This study considers the extent to which entrepreneurs are satisfied with their businesses in their third year of business ownership. Entrepreneurial satisfaction might be viewed as a basic measure of performance. It may bear upon decisions by individual entrepreneurs about whether to invest more time and money, whether to cut back, or whether to close down. It may also influence whether entrepreneurs work effectively with their customers and employees. For researchers, the investigation of why, in particular settings, some entrepreneurs may be more satisfied than others may aid in the interpretation of past research, which has used this as a performance measure.

This research draws upon a theoretical framework used in investigations of employee satisfaction. Called discrepancy theory, it suggests that individual satisfaction is determined, in part, by whether there is a "gap" between actual rewards or performance and the individual's goals or expectations.

In this research, it was hypothesized that entrepreneurs emphasizing primarily noneconomic goals (such as doing the work they wanted to do) would have higher satisfaction when the business was experiencing lower levels of performance. For higher levels of performance, there would be no difference. In essence, the satisfaction of those emphasizing economic goals would vary more with economic performance. A related hypothesis was that, for this sample of start-up firms (many of which would be experiencing low levels of performance), those emphasizing noneconomic goals would have higher average levels of satisfaction. This was based upon the expectation that many start-up firms would be experiencing marginal performance, so that the "gap" between goals and performance would be greater for economically oriented entrepreneurs. The research also focused upon expectations, because one aspect of discrepancy theory suggests that satisfaction decreases if there is a gap between expectations and performance. Accordingly, it was hypothesized that, controlling for performance, entrepreneurs with higher initial expectations would subsequently have lower levels of satisfaction. Previous research suggests that membership in particular demographic groups may influence expectations. This led to hypotheses that older entrepreneurs, female entrepreneurs, and minority entrepreneurs would have...
lower levels of initial expectations. This, in turn, may influence later satisfaction. Thus, it was hypothesized that, controlling for performance, entrepreneurs in each of these groups would have higher satisfaction because their initial expectations would be lower.

The study utilized a sample of 287 entrepreneurs who were followed over a 3-year period. The data on predictors of satisfaction were gathered in year 1, when the average owner had been in business for 11 months. The satisfaction measures were gathered 2 years later. By that time there should have been some stabilization in the routines of the business, and the entrepreneur could reflect upon historic performance and experiences in judging the extent to which business ownership had been satisfying. The data were analyzed primarily using path analysis, in which it was hypothesized that certain variables would have both direct and indirect effects upon satisfaction.

It was found that the satisfaction of entrepreneurs emphasizing economic goals was not more sensitive to economic performance, at least within the range of performance considered in this sample. For this group of firms, many of which appeared to be experiencing marginal performance, those emphasizing noneconomic goals did express higher levels of satisfaction. It had been expected that those with higher initial expectations would later be less satisfied because they would have a greater expectation-performance gap. However, the opposite was found; those who were more optimistic initially were more satisfied later, even when controlling for performance. Demographic influences on initial expectations were examined. Contrary to expectations, none of the demographic traits was significantly related to initial assessment of likelihood of success. Older entrepreneurs, women entrepreneurs, and minority entrepreneurs were just as optimistic as those in other groups. The relationship between membership in these demographic groups and later satisfaction was also examined. No significant relationships were found for older entrepreneurs and minority entrepreneurs. However, there was some evidence ($p = .07$) that women entrepreneurs were more satisfied with business ownership.

Two of the most interesting findings were those related to initial expectations and to women entrepreneurs. Contrary to discrepancy theory, those who had higher initial expectations were later more satisfied, not less. This may suggest, as Staw and Ross (1985) found in a longitudinal study of employee satisfaction, that attitudes are, in part, a function of stable individual traits. Those who had a positive view of their initial prospects later viewed the experience of business ownership more favorably, regardless of subsequent performance. For women entrepreneurs, the higher levels of satisfaction may reflect a view that they have fewer attractive alternatives; it may also be that they discover greater relative satisfaction from the day-to-day aspects of business ownership.

For entrepreneurs and their advisors, the findings suggest that particular goals, attitudes, and backgrounds are likely to be associated with greater satisfaction. This may influence whether entrepreneurs stay with marginal businesses. For researchers, the study provides insight into discrepancy theory by considering its application to entrepreneurs rather than the hired employees normally studied. In addition, subjective measures of performance, such as satisfaction, have often been used in previous research on entrepreneurial performance. This study casts light on why, in particular settings, some entrepreneurs may be more satisfied than others.

INTRODUCTION

This study is concerned with assessing entrepreneurs' satisfaction with their businesses. Overall satisfaction is clearly a fundamental measure of success for the individual entrepreneur. As such, it seems particularly appropriate to study the influences upon this key measure of performance. There may be important practical benefits for entrepreneurs in assessing how satisfaction with their ventures may be related to their own personal frames of reference and backgrounds and in understanding more fully what to anticipate. In addition, researchers may gain insight into factors influencing venture survival and growth. This is because entrepreneurial satisfaction may bear upon decisions by individual entrepreneurs about whether to continue or close down their ventures, as well as whether to invest more time and money.
or cut back. Furthermore, it may be that more satisfied entrepreneurs work more effectively with their customers and employees, with satisfaction thereby leading to greater success.

To date, research on satisfaction has been reported primarily in the literature on organizational behavior and human resource management and has focused upon the antecedents and consequences of employee satisfaction, not that of entrepreneurs. This literature provides guidance, as we develop a theoretical framework of factors likely to bear upon entrepreneurial satisfaction. However, we should note that entrepreneurs differ from hired employees in a number of ways, including their degree of commitment to their organizations. In addition, they work in organizations whose strategies they have developed, and the financial benefits of venture success often flow directly to them. Thus, the relationships considered here, examining the determinants of entrepreneurial satisfaction, have not been tested before.

For scholars, the expansion of job satisfaction research from employees of organizations to entrepreneurs should broaden understanding of the concept and measure the generalizability of existing research to a broader population.

This study specifically focuses upon the determinants of entrepreneurial satisfaction, while controlling for economic performance. We would, of course, expect that the satisfaction of individual entrepreneurs would be highly correlated with the economic performance of their ventures. Thus, those who do better should feel better. However, theory suggests that satisfaction may be related to other factors as well. This study specifically investigates three of those possible determinants: the entrepreneur's initial goals, the entrepreneur's expectations, and certain demographic attributes of the entrepreneur that may bear indirectly upon satisfaction.

Entrepreneurial satisfaction may well fluctuate, particularly in the early months when prospects can be so uncertain. One entrepreneur described his thinking during this time, "Time and again over the coming months I would slip into sieges of rejection, anxiety, and negativism. I came to see how completely my mental state colored my perceptions of daily events and what I thought the future held" (Cook 1986, p. 19). With this in mind, we focus upon entrepreneurial satisfaction during the third year of ownership. By that time there should be some stabilization in the routines of the business. There may still be major uncertainties about long-run performance. However, the entrepreneur can reflect upon historic performance and experiences in judging the extent to which business ownership has been satisfying.

DISCREPANCY THEORY

There is a well-established body of literature in industrial and organizational psychology addressing the determinants of job satisfaction. One of these explanations suggests that satisfaction is determined, in part, by the "gap" between an individual's personal standards of comparison (e.g., what he or she wants or feels entitled to) and actual experiences. These cognitive comparison processes are referred to as discrepancy theory.

Michalos (1986), in his extensive literature review, found that 90% of the studies investigating the existence of discrepancy theory reported finding a significant relationship between the satisfaction levels of individuals and some type of perceived "gap" between what they currently have, and what they want to have. These findings provide strong support for the discrepancy theory explanations of the determinants of an individual's satisfaction level.

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1The difference in satisfaction between the self-employed and employees who receive wages or salaries has been examined; in general, the self-employed have reported higher satisfaction (Katz 1993).
Michalos identified at least six distinct types of "discrepancies," which have been investigated in previous work. Although the actual terminology used to describe these different types varies from study to study, Michalos's classification scheme provides a useful framework for understanding the individual elements comprising "discrepancy theory." Two of the types will be examined in this research. The first is what Michalos refers to as "goal-achievement gap theory." Research on this aspect of discrepancy theory focuses on the discrepancies between the initial goals of the individual and the actual outcomes that are realized. The degree to which outcomes are consistent with the initial goals of the individual in turn determines the satisfaction levels the person experiences. The second type examined here, referred to as "expectation-reality gap theory," addresses the perceived gap between the situation that is achieved now, and what the individual expected it to be. To clarify the differences, we note that, with expectations, there is no reference to desirability or preference for specific outcomes, as is implied when examining goals. With expectations, we are simply matching initial estimates of probable outcomes against what actually happens, resulting in either positive or negative satisfaction.

**Determinants of Satisfaction**

**Goals**

We first consider the application of goal-achievement gap theory to entrepreneurs. There is a considerable body of research examining how entrepreneurs differ according to their primary goals. One study classified organizations as "craft, promotion, and administrative" types, with the primary objectives of the chief executive being "comfort-survival, personal achievement, and market adaptation," respectively (Filley and Aldag 1978). Another developed an entrepreneurial typology of "caretakers" and "managers," with the former particularly seeking "to let you do the kind of work you want to do" and the latter emphasizing primarily financial goals (Braden 1977). Given that entrepreneurs differ in their goals, two lines of reasoning are apparent for the expected relationship between an entrepreneur's initial goals and satisfaction.

First, those entrepreneurs placing primary emphasis upon financial goals may react differently to a given level of performance than their counterparts whose primary goals are noneconomic. We would expect that the levels of satisfaction realized for those entrepreneurs emphasizing economic goals would be more sensitive to the financial performance of their firms. Thus, economically motivated entrepreneurs' satisfaction levels would be influenced strongly by the financial performance of their ventures. At lower levels of performance their gap between goals and performance would be greater. However, those entrepreneurs emphasizing noneconomic goals presumably would be relatively satisfied even at lower levels of performance, as long as performance is sufficient to allow them to achieve the noneconomic goal of doing work they want to do. The relationship is shown in Figure 1, reflecting the expectation that the satisfaction of economically oriented entrepreneurs will be more sensitive to economic performance. Therefore, we would expect satisfaction to vary, depending upon the performance levels being realized and the initial primary goals.

*H1a*: For lower levels of performance, entrepreneurs emphasizing noneconomic goals will have higher levels of satisfaction than entrepreneurs with primarily economic goals. For higher levels of performance, there will be no difference.

The preceding hypothesis suggests that entrepreneurs with primary economic goals may be more sensitive to changes in performance than noneconomically motivated entrepreneurs.
However, another line of thought suggests that, given the context examined here, the hypothesized differences in sensitivity may not be observable.

In the previous hypothesis, there was no specification of what constitutes "lower levels" or "higher levels" of performance. The study reported here only examines those entrepreneurs in the initial stages of venture operation. During this period, much of the cash flow generated from their businesses is reinvested to meet financial obligations and promote continued growth. In this environment, most entrepreneurs may actually receive little financial compensation. This is particularly true when one considers the long hours entrepreneurs usually work as they strive to make their ventures succeed. Thus, the range of performance considered in this study may not reach the threshold necessary to observe the relationship hypothesized previously. Rather, much of the satisfaction the entrepreneurs derive at this stage may be attributable to noneconomic rewards. If this is the case, then we would anticipate that entrepreneurs emphasizing noneconomic goals would show greater satisfaction. This is because most of these young ventures are experiencing "lower levels" of performance, essentially operating to the left on the economic performance scale in Figure 1. This leads to the second hypothesis.

H1b: Entrepreneurs emphasizing noneconomic goals will have higher levels of satisfaction than entrepreneurs with primarily economic goals.

Expectations

We can investigate the second type of discrepancy theory, expectation-reality gap theory if we can first get an indication of the relative expectations of entrepreneurs when they start. One way of doing this is by assessing their individual perceptions of initial odds for success. Previous research has established that entrepreneurs tend to have high expectations. Cooper
et al. (1988), using the same metric applied in this study, questioned entrepreneurs shortly after they had become business owners about their perceived prospects for venture success. Their results showed that, on average, entrepreneurs were highly optimistic about their chances of success, with 81% of the respondents rating their odds of success as seven out of 10 or better, and 33% rating their odds of success as 10 out of 10!

Regardless of the absolute levels of expectations, the relative levels of expectations among the individual entrepreneurs allows us to compare expectation-reality gaps. Discrepancy theory argues that, in the comparison of expectations with achievements, those entrepreneurs with above average initial expectations would have established higher benchmarks against which subsequent performance would be measured. This suggests that, controlling for performance, the realized levels of satisfaction of entrepreneurs should be a function of their initial set of expectations. If this relationship exists, it should result in:

\[ H2: \text{Controlling for performance, entrepreneurs with higher initial expectations will have lower levels of satisfaction.} \]

Demographic Influences on Expectations

The preceding hypotheses have considered the entrepreneurial population as a whole. Now, we consider whether particular subgroups, notably those identifiable by the entrepreneur's age, gender, and minority status, may realize different levels of satisfaction. Earlier we argued that entrepreneurs' initial levels of expectations would influence subsequent degrees of satisfaction. Now, we turn to the factors which theory suggests may influence the levels of expectations of particular groups.

To provide guidance in identifying these factors driving expectations, we consider relevant research from industrial organization psychology, organizational behavior, and sociology. Theory in these areas suggests that, although the levels of an individual's expectations are undoubtedly influenced by a myriad of factors, specific groups with common demographic characteristics exhibit a propensity to have distinctive levels of expectations.

There is evidence suggesting that levels of job satisfaction and age are positively correlated. Herzog and Rogers (1986) examined research findings in numerous surveys in the United States and Europe and concluded that: "Older adults tend to report somewhat higher levels of satisfaction than do younger adults . . ." and " . . . this finding reflects a generalized tendency in developed Western nations (p. 248)."

Numerous factors are proposed to explain this relationship between age and levels of satisfaction. Campbell et al. (1976) argue that as individuals age, they often experience declining expectations and aspirations. These reduced expectations are attributable, in part, to the narrowing of the number of alternatives that older people perceive as available to them. For example, if asked how easy it would be to find another job, older persons perceive more difficulty than younger ones (Carp 1975).

\[ H3a: \text{Older entrepreneurs will have lower levels of initial expectations than younger entrepreneurs.} \]

Research on the impact of gender on individual perceptions provides evidence that there are differences between men and women in levels of job satisfaction, commitment, and motivation. Harriman (1985) summarized a large body of such findings by stating that "Men and women do differ in terms of the values they attach to various organizational rewards, their commitment to work, the satisfaction they receive from work and the sources of that"
satisfaction, the extent to which they are motivated by achievement, affiliation or power needs, and the sources to which they and others attribute their successes or failures" (p. 221).

The reasons for possible differences in levels of satisfaction between men and women can be attributed, in part, to initial expectations. Numerous studies have examined women entrepreneurs and the challenges they confront in developing businesses. There is some evidence that women encounter more barriers to financing, including having to provide more collateral (Riding and Swift 1990) and overcoming society's belief that women are not as serious as men about business (Hisrich and Brush 1985). Other authors have observed that "women generally have less business experience than men" (Kalleberg and Leicht 1991, p. 141). All of these factors may contribute to barriers confronting women entrepreneurs. This, in turn, may lead to lower expectations.

\[ H3b: \text{Female entrepreneurs will have lower levels of initial expectations than male entrepreneurs.} \]

Similar reasoning may apply as we consider the expectations of minorities. Clearly, many minorities may confront prejudice and the challenges of operating in economically depressed communities. Minority entrepreneurs have reported that they have difficulty in obtaining lines of credit (Hisrich and Brush 1985). Barriers may also exist because of poor location and limited access to the general market (America 1980). One study noted that "the development of appropriate networks for would-be (minority) entrepreneurs is not easily achieved" (Carsrud et al. 1988, p. 657). Another found substantial differences between the earnings of blacks and whites who were self-employed and attributed it to customer discrimination, in which consumers were less likely to purchase goods from self-employed minorities (Sexton and Robinson 1989). These factors may constitute real barriers to venture formation and thus lead to lower expectations.

\[ H3c: \text{Minority entrepreneurs will have lower levels of initial expectations than nonminority entrepreneurs.} \]

Expectation-reality gap theory suggests that these lower initial expectations, if they exist, can be expected to result in subsequent higher levels of satisfaction for older people, women, and minorities (Michalos, 1986). Note that all of this assumes that we are only considering entrepreneurs whose businesses survive and that we are controlling for economic performance. The resulting hypotheses are as follows:

\[ H4a: \text{Controlling for performance, older entrepreneurs will have higher levels of satisfaction than younger entrepreneurs.} \]

\[ H4b: \text{Controlling for performance, women entrepreneurs will have higher levels of satisfaction than male entrepreneurs.} \]

\[ H4c: \text{Controlling for performance, entrepreneurs who are members of minority groups will have higher levels of satisfaction than nonminority entrepreneurs.} \]

The expected relationships stated in hypotheses 1b–4c are depicted in Figure 2.

**SAMPLE AND VARIABLES**

The entrepreneurs studied were drawn from a 3-year longitudinal survey of new businesses conducted in 1985, 1986, and 1987. The original sample consisted of 2994 owner/managers, all members of the National Federation of Independent Businesses (NFIB). These respondents
were all identified as having become owners within the 17 months prior to the 1985 survey. At the time of the initial questionnaire, the average entrepreneur had been in business for 11 months. The sample represents all geographic areas and all industry sectors. In determining the representativeness of this sample, it should be noted that there are no published data on the population of "new businesses" in the United States. Comparisons with 1982 Characteristics of Business Owners, prepared by the Bureau of the Census, and the Statistics of Income, prepared annually by the Internal Revenue Service, were conducted. These indicated that retail businesses and businesses in the western United States were slightly overrepresented. However, the sample appears to be broadly representative of new businesses in the United States.² [See Cooper et al. (1990), for the detailed description of tests that were conducted to determine representativeness.]

These original "start-up" firms were mailed follow-up questionnaires in May 1986 and May 1987. Those who did not respond were followed in multiple ways. These multiple venues (surveys, short-response postcards, NFIB field data, post office return mail) enabled us to determine the survival or failure status of all but one of the 2994 ventures.

The focal dependent variable in this study, satisfaction, is a year 3 measure. Hence, we narrowed the original sample of entrepreneurs to include only those who responded in both years 1 and 3. Although we know that 2193 of the original firms survived under the original ownership to the third year, 1316 of these did not respond to the year 3 survey. Of the 877 who did respond, 517 were eliminated because their initial goals were not clearly economic or noneconomic. After discarding an additional 63 cases with incomplete information, the final sample size for this study was 287.³

²To assess nonresponse bias, a series of t-tests were run examining the extent to which the earlier financial performance of year 3 respondents differed from those who responded in year 2 and survived to year 3, but did not respond in year 3. Results from this analysis indicated no significant differences between the two groups on any year 2 performance measures including gross sales, change in total assets, and growth in the number of employees.

³The original sample of 2994 included 22% women and 6% minorities. The final sample of 287 included 20% women and 4% minorities.
Dependent Variable: Satisfaction

To operationalize the satisfaction measure for entrepreneurs, respondents were asked in year 3 of the survey to assess several dimensions of satisfaction. Four of these items were used to measure entrepreneurial satisfaction. The first two assessed the entrepreneurs' satisfaction with their ventures' sales and with profits. Whereas these questions address specific performance areas, the third item asked respondents to assess their "personal overall satisfaction with their business." For each of these first three items, entrepreneurs were asked to compare their year 3 satisfaction to what they expected it to be when they started. (Note that, consistent with previous research involving employees, this involves a comparison of expectations and actual experience.) Our fourth survey item evaluated the entrepreneurs' willingness to start the same business again. Hence, this item also assessed the entrepreneurs' overall satisfaction with their ventures. Principal component factor analysis with varimax rotation found the four items represented one underlying factor. The reliability scale for the composite satisfaction was high, as indicated by a Cronbach's alpha value of 0.78. This level is well above Nunally's (1978) guideline of 0.7, indicating satisfactory evidence of internal consistency.

Our dependent variable is therefore a 10-point (0-9) measure, with 0 representing the lowest level of entrepreneur satisfaction. The overall distribution of responses was centered near the midpoint of the scale, with a mean value of 4.72. It should be noted that, whereas existing research pertaining to satisfaction has been primarily cross-sectional or longitudinal over short time periods, this study is unique in that the independent variables are year 1 measures, and the dependent variable is a year 3 measure. As noted earlier, a focus upon satisfaction during the third year allows the founder to reflect upon the rewards and frustrations of entrepreneurship based upon experience after the start-up process.

Control Variable: Money Taken Out

As we are interested in determinants of satisfaction, controlling for performance, we add a performance metric as a control variable. In this study, performance is a year 3 measure, "the amount of money taken out by the entrepreneur in the previous 12 months, including salary, draw, dividends, etc." Although this measure can be criticized on the grounds that it is dependent on the discretion of the entrepreneur, it was chosen because it best captures the immediate direct benefit to the entrepreneur. As such, this measure is analogous to the measure most often used in previous studies addressing satisfaction—compensation received by employees.

Other Variables

Other independent variables have been noted in earlier discussions. Definitions for all variables are listed in Table 1. Descriptive statistics and correlation coefficients are presented in Table 2.

METHODOLOGY AND RESULTS

We first investigate hypothesis 1a, which seeks to determine whether, for lower levels of performance, entrepreneurs emphasizing noneconomic goals would have higher satisfaction than those emphasizing economic goals. It was further hypothesized that, for higher levels of performance, there would be no difference. This can be tested by a regression model in
TABLE 1 Variable Definitions

| Dependent variable: | | | | |
|---------------------|---|------------------|------------------|---|---|---|---|
| Statis3             | Entrepreneurs' year 3 assessment of their degree of satisfaction with their business sales, profits, and overall satisfaction, compared to what they expected it to be in year 1 (coded 0, 1, 2, for each). |

| Independent variables: | | | | |
|------------------------|---|------------------|------------------|---|---|---|---|
| Goal                   | 1 | Most important goal is “to make more money than otherwise” |
|                        | 0 | Most important goal is “to do the kind of work I wanted to do” |
| Expect                 | Entrepreneurs' year one assessment of the odds of their business succeeding (1 out of 10, 2 out of 10, etc.). |
| Age1                   | The age of the entrepreneur when he or she became the owner or principal manager of the business. |
| Gender                 | 1 | if male |
|                        | 0 | female |
| Minority               | 1 | if entrepreneur was a federally defined minority |
|                        | 0 | otherwise |
| Takeout                | Total amount of money taken out of the business in the previous 12 months (a year 3 measure). This includes salary, dividends, “draw,” etc. |

which satisfaction is a function of initial goals (GOALS), the performance control variable (TAKEOUT), and the interaction between goals and performance (GOALTAKEOUT). If the interaction term is significant and positive, then there is support for the relationship shown in Figure 1.

Table 3 gives the estimated parameters and the associated t-statistics from OLS regression. The interaction term between GOALS and TAKEOUT is insignificant, indicating hypothesis 1a is not supported. Hence, we conclude that, with this sample of start-up entrepreneurs, those with primarily economic goals are not more sensitive to changes in performance than those with noneconomic goals.

Whereas the use of the interaction term to test hypothesis 1a precludes the use of path models, path analysis was conducted to evaluate the remaining hypotheses in our model (Cohen and Cohen 1983). As noted earlier, these findings may reflect a limited range for the performance variable for these start-up ventures. All possible paths, both hypothesized and nonhypothesized, were tested. In addition, as is standard in path analysis, OLS regression was used to estimate the direct effects on entrepreneurial satisfaction (SATIS3), expectations (EXPECT), goals (GOAL), and performance (TAKEOUT). However, as the goal variable was dichotomously scored, (either to make more money or to do work wanted), the estimates for the direct effects on this variable (GOAL) were obtained using logistic analysis. Although the nature of the goal variable warrants such methods, it prohibits the calculation of indirect


TABLE 2 Descriptive Statistics and Correlation Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Goal</th>
<th>Satis3</th>
<th>Expect</th>
<th>Age1</th>
<th>Gender</th>
<th>Minority</th>
<th>Takeout</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>0.43</td>
<td>4.72</td>
<td>8.34</td>
<td>37.05</td>
<td>0.83</td>
<td>0.04</td>
<td>23.72</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>0.50</td>
<td>2.39</td>
<td>1.81</td>
<td>9.19</td>
<td>0.38</td>
<td>0.19</td>
<td>18.44</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>1.00</td>
<td>-0.07</td>
<td>-0.01</td>
<td>-0.05</td>
<td>0.09</td>
<td>0.08</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>Satis3</strong></td>
<td>1.00</td>
<td>0.25a</td>
<td>-0.01</td>
<td>-0.05</td>
<td>0.07</td>
<td>-0.06</td>
<td>0.32b</td>
</tr>
<tr>
<td><strong>Expect</strong></td>
<td>1.00</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Age1</strong></td>
<td>1.00</td>
<td>-0.08</td>
<td>-0.10</td>
<td>-0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>1.00</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minority</strong></td>
<td>1.00</td>
<td>-0.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Takeout</strong></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{a} p < .01.\)  \(^{b} p < .05.\)

and total effects, because the OLS and logistic estimates cannot be combined. Although it should be highlighted that the model does allow for indirect effects, our hypotheses only focus on direct effects.

As always, standardized or unstandardized coefficients may be used to express effects between the criterion and predictor variables. However, standardized coefficients are usually reported in path-analytic applications because of their ease of interpretability (Pedhazur and Schmelkin 1991). Furthermore, these coefficients are more relevant to understanding the hypothesized relationships than the correlations reported in Table 2, which do not account for any multivariate effects. Significant hypothesized and nonhypothesized standardized path coefficients for the endogenous variables are shown in Figure 3.

As expected, the performance variable (TAKEOUT) was highly significant and in the predicted direction, confirming the positive impact that higher levels of performance (measured in money taken out) had on the entrepreneurs' satisfaction.

Hypothesis 1b concerned the relationship between an entrepreneur's initial goals and subsequent satisfaction. The negative relationship between initial goals (GOAL) and satisfaction was significant (.05). It suggests that, controlling for performance, entrepreneurs with primarily economic goals were less satisfied than entrepreneurs with noneconomic goals. Hence, there is some support for hypothesis 1b.

Hypothesis 2 examined whether an entrepreneur's initial expectations are related to satisfaction. The initial expectation variable (EXPECT) was highly significant, but in a direction opposite to that predicted by the expectation-reality gap version of discrepancy theory. This analysis found that as entrepreneurs' initial expectations increased, so did their level of satisfaction. It is clear that we must reject hypothesis 2, and conclude that there is a positive relationship between the initial expectations of the entrepreneurs and satisfaction.

Hypotheses 3a, 3b, and 3c concerned the influence of demographic traits on initial expectations. Specifically, we examined the influence of the entrepreneur's age (AGE1), gender (GENDER), and minority status (MINORITY) on expectations. None of the demo-

TABLE 3 Estimated Model. Dependent Variable: Satisfaction

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Unstd. Coefficient</th>
<th>t-Value</th>
<th>Sig. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.129</td>
<td>14.887</td>
<td>0.0000</td>
</tr>
<tr>
<td>Takeout</td>
<td>0.040</td>
<td>4.049</td>
<td>0.0001</td>
</tr>
<tr>
<td>Goal</td>
<td>-0.820</td>
<td>-1.827</td>
<td>0.0687</td>
</tr>
<tr>
<td>Goal•Takeout</td>
<td>0.009</td>
<td>0.675</td>
<td>0.5005</td>
</tr>
</tbody>
</table>
graphic traits was significantly related to initial assessment of likelihood of success. Thus, our findings provide no support for hypotheses 3a, 3b, and 3c.4

Demographic influences on entrepreneurial satisfaction were investigated in hypotheses 4a, 4b, and 4c. Both the age and the minority status variables were insignificant in the analysis—thus providing no support for hypotheses 4a and 4c. However, hypothesis 4b, stating that women entrepreneurs would have higher levels of satisfaction than their male counterparts, was supported at the .07 level.

In addition to examining the hypothesized relationships, two significant nonhypothesized paths were found. First, the gender variable was positively related to TAKEOUT, indicating that male entrepreneurs reported higher performance than female entrepreneurs. Second, the negative relationship between MINORITY and TAKEOUT indicates that minority entrepreneurs reported lower level of performance than nonminority entrepreneurs.

It is also possible that one additional factor, the period of time the entrepreneurs had owned their businesses at the time they responded to the year 1 survey, could bear upon these findings (length of ownership had ranged from 1 to 17 months). For example, the initial optimism that entrepreneurs experienced at venture start-up could have been tempered over time by the realities of operating their businesses. Hence, longevity might play an important role in determining the entrepreneurs' initial expectations, and consequently, their year 3 satisfaction. To investigate this possibility, a second complete path analysis was conducted with months in business at the time of the year 1 survey added as a control variable. This analysis found no relationship between longevity and initial expectations (EXPECT), initial goals (GOAL), performance (TAKEOUT), or year 3 satisfaction (SATIS3). Therefore,

4 It is possible that the insignificant relationships between demographic variables and initial expectations may have been different for nonrespondents. This would be the case if particular demographic groups included substantial numbers of entrepreneurs who had both low expectations and low subsequent rates of survival or response to the survey. To examine this possibility, regression analysis was conducted using those entrepreneurs not responding to the year 3 survey. Results were similar to those found for respondents with the exception of the gender (GENDER) variable. Specifically, among nonrespondents, female entrepreneurs were found to have lower levels of initial expectations than male entrepreneurs, thus supporting hypothesis 3b (.05 significance).
length of time in business at the time of the initial questionnaire does not appear to have influenced findings.

To examine the goodness of fit of the model, Pedhazur (1982) suggests that, with path analysis, "attention be paid to Q" (p. 620). The Q statistic is based on the sum of all the squared residual paths (1-R^2) for each of the regression equations used in the path model. Values of Q may range from 0 to 1, with higher values indicating a better fit of the model to the data. Here, Q was calculated to be 0.87, indicating good fit.\(^5\)

**DISCUSSION**

In this examination of the determinants of entrepreneurial satisfaction, several findings seem apparent. There is some evidence suggesting that the "goal-achievement gap theory" may apply to the entrepreneurial population. Discrepancy theory suggests that the lower levels of satisfaction experienced by economically driven entrepreneurs may be due to a larger perceived "gap" between initial goals and realized outcomes. The performance levels for the firms studied here were relatively modest, with a mean takeout of $24,270 in the preceding year. Considering that the median entrepreneur had an educational background of "some college," these income levels may have been less than many could have earned by working for others. Many of the entrepreneurs in the study may have been operating to the left in Figure 1, where economic goals were often not being realized. For the sample as a whole, the satisfaction of entrepreneurs emphasizing economic goals was lower than entrepreneurs with noneconomic goals such as "to do the kind of work I wanted to do." For this latter group, we would expect that as long as performance remains sufficient to allow the business to continue, a significant percentage of these entrepreneurs would be able to achieve their goals and, hence, be satisfied with their businesses. In contrast, for those entrepreneurs with primarily economic aspirations, satisfaction is much less certain.

A much more surprising result was the finding showing that entrepreneurs' initial expectations were positively (not negatively) related to the levels of satisfaction realized. In other words, those who had the highest initial expectations (expected probabilities of success) were later more satisfied, even after controlling for performance. This is in direct conflict with the expectation-reality gap theory.

A possible explanation for these results may lie in the benchmark that entrepreneurs use to measure their performance. The theoretical model developed assumes that the entrepreneurs' year 3 satisfaction involves a comparison between their actual performance and their year 1 expectations. However, it may be that, as their experience increases, the entrepreneurs' expectations of success also evolve to different levels by year 3. In this study, with its high percentage of very optimistic entrepreneurs in year 1, there was probably only one way for expectations to move. Similar to a regression to the mean phenomenon, year 3 expectations may have declined. Furthermore, if entrepreneurs measured their satisfaction in year 3 against year 3 expectations, (even though they were asked to compare them with initial expectations), the gap between expectations and actual performance would be lessened. Hence, this may be one reason why expectations were not negatively related to satisfaction.

\(^5\)As mentioned, to create the path model, all possible hypothesized and nonhypothesized relationships were examined. Hence, four separate regression equations were run, each with a different dependent variable. For the two models in which formal hypotheses were presented, adjusted R^2 was 0.141 [year 3 satisfaction (SATIS3) as dependent] and 0.048 [initial expectations (EXPECT) as dependent]. For the two models in which no relationships were hypothesized, adjusted R^2 was 0.114 [performance (TAKEOUT) as dependent] and 0.026 [initial goals (GOAL) as dependent].
These findings might also be interpreted in light of an alternative framework. Staw and Ross (1985) investigated determinants of employee job satisfaction over time. They found that global job satisfaction in a later period was strongly related to satisfaction in an earlier period, even after controlling for intervening pay changes and occupational changes. They suggest that worker attitudes are a function of stable individual traits. Thus, people who were more optimistic may later be more satisfied, even if performance falls short of their higher expectations.

This analysis also found some support for women entrepreneurs having a higher probability of being satisfied (.07 level) than male entrepreneurs. Although this relationship was expected, we argued that it would be primarily attributable to the lower initial expectations that female entrepreneurs would report. Although this was the case for the nonrespondent population (.05), no such relationship was found in our focal sample. Our analysis showed there were no significant differences between the sexes in terms of their initial expectations of their ventures’ success. [Kalleberg and Leicht (1991) also found that male and female business owners appeared to be equally confident, p. 153.] Although a thorough investigation of the underlying determinants of these results is beyond the scope of this study, the literature on equity theory may provide guidance.

Austin (1979) found that if individuals have been conditioned to expect an inequitable situation, they are less outraged when it occurs. Austin suggests that this finding may help explain why certain groups that have been the victims of previous discrimination become less aroused and angry upon encountering new injustices. If women entrepreneurs face larger barriers in starting and operating their ventures than men entrepreneurs, then women may have become more psychologically accustomed to disappointing results. For this study, this resignation may manifest itself in their expressing less dissatisfaction, given the same results, than do their male counterparts.

There is also evidence suggesting that, in general, women entrepreneurs may be satisfied with fewer financial rewards than male entrepreneurs. Callahan-Levy and Messe (1979) investigated differences between the sexes in the allocation of pay. They found that, for the same level of performance, women not only paid themselves less money than the men paid themselves, but they were more likely to report that less money was “fair” pay. This finding suggests that women entrepreneurs may perceive a greater level of satisfaction with a given level of business performance than their male counterparts. In this study it should be noted that the women entrepreneurs had lower performance than their male counterparts ($14,880 versus $25,550). However, in the multivariate analysis, controlling for these differences in income level, the women entrepreneurs still indicated marginally higher levels (.07 level) of satisfaction.

There may be aspects of the experience of women entrepreneurs, not explored here, which bear upon their higher satisfaction. Possibly their expressed satisfaction relates to a paucity of perceived alternatives. Women entrepreneurs may feel that managing their own ventures, even with limited financial returns, is more satisfying than working in the jobs they perceive to be open to them. They may discover greater relative satisfaction from the responsibilities of business ownership. In addition, some may find that business ownership enables them to combine childrearing and a career.

Although examination of the connection between satisfaction and subsequent persistence was not a primary focus of this research, we were able to cast some light on this relationship with data available from this longitudinal sample. Satisfaction was determined for the entrepre-
neurs who responded to the second-year survey. Year 3 firm status was measured in two ways: (1) whether the firm discontinued or survived in year 3, and (2) for surviving firms, the change in assets from year 2 to year 3. Two regression models were used to examine the relationship between satisfaction and the two measures of firm status, while controlling for firm performance. A significant (.001) difference was found in both instances. Those who were more satisfied in year 2 were more likely to see their businesses survive to year 3, and, for those survivors, more likely to commit to an increase in assets. Prior growth in employees was not significant in either case, which may reflect the fact that many entrepreneurs may have overstaffed at start-up and therefore either had no change (28% of total), or actually reduced (30% of total) the number of employees by year 2. These findings are not directly comparable to the research reported here on determinants of satisfaction, because we do not have the same performance measure for year 2 (money taken out). One must also be careful about inferring causality. “Good performance,” however measured, may lead both to satisfaction and also to decisions to continue with a business. However, it appears that there may be relationships between satisfaction and subsequent persistence.

The relationship between entrepreneurial job satisfaction and venture continuation has not been examined in the literature previously. However, related research on employee job satisfaction and turnover intentions seems relevant. Overall job dissatisfaction appears to be associated with employees' intentions to leave their organizations (Angle and Perry 1981; Bedeian and Armenakis 1981.) There is also evidence that satisfaction may indirectly impact the likelihood of an entrepreneur continuing with a venture by impacting the entrepreneur's commitment. Numerous studies have found a positive relationship between employee satisfaction and commitment (e.g., Farkas and Tetrick 1989; Williams and Hazer 1986). In addition, many studies have reported a significant association between commitment and turnover intentions, with those making greater commitments indicating they were less likely to leave (Mowday, Steers, and Porter 1979; Williams and Hazer 1986). Hence, even if there is no direct relationship between satisfaction and turnover, satisfaction may indirectly impact the likelihood of an entrepreneur closing a business by reducing commitment to the venture (Williams and Hazer 1986).

Whereas most existing studies examine the job satisfaction of employees, these relationships have also been considered in a study of self-employed certified public accountants (CPAs) (Lachman and Aranya 1986). Their results revealed that job satisfaction did not directly affect the intent of these CPAs to leave their business. However, a positive relationship was found between satisfaction and commitment, and a negative relationship was found between commitment and intent to leave. Thus, that study provides support for the prediction that satisfaction indirectly impacts likelihood of venture continuation by affecting the entrepreneur's commitment.

In considering the lack of significant findings between age and expectations, there may be two offsetting factors at work. We noted that older individuals often have lower expectations and that this might be expected to translate to greater satisfaction later. However, because older people tend to be more satisfied with their current situations, this may mean that those who chose to take the step of starting a venture would have required higher expectations of

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6 Data available for year 2 included three measures of satisfaction: satisfaction with sales, profits, and overall personal satisfaction, all compared with expectations.

7 As data were not available on “money taken out” during the second year, year 2 performance was measured by the percentage change in employees from year 1 to year 2.
success in order to give up their relatively satisfying prior positions. Thus, although most older people may demonstrate lower expectations, those who took this step may not.⁸

What are the implications of these findings for potential entrepreneurs? Entrepreneurs might assess themselves against these findings in judging whether they are likely to achieve satisfaction. Satisfaction appears to be more likely for those whose initial goals are noneconomic, for those who are initially optimistic, and for women entrepreneurs. We might assume that, when these apply, entrepreneurs would be more likely to make a continuing commitment to their ventures.

What are the implications for researchers? For scholars, they provide additional insights into discrepancy theory by investigating its application to entrepreneurs, rather than to the hired employees usually studied in industrial and organizational psychology. Specifically, for our entrepreneurial population, we found some evidence that the existence of the goal-achievement gap theory was a determinant of entrepreneurial satisfaction. In contrast, our findings suggest that the prediction suggested by expectations-reality gap theory did not hold for entrepreneurs. In fact, there was just the opposite effect on entrepreneurs' satisfaction, with some evidence that individual traits may color how they view their experiences. Furthermore, the fact that there were no significant relationships between entrepreneurs' age, gender, or minority status, and their levels of expectations is in sharp contrast to theory suggesting that demographic variables should be important determinants of an individual's expectations.

One additional contribution of this research is that it casts light on the implications of using subjective measures of satisfaction with performance as a proxy for objective measures of performance. Chandler and Hanks (1993), in their comparison of alternative measures of performance, found that subjective measures of satisfaction with performance demonstrated poor external validity. They noted that "satisfaction with performance and more objective measures of performance were not the same thing" (p. 404). In no way are we suggesting that satisfaction measures should not be used. Satisfaction is a basic measure of performance and, as noted, may bear directly or indirectly upon entrepreneurial commitment and possibly upon decisions of whether to continue with marginal businesses. Subjective measures have frequently been used in previous research and, because of their availability and internal consistency, may often be used in the future as well. This study suggests factors specific to the entrepreneur that might be taken into account in interpreting this measure of venture performance.

It should be acknowledged that the individual regression equations used to create the path model explain a limited amount of the variance in the focal dependent variables. This is most relevant for the two models in which hypothesized relationships were developed, i.e., those in which first year expectations and third year satisfaction were the dependent variables. As noted, the posited relationships pertaining to expectations were not significant, and this is reflected in the low $R^2$ (0.048). For the satisfaction variable, there do appear to be systematic relationships ($R^2 = 0.141$), even in this broad cross-sectional study. Other factors not examined here, such as the entrepreneurs' commitment to their ventures, and the alternatives perceived by each individual, may also bear upon satisfaction.

There are other limitations to this research. The measure of "expectations of success" left it to the entrepreneur to define success. It may be that some thought only in terms of probability of survival, whereas others thought in terms of self-defined thresholds of sales, profits, or personal compensation. The construct of satisfaction used here reflects judgments about specific dimensions of performance relative to expectations—specifically sales, profits,

⁸We are indebted to an anonymous reviewer for this point.
and two measures of overall satisfaction. It should be recognized that there are differences in the initial measure of expectations and the later measure of satisfaction. There appear to be opportunities for future research involving more explicit measures of initial expectations and subsequent satisfaction. It should also be noted that this study has primarily been concerned with testing hypothesized relationships between certain variables and satisfaction. It has not sought to develop a model of all major variables influencing individual satisfaction. Future research might include other variables, such as those bearing upon opportunity costs for the individual entrepreneur as well as measures of environmental hostility.

There appear to be a number of other opportunities for research that might build upon what has been done here. The extent to which satisfaction is a stable construct, as distinct from fluctuating with day to day events, could be examined. It seems likely that, as a venture matures, satisfaction would become more stable; however, this has not been explored. The relationship between satisfaction and subsequent commitment seems important. Do entrepreneurs with high levels of satisfaction subsequently commit more heavily to their businesses? Does their satisfaction translate into more effective interaction with employees and customers?

It has been noted that, in many cases, discontinuance of a venture results from a conscious decision by an entrepreneur to close a business down. In part, this is determined by whether performance exceeds the required threshold level of performance, a level which may differ by entrepreneur and by venture (Cooper et al. 1992). What has not been explored is whether satisfaction enters the equation. We should note that this study presents only suggestive findings on how satisfaction influences decisions to stay with a venture or commit additional resources to it. To investigate this more fully, it would be necessary to track satisfaction and subsequent decisions to stay with or exit from a business, while controlling for various measures of performance, including cash taken out of the business. This would help to answer the question of whether satisfied entrepreneurs are more likely to stay with a marginal business and try to make it succeed.

There has been substantial research to date that uses subjective measures of performance, in essence considering how business owners evaluate particular dimensions of performance. However, little has been done to consider what factors influence individual ratings and why, in a particular setting, some entrepreneurs may be more satisfied than others. We hope that this research contributes to our understanding of this important dimension of entrepreneurial performance.

REFERENCES


