between average job-satisfaction scores of the self- and organizationally employed sample members is 0.36 (4.00 – 3.64). The difference between this amount and the difference of 0.45 reported by Katz (1993) was found to be due to subsample differences.⁷

The self-employed differ from the organizationally employed in the ways proposed in hypotheses 1 through 4. Their jobs have more autonomy, variety, flexibility, and skill utilization. However, contrary to expectations

⁷ Katz, in order to replicate Eden's methodology, eliminated self-employed who headed larger firms and organizational workers who worked for very small firms and included agricultural workers. Estimates from a subsample based on sample-selection rules resulted in a self/organizational score of 4.055 – 3.61 = 0.445. When, like Katz, self-employed workers with 10 or more employees and organizational workers in firms with less than 10 workers were held out of the sample of nonfarm workers used in this analysis, the difference was 0.40 (4.01 – 3.61).

about how the self- and organizationally employed differ in perceptions of their market position, the self-employed are less likely to see a shortage of alternative jobs and see themselves as having greater job security.

Estimates of the regression coefficients in the job-satisfaction models are, except for the *perceived job shortage* coefficient, consistent with expectations. With the notable exceptions of the *autonomy* and *job loss likelihood* coefficients, the coefficients on the job and work characteristics variables in the self-employed regression model are of similar size to the coefficients on the same variables in the organizationally employed model.

The model coefficients are used to estimate how much the differences in attributes between the self- and organizationally employed contribute toward the difference in job-satisfaction scores between the self- and organizationally employed. Hypotheses 1 and 2, that greater task autonomy and variety of self-employed jobs contribute to the higher job satisfaction of the self-employed, are supported. A large part of the greater job satisfaction experienced by the self-employed occurs because they perceive their jobs to be more autonomous. Based on the organizationally employed coefficient, more than one-third of the job-satisfaction difference between organizationally employed and self-employed would be eliminated if the average organizational job were as autonomous as the average self-employed job. Based on the self-employed model, nearly 60 percent of the job-satisfaction difference is explained by autonomy differences. Altogether, *autonomy* and *variety* explain 49.9 percent of the job-satisfaction difference using the combined model, 50.8 percent using the organizationally employed model, and 75.2 percent using the self-employed model.

Hypothesis 3, that more flexible work schedules of the self-employed make them relatively more satisfied, is also supported. The data confirm that self-employed have more flexibility in time-off and working hours, accounting, respectively, for 5.3 and 18.0 percent of the job-satisfaction difference using the combined model coefficients.

Hypothesis 4, that the self-employed are more satisfied because their skills are more often fully utilized, is supported. The self-employed are significantly less likely to have unused skills; the presence of unused skills negatively affects job satisfaction. Based on the coefficients from the combined sample, 11.8 percent of the job-satisfaction difference is due to the greater extent of skill utilization among the self-employed.

The propositions underlying hypothesis 5 are not supported. Whereas it was expected that job satisfaction would be greater when alternative jobs were perceived to be in short supply, the estimated regression coefficient on the *perceived job shortage* variable is negative (and weakly significant

at $p < 0.1$ in each of the models). But since, also contrary to expectations, the self-employed actually have a more optimistic view of the market alternatives open to them, the differences in perceived job alternatives do contribute to higher satisfaction among self-employed. This contribution is, however, relatively small, amounting to only 7.2 percent (combined coefficients).

In an interesting finding, the results show that differences in the risk of job loss actually contribute to greater job satisfaction among the self-employed. Again, contrary to the propositions underlying hypothesis 5, the self-employed see themselves as having greater job security. Consistent with the theory underlying the job-satisfaction models, the *likelihood of job loss* variable is negatively associated with job satisfaction. The relatively greater job security of the self-employed explains 11.6 percent of the job-satisfaction difference (using the organizationally employed coefficients), 15.7 percent of the difference (self-employed coefficients), and 11.8 percent of the difference (combined coefficients).

Analysis of the NSCWF data. Measures. Job satisfaction is measured by a four-point scale capturing the response to the question, "In all, how satisfied are you with your job?" ranging from 1 (not satisfied at all) to 4 (very satisfied). The *autonomy* measure ($\alpha = 0.70$) is the mean of a subset of four of the six items that constitute the autonomy measure in the QES. Skill utilization is a four-point scale capturing the response to "My job lets me use my skills and abilities."

Results. As shown in Table 1, the self-employed members of the NSCWF sample are more satisfied with their jobs, have more autonomy, and see their jobs as utilizing their skills more fully. Estimates of job-satisfaction models show that the autonomy and skill-utilization variables have positive and significant effects on job satisfaction. Job autonomy is particularly important. Using the combined sample coefficients, 73.4 percent of the job-satisfaction difference is explained by the greater autonomy of the self-employed (supporting hypothesis 1), and 16.4 percent is accounted for by the greater skill utilization (supporting hypothesis 4).

Analysis of GSS data. Measures. Data from the annual panels of the General Social Survey (GSS) for the years 1989, 1990, 1991, 1993, 1994, and 1996 were used to test for the effects of perceived alternatives (hypothesis 5) and job security (hypothesis 6).⁸ Job satisfaction is measured by the

⁸ Observations for the years 1992 and 1995 were not included because the questions about job security and ease of finding another job were not asked in those years.

TABLE 1

JOB SATISFACTION SCORES, CHARACTERISTICS OF SELF- AND ORGANIZATIONALLY EMPLOYED JOBS, REGRESSION MODEL COEFFICIENTS, AND PERCENTAGE OF SELF/ORGANIZATIONALLY EMPLOYED JOB-SATISFACTION DIFFERENCE EXPLAINED BY DIFFERENCES IN CHARACTERISTICS: QUALITY OF EMPLOYMENT SURVEY 1977 (QES), NATIONAL STUDY OF THE CHANGING WORK FORCE 1997 (NSCWF), AND GENERAL SOCIAL SURVEY 1989-1996 (GSS).

	Average characteristics			Coefficients and percentage of job-satisfaction difference explained ^b		
	Self ^a	Org. ^a	Self-org. ^b	Org.-employed model coeff. % explained ^d	Self-employed model coeff. % explained ^d	Combined model ^c coeff. % explained ^d
QES						
Job satisfaction score	4.00 (0.90)	3.64 (1.04)	0.36** (4.69)			
Autonomy	4.18 (0.59)	3.29 (0.81)	0.90** (16.63)	0.14** (3.35)	0.26* (1.98)	0.14** (3.58)
Variety	3.99 (0.52)	3.65 (0.67)	0.34** (7.02)	0.19** (3.78)	0.21 (1.29)	0.20** (4.19)
Hard to take time off	1.85 (1.00)	2.01 (1.02)	-0.17* (1.78)	-0.11** (4.16)	-0.14 (1.86)	-0.12** (4.62)
Hard to change hours	2.42 (1.21)	3.24 (1.01)	-0.82** (8.13)	-0.08** (2.83)	-0.11 (1.73)	-0.08** (3.30)
Unused skills	0.28 (0.45)	0.37 (0.48)	-0.08* (2.42)	-0.49** (8.45)	-0.29** (1.97)	-0.46** (8.62)
Perceived job shortage	0.15 (0.37)	0.37 (0.37)	-0.22* (6.97)	-0.10 (1.64)	-0.14 (1.62)	-0.10 (1.84)
Job loss likelihood	1.48 (0.70)	1.76 (0.82)	-0.28** (4.29)	-0.17** (4.89)	-0.25* (2.31)	-0.17** (5.33)
R ²				0.22	0.22	0.22
N				1,162	154	1,316
NSCWF						
Job satisfaction score	3.54 (0.65)	3.34 (0.70)	0.20** (6.32)			
Autonomy	3.59 (0.53)	3.02 (0.72)	0.57** (20.99)	0.25** (13.34)	0.27** (6.65)	0.26** (15.20)
Skill utilization	3.70 (0.66)	3.58 (0.75)	0.12** (3.61)	0.28** (15.39)	0.31** (7.89)	0.28** (17.11)
R ²				0.21	0.22	0.22
N				2,689	564	3,253

	Average characteristics			Coefficients and percentage of job-satisfaction difference explained ^b		
	Self ^a	Org. ^a	Self-org. ^b	Org.-employed model coeff.	Self-employed model % explained ^d	Combined model ^c % explained ^d
GSS						
Job satisfaction score	2.46 (0.79)	2.25 (0.75)	0.21** (6.29)			
Complexity	20.20 (5.67)	18.80 (5.63)	1.40** (5.68)	0.02** (8.78)	15.2	0.02** (9.05)
Job availability	2.02 (0.86)	1.82 (0.79)	0.2** (5.19)	0.03** (2.04)	3.1	0.04** (2.53)
Job loss likelihood	1.29 (0.65)	1.57 (0.82)	-0.28** (9.42)	-0.11** (7.45)	15.0	-0.12** (8.40)
R ²				0.05	0.07	0.06
N				4,043	575	4,618

Note: Regression models also include gender, age, three dummy variables for educational attainment (high school graduate, bachelor's degree, and master's degree) and annual income (QES only) or annual earnings (NSCWF only). GSS models also include dummy variables to control for year of observation.

^aStandard deviations in parentheses.

^b t Values in parentheses.

^cModel estimated with pooled sample of self-employed and organizational workers.

^d% Explained = $\beta_k [(X_{k6} - X_{k6o}) / (\bar{S}_k - S_0)] \cdot 100$, where β_k is coefficient on the k th attribute, \bar{X}_{k6} and \bar{X}_{k6o} are the average values on the k th attribute, and \bar{S}_k and S_0 are the mean job satisfaction scores for self- and organizational workers, respectively.

* $p < 0.05$.

** $p < 0.01$.

response on a three-point scale to the question, “On the whole, how satisfied are you with the work you do?” Job loss likelihood is measured by a four-point scale capturing judgments of the likelihood of losing the current job or being laid off, ranging from 1 (not at all likely) to 4 (very likely). Job availability is a three-point scale capturing judgments about the ease of finding another job with approximately the same income and benefits, ranging from 1 (not easy at all) to 3 (very easy). Estimates of job complexity derived from the “Dictionary of Occupational Titles” (DOT) by Cain and Treiman (1981) were assigned using three-digit occupational codes. While this measure is only an indirect estimate of job challenge, it has the advantage of not being based on worker self-reports and has been shown to be a good predictor of job satisfaction (Gerhart 1987).

Results. As shown in Table 1, the self-employed are, on average, more satisfied with their jobs than the organizationally employed. The finding from the QES that the self-employed are more secure in their jobs and more confident of finding alternative employment is corroborated. The pattern of coefficient estimates for the job-satisfaction models is consistent with the results from the QES sample. The coefficient on *job availability* is positive and of similar size in each regression. The coefficient on *job loss likelihood* is negative and significant ($p < 0.01$) in all regressions and biggest in the self-employed model. Based on the organizationally employed coefficients, the difference in likelihood of job loss explains 15 percent of the difference in job satisfaction (compared with about 12 percent with the QES). Based on the self-employed coefficients, the apparently greater security of the self-employed explains about 23 percent of the job-satisfaction difference (compared with about 16 percent with the QES).

Further analysis. Several analyses were conducted to assess the robustness and stability of the estimates. The first tests relate to the stability of coefficient estimates across different specifications of the job-satisfaction regression models—specifically the extent to which estimates of key coefficients in the models estimated with NSCWF and GSS data are sensitive to omitted variable bias.

Alternative regression models were estimated from the QES data. The first set of models were specified analogously to the ones estimated with the NSCWF data, including measures of task autonomy and skill utilization along with the demographic controls. (That is, variables capturing perceived alternatives, job security, and task characteristics other than autonomy were excluded.) The second set of models was specified

similarly to those estimated with the GSS data in that measures of job security and perceived alternatives were included, along with the occupational complexity variable and the demographic controls. The estimates of the regression coefficients in these more parsimonious models were similar to the estimates in the fully specified models (reported in Table 1) in terms of direction of both the effects and the statistical significance. The size of coefficients capturing the effects of skill utilization, market alternatives, and job risk were not substantively affected by the exclusion of other variables. However, the size of the autonomy coefficient increases considerably when other variables are excluded. Based on the combined sample, the coefficient increases from 0.14 ($t = 3.58$) to 0.23 ($t = 6.25$) in the NSCWF analogue, increasing the amount of the job-satisfaction difference explained from 33 to 56 percent. This suggests that the proportion of the differential explained by the autonomy variable in the estimates from the NSCWF may be exaggerated due to the exclusion of other relevant explanatory variables such as job security and task variety.

In all model specifications, the control variables for age, sex, educational attainment, and income were found to make relatively minor contributions to the difference in job satisfaction between the self- and organizationally employed. Based on the coefficients for the combined samples, the proportions of the differential explained by these variables were 6.8 percent (QES), 4.8 percent (NSCWF), and 15.0 percent (GSS). Further specification tests showed that regression coefficients on the job and work environment characteristics were not affected by the inclusion of additional explanatory variables, specifically measures of average hourly earnings, firm size, annual hours of work, and race (African-American status).

Analysis of GSS data from an earlier period (1977–1978) shows that the tendency of the self-employed to feel more secure in their jobs preceded the corporate downsizings of the 1980s and early 1990s—events that would have been expected to increase the relative amount of job insecurity felt by organizational workers. The data show that the self-employed were more secure and satisfied with their jobs than organizational workers in both the earlier period (1977–1978) and the later period (1989–1996), as reported in Table 1.⁹

The possibility that the greater reported job satisfaction of the self-employed is simply the result of an underlying predisposition of those who

⁹For 1977–1978, the *job loss likelihood* score was 1.47 for self-employed and 1.25 for organizational workers. In 1989–1996, the score was 1.57 for self-employed and 1.29 for organizational workers. An estimated 12.9 percent of the greater job satisfaction of the self-employed in 1977–1978 was due to the greater job satisfaction (using regression coefficients from the whole sample).

tend toward self-employment to be more satisfied was investigated. This prospect needs to be taken seriously in view of the suggestions that personality attributes, such as locus of control, predict choice of employment mode (Perry 1990), and evidence of individual differences in the propensity to be satisfied (Arvey, Carter, and Buerkley 1991; Judge 1992).

Whether or not observed differences in job satisfaction of self- and organizationally employed individuals are attributable to dispositional effects can be checked with longitudinal data measuring job satisfaction for the same individual in both self-employed and organizational jobs. Such information is available from the final two waves of the National Longitudinal Study of the High School Class of 1972 (see Tourangau et al. 1987), which yielded 10,921 individuals who held jobs in both 1979 (year 1) and 1986 (year 2). Consistent with other estimates, the average job-satisfaction score of the self-employed was significantly greater than the average job-satisfaction score of the organizationally employed in both years. As shown in Table 2, individuals who were organizationally employed in year 1 and who were self-employed in year 2 experienced a marked increase in job satisfaction, whereas those who were self-employed in year 1 and organizationally employed in year 2 experienced a significant decrease in job satisfaction. The fact that those workers who were observed in both employment modes report their higher job

TABLE 2
JOB SATISFACTION SCORES BY EMPLOYMENT MODE: NATIONAL LONGITUDINAL
STUDY OF THE HIGH SCHOOL CLASS OF 1972

Employment modes year 1 (1979) and year 2 (1986)	Number	Mean job satisfaction scores			Cohen's d ^c
		Year 1 ^a	Year 2 ^a	Year 2 - Year 1 ^b	
All job holders	10,921	3.12 (0.67)	3.09 (0.66)	-0.03* (2.08)	0.04
Organization(1)/self(2)	882	3.17 (0.69)	3.35 (0.61)	0.18** (5.09)	0.28
Self(1)/organization(2)	192	3.40 (0.60)	3.11 (0.67)	-0.29** (4.23)	0.46
Self(1)/self(2)	225	3.54 (0.55)	3.32 (0.61)	-0.22** (4.10)	0.38
Organization(1)/organization(2)	9,622	3.10 (0.69)	3.06 (0.68)	-0.04** (4.10)	0.06

^aStandard deviations in parentheses.

^bt Values in parentheses.

^cCohen's $d = \frac{|\bar{X}_2 - \bar{X}_1|}{\sqrt{(\sigma_2^2 + \sigma_1^2) / 2}}$, where \bar{X}_2 and \bar{X}_1 are mean job satisfaction scores for year 2 and year 1, respectively, and σ_2

and σ_1 are standard deviations (Cohen 1988).

* $p < 0.05$.

** $p < 0.01$.

satisfaction when self-employed suggests that the greater job satisfaction of the self-employed is at least partly founded in differences in the jobs and work environment and not in the propensity of one of the groups to be inherently more or less satisfied.

Analysis of Occupational Differences

In order to test for interoccupational differences in the effect of self-employment on job satisfaction, three-digit occupational codes were used to divide the NSCWF sample into occupational categories, including managers and established professionals. The category of established professions included doctors, dentists, lawyers, veterinarians, architects, surveyors, and civil engineers—occupations that, on the basis of previous analyses (Pashigan 1980; Abbott 1988; Aronson 1991; Freidson 1994), were judged to be professions that have been able to control the boundaries of work performed by members and entry into the profession through occupational licensing.

The hypotheses that the difference in job satisfaction between self- and organizationally employed is smaller among managers and established professionals than it is among other occupations are tested by comparing mean differences in job-satisfaction scores within each of these groups with the mean difference for all other occupations. As shown in Table 3, the self/organizationally employed job-satisfaction differences are much smaller for managers and established professionals than for all other occupations in general or for any of the other major occupations. Formal tests for hypotheses 7 and 8 were conducted by comparing the self/organizationally employed job-satisfaction differences for these occupations against the difference for all other occupations. The difference between the self/organizationally employed job-satisfaction difference for managers and the self/organizationally employed job-satisfaction difference for all other occupations is -0.13 , with a t value of 1.97 —sufficient to reject the null hypothesis that the difference among managers is not less than the difference among all other workers at $p < 0.05$. The difference between the self/organizationally employed job-satisfaction difference for established professionals and the self/organizationally employed job-satisfaction difference for all other workers (excluding managers) is -0.29 , with a t value of 1.75 —sufficient to reject the null hypothesis at $p < 0.1$.

Further analysis indicates that the relatively smaller (or nonexistent) self-employed job-satisfaction advantage among managers and members of the established professions may be traceable to the fact that the self-employed in these groups have a smaller advantage in autonomy and no

TABLE 3
DIFFERENCES IN JOB SATISFACTION BETWEEN SELF-EMPLOYED AND ORGANIZATIONALLY EMPLOYED BY MAJOR OCCUPATIONAL GROUPS: NATIONAL STUDY OF THE CHANGING WORK FORCE 1997

	Self/organizational differences ^a			Satisfaction difference due to			Adjusted satisfaction difference ^a
	Satisfaction $\bar{S}_s - \bar{S}_o$	Autonomy ΔA	Skill use ΔU	Autonomy $\hat{\beta}_a \Delta A$	Skill use $\hat{\beta}_u \Delta U$	Total $\hat{\beta}_a \Delta A + \hat{\beta}_u \Delta U$	
Managers and established professions							
Managers	0.09 (1.42)	0.42** (8.23)	-0.03 (0.46)	0.10	-0.01	0.09	-0.04 (0.56)
Established professionals	-0.07 (0.36)	0.24 (1.40)	-0.20* (1.97)	0.06	-0.05	0.01	-0.12 (0.61)
All other occupations							
All others	0.22** (11.47)	0.58** (18.61)	0.14** (3.69)	0.15	0.04	0.19	0.03 (0.89)
Other professionals	0.24* (2.40)	0.49** (5.60)	0.23** (4.49)	0.13	0.06	0.19	0.08 (0.82)
Technical and craft	0.25* (2.04)	0.63** (6.92)	0.13 (1.16)	0.16	0.04	0.20	0.01 (0.01)
Sales	0.25** (3.69)	0.63** (10.31)	0.08 (1.02)	0.16	0.02	0.18	0.05 (0.76)
Construction craft	0.26* (2.47)	0.56** (4.48)	0.05 (0.71)	0.15	0.01	0.16	0.10 (0.93)
Services	0.29** (2.68)	0.62** (7.24)	0.28* (2.31)	0.16	0.08	0.24	0.11 (0.94)
Other occupations	0.19** (3.37)	0.52** (9.00)	0.16* (2.31)	0.14	0.04	0.18	0.03 (0.44)

Note: ΔA denotes the difference between mean autonomy scores of self- and organizationally employed workers ($\bar{A}_s - \bar{A}_o$). ΔU denotes difference between mean skill utilization scores (uses skills and abilities) of self- and organizationally employed ($\bar{U}_s - \bar{U}_o$). $\hat{\beta}_a$ is the regression coefficient on autonomy variable, and $\hat{\beta}_u$ is the regression coefficient on skill-utilization variable from job-satisfaction model for pooled sample from the NSCWF sample (see Table 1). Adjusted satisfaction difference is regression coefficient on employment mode dummy variable (1 = self-employed) in the regression of job satisfaction on autonomy, skill utilization, and employment mode. Managers ($n = 428$ organizationally employed, 111 self-employed) include all executive, administrative, and managerial occupations (1990 Census codes 4-37). Established professionals ($n = 15,15$) include physicians, medical specialists, dentists, lawyers, architects and civil engineers (43, 53, 84-89, 178-179). All others ($n = 2226, 426$) include all others not classified as managers or established professionals. Other professionals ($n = 264, 38$) include all other professional specialties except for writers, performers, athletes, and entertainers (44-83, 95-177). Sales ($n = 273, 102$) include all sales occupations (243-285). Construction craft ($n = 86, 50$) includes all construction trades (553-599). Technical and craft ($n = 340, 40$) include technicians and related support occupations (203-235) and all precision production, craft, and repair occupations except for construction trades (503-549, 617-699). Services ($n = 230, 55$) include service occupations except for protective and household services (433-469). Other occupations ($n = 1041, 144$) include all administrative support occupations (303-389), operators, fabricators, and laborers (703-889), and writers, performers, athletes, and entertainers (188-199).

^a Values in parentheses.

* $p < 0.05$.

** $p < 0.01$.

advantage at all in scope for skill utilization. As shown in Table 3, the self/organizational differences in autonomy scores, though positive, are smallest for both these groups. Unlike any of the comparison groups, self-employed managers and established professionals see themselves as having less scope for skill utilization than their organizationally employed counterparts do.

An idea of how self/organizationally employed differences in autonomy and skill utilization affect the pattern of job-satisfaction differences across occupations can be gained by using the relevant coefficients from the job-satisfaction regression for all workers (see Table 1) to predict the effects of these differences on job satisfaction. As shown in Table 3, the job-satisfaction advantages of the self-employed (if any) that are due to autonomy and skill utilization differences are much smaller among managers and established professionals than among other groups. The predicted job-satisfaction advantage of self-employment that is attributable to autonomy and skill utilization is 0.09 for managers, 0.01 for established professionals, and 0.19 for all other workers. As an additional test, the effects of the autonomy and skill utilization variables on job satisfaction were allowed to vary across occupations by estimating job-satisfaction models with self-employment dummy variable (1 = self-employed) and autonomy and skill utilization as independent variables separately for each occupation. The coefficient on the self-employed dummy provides a direct estimate of the job-satisfaction difference after controlling for autonomy and skill utilization differences. As shown in Table 3, the adjusted differences are not significantly different from zero for any group. While the adjusted differentials for established professionals and managers are negative, all the others are positive.

Discussion and Conclusion

The results from three data sets contribute to the resolution of previous conjectures about the distinguishing characteristics of self-employed work and how these affect the way that self-employed people evaluate their jobs. While some of the effects, such as those relating to autonomy and work schedule flexibility, are consistent with theoretical expectations, the effects of other factors, notably job security, are not.

A sizable portion of the difference in job satisfaction between the self- and organizationally employed is attributable to factors related to the independence of the self-employed from the routines and constraints of organizational life. Task autonomy makes a large contribution, with our results from 1977 and 1997 data supporting Eden's (1975) findings from 1969 data. The enduring tendency of self-employment to provide greater job autonomy contributing to greater job satisfaction is noteworthy. The last three decades have seen many attempts to provide job autonomy of organizational employees through job enrichment and organizational designs intended to be more empowering than the bureaucratic hierarchies that were presumably more pervasive 30 years ago. Nevertheless,

the advantages that self-employment has in providing job autonomy and job satisfaction have persisted.

A provocative finding, given previous speculation regarding the risk of failure in a self-employed business, is that the self-employed see themselves as being less at risk of losing their current job and as having better alternatives if they were to leave. It is possible that the self-employed may derive feelings of security from the idea that their future is in their own hands. Unlike organizational employees, they do not need to be concerned with the prospect of job loss due to capricious supervisory behavior or organizational decline due to misjudgments by senior executives. Because they are in charge, they have fewer constraints on their capacity to redefine their business in order to meet new threats and opportunities to ensure survival, including the adjustment of expectations of the degree of business success necessary for survival during times of adversity.

The finding that self-employment provides for greater skill utilization is consistent with this view. To the extent that development of specific human capital is facilitated by experiences that utilize existing skills and abilities, self-employment may provide more opportunities for developing the capabilities necessary for the individual to survive in his or her business. Similarly, self-employment may facilitate the development of skills that lead to better alternatives in the job market.

The results provide an interesting perspective on Thompson, Kopelman, and Schriesheim's (1992) "all their eggs in one basket" concept that sees self-employment as involving the commitment of large amounts of financial and psychic assets to a business and the prospect that these will be lost if the business fails. A large stake in the self-employed business will not be a psychological burden unless it is perceived to be at risk of loss, and my results suggest that most self-employed people do not bear this burden because they feel secure. However, to the extent that the self-employed have a greater stake in their current position, then the job satisfaction of the self-employed should be more sensitive to variations in job security. This is confirmed by comparing the *job loss likelihood* coefficients from the self- and organizationally employed job-satisfaction models. The self-employed *job loss likelihood* coefficient is about 50 percent greater than the organizationally employed coefficient for the QES sample and over 60 percent greater for the GSS sample (differences significant at $p < 0.05$).

The regression estimates showing that self-employed job satisfaction is more sensitive to changes in job autonomy also support some of the commonly held ideas about how the self-employed view or value their jobs. The self-employed autonomy coefficient is nearly twice as great

as its organizationally employed counterpart with the QES sample—significantly different at $p < 0.01$. This is consistent with the idea that the need for independence has greater psychological centrality for the self-employed—a proposition that has some indirect support from the evidence that independence needs do predict entry to self-employment (Hisrich 1990; Taylor 1996).

The data show that the advantage in job satisfaction enjoyed by the self-employed is much smaller among managers and established professionals. Relative to other organizationally employed groups, managers and established professionals retain relatively greater job autonomy. Self-employed members of the established professions do not have significantly more job autonomy than their organizational counterparts and actually have less opportunity for skill utilization. Professionals who can retain control over their traditional work domains actually may have scope for greater skill utilization when they work in an organization, since the organization can provide the support for the practice of the professionals and facilitate the delegation of routine tasks to administrative support and technical specialists.

Future research could proceed in a number of directions. The forces underlying the perceptions of greater job security by the self-employed need unraveling. Longitudinal labor force data could be used to test whether the self-employed are objectively more secure in their positions. One possibility is that while the typical (randomly selected) worker may not be more secure in self-employment, self-employment attracts individuals with high self-efficacy (Bandura 1997) who have the self-confidence and the competencies to succeed in business.

Subsequent work should recognize the heterogeneity of self-employed work and the self-employed themselves. While the self-employed may have, on average, greater financial and psychic investments in their business, the size of the stake is likely to vary widely, ranging from nearly everything (such as the entrepreneur who backs a single product) to almost nothing (such as the professional who can easily switch to organizational work).

Future research could focus on job requirements and psychological rewards of those self-employed people who are engaged in activities that are distinctively entrepreneurial in nature, involving the establishment and development of a new business, rather than the operation of an existing small business or professional practice. While there is no consensus on the correspondence between self-employment and entrepreneurship, there is evidence that the entrepreneurially self-employed are distinctive in terms of both the work that they do and their personalities (Stewart 1996).

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