

AN INVESTIGATION OF THE COMPARATIVE MODERATING EFFECTS OF NEED FOR AUTONOMY ON THE AUTONOMY-PERFORMANCE RELATIONSHIP BETWEEN INSURANCE AGENTS AND RETAIL SALESPERSONS

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Comparative data from two diverse types of salespersons, insurance agents and retail salespersons, were investigated to determine the similarities and differences among salespeople in terms of their need for autonomy, perceived job autonomy, the relationship between autonomy and salesperson performance and the comparative moderating effects of need for autonomy on this relationship. Although insurance agents perceive their job environment to have more organizationally mediated autonomy than that of retail salespersons, both retail and insurance salespersons were found to have a low (and not significantly different) need for autonomy. The strength of the relationship between perceived autonomy and performance also proved to be relatively low and not significantly different. The lack of support for concluding that the moderating effects of need for autonomy on the autonomy-performance relationship is pervasive across diverse types of selling may be due to the inability of the scales to measure these perceptions for job specific situations. Additional research is needed to determine if more situationally job specific measures of need for autonomy, perceived autonomy, and salesperson/agent performance will more clearly define the relationship among these variables. This would result in the availability of better tools for sales managers to use in managing salesperson autonomy.

OVERVIEW

Autonomy has been identified as an inherent part of a salesperson's job due to his/her occupying a "multi-faceted" boundary spanning position (Yammarino and Dubinsky, 1990; Churchill, Ford, and Walker, 1994). Salespeople often equate autonomy with selling, as a functional part of the job (Rich, 1990; Becherer, 1982). That salesperson autonomy is important to sales managers is evidenced by studies which have found a positive relationship between salesperson autonomy and salesperson performance (Yammarino

and Dubinsky, 1990; Dubinsky and Yammarino, 1985; Tyagi, 1985; Dubinsky and Skinner, 1984).

Management of autonomy has been identified as a critical skill in managing professionals in that autonomy, due to its importance to both managers and professionals, causes disagreements between the two in determining the extent to which management exercises its own autonomy without excessive incursion into the professional's autonomy and vice versa (Raelin, 1989). However, although autonomy is expected as part of a salesperson's job, all expectations are not the same. Salespeople differ in their need for autonomy. Studies have found that need for autonomy differs by type of sales job (Comer and Dubinsky, 1985; Hall, 1985; Mahajan, Churchill, and Ford, and Walker, 1984), career

stage/job longevity (Dalrymple and Cron, 1992; Rich, 1990; Spindle, 1990), and gender (Steel, Cheladurai, and Brown, 1987; McHenry, 1985; Parasuraman, 1984). Therefore, although it is accepted a priori that increased autonomy leads to increased salesperson performance, the focus of this research is to examine the similarities and differences diverse types of sales people have in their perceived autonomy, need for autonomy and their relationships between perceived job autonomy and salesperson performance.

Importance

Demonstrating that diverse types of salespeople differ in their perceptions of job autonomy, need for autonomy, and their effect on performance is important so that sales managers may more effectively manage their salespeople. Sales managers need to realize that perceived autonomy in the job may differ among diverse types of salespeople as may their need for autonomy. More importantly, both types of sales managers need to be aware that these differences may change the relationship between perceived autonomy and performance. That is, the positive relationship found between perceived autonomy and performance for both retail salespersons and insurance agents (Strain, 1994) may be weaker for retail salespersons than that of insurance agents. Additionally, since jobs vary in the amount of autonomy permitted (Boughn, 1988; Comer and Dubinsky, 1985; Hall, 1985; Pinch, 1985), it is likely that salespeople in these jobs will differ in their perception of the amount of autonomy they have on the job.

However, despite differences in the diverging perceptions of the amount of autonomy the job permits as well as those associated with differences in salesperson need for autonomy, there should be no difference in the moderating effect of need for autonomy on the relationship between perceived job autonomy and salesperson performance between the two types of salespersons.

Need for Autonomy as a Moderating Variable

It is important to consider the differences in the moderating effects of need for autonomy on the autonomy-performance relationship because this may

moderate the sales manager's ability to determine how to more effectively manage organizationally mediated autonomy for their salespeople. The moderating effect of need for autonomy on this relationship derives from differences between salesperson perceived autonomy and the need for autonomy. That is, it appears that while salespeople consider autonomy to be inherent in sales positions, the differences in need for autonomy among salespersons may cause some of them to believe that the level of perceived autonomy in the job is incongruent with the salesperson's need for autonomy. If so, then the traditional view that increased salesperson autonomy leads to increased salesperson performance may not persist when salespeople perceive their job to have either too much or too little autonomy.

Understanding the moderating effect of need for autonomy on the relationship between job autonomy and performance will allow sales managers a better understanding of why it is important for sales managers to match the level of need for autonomy within their salespeople to that situation that can best address that need. That is, increased congruency between an individual's perceived autonomy and his/her perceptions of the autonomy in that job may result in increased performance while a lack of congruency may result in decreased performance (George, 1992). More specifically, it is suggested that arbitrarily increasing an individual's perceived job autonomy, without considering his/her need for autonomy, as is being advocated with regard to the employment of empowerment (James, 1992), can result in organizational disappointment if the employee's performance does not increase as well.

The finding of a moderating effect on the autonomy-performance relationship (Strain, 1994) indicates that organizations that find little or no relationship between perceived job autonomy and performance may have employees high in need for autonomy who perceive the job to be low in autonomy (or at least lower than they want) or they have employees low in need for autonomy who are finding increased levels of autonomy to be too much for them. In this case, increasing the autonomy of those with high needs for autonomy while reducing the level of autonomy for

those low in need for autonomy may result in increased organizational productivity. Secondly, the comparative aspects of need for autonomy among diverse types of salespersons should be considered.

The types of people who are attracted to the very different operating environments involved in selling provide a clear dichotomy in terms of need for autonomy and perceived autonomy. For example, insurance agents operate in an autonomously complex external sales environment separated from immediate supervisory control where their supervisor is likely to be less knowledgeable of the agents' performance activities. Retail sales managers, on the other hand, have close supervision over a much less complex and more routine position that requires significantly less product knowledge and subsequently a much lower order of selling skills than do insurance agents (Yammarino and Dubinsky, 1990). However, despite these extreme differences, it is hypothesized that the congruency effects will be the same. That is, whether managing insurance agents or retail salespersons, those whose need for autonomy matches their perceived autonomy will perform better than those whose need for autonomy is not being satisfied. That is, both insurance agents and retail salespersons should manifest the same level of moderating effect in finding need for autonomy to be a moderating variable in the autonomy-performance relationship.

Samples

Two diverse types of salespersons were chosen to test these hypotheses: retail salespersons and insurance agents. Insurance agents comprised the external sales force hypothesized to be high in both need for autonomy and perceived job autonomy (Barker, 1991; Rich, 1990). Retail salespersons comprised the internal sales force and were hypothesized to be both lower in need for autonomy and perceived job autonomy than are insurance agents (Dubinsky and Skinner, 1984).

Scales

A nine-item perceived autonomy scale, collapsed to form one measure (Breaugh, 1989), was used to measure job autonomy. The scale comprises three

items each of measures of work method autonomy, scheduling autonomy, and criterion autonomy on a seven point Likert scale.

The sixteen item Personality Research Form (Jackson, 1987) measured need for autonomy. This scale uses sixteen true/false statements, half of which are reverse scored to reduce left/right hand bias. The statements were coded as 1 for low autonomy and 2 for high autonomy.

Two scales measured performance for each sample: a supervisory rating scale and an objective measure of performance. Linear regression, canonical regression, and correlation analysis tested the strength of the autonomy-performance relationships. Moderated regression analysis determined the moderating effect of need for autonomy on the autonomy-performance relationship. A test for significant difference of means tested the hypothesized significant difference in the need for autonomy of insurance versus retail salespersons.

HYPOTHESES

Four primary hypotheses were tested in comparing the two diverse types of salespeople:

- H₁: Insurance agent *perceived job autonomy* is greater than retail salesperson *perceived job autonomy*.
- H₂: Insurance agent *need for autonomy* is greater than retail salesperson *need for autonomy*.
- H₃: There is a stronger association between *perceived autonomy* and *salesperson performance* for insurance agents than for retail salespeople.
- H₄: The moderating effect of *need for autonomy* on the *autonomy-performance* relationship should be demonstrated for both retail salespersons and insurance agents.

The comparative aspects of these hypotheses are considered in that both insurance agents and retail salespersons are expected to demonstrate a positive relationship between perceived autonomy and performance. However, due to the relatively lower amount of supervision inherent in their job, insurance

agents should perceive their job to be higher in autonomy than do retail salespersons. Additionally, it is hypothesized that insurance agents have a higher need for autonomy than do retail salespersons. Finally, the moderating effect of need for autonomy on the autonomy-performance relationship is expected for both insurance agents and retail salespersons. That is, despite the hypothesized differences in their need for autonomy and perceived autonomy, both insurance agents and retail salespersons should perform more effectively when their need for autonomy is being met than do their counterparts with unsatisfied needs.

DATA COLLECTION

One-hundred fifty-two agents from a regional insurance organization and 468 retail salespersons from a large regional department store chain participated in completing the two page survey instrument. The insurance agency provided two measures of sales performance data: supervisor evaluations and the agent's production report for new business across seven lines of insurance over a one year period. The retail department store chain provided supervisor evaluations and the percentage of goal achieved for each salesperson. Surveys containing missing data in the form of items left unanswered on either of the respondent perception scales (need for autonomy or perceived autonomy) or the supervisor evaluation scale were included in the usable data set after substituting the mean value of all other respondents on that item (Nie, et al., 1975). Response rates for the insurance and retail samples were 91.44% and 77.45%, respectively. Tests for non-response bias support the lack of problematical non-response bias effects on the data.

Retail Data Collection

Eleven stores, employing 1015 retail salespersons from a large regional department store chain, participated in completing the hand delivered survey instrument. Of the 736 potential respondents working the day the survey was distributed, 570 returned it (77.45%). Of these, 102 were unusable due to missing data in the form of non-evaluation by his/her supervisor as well as those who had not been employed long enough to have established a

performance goal. Surveys containing missing data in the form of items left unanswered on either of the respondent perception scales (need for autonomy or perceived autonomy) or the supervisor evaluation scale were included in the usable data set after substituting the mean value of all other respondents on that item (Nie, et al., 1975). There were 468 usable responses.

Non-Response Bias Testing

A significant difference of means test determined that the usable response mean supervisor evaluation performance value of 3.58 ($n = 468$;) did not differ significantly from the population supervisor evaluation mean performance value of 3.52 ($N = 1015$; $p = .142$). This analysis supports the lack of problematical non-response bias effects on the data.

Measures of Scale Internal Consistencies (Cronbach's α)

Each scale was tested for internal consistency using Cronbach's α . The results are presented in Table 1. It is clear from these values that all scales demonstrate sufficient internal consistency measures, although the need for autonomy scale is barely within tolerance (Nunnally, 1967).

TABLE 1
Retail Data Measures of Scale Internal
Consistency Using Cronbach's α
Cronbach's α

Supervisor's Evaluation	.97
Perceived Autonomy	.84
Need For Autonomy	.71

Insurance Data Collection

Data was collected from a regional mid-western insurance organization. One-hundred eighty-seven agents participated in a mail survey of their need for autonomy and perceived job autonomy. The organization provided two measures of sales performance data: supervisor evaluations and the

agent's production report for new business across seven lines of insurance over a one year period. Each agent was mailed a one-page, two-sided survey with an attached cover letter requesting his/her voluntary participation. A memo from their agency senior-vice president was included along with a business reply mail envelope.

One-hundred fifty-eight agents (84.49%) responded to the first wave mailing. A second cover letter reminding the agents of the first attempt and requesting their assistance (along with another copy of their senior vice president's memo) was mailed to the 29 non-respondents. Thirteen agents (77.82%) responded to the second wave mailing. The total of 171 responses (first plus second wave) results in an overall response rate of 91.44%. Of these, nineteen were not employed for the entire year resulting in 152 usable responses for an effective response rate of 81.28%. Of the 152 usable responses, some had missing values in one of the perception scales (evaluations, perceived autonomy, need for autonomy). In these cases, the mean response for all respondents on this item was substituted for these missing values (Nie, et al., 1975). This procedure was not used for any other variable. Missing data in objective performance data caused that case to be deleted.

Non-response Bias Testing

To determine potential non-response bias, the mean supervisor evaluations for the first wave (3.15; $n = 158$) were compared to the second wave (2.79, $n = 13$). No significant difference was found ($t = 1.483$; $p = .139$). The mean response evaluation for all responses collected (3.12; $n = 171$) was compared to the population evaluation mean (3.06, $n = 187$). No significant difference was found ($t = 0.663$; $p = .491$). Finally, the mean supervisor evaluations of those usable responses (3.122, $n = 152$) were compared to the evaluation mean of the population (3.06, $n = 187$). No significant difference was found ($t = 0.611$; $p = .541$). This analysis supports the lack of problematical non-response bias effects on the data.

TABLE 2
Insurance Data Measures of Scale Internal
Consistency using Cronbach's α
Performance Scale

	α
Supervisor Evaluation (13 Item Scale)	.95
Perceived Autonomy (9 Item Scale)	.85
Need for Autonomy (16 Item Scale)	.70

Hypothesis Testing

H₁: Insurance agent *perceived job autonomy* is greater than retail salesperson *perceived job autonomy*.

The data support the hypothesis that insurance agents perceive themselves to have more autonomy in their job than do retail salespersons. Insurance agents' perception of a moderately high level of autonomy (5.549) is significantly higher than retail salespersons moderately low perceived autonomy (4.613; $p < .01$). Table 3 summarizes these findings.

TABLE 3
Perceived Autonomy: Insurance vs
Retail Salespersons

	MEAN	n	p	t
Insurance:	5.549	152	p < .01	9.790
Retail:	4.613	468		
scale is 7 - 1 (High to Low)				

H₂: Insurance agent *need for autonomy* is greater than retail salesperson *need for autonomy*

The hypothesis that insurance agents have a higher need for autonomy than do retail salespersons was not supported. Surprisingly, outside sales insurance agents' low need for autonomy (1.324) is not significantly different from the low need for autonomy found for retail salespersons (1.310; $p = .490$). Table 4 summarizes the findings.

TABLE 4
Tests for Differences in Need for Autonomy

	Mean	n	p	t
Insurance	1.324	152	p = .490	0.787
Retail	1.310	468		

Note: Need for Autonomy scale is:
1.000 → 2.000 (LOW to HIGH)

H₃: There is a stronger association between perceived job autonomy and salesperson performance for insurance agents than for retail salespeople.

This hypothesis is tested by determining the correlation between perceived autonomy and performance, measured on a common ten-item supervisor evaluation scale, for each data set. The two correlations are then tested for significant difference using Fisher's Z-transformation (Cohen and Cohen, 1975). The insurance agent perceived autonomy-performance correlation of $r = .232$ is not significantly different from the correlation between perceived autonomy and supervisor evaluations of performance for retail salespersons $r = .146$. The Fisher's Z' transformation of these correlations as: $Z' = .236$ and $Z' = .146$ are not significantly different at $p = .342$.

H₄: The moderating effect of need for autonomy on the autonomy-performance relationship should be demonstrated for both retail salespersons and insurance agents.

This hypothesis was tested using both moderated regression analysis and moderated canonical regression analysis. The test for the moderating effect of need for autonomy (NFA) on the autonomy-performance relationship is to calculate an F-statistic comparing the coefficient of determination of the multiple regression (equation 2) to that of the moderated multiple regression (equation 3) as follows (Evans, 1985):

$$F = \frac{\frac{R^2 - R^2_3}{1 - R^2_3}}{\frac{K_B}{n - K - K - 1}}$$

Such that: R^2_3 is the coefficient of determination for equation 3. R^2_2 is the coefficient of determination for equation 2. The sample size is n . K_A is the number of independent variables in equation 2. K_B is the number of variables added going from equation 2 to equation 3.

The retail salesperson data failed to demonstrate the moderating effect. Since the calculated F-statistic for each measure of performance [$F = 0.4740$; d.f. = 1, 464 (Supervisor Evaluations); 0.0000 d.f. ; 1, 464 (Percentage of Goal Achieved)] as well as for both performance measures simultaneously [0.2350 ; d.f. = 1, 464 (Canonical)] are significantly less than $F = 3.84_{\alpha=.05} (1, \infty)$, fail to reject the null hypothesis and conclude that there is no support for need for autonomy moderating the relationship between perceived autonomy and retail salesperson performance.

The insurance agent data found need for autonomy moderates the relationship between perceived autonomy and an objective measure of insurance performance (other lines of insurance). The calculated F-statistic is: $F = 5.263$; d.f. = 1, 148. Since $F = 5.263 (1, 148) > F = 5.02 (1, \infty)$, reject the null hypothesis and conclude that perceived autonomy moderates the relationship between perceived autonomy and this measure of insurance agent performance ($p < .01$). Thus, the data indicate that the moderating effects of need for autonomy on the autonomy performance relationship exist for insurance agents ($p < .01$) but not for retail salespeople. Therefore, the fourth hypothesis is not supported.

This procedure tests the canonical moderated regression using the redundancy index in place of the canonical R^2 . The redundancy index is used in lieu of the canonical R^2 to reduce the possibility of misinterpretation due to the potential for the canonical R^2 associated with the first canonical variate to overstate the explanatory power the set of independent variables has for the dependent variable set (Hair, Anderson, and Tatham, 1987). The redundancy index is determined by averaging the squared multiple correlations between the predictor variables (as a set) and each individual dependent

variable. The average R^2 is then used to calculate the F-statistic used for the moderated multiple regression.

CONCLUSIONS

Clearly, the lack of support for three of the four hypotheses creates confusion on the applicability of sales managers developing methods of managing salesperson autonomy. Although autonomy has been noted to be a key aspect in managing professionals (Raelin, 1989), the results of this research generates as many questions as answers.

Even though different salespersons do appear to perceive differing amounts of autonomy in their job, no difference was found in the need for autonomy between two very diverse types of salespeople. The indication that retail salespeople perceive their job to be low in autonomy, and have a low need for autonomy, is consistent with the finding that people tend to gravitate toward jobs that fit their personal needs (Snyder, 1983; Motowidlo, 1982; Weitz, 1981). However, the insurance data fails to conform to this conclusion. Insurance agents, found to have as low a need for autonomy as retail salespeople, were working in a job environment they perceived to be high in organizationally mediated autonomy (significantly higher than that perceived by the sample retail salespersons).

These findings allow some insight into the failure to support the third hypothesis. Since insurance agents' need for autonomy is both low and not significantly different from their retail salesperson counterparts, and is inconsistent with their perceived autonomy, it is not surprising that the relationship between perceived job autonomy and salesperson performance is no stronger for insurance agents than for retail salespersons. That is, since insurance agents' moderately high perceived autonomy is inconsistent with their moderately low need for autonomy (i.e., they already have more autonomy than they need), it is not surprising that the correlation between perceived job autonomy and performance, though still positive, is relatively weak and not significantly different from the low need for autonomy retail salespersons who perceive they are receiving the low autonomy they need. Indeed, it is surprising that the correlation

between autonomy and performance for retail salespersons is not stronger than that of insurance agents due to the relatively higher congruence between need for autonomy and perceived autonomy exhibited by the retail salespeople versus that of the insurance agents.

Most puzzling is the inability of the retail data to demonstrate the moderating effect of need for autonomy on the autonomy-performance relationship, especially in light of finding them to be congruent between their needs and their perceptions, when the insurance agent sample did support this and their perceptions needs were incongruent! One explanation for these apparent inconsistencies lies in the inability of the measurement instruments to capture the situational effects inherent in both salesperson need for autonomy and perceived autonomy. Neither scale measures the salespersons' need for autonomy/perceived autonomy on specific aspects of the job. This could be critical to our understanding of the effects of need for autonomy on the relationship between perceived job autonomy and performance.

It has been generally accepted that employee performance is influenced by both personal and situational variables (Pervin, 1985) in an interactive mode (Carson, 1989). Since both situational (Davis-Blake and Pfeffer, 1989) and personality variables (Kendrick and Funder, 1988; Rowe, 1987) as well as the work situation itself (Schneider, 1987) may influence employee behaviors, it is necessary to develop more situation-specific measures of both need for autonomy and perceived job autonomy.

Since it has been noted that the better the fit that exists between employee personality and his/her workplace environment the better his/her performance (Rounds, Dawis, and Lofquist, 1987), more situationally-specific measures of perceived autonomy, and of need for autonomy and performance may help to eliminate error associated with trying to assess the relationships among these variables at the macro level and provide more robust predictors of salesperson performance (Hough et al, 1990; Baehr and Orban, 1989; Day and Silverman, 1989; McHenry et al, 1985).

Applications for Management

Sales managers should be aware that stereotyping salespeople as to their probable perceived/need for autonomy based on selling task may be a mistake. Salespeople in diverse types of selling seem to be more similar in their need for autonomy than was previously thought. Additionally, situation-specific aspects of the job should cause salespeople to vary in their need for autonomy from one part of their work to the next.

If so, then the complexity of managing their professionals' autonomy has greatly increased for sales managers. Instead of determining the optimum level of congruency between each salesperson's overall need for autonomy and the amount of autonomy needed on the job as a whole, the sales manager is faced with the prospect of varying the amount of autonomy each salesperson has on different aspects of the job based on his/her need for autonomy in that specific situation.

To facilitate this, better tools are needed. Specifically, more situation-specific measures of need for autonomy must be developed. Scales based on the three aspects of job-related autonomy developed by Breugh (1989) would provide a more focused measure of job-related need for autonomy. That is, need for autonomy based on work method autonomy, scheduling autonomy, and criteria autonomy may provide a better insight into the situation-specific aspects of job-related need for autonomy than can be derived from the more general need for autonomy scale from the Personality Research Form (Jackson, 1987). Sales managers would then be better able to manage the autonomy of their salespersons.

Limitations

Obvious limitations of this research exist. Comparisons were made between two of the many different types of selling jobs. Thus, the results of this study cannot be generalized to the general salesperson population. In not specifically measuring need for autonomy or perceived autonomy with respect to specific areas of the job, the analysis was unable to determine the effects of implied relationships among the variables. However, the results of this study are

encouraging and provide guidance for further research.

Recommendations

Although this research failed to find support for need for autonomy to modify the autonomy-performance relationship in differing types of sales jobs, the conclusion that the problem may lie in the inability of the measures to provide situation-specific measures of need for autonomy, perceived job autonomy and salesperson performance calls for future research to correct these errors. Since it is recognized that employee behaviors are influenced by both personal and situational variables (Pervin, 1985), the hypothesized moderating effect of need for autonomy may manifest itself only under specific situational conditions. Salespersons may have a higher need for autonomy in the conduct of certain parts of the job than in others. The amount of perceived job autonomy the salesperson feels he/she has may vary from one part of the job to another.

Thus, it may be necessary to measure salesperson need for autonomy within the various contexts of the job rather than on the job as a whole. This is indicated by the observation that employees maintain the type of work environment most congruent with their personalities (Schneider, 1987). Additionally, measuring perceived autonomy for that part of the job for which there is a specific measure of performance and comparing it to the person's need for autonomy in that particular part of the job may yield more conclusive indications of the specified moderating relationship and allow more comparisons indicative of a generalized norm of the moderating effect of need for autonomy on the autonomy-performance relationship across diverse types of selling.

To provide support for generalizable comparative study, future research must overcome these limitations. Specifically, data should be collected from a random sample of a wider variety of sales organizations. This would allow for a more complete assessment of both the differences in perceived autonomy and need for autonomy among sales types as well as a comparison of the strengths of the

perceived autonomy-performance relationship. Testing for the moderating effect of need for autonomy on the relationship between autonomy and performance among many different types of sales organizations would allow for a more complete understanding of the conditions under which this relationship exists.

REFERENCES

- Baehr, M.E. and J.A. Orban (1989), "The Role of Intellectual Abilities and Personality Characteristics in Determining Success in Higher-level Positions," *Journal of Vocational Behavior*, 35, 270-287.
- Barker, J.J., M.A. Campbell, V.T. Coffey, S.P. Heard, S.A. Kirsche, K.A. Murray (1991), "Why Insurance Producers Leave Independent Agencies: A Study of Producer Turnover," *CPCU Journal*, March, 12-18.
- Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, v51n6, 1173-1182.
- Becherer, Richard C. and F. Morgan (1982), "The Job Characteristics of Industrial Salespersons: Relationship to Motivation and Satisfaction," *Journal of Marketing*, v46n4 Fall, 125-135.
- Boughn, Susan (1988), "A Lack of Autonomy in the Contemporary Nursing Student: A Comparative Study," *Journal of Nursing Education* v27n4, 150-155.
- Breaugh, James A. (1989), "The Work Autonomy Scales: Additional Validity Evidence," *Human Relations*, v42n11, 1033-1056.
- Bush, Robert P., Alan J. Bush, David J. Ortinau, and Joseph H. Hair, (1990), "Developing a Behavior-Based Scale to Assess Retail Salesperson Performance," *Journal of Retailing*, Vol 1, No 1, (Spring), 119-135.
- Carson, R. C. (1989), "Personality," *Annual Review of Psychology*, 40, 227-248.
- Churchill, Gilbert A., Neil M. Ford, and Orville C. Walker (1994), *Sales Force Management: Planning, Implementation, and Control*, Homewood, IL., Irwin.
- Comer, James M., and Alan J. Dubinsky (1985), *Managing the Successful Sales Force*, Lexington Books.
- Dalrymple, Douglas J. and William L. Cron (1992), *Sales Management*, 4th Edition, New York: John Wiley & Sons.
- Davis-Blake, A. and J. Pfeffer (1989), "Just a Mirage: The Search for Dispositional Effects in Organizational Research," *Academy of Management Review*, 14, 385-400.
- Day, D.V. and S.B. Silverman (1989), "Personality and Job Performance: Evidence of Incremental Validity," *Personnel Psychology*, 42, 25-36.
- Dubinsky, Alan J. and Francis J. Yammarino (1985), "Job-Related Responses of Insurance Agents: A Multi-Firm Investigation," *The Journal of Risk and Insurance*, 501-517.
- Dubinsky, Alan J. and Steven J. Skinner (1984), "Impact of Job Characteristics on Retail Salespeople's Reactions to their Jobs," *Journal of Retailing*, v60n2, Summer, 35-62.
- Dubinsky, Alan J. and Steven J. Skinner (1984), "Job Status and Employees' Responses: Effects Of Demographic Characteristics," *Psychological Reports*, v55, 323-328.
- Evans, Martin G. (1985), "A Monte Carlo Study of the Effects of Correlated Method Variance in Moderated Multiple Regression Analysis," *Organizational Behavior and Human Decision Processes*, 36, 305-323.
- Ford, Neil M., Orville C. Walker, Jr., Gilbert A. Churchill, Jr. and Steven W. Hartley (1987), "Selecting Successful Salespeople: A Meta-Analysis of Biographical and Psychological Selection Criteria," *Review of Marketing: American Marketing Association*, 90-131.
- George, Jennifer M. (1992), "The Role of Personality in Organizational Life: Issues and Evidence," *Journal of Management*, v18n2, 185-213.
- Goski, Kelly L. and Mary Belfry (1991), "Achieving Competitive Advantage Through Employee Empowerment," *Employment Relations Today*, Summer, 213-220.
- Hair, Joseph F. Jr., Rolph E. Anderson, and Ronald L Tatham (1987), *Multivariate Data Analysis*, New York, NY. MacMillan Publishing Company.

- Hall, Richard H. (1985), "Professional/Management Relations: Imagery vs. Action," *Human Research Management*, Vol. 24, no. 2, (Summer), 227-236.
- Hough, L.M., N.K. Eaton, M.D. Dunnette, J.D. Kamp, and R.A. McCloy (1990), "Criterion-Related Validities of Personality Constructs and the Effect of Response Distortion on those Validities," *Journal of Applied Psychology*, 75, 581-595.
- Jackson, Donald N.(1987), *Personality Research Form Manual*, Sigma Assessment Systems, Inc. Research Psychologists Press Division, Port Huron, Michigan.
- James, Graham (1992), "Quality of Working Life and Total Quality Management," *International Journal of Manpower*, Vol 13, n1, 41-58.
- Kendrick, D.T. and D.C. Funder (1988), "Profiting From Controversy: Lessons From the Person-Situation Debate," *American Psychologist*, 43, 23-24.
- Kohn, Melvin L. and Carmi Schooler (1982), "Job Conditions and Personality: A Longitudinal Assessment of Their Reciprocal Effects," *Journal of Psychology*, v87n6, 1257-1286.
- Mahajan, Jayashree, Gilbert A. Churchill, Neil M. Ford, and Orville C. Walker, Jr. (1984), "A Comparison of the Impact of Organizational Climate on the Job Satisfaction of Manufacturers' Agents and Company Salespeople: An Exploratory Study," *Journal of Personal Selling and Sales Management*, (May), 1-10.
- McHenry, Patrick C., Kent G. Hamdorf, Connor M. Walters and Colleen I. Murray (1985), "Family and Job Influences on Role Satisfaction of Employed Rural Mothers," *Psychology of Women Quarterly*, v9,242-257.
- Motowidlo, Stephan J. (1982), "Relationship Between Self-Rated Performance and Pay Satisfaction Among Sales Representatives," *Journal of Applied Psychology*, Vol. 62, No. 2, 209-213.
- Nie, Norman H., C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent (1975), *Statistical Package for the Social Sciences*, New York, NY. McGraw-Hill Book Company.
- Nunnally, J. (1967), *Psychometric Methods*, New York: McGraw-Hill.
- Parasuraman, Saroj and Joseph A. Alutto (1984), "Sources and Outcomes of Stress in Organizational Settings: Toward the Development of a Structural Model," *Academy of Management Journal*, v27n2, 330-350.
- Pervin, L.A. (1985), "Personality: Current Controversies, Issues, and Directions," *Annual Review of Psychology*, 36, 83-114.
- Pinch, Winifred J., (1985), "Ethical Dilemmas in Nursing: The Role of the Nurse and Perceptions of Autonomy," *Journal of Nursing Education*, v24n9, November, 372-376.
- Raelin, Joseph A. (1989), "An Anatomy of Autonomy: Managing Professionals," *The Academy of Management EXECUTIVE*, v3n3, pp. 216-228.
- Rich, D. Layne (1990), "Recruiting for a Profession," *Manager's Magazine*, (January), 5, 16-17.
- Rounds, J.B., R.V. Davis, and L.H. Lofquist (1987), "Measurement of Person Environment Fit and Prediction of Satisfaction in the theory of Work Adjustment," *Journal of Vocational Behavior*, 31, 297-318.
- Rowe, D.C. (1987), "Resolving the Person-Situation Debate: An Invitation to an Interdisciplinary Dialogue," *American Psychologist*, 42, 218-227.
- Schneider, Benjamin (1987), "The People Make the Place," *Personnel Psychology*, 40, 437-453.
- Schneider, Benjamin (1987), "E = f(P,B): the Road to a Radical Approach to Person-Environment Fit," *Journal of Vocational Behavior*, 31, 353-361.
- Snyder, Mark (1983), "The Influence of Individuals on Situations: Implications for Understanding the Links Between Personality and Social Behavior," *Journal of Personality* v51n3, September, 497-516.
- Spindle, Robert B. (1990), "Improve Retention by Promoting Independence," *Agency Management*, (January), 139 - 141.
- Steel, Beth, P. Chelladurai, and Barbara A. Brown (1987), "Gender Differences in Managerial Aspirations and Potential Among Physical Education and Non-Physical Education Students," *Journal of Sport Psychology*, 9, 118-129.

- Strain, Charles R., Jr. (1994), "Need for Autonomy's Influence on the Autonomy-Performance Relationship", unpublished dissertation.
- Teas, Kenneth R. (1982), "Performance-Reward Instrumentalities and the Motivation of Retail Salespeople," *Journal of Retailing*, v58n3, Fall, 4-26.
- Tyagi, Pradeep (1985), "Relative Importance of Key Job Dimensions and Leadership Behaviors in Motivating Salesperson Work Performance," *Journal of Marketing*, v49, Summer, 76-86.
- Tyagi, Pradeep (1985), "Work Motivation Through the Design of Salesperson Jobs," *Journal of Personal Selling and Sales Management*, May, 41-51.
- Weitz, Barton A. (1981), "Effectiveness in Sales Interactions: A Contingency Framework," *Journal of Marketing*, Vol. 45, (Winter), 85-103.
- Yammarino, Francis J. and Alan J. Dubinsky (1990), "Salesperson Performance and Managerially Controllable Factors: An Investigation of Individual and Work Group Effects," *Journal of Management*, v16n1, 87-106.