

Steven P. Brown & Robert A. Peterson

The Effect of Effort on Sales Performance and Job Satisfaction

The authors address a fundamental gap in understanding how sales performance and job satisfaction are determined in an investigation of the sales force of a direct-selling organization. Results indicate a direct positive effect of work-related effort on job satisfaction that is not mediated by sales performance. This is inconsistent with commonly accepted theoretical models and suggests that the perspective of work as a "terminal value" (i.e., an end in itself, rather than strictly a means to an end) has been underemphasized in models of work behavior. As such, either (1) measures of sales performance should be broadened to encompass the terminal value perspective on the psychological value of work or (2) conceptual models should be revised to reflect that narrowly defined measures of sales performance do not completely mediate the effect of effort on job satisfaction. The authors conclude with a discussion of managerial implications of these findings.

In spite of the extensive research literature on salesperson motivation, performance, and job satisfaction, one crucial variable has been largely neglected—effort. Although it is intuitively logical that the harder salespeople work, the better they perform, few attempts have been made to empirically document the strength of this relationship. Scarcer still is research on how work-related effort affects job satisfaction. Such relationships represent fundamental inputs and outcomes of sales work, and lack of knowledge about them constitutes a basic gap in understanding the psychology of sales work.

The relationship between effort and job satisfaction is of particular interest. This study investigates whether exertion of effort influences job satisfaction only through the mediation of performance or whether it has a direct effect on satisfaction that is not contingent on performance. Previous research (i.e., Walker, Churchill, and Ford 1977) has conceptualized salesperson job satisfaction primarily as a function of performance outcomes rather than a direct function of effort exerted. When performance is construed narrowly (i.e., as only those outcomes that are instrumental for the firm), this conceptualization would imply that work is fundamentally a means to an end, an activity that people engage in primarily for the material and psychological rewards that accrue from successful performance. An alternative view holds that exertion of effort in the work itself provides fulfillment of people's intrinsic needs to be competent, effective, and self-determining, and hence contributes to job satisfaction independently of performance outcomes.

Steven P. Brown is an Assistant Professor of Marketing at the Edwin L. Cox School of Business, Southern Methodist University. Robert A. Peterson holds the John T. Stuart III Centennial Chair in Business Administration and the Charles Hurwitz Fellowship at the University of Texas at Austin. The authors appreciate the constructive comments of the anonymous reviewers.

In positing that performance completely mediates the relationship between effort and job satisfaction, some expectancy theory models (e.g., Churchill, Ford, and Walker 1993) have conceptualized performance more broadly, to encompass not only outcomes that are instrumental for the firm, but also those that are instrumental primarily for the personal goals, growth, and well-being of the salesperson. However, empirical measures of performance in sales force and organizational behavior research have not reflected this broad conceptual definition. Most operationalizations in sales force research and practice have defined performance more narrowly as only those outcomes that are instrumental to the organization in the short term; they do not consider the psychological value of work itself. Thus, our study investigates whether commonly accepted theoretical relationships between effort, performance, and job satisfaction hold when sales performance is measured only in terms of outcomes that are instrumental to the organization.

Investigation of these different perspectives on work behavior and attitudes is important to understanding what work *means* to members of the sales force. Only through such understanding can effective policies be formulated for motivating, controlling, and evaluating the sales force. Invalid assumptions regarding the psychological meaning of work and the measurement of sales performance are likely to lead to policies that demotivate salespeople and reduce the impact of sales management activities.

Cherrington (1980) described two fundamental perspectives on the psychological value of work: (1) work as an *instrumental* value and (2) work as a *terminal* value. The instrumental value perspective views work primarily as a means to an end, or as "a positive activity because it contributes, at least indirectly, to other worthwhile goals" (Cherrington 1980, p. 26). The terminal value perspective views work as a positive activity in and of itself; it holds that "dedicated work is a positive virtue, much like honesty or loyalty. Implicit in this belief is an ethical demand that a person *ought* to be diligent and industrious" (Cherrington

1980, p. 26). It also holds that “work is a natural law that governs life. It produces a feeling of dignity, self-respect, and independence” (Cherrington 1980, p. 26). This perspective implies that effortful engagement in work has affective consequences that have not been recognized in models of sales force motivation and behavior.

The prevailing conceptual notion that sales performance strongly influences job satisfaction and mediates the effects of antecedent variables on job satisfaction (e.g., Walker, Churchill, and Ford 1977) has not been supported in the majority of existing studies (Brown and Peterson 1993).¹ Thus, it is important to account for the discrepancy between conceptual models and the accumulated empirical results. A possibility investigated here is that effort affects both sales performance and job satisfaction simultaneously and directly and that the relationship between performance and job satisfaction is spurious and attributable to the relationship of both with effort. We also investigate the role of effort as a mediator of the effects of motivational and role perception constructs on sales performance and job satisfaction.

The next section develops the conceptual foundations of the study. This is followed by the development and testing of a model of the relationships between effort and antecedent and consequent constructs. We conclude with a discussion of the results and their implications.

Motivation, Role Perceptions, and Effort

Conceptually, effort has often been confounded with, or considered equivalent to, motivation. For example, motivation has been defined as the amount of effort expended in work-related tasks (cf. Campbell and Pritchard 1976). However, clearer and more useful definitions have discriminated between motivation and effort, identifying the former as an antecedent of the latter (e.g., Naylor, Pritchard, and Ilgen 1980; Walker, Churchill, and Ford 1977). This distinction is maintained here. Motivation and effort are treated as conceptually distinct, with effort representing the force, energy, or activity by which work is accomplished, whereas motivation represents the psychological state or predisposition of the individual with respect to choices involving the direction, intensity, and persistence of behavior (e.g., Ilgen and Klein 1988; Naylor, Pritchard, and Ilgen 1980).

Sales force and organizational behavior researchers have consistently recognized the importance of effort in conceptual models of performance (Naylor, Pritchard, and Ilgen 1980; Walker, Churchill, and Ford 1977). These models typically have considered effort to mediate the relationship between motivation and performance. Thus, they are consistent with the previous conceptualization in representing effort as the mechanism by which motivation is trans-

¹It should be noted, however, that the majority of empirical studies operationally define sales performance narrowly, in terms of criteria instrumental for the firm. Given this narrow operationalization, though, the accumulated results of empirical research suggest that sales performance is only weakly related to job satisfaction and other work attitudes.

lated into accomplished work (Naylor, Pritchard, and Ilgen 1980).

Naylor, Pritchard, and Ilgen (1980, p. 6) define effort as “the amount of energy ‘spent’ on [an] act per unit of time.” Ilgen and Klein (1988) reiterate this definition. The definition, however, ignores the perseverance aspect of work-related behavior that logically constitutes part of the effort construct. Both the duration of time spent working and the intensity of work activities represent important aspects of effort (Campbell and Pritchard 1976).

In addition to motivational factors, other broad categories of variables may have antecedent effects on salesperson effort. These include personality characteristics (e.g., competitiveness, instrumentality, self-efficacy), role perceptions (e.g., role ambiguity, role conflict), supervisory behaviors (e.g., feedback, contingent rewards), job characteristics (e.g., task variety, task significance, autonomy), and environmental factors (e.g., territory potential, workload). We focus on two individual difference constructs (competitiveness and instrumentality) and two role perception constructs (role ambiguity and role conflict) that previously have not been studied in relation to salesperson effort.

The Effort-Satisfaction Linkage

A long tradition of theory and research has argued that work itself provides meaning and satisfaction irrespective of performance outcomes. White (1959, p. 318) argues that people possess an innate need for “effectance” (i.e., an “inborn need to deal [effectively] with the environment”). According to White (p. 322), “satisfaction has to be seen as lying in a considerable series of transactions, in a trend of behavior rather than a goal that is achieved.” Deci (1975; Deci and Ryan 1985) builds on White’s idea of effectance in elaborating intrinsic motivation theory. This theory (or, more accurately, meta-theory) posits that people possess an innate need to be competent, effective, and self-determining. Like White’s theory of effectance, intrinsic motivation theory holds that work motivation is inborn and work itself is fulfilling to the extent that the worker undertakes it willingly and finds it to be an optimal challenge (Deci and Ryan 1985). These perspectives suggest that effort affects job satisfaction in ways that do not depend on narrowly defined performance outcomes.

Other conceptual frameworks also predict a direct effect of effort on job satisfaction not mediated by performance. For example, self-perception theory (Bem 1972) posits that people infer their attitudes from their own overt behavior. Cognitive dissonance theory maintains that people adjust their attitudes to be consistent with their behavior to relieve tension resulting from attitudes that are discrepant from behavior (Festinger 1957). Both theories tend to make the same empirical predictions (Fazio, Zanna, and Cooper 1977). Using these frameworks, several empirical studies (e.g., Aronson and Mills 1959; Cardozo 1965; Emmons 1986; Mitchell 1983) have documented that expenditure of effort tends to increase people’s evaluations of objects, outcomes, feeling states, and memberships they earn or experience by means of their exertions. Hence, they support the hy-

pothesis of a direct positive effect of effort on job satisfaction.

Motivation

Researchers have identified two broad categories of motivational theories: (1) mechanistic or process theories (e.g., expectancy theory; Walker, Churchill, and Ford 1977) and (2) substantive or content theories (i.e., theories positing dispositional needs and motives within individuals; e.g., Hechhausen, Schmalz, and Schneider 1985). This research employs the latter conceptualization, focusing on two achievement-related individual difference variables, instrumentality and competitiveness, and their effects on salesperson effort and performance.

Instrumentality. Instrumentality represents a task-centered, individualistic orientation (Spence and Helmreich 1983). Those high in instrumentality tend to focus on task accomplishment and be independent and self-determining in their work behavior, whereas those low in instrumentality have less task focus and tend to be less independent, assertive, and self-determining. The highly instrumental salesperson is likely to maintain a focus on the details of task performance, recognize the relationship between effort and sales performance, and engage and persevere in the activities instrumental to successful performance (Spence and Helmreich 1983). Although instrumentality previously has not been investigated in sales force research, it has been related positively to performance in athletics, scientific attainment, aviation pilot performance, and entrepreneurial business attainment (Carsrud and Olm 1986; Spence and Helmreich 1983).

Competitiveness. Competitiveness is an individual difference construct relating to the "enjoyment of interpersonal competition and the desire to win and be better than others" (Spence and Helmreich 1983, p. 41). Highly competitive people are especially attentive to how their performance compares with that of others. The importance they attach to exceeding the performance of others motivates them to exert high effort levels in the expectation that it will lead to winning performance. Such dynamics apparently constitute a "theory in use" (Zaltman, LeMasters, and Heffring 1982) of sales managers, who often use sales contests to stimulate effort and boost sales.

Although researchers have investigated the effects of contests on sales performance (e.g., Wildt, Parker, and Harris 1987; Wotruba and Schoel 1983), very few have considered the effects of competitiveness as a dispositional characteristic of salespeople. One exception was Plotkin (1987), who reported a positive relationship between competitiveness and sales performance. In other work domains, competitiveness has been found to be correlated positively with the number of publications of academic psychologists (Helmreich et al. 1980), business performance by entrepreneurs (Carsrud and Olm 1986), and performance of commercial lending officers (Murphy 1986). Locke (1968) suggests that the effect of competition on performance was likely to occur through stimulation of higher levels of effort. According to Locke (1968, p. 179), competition "can serve as an incentive to increase one's effort on a task." Highly compet-

itive salespeople are likely to exert greater effort than less competitive salespeople. Effort is expected to mediate the relationships between instrumentality and competitiveness and performance.

Role Ambiguity and Role Conflict

As "boundary personnel" linking an organization to its customers, salespeople often experience role ambiguity and role conflict. The stress that results has negative effects on job satisfaction (e.g., Churchill, Ford, and Walker 1976). Effects of role ambiguity and role conflict on sales performance have been weaker and less consistent (Brown and Peterson 1993).

If a salesperson's calling pattern generates high levels of role conflict, a degree of call reluctance could result. An obvious way to reduce the conflict is to reduce the number of sales calls. Coping with role conflict by reducing effort is likely to affect sales performance negatively. Thus, role conflict is likely to affect salesperson effort negatively, and effort is likely to mediate the effect of role conflict on sales performance. The negative effect of role conflict on job satisfaction, on the other hand, is likely to be strong and direct, because conflict is likely to generate less positive evaluations of the job (e.g., Churchill, Ford, and Walker 1976).

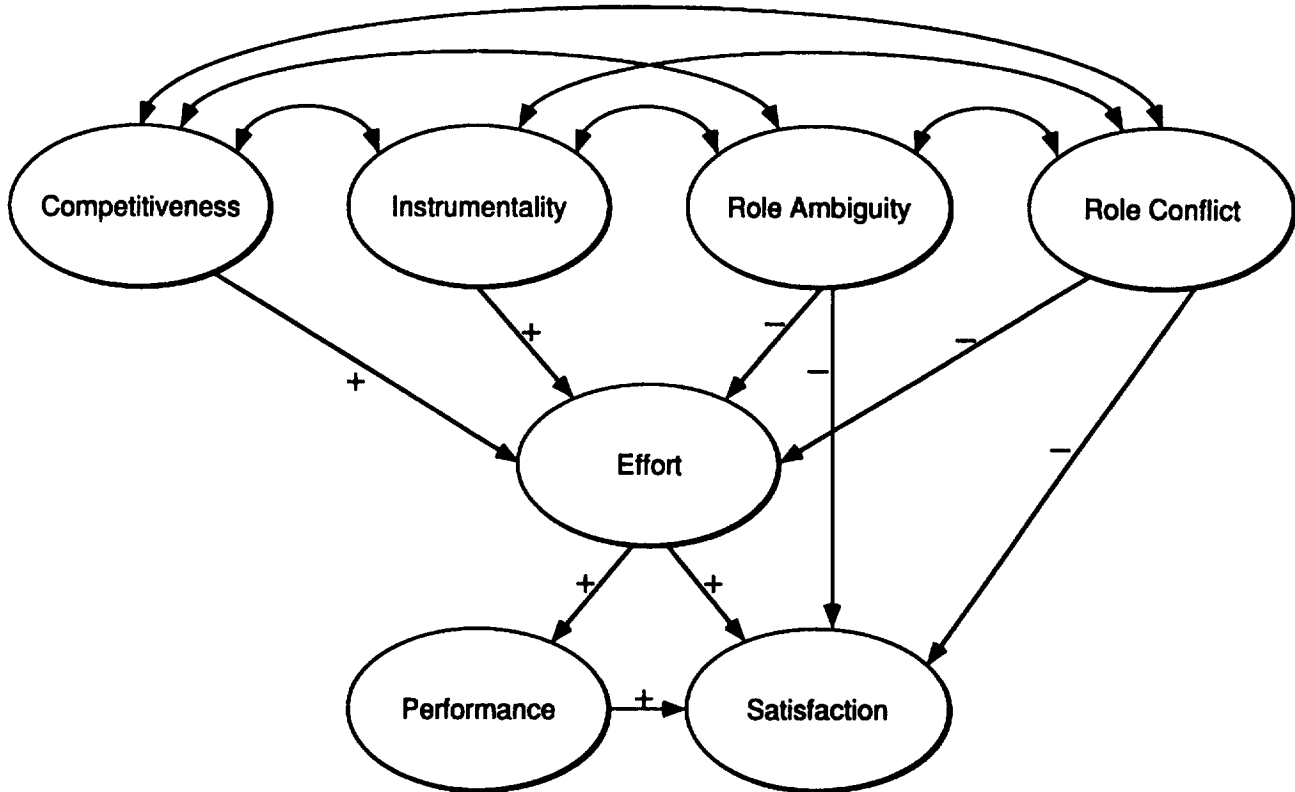
Similarly, uncertainty regarding role performance expectations is likely to result in less purposeful exertion of effort (Behrman and Perreault 1984), resulting in lower sales performance. Thus, it is reasonable to expect role ambiguity to affect salesperson effort negatively and effort to mediate the effect of role ambiguity on sales performance. Consistent with previous research (e.g., Churchill, Ford, and Walker 1976), a direct negative effect of role ambiguity on job satisfaction is predicted.

Hypotheses

On the basis of the literature reviewed, the following research hypotheses guided the empirical study:

- H₁: Work-related effort will have a direct positive effect on job satisfaction and an indirect positive effect that is mediated by sales performance.
- H₂: Competitiveness will be positively related to effort; effort will mediate the relationship between competitiveness and sales performance.
- H₃: Instrumentality will be positively related to effort; effort will mediate the relationship between instrumentality and sales performance.
- H₄: Role ambiguity will be negatively and directly related to job satisfaction; effort will mediate an indirect effect of role ambiguity on job satisfaction.
- H₅: Role ambiguity will be negatively related to salesperson effort; effort will mediate the effect of role ambiguity on sales performance.
- H₆: Role conflict will be negatively and directly related to job satisfaction; effort will mediate an indirect effect of role conflict on job satisfaction.
- H₇: Role conflict will be negatively related to salesperson effort; effort will mediate the negative effect of role conflict on sales performance.
- H₈: Effort will positively influence sales performance.
- H₉: Sales performance will positively influence job satisfaction.

FIGURE 1
Hypothesized Model



The model of hypothesized relationships is depicted in Figure 1.

Method

The Direct-Selling Context

This study was conducted in the context of a direct-selling organization. This context was used to provide a rigorous test of boundary conditions under which performance totally mediates the relationship between effort and satisfaction as posited in prevailing conceptual models. If the hypothesized relationships are not supported empirically under boundary conditions, they are not likely to hold in other situations. A direct-selling company sells to the end user without the use of channel intermediaries. It has been estimated recently that approximately 5.5 million Americans and a rapidly growing number of people worldwide work for direct selling organizations and that annual industry sales exceed \$14 billion in the United States and \$40 billion worldwide (Direct Selling Education Foundation 1993).

Salespeople working for direct-selling companies traditionally are independent contractors rather than employees. Hence, company managers recruit, train, and motivate salespeople but do not have coercive power over them. Thus, di-

rect salespeople enjoy a high degree of self-determination over their work activities. Deci and Ryan (1985) maintain that a person's maximum involvement in and satisfaction with their activities occur only when those activities are self-determined. Therefore, it is fitting to investigate the hypotheses in a context in which self-determination is maximized. Such a context is likely to provide a rigorous boundary condition test of the effort → performance → satisfaction causal sequence.

Sample

The sample used in this study consisted of 380 direct salespeople who worked for a company that sells a durable product line door-to-door throughout the United States. These included all salespeople from two 1-week training classes who completed a 10- to 14-week field selling period. Approximately 69% of those who completed the training classes also completed the field selling period and thus were included in the final sample. The salespeople represented all 50 states and several foreign countries. Of the 380 salespeople, 265 were males.

This sample had numerous benefits for testing the hypotheses. For example, salespeople in this setting are very focused on face-to-face selling and little concerned with other activities such as information gathering, customer service, and administrative work, which tend to occupy more sub-

stantial portions of time in other contexts. This facilitated measurement of effort as the amount of time spent selling and the intensity of selling activity during that time. It also facilitated assessment of the effects of effort on work outcomes, because this would have been more difficult if efforts were more divided among disparate activities. Also, virtually all sales result directly from individual sales calls on potential customers. Hence, there were no carryover sales, and the probability of "windfall" sales was small. All salespeople began and concluded selling activities at nearly the same time of year (the total period varying between 10 and 14 weeks). In summary, the study context represents "pure" selling, or personal selling reduced to its lowest common denominator.

Measures and Data Collection

Measures of the constructs were obtained at three different points in time over four months. Measures of instrumentality and competitiveness were obtained during training classes. Salesperson self-reports of role ambiguity, role conflict, effort, and satisfaction were obtained at the end of the selling period. Finally, manager ratings of performance were collected separately after the selling period. The time between collection of the exogenous and endogenous measures was long enough to inhibit any potential memory effects on the relationships between them and facilitated assessment of true predictive (rather than concurrent) validity and reduced the potential effects of common measurement bias.

Salesperson effort was measured by three self-report items assessing overall effort in the sales task, number of hours worked, and number of calls made. The items asked the salespeople to rate how they compared with all others in the company on bipolar scales anchored by "Among the most in the company"–"Among the least in the company."² Coefficient alpha for the three items was .93.

Competitiveness was measured by a 5-item scale taken from Helmreich and Spence (1978), which consisted of Likert items assessing the individual's drive to exceed the performance of others (e.g., "I enjoy working in situations involving competition with others," "It annoys me when other people perform better than I do"). Coefficient alpha for the scale was .68.

Instrumentality was measured by means of a scale taken from Spence and Helmreich (1978) that consisted of eight bipolar items utilizing 5-point response formats. Sample items included "Not at all independent"–"Very independent" and "Go to pieces under pressure"–"Stand up well under pressure." Coefficient alpha for the scale was .75.

Sales performance was measured by manager ratings of the salespeople under their supervision. Manager ratings are commonly used in sales force and organizational behavior research and have not been found to systematically bias correlations with other constructs (Churchill et al. 1985; Landy

²The participating company followed the industry practice of weekly (and even more frequent) sales force meetings in which individual salespeople interacted extensively with one another as well as with the manager. Number of calls and hours worked were discussed frequently at these meetings, and one's relative standing on these indicators was well known.

and Farr 1983).³ Managers rated the salespeople on five 7-point scales assessing their overall sales performance and their effectiveness on specific aspects of the selling process. The items asked how effective the salesperson was in making product demonstrations, closing, and collecting cash payments for sales made ("Extremely effective"–"Extremely ineffective"), how the manager would rate the overall performance of the salesperson ("Among the best in company"–"Among the worst in the company"), and how the salesperson's performance would rank compared with all other salespeople in the company ("Among the best in company"–"Among the worst in the company"). Coefficient alpha for the manager rating measure was .89.

Measures of job satisfaction, role ambiguity, and role conflict were included on a questionnaire the salespeople completed at the end of the selling period investigated. The job satisfaction measure was global and adapted to the direct-selling context. Similar global measures have been used in previous research (e.g., Bagozzi 1980). The measure assessed overall satisfaction by means of 7-point bipolar scales. The items asked how satisfied the salesperson was overall ("Extremely satisfied"–"Not satisfied at all"), to what extent the salesperson found the work exciting ("Extremely exciting"–"Not at all exciting"), how worthwhile the salesperson considered the investment of time spent selling ("Extremely worthwhile"–"Not at all worthwhile"), whether the salesperson would advise a friend to sell for the company ("Absolutely yes"–"Absolutely no"), and whether the salesperson would recommend the company as a place to work ("Definitely yes"–"definitely no"). Cronbach's alpha for this scale was .86.

The role ambiguity and role conflict measures were taken from Rizzo, House, and Lirtzman (1970) and consisted of six Likert items each. The measures contained fewer items than the original scales owing to elimination of items that did not relate well to the direct-selling context (e.g., "I had to buck a rule or policy in order to carry out an assignment"; "I had enough time to complete my work"). Cronbach's alpha for role conflict was .77; for role ambiguity it was .73.

Analytical Procedure

Path coefficients for the hypothesized model were estimated using LISREL VII (Jöreskog and Sörbom 1989). The relatively large number of observed indicators for the constructs were combined into single index measures equal to the arithmetic mean of the item scores. The values of the paths from the latent constructs to their observed indicators were fixed to equal the square roots of the measure reliabilities in a manner consistent with Loehlin (1987, p. 105).

³An objective measure of sales performance, total merchandise units sold, also was collected. The correlation between manager ratings and this objective measure was .71, suggesting a high degree of convergence. Model results and substantive conclusions of the study are the same using either measure of performance. Results using the manager ratings are reported here because they reflect a somewhat broader construal of performance in this selling context.

TABLE 1
Intercorrelations Among Constructs^a

Construct	1	2	3	4	5	6	7
1. Role ambiguity	[.73]						
2. Role conflict	.36 (.01)	[.77]					
3. Competitiveness	-.02 (n.s.)	.15 (.01)	[.68]				
4. Instrumentality	-.03 (n.s.)	-.21 (.01)	.47 (.01)	[.75]			
5. Effort	-.13 (.05)	-.09 (n.s.)	.04 (n.s.)	.13 (.01)	[.93]		
6. Performance	-.06 (n.s.)	.04 (n.s.)	.17 (.01)	.17 (.10)	.51 (.01)	[.89]	
7. Satisfaction	-.17 (.01)	-.31 (.01)	.17 (.01)	.20 (.01)	.41 (.01)	.31 (.01)	[.89]

^aSignificance levels are noted in parentheses.
Cronbach's alpha reliability coefficients are reported in the diagonal.

TABLE 2
Standardized Path Coefficients and t-Values for Hypothesized and Revised Model^a

Structural Path	Hypothesized Model		Revised Model	
	Standardized Coefficient	t-Values	Standardized Coefficient	t-Values
Competitiveness → Effort	-.02	-.21	—	—
Instrumentality → Effort	.23	2.14	.17	2.59
Role conflict → Effort	.05	.52	—	—
Role ambiguity → Effort	-.19	-2.05	-.16	-2.23
Competitiveness → Performance	—	—	.15	2.80
Role conflict → Satisfaction	-.37	-5.05	-.34	-5.99
Role ambiguity → Satisfaction	.06	.76	—	—
Effort → Performance	.64	11.11	.62	11.05
Effort → Satisfaction	.47	5.43	.48	8.48
Performance → Satisfaction	.04	.46	—	—
		$\chi^2_{(6)} = 13.76$ $p = .032$ GFI = .990 RMSR = .029		$\chi^2_{(9)} = 7.03$ $p = .634$ GFI = .995 RMSR = .022

^at-values exceeding 2.0 are statistically significant.

Results

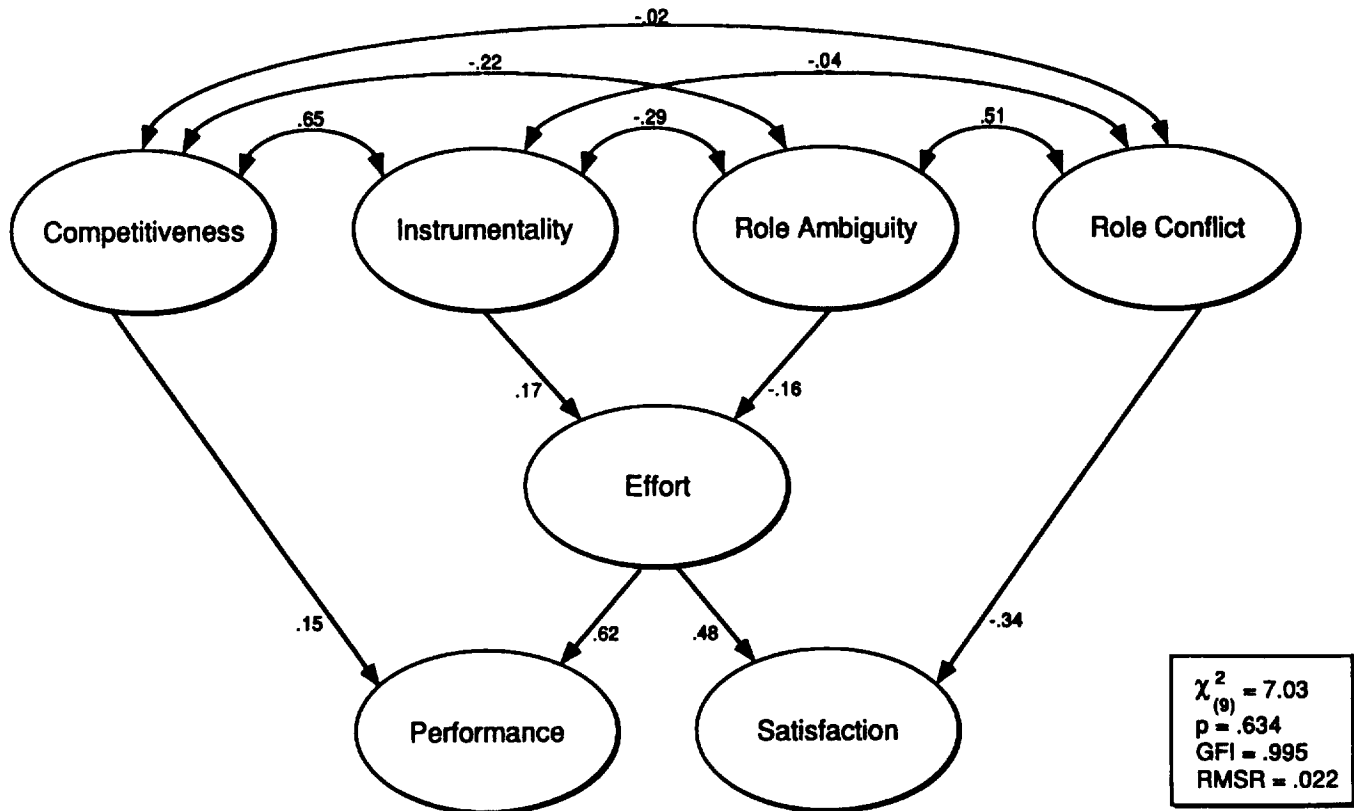
Model Estimation and Modification

Table 1 reports the observed intercorrelations among the constructs. The results of estimating the hypothesized model are presented in Table 2. Fitting the model resulted in $\chi^2 = 13.76$ with 6 degrees of freedom ($p = .032$). In spite of a chi-square value that is significant at the .05 level, the model's ability to recreate the sample correlation matrix is evidenced by the small root mean square residual (.029) and large goodness of fit index (.990). These indices suggest a good fit to the data. The crucial direct path from effort to job satisfaction was statistically significant. There was no *indirect* effect of effort on job satisfaction; the sales performance → job satisfaction path was not statistically signifi-

cant after the effects of effort on both outcome constructs were controlled. This was true in spite of a statistically significant zero-order correlation between performance and satisfaction ($r = .31, p < .001$). This strongly suggests that the observed pairwise correlation was spurious and attributable to the common antecedent, effort.

In spite of the adequate fit of the hypothesized model, modifications were undertaken to provide a more accurate and parsimonious representation of the data (McCallum 1986). First, the nonsignificant paths were deleted from the model. Second, LISREL modification indices suggested the existence of a direct relationship between competitiveness and sales performance that was not mediated by effort. Such a direct path suggests that competitiveness may contribute positively to sales performance primarily through means other than greater effort exertions (e.g., self-presen-

FIGURE 2
Revised Model



tational/selling skills). No other additions to the model were suggested by the modification indices.

Estimation of the revised model, depicted in Figure 2, resulted in a very good fit of the model to the data ($\chi^2 = 7.03$ with 9 d.f., $p = .63$, GFI = .995, RMSR = .022). These indices suggest that the model provides a very accurate and parsimonious representation of the data. All paths were statistically significant.

Hypotheses Tests

As predicted (H_1), salesperson effort had a significant direct effect on work satisfaction. Contrary to H_1 , however, effort did not have an indirect effect on job satisfaction mediated by sales performance. Although effort significantly affected sales performance, performance did not have a significant effect on job satisfaction.

The positive effect of competitiveness on salesperson effort predicted in H_2 was not significant. However, a significant *direct* relationship between competitiveness and sales performance was observed. As predicted (H_3), instrumentality had a significant positive effect on salesperson effort.

Role ambiguity did not have the significant direct negative effect on job satisfaction predicted in H_4 , though it did have a modest indirect effect mediated by effort. Role ambiguity also had the significant direct effect on effort and indirect effect on performance predicted in H_5 .

Role conflict had the direct negative effect on job satisfaction predicted in H_6 but not the predicted indirect effect mediated by effort. Role conflict did not negatively affect effort or performance as predicted in H_7 . As predicted in H_8 , effort had a strong positive effect on sales performance. Finally, contrary to the prediction of H_9 , performance had no significant effect on job satisfaction.

Does the Effort-Satisfaction Effect Generalize?

Although the direct effect of effort on job satisfaction emerged clearly, it is possible that the effect was specific to the direct-selling context. To assess the generalizability of this result, meta-analytic techniques were used to synthesize previous research involving effort, work performance, and job satisfaction.⁴ An extensive search of the sales force and organizational behavior literatures located 11 empirical studies (5 sales force and 6 non-marketing-related organizational behavior studies) that considered effort in relation to work performance and/or job satisfaction.

⁴Technical details are available from the first author. Even if the results of this study did not generalize beyond the direct-selling context, the fact that over 5.5 million people work in direct-selling jobs in the United States makes that context substantively important in the overall work force (Direct Selling Association 1993).

TABLE 3
Meta-analytic Results for Sales Force and Non-Sales Force Studies

Relationship	Sales Force Studies			Non-Sales Force Studies		
	\bar{r}	No. of Studies	Cumulative N	\bar{r}	No. of Studies	Cumulative N
Effort-Performance	.24	5	999	.27	5	1124
Effort-Satisfaction	.17	3	684	.25	4	998
Performance-Satisfaction	.15	3	684	.20	3	878

Weighted-mean pairwise correlations among the constructs were computed according to formulas and procedures described in Hedges and Olkin (1985). These weighted-mean correlations are reported in Table 3. Because the weighted-mean correlation for non-sales force studies was significantly greater than the corresponding correlation for sales force studies for the effort-satisfaction relationship, the two groups of studies were treated separately.

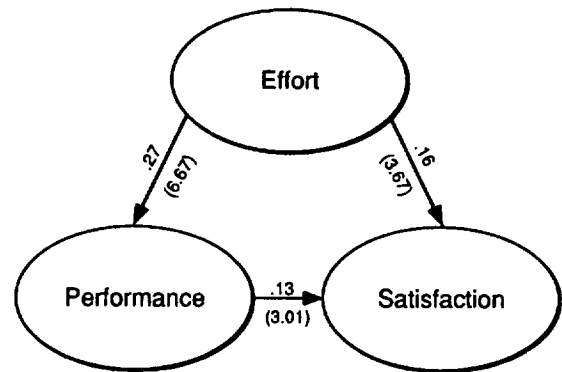
The weighted-mean correlations from the two groups of studies were used to estimate the model depicted in Figure 3, with effort representing the common antecedent of both performance and job satisfaction and performance also designated as an antecedent of job satisfaction (e.g., Bagozzi 1980; Sheridan and Slocum 1975). Standardized path coefficients and t-values are reported in Figure 3. All three structural paths were statistically significant for both sales force and non-sales force studies. As in the empirical analysis, the direct effort → job satisfaction path was significant for both sales force and non-sales force studies. Thus, it appears that the direct effect of effort on job satisfaction is not specific to the direct-selling context. The meta-analysis did find a significant performance → job satisfaction path, however, suggesting that this relationship is not completely attributable to the common relationship of both constructs with effort.

Discussion and Conclusions

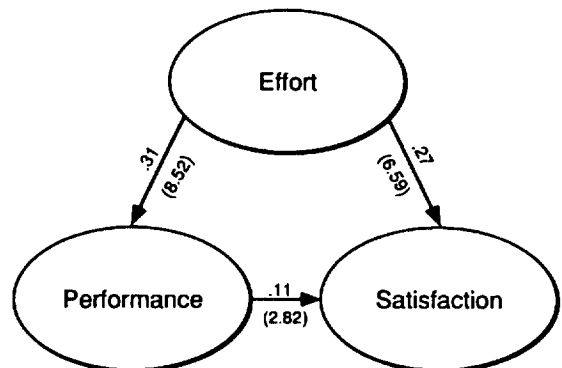
The empirical study indicates that effort has a strong direct effect on job satisfaction that is not contingent on sales performance. The findings also corroborate those of previous studies (e.g., Behrman and Perreault 1984; Dubinsky and Hartley 1986) that sales performance is, at best, weakly related to job satisfaction. In the empirical study, no indirect effect of effort on job satisfaction (i.e., mediated by performance) was observed. In light of the significant zero-order correlation between performance and job satisfaction ($r = .31, p < .001$), the results are consistent with Behrman and Perreault's (1984) assertion that the performance-satisfaction relationship may be at least partially attributable to common antecedent variables. In both the empirical and meta-analytic studies, effort was a direct antecedent of both constructs. In the empirical study, the causal relationship between sales performance and job satisfaction became negligible when the effects of effort were controlled, whereas in the meta-analytic study, a significant performance → satisfaction path still resulted after considering the effects of effort. Thus, though effort clearly appears to be a common an-

FIGURE 3
Standardized Path Coefficients and t-Values for Causal Model Relating Effort, Work Performance, and Job Satisfaction in Sales Force and Non-Sales Force Contexts

A. Model for Sales Force Studies



B. Model for non-Sales Force Studies



t-values are in parentheses

tecedent of both performance and job satisfaction, the evidence is inconclusive on the extent to which the relationship between performance and satisfaction is attributable to the association of both constructs with effort.

The results suggest that sheer input of effort into sales work enhances job satisfaction and that this enhancement is independent of narrowly measured performance outcomes. Although effort also had a concomitant positive effect on performance, its positive effect on job satisfaction occurred independently of performance and was not mediated by it.

The strong direct effect of effort on job satisfaction implies that the perspective of work as a terminal value merits greater attention in conceptual models of work behavior and job attitudes. This effect is consistent with theories of intrinsic motivation (Csikszentmihalyi 1990; Deci 1975; Deci and Ryan 1985; White 1959), which emphasize people's inherent needs to be competent, effective, and self-determining and maintain that high levels of involvement in instrumental activities such as work constitute a primary means of satisfying these needs.

Csikszentmihalyi (1990), for example, cites instances of people in very mundane situations such as factory work, who, through intense focus on and involvement in their routine work tasks, achieve high levels of job satisfaction. In the process, they also achieve high performance; however, their satisfaction does not result from their performance, but rather from involvement in their work.

The results of this study are generally consistent with previous research regarding the effects of role ambiguity and role conflict on sales work outcomes. They contribute to understanding the *process* through which role ambiguity negatively affects sales performance by demonstrating that effort mediates the relationship, which suggests that the effect of role ambiguity on sales performance occurs primarily through a reduction in the level of effort exerted. Interestingly, role ambiguity was only indirectly related to job satisfaction (also through the mediation of effort).

Contrary to role ambiguity, role conflict had a negative direct effect on job satisfaction but no significant effect on either effort or performance. These results are consistent with previous research (e.g., Behrman and Perreault 1984).

A positive relationship was observed between instrumentality and effort. The independence and task-orientation characteristic of highly instrumental salespeople was associated with greater effort levels; those low in instrumentality tended to exert less effort and, as a result, to be lower performers than those high in instrumentality. Effort mediated the indirect effect of instrumentality on sales performance.

Competitiveness was positively and directly related to performance. Surprisingly, this effect was *not* mediated by effort. This suggests that though competitiveness was associated with higher performance, the effect occurred primarily through behavioral channels other than effort (e.g., self-presentation).

Although research in other contexts has suggested that competitiveness is a "mixed blessing" (e.g., Spence and Helmreich 1983), it appears that in this context, as well as in others that have been studied, competitiveness is associated with higher performance. Within a well-considered framework of superordinate organizational goals, it appears that a spirit of competition can serve a useful motivational purpose, but it is important that all parties to the competition consider themselves primarily to be members of the larger, unified team and only secondarily to be members of competing subunits (Sherif et al. 1961).

These results contribute toward a better understanding of the psychological meaning of work to the sales force. In terms of a falsificationist view of theory development (cf. Popper 1963), the empirical study has subjected the hypoth-

esis that narrowly defined sales performance totally mediates the effect of effort on job satisfaction to a rigorous test and provided disconfirming evidence. The meta-analytic results provided supporting evidence suggesting that this relationship is not unique to the direct-selling context. These findings, along with the accumulation of previous results indicating that performance is only modestly related to satisfaction, suggest that current measures of job performance do not capture performance aspects that reflect the terminal value perspective on the psychological meaning of sales work. Consequently, a discrepancy exists between commonly accepted theoretical models and the accumulated empirical research findings. To address and correct this discrepancy, either broader measures of sales performance that adequately encompass the terminal value perspective should be developed and employed or conceptual models should be revised to reflect the limitations of narrowly defined performance measures. Such narrow measures do not appear to mediate the effects of effort completely, as posited in prevailing conceptual models.

Managerial Implications

Our results have implications for sales management with respect to recruiting, training, motivating, and evaluating the performance of sales personnel. With respect to recruiting, the results regarding instrumentality and competitiveness suggest that these dispositional traits are positively related to effort and performance, respectively, and that managers might screen candidates usefully for sales positions on these traits. In the case of competitiveness, however, it is important for managers to recognize the potential for very high levels of competition among members of the sales force to be dysfunctional (e.g., Sherif et al. 1961).

With respect to training and organizational socialization, our results are consistent with those of previous research in social psychology suggesting that effortful and difficult initiations tend to enhance people's attitudes toward group membership (e.g., Aronson and Mills 1959; Gerard and Mathewson 1966). If requiring performance of effortful or difficult tasks enhances appreciation of group membership, then salesperson socialization procedures that ask high levels of effort from new employees can enhance their esteem for the role they are to play in the organization. When salespeople exert high levels of effort to become initiated into the sales force (e.g., Dubinsky et al. 1986), they may value membership more highly than when socialization is less effortful.

Managerial focus on effort is also likely to be important in motivating veteran salespeople. Honor clubs (e.g., hundred percent clubs) are likely to be an excellent way of motivating high performers to sustain high effort levels. Recognition of consistency in achieving quota is likely to be effective in sustaining the efforts of successful salespeople. This study also suggests that recognition of salesperson effort can have beneficial effects on both performance *and* job satisfaction. It suggests that contests, awards, and recognition based at least partly on effort (e.g., number of contacts or calls made, number of hours worked) could be particularly worthwhile.

Our results reveal that effortful engagement in sales work has psychological benefits for salespeople that are not captured by typical measures of sales performance. This suggests that to capture elements of performance that have the most psychological meaning to their salespeople, managers should consider broadening their evaluative criteria to include not only dimensions that are instrumental to the firm in the short term, but also those that are instrumental in the long term and even those that are more meaningful for the salesperson than for the organization. Such broadened performance criteria can help build organizational commitment by helping salespeople link their personal goals with those of the organization.

Because turnover consistently has been found to be negatively related to job satisfaction, it is imperative that managers understand and appreciate the antecedents of job satisfaction. The present results suggest that managers would be ill-advised to assume that salespeople who perform well on measures instrumental to the firm's performance necessarily will be more satisfied with their jobs and hence less likely than low performers to leave the organization. Because the results suggest that effortful involvement in work is a better predictor of salesperson job satisfaction than is performance, to ensure some degree of turnover functionality (i.e., the retention of top performers and simultaneous winnowing of weak performers), managers should consider proactive steps to sustain the effort expended by high performers.

Directions for Further Research

Although the empirical context of the present research consisted of only one type of sales force, the substance and implications of the research questions are general in nature. Hence, replication of these results in other types of sales forces and other work contexts are needed to further explore the boundary conditions and moderators of the relationships among effort, performance, and job satisfaction. For example, is the direct effect of effort on job satisfaction generalizable to more complex selling situations in which the results of a salesperson's efforts are not so quickly and readily observable as in this context? The meta-analytic investigation would suggest that it is, but further research probing the limits of these findings would be useful. In particular, research investigating different compensation systems, different selling cycles, transaction- versus relationship-selling ori-

entations, and individual versus team selling would be especially worthwhile.

The present study suggests that research on the respective effects of working harder versus working smarter on sales performance (e.g., Sujan 1986) should be extended to consider the relative effects of these aspects of selling behavior on job satisfaction and to what extent each is mediated by sales performance.

As previously noted, prior research has not adequately explored the conceptual domain of work-related effort. A comprehensive consideration of the nature and scope of work-related effort as well as its antecedents and consequences is needed. Sales force and organizational behavior researchers have tended to use the concept of effort as if a universally accepted conceptual and operational definition existed. Such a definition does not currently exist, however, and requires comprehensive and rigorous development.

Although the present study uses measures typical of those employed in related research, it is possible that they did not fully capture the conceptual domains of the effort, performance, and job satisfaction constructs (e.g., as they are conceptualized in Churchill, Ford, and Walker 1993). Further research could focus usefully on developing and validating broader measures of these constructs that more fully incorporate the terminal value perspective on the psychological meaning of work. The possibility of common measurement bias also exists because effort and job satisfaction were measured using the same instrument. It would be useful for further research to replicate these results by measuring all constructs independently.

It is important to consider managerially controllable antecedents of effort, such as supervisory behaviors and organizational variables. Variables such as the frequency and quality of communication and feedback, consideration, initiation of structure, participation in decision-making, task variety, influence over standards, and contingent rewards would all make useful contributions to the theory and practice of sales management.

This study suggests that models of work behavior and performance can be refined and improved through specification and testing of process variables. Identification of other mediator variables in sales force and other work contexts would increase understanding of how sales performance and job attitudes are determined. When these processes are better understood, prescriptions for effectively managing work behavior can be offered with greater confidence.

REFERENCES

- Aronson, Elliot and Judson Mills (1959), "The Effect of Severity of Initiation on Liking for a Group," *Journal of Abnormal and Social Psychology*, 59 (September) 177-81.
- Bagozzi, Richard P. (1980), "Performance and Satisfaction in an Industrial Sales Force: An Examination of their Antecedents and Simultaneity," *Journal of Marketing*, 44 (Spring), 65-77.
- Behrman, Douglas N. and William D. Perreault, Jr. (1984), "A Role Stress Model of the Performance and Satisfaction of Industrial Salespersons," *Journal of Marketing*, 48 (Fall), 9-21.
- Bem, Darryl J. (1972) "Self-Perception Theory," in *Advances in Experimental Social Psychology*, Vol. 6, Leonard Berkowitz, ed. New York: Academic Press.
- Brown, Steven P. and Robert A. Peterson (1993), "Antecedents and Consequences of Salesperson Job Satisfaction: Meta-Analysis and Assessment of Causal Effects," *Journal of Marketing Research*, 30 (February), 63-77.
- Campbell, John P. and Robert D. Pritchard (1976), "Motivation Theory in Industrial and Organizational Psychology," in *Handbook of Industrial and Organizational Psychology*, Marvin Dunnette, ed. Chicago: Rand-McNally, 63-130.
- Cardozo, Richard N. (1965), "An Experimental Study of Consumer Effort, Expectation, and Satisfaction," *Journal of Mar-*

- keting Research, 2 (August), 244-49.
- Carsrud, Alan L. and Kenneth W. Olm (1986), "The Success of Male and Female Entrepreneurs: A Comparative Analysis of the Effects of Multi-Dimensional Achievement Motivation," in *Managing Take-Off in Fast-Growth Companies*, Raymond W. Smilor and Robert L. Kuhn, eds. New York: Praeger.
- Cherrington, David J. (1980), *The Work Ethic: Working Values and Values that Work*. New York: Amacom.
- Churchill, Gilbert A., Jr., Neil M. Ford, Steven W. Hartley, and Orville C. Walker (1985), "The Determinants of Salesperson Performance: A Meta-Analysis," *Journal of Marketing Research*, 22 (May), 103-18.
- _____, _____, and Orville C. Walker (1976), "Organizational Climate and Job Satisfaction," *Journal of Marketing Research*, 13 (November), 323-32.
- _____, _____, and _____ (1993), *Sales Force Management*, 4th ed. Homewood, IL: Richard D. Irwin, Inc.
- Csikszentmihalyi, Mihaly (1990), *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.
- Deci, Edward L. (1975), *Intrinsic Motivation*. New York: Plenum.
- _____, and Richard M. Ryan (1985), *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum.
- Direct Selling Industry Survey* (1993), Washington, DC: Direct Selling Education Foundation.
- Dubinsky, Alan J. and Steven W. Hartley (1986), "A Path Analytic Study of a Model of Salesperson Performance," *Journal of the Academy of Marketing Science*, 14 (Spring), 36-46.
- _____, Roy D. Howell, Thomas N. Ingram, and Danny N. Belenger (1986), "Salesforce Socialization," *Journal of Marketing*, 50 (October), 192-207.
- Emmons, Robert A. (1986), "Personal Strivings: An Approach to Personality and Subjective Well-Being," *Journal of Personality and Social Psychology*, 51 (November), 1058-68.
- Fazio, Russell H., Mark P. Zanna, and Joel Cooper (1977), "Dissonance and Self-Perception: An Integrative View of Each Theory's Proper Domain of Application," *Journal of Experimental Social Psychology*, 13 (September), 464-79.
- Festinger, Leon (1957), *A Theory of Cognitive Dissonance*. Palo Alto, CA: Stanford University Press.
- Gerard, H. and G. Mathewson (1966), "The Effects of Severity of Initiation on Liking for a Group: A Replication," *Journal of Experimental Social Psychology*, 2 (April), 278-87.
- Hechhausen, Heinz, Heinz-Dieter Schmalz, and Klaus Schneider (1985), *Achievement Motivation in Perspective*. New York: Academic Press.
- Hedges, Lawrence V. and Ingram Olkin (1985), *Statistical Methods for Meta-Analysis*. Orlando, FL: Academic Press.
- Helmreich, Robert L. and Janet T. Spence (1978), "The Work and Family Orientation Questionnaire: An Objective Instrument to Assess Components of Achievement Motivation and Attitudes Toward Family and Career," *JSAS Catalog of Selected Documents in Psychology*, 8, 35.
- _____, _____, William E. Beane, G. William Lucker, and Karen A. Matthews (1980), "Making It in Academic Psychology: Demographic and Personality Correlates of Attainment," *Journal of Personality and Social Psychology*, 39 (May), 896-908.
- Ilgel, Daniel R. and Howard J. Klein (1988), "Individual Motivation and Performance: Cognitive Influences on Effort and Choice," in *Productivity in Organizations*, John P. Campbell and Richard J. Campbell, eds. San Francisco: Jossey-Bass, 143-76.
- Jöreskog, Karl G. and Dag Sörbom (1989), *LISREL: Analysis of Linear Structural Relations by the Method of Maximum Likelihood*, Version VII. Chicago: National Education Resources.
- Landy, Frank and James L. Farr (1983), *The Measurement of Work Performance*. New York: Academic Press.
- Locke, Edwin A. (1968), "Toward a Theory of Task Motivation and Incentives," *Organizational Behavior and Human Performance*, 3 (May), 157-89.
- Loehlin, John C. (1987), *Latent Variable Models*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- McCallum, Robert C. (1986), "Specification Searches in Covariance Structure Modeling," *Psychological Bulletin*, 100 (January), 107-20.
- Mitchell, James V. (1983), "Self-Assessment Variables Related to Grade Satisfaction and Dissatisfaction in High School," *School Counselor*, 30 (May), 368-73.
- Murphy, Richard H. (1986), "Personality Correlates of Commercial Lending Job Performance," doctoral dissertation, University of Texas at Austin.
- Naylor, James C., Robert D. Pritchard, and Daniel R. Ilgen (1980), *A Theory of Behavior in Organizations*. New York: Academic Press.
- Plotkin, Harris M. (1987), "What Makes a Successful Salesperson?" *Training and Development Journal*, 41 (September), 54-56.
- Popper, Karl R. (1963), *Conjectures and Refutations*. New York: Harper Torchbooks.
- Rizzo, John R., Robert J. House, and S.I. Lirtzman (1970), "Role Conflict and Ambiguity in Complex Organizations," *Administrative Science Quarterly*, 15 (March), 150-63.
- Sheridan, John E. and John W. Slocum, Jr. (1975), "The Direction of the Causal Relationship Between Job Satisfaction and Work Performance," *Organizational Behavior and Human Performance*, 14 (April), 159-72.
- Sherif, Muzafer, O.J. Harvey, B. Jack White, William R. Hood, and Carolyn W. Sherif (1961), *Intergroup Conflict and Cooperation: The Robber's Cove Experiment*. Norman, OK: University of Oklahoma, Institute of Intergroup Relations.
- Spence, Janet T. and Robert L. Helmreich (1978), *Masculinity and Femininity: Their Psychological Dimensions, Correlates, and Antecedents*. Austin, TX: University of Texas Press.
- _____, and _____ (1983), "Achievement-Related Motives and Behavior," in *Achievement and Achievement Motives: Psychological and Sociological Approaches*, Janet T. Spence, ed. San Francisco: Freeman, 10-74.
- Sujan, Harish (1986), "Smarter Versus Harder: An Exploratory Attributional Analysis of Salespeople's Motivation," *Journal of Marketing Research*, 23 (February), 41-49.
- Walker, Orville C., Gilbert A. Churchill, Jr., and Neil M. Ford (1977), "Motivation and Performance in Industrial Selling: Present Knowledge and Needed Research," *Journal of Marketing Research*, 14 (May), 156-68.
- White, Robert W. (1959), "Motivation Reconsidered: The Concept of Competence," *Psychological Review*, 66 (July), 297-333.
- Wildt, Albert R., James D. Parker, and Clyde E. Harris, Jr. (1987), "Assessing the Impact of Salesforce Contests: An Application," *Journal of Business Research*, 15 (March), 145-55.
- Wotruba, Thomas R. and Daniel J. Schoel (1983), "Evaluation of Salesforce Contest Performance," *Journal of Personal Selling and Sales Management*, 3 (May), 1-10.
- Zaltman, Gerald, Karen LeMasters, and Michael Heffring (1982), *Theory Construction in Marketing*. New York: John Wiley & Sons, Inc.