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DEVELOPING AND RETAINING NEW HIRES DURING  
THE SALES FORCE SOCIALIZATION PROCESS

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DEVELOPING AND RETAINING NEW HIRES DURING  
THE SALES FORCE SOCIALIZATION PROCESS

*Abstract*

## ABSTRACT

This dissertation shines light on the sales force socialization process, wherein companies aim to develop and retain new hires. In the first essay, we draw from learned helplessness theory to understand why cumulative periods of sales performance failure enhance new hires' intentions to engage in sales-oriented behaviors. Based on panel survey data from 221 new hires of a furniture retailer, findings suggest that core transformational leadership thwarts this process, but also that its effect diminishes as instances of unmet sales goals accumulate. A subsequent lab experiment identifies perceived task difficulty as the mechanism through which sales performance failure translates into sales-oriented behavior intentions and finds support for error management as a better way to curb helplessness and develop new hires. In the second essay, we study the influence of social effects on sales force turnover, using a multi-source, longitudinal dataset from a national household durables retailer of 3,832 sales agents. The results advance social information processing theory and again propose that core transformational leadership plays an important role during early tenure stages; the analyses also show that this management style had a sustained effect on new hires' risk of turnover for fostering the acceptance of group goals, however. On the other hand, the influence of peers tended to increase over time, with the ethnic diversity of new hires' sales districts increasing their risk of turnover during later tenure stages and observations of peers quitting having a similar effect. Taken together, these essays provide insights that companies can incorporate into their sales force socialization processes to develop and retain new hires.

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LEARNED HELPLESSNESS AMONG NEWLY HIRED  
SALESPEOPLE AND THE INFLUENCE OF LEADERSHIP

## Introduction

The sales profession is rife with failure-prone occupations. As a case in point, evidence from a recent industry survey suggests that about fifty percent of salespeople fail to reach their annual targets (Ahearne et al. 2012, p. 39). But annual quotas are just one milestone salespeople aspire to hit. “Making the numbers” is also an hourly, daily, weekly, monthly, and quarterly affair for salespeople. For instance, a famous study by Camerer et al. (1997) found that daily income targets are salient in the minds of NYC cab drivers. This present research defines sales performance failure to be the lack of achieving these self-defined sales goals and contributes to the extant sales literature in three related ways.

First, we investigate the relationship between cumulative periods of sales performance failure and salespeople’s intentions to engage in sales-oriented behaviors. Previous researchers have studied various forms of behavioral responses to salesperson failure (e.g., Dixon and Schertzer 2005; Dixon, Spiro, and Forbes 2003; Dixon, Spiro, and Jamil 2001); however, to the best of our knowledge, no prior failure research has studied the disingenuous behavioral intentions we examine here. The sales-oriented behaviors we study can be defined as customer-directed influence attempts that are indifferent to customers’ unique needs and intended to spur immediate sales (Saxe and Weitz 1982). We believe these behaviors are critical to inspect, since they undoubtedly contribute to the sales profession’s dismal reputation (see, e.g., Gallup 2012).

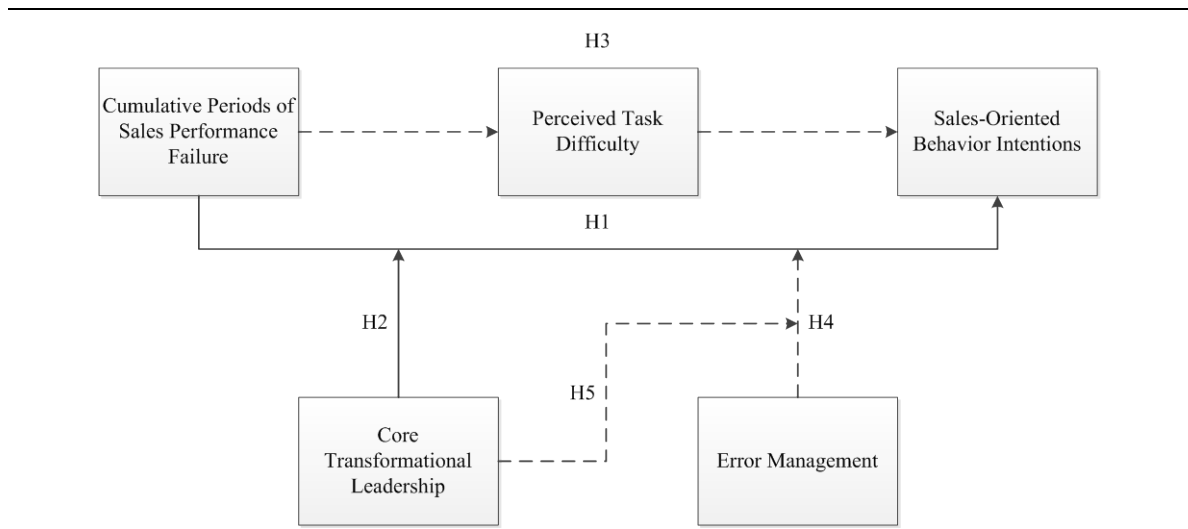
Second, we place the sales force socialization process under the microscope, a research area that remains scant despite Dubinsky et al.’s (1986) foundational article. Newly hired salespeople learn the “values, abilities, expected behaviors, and social

knowledge” (Louis 1980, p. 229-230) needed to succeed in a given sales organization during their initial months on the job. We draw from the learned helplessness paradigm (Seligman 1975) to theorize why newly hired salespeople’s intentions to engage in sales-oriented behaviors might tend to heighten as periods of sales performance failure accumulate during their primitive months. In this sense, we find that new hires tend to attribute late stages of sales performance failure to a selling task’s difficulty, which represents a stable failure attribution and a feeling of helplessness (Heider 1958; Martinko and Gardner 1982). This stable failure attribution, then, increases new hires’ intentions to adopt a sales-oriented approach with customers. It follows that understanding how sales-oriented behaviors can be subdued in light of cumulative periods of sales performance failure is an integral pursuit for the field of personal selling and sales management.

Third, the two studies in this essay embark on this pursuit by testing the efficacy of managerial actions during early and late stages of sales performance failure. We find that core transformational leadership (i.e., articulating a vision, leading by example, and fostering the acceptance of group goals) reduces newly hired salespeople’s intentions to engage in sales-oriented behaviors during early stages of sales performance failure, but that its efficacy diminishes as periods of failure accumulate. That is, core transformational leadership “involves fundamentally changing the values, goals, and aspirations of followers” (MacKenzie, Podsakoff, and Rich 2001, p. 116), which our results suggest is more achievable when a new hire has encountered initial (as opposed to multiple) periods of sales performance failure. In turn, we aim to understand how sales-oriented behaviors can be subdued after multiple periods of failure by studying error

management (Keith and Frese 2008). This pursuit led us to find that sales managers who encourage new hires to make (rather than to avoid) errors during their interactions with customers are able to curb sales-oriented behaviors during late-stage sales performance failure. Further, we find that pairing core transformational leadership with positive error framing restores its efficacy. These insights allow us to offer sales managers who oversee failure-prone environments a recommended approach during the sales force socialization process.

We detail the components of this recommended approach in the general discussion section of this essay. First, however, we provide an overview of the theory of learned helplessness and develop our hypotheses (see Figure 1.1 for a graphical depiction of our conceptual framework). Then, we outline our two studies and report their results. The essay concludes with a declaration of these studies' limitations and our suggestions for future research in the area of sales performance failure.



Notes: Hypotheses 3-5, depicted with dashed lines, are not investigated in Study 1. Study 2 examines the entire spectrum of this conceptual framework (i.e., Hypotheses 1-5).

**Figure 1.1: Conceptual Framework**

## **Theoretical Background and Hypotheses Development**

### ***Learned Helplessness***

The theory of learned helplessness is particularly relevant to sales research, as failure is such a large part of the sales profession (Schulman 1999; Sujan 1999). Two of its central tenets are, first, that pessimism potentiates acts of helplessness and, second, that repetitive, seemingly uncontrollable failure leads people to behave helplessly (Abramson, Seligman, and Teasdale 1978; Seligman 1975). Seligman and Schulman (1986) investigated the former tenet in the context of insurance sales and found that pessimistic agents quit at twice the rate of optimistic agents within their first year on the job. In addition, compared to the optimistic agents in their study, pessimistic agents sold 37% less insurance in their first two years. Notably, other research has also found pessimism to be negatively related to sales performance (e.g., Anderson 1983; Schulman 1999), supporting the first tenet mentioned above.

With this body of research established, we diverge and aim to examine the second tenet of learned helplessness, proposing that newly hired salespeople are likely to behave helplessly as periods of sales performance failure accumulate. In this effort, we recognize that acts of helplessness in the sales profession have traditionally been conceptualized in the literature as avoidance behaviors. For instance, prior research has suggested that salespeople who feel helpless tend to avoid interacting with customers altogether by way of quitting or finding “other work to do around the office besides cold calling” (Schulman 1999, p. 33). Then, if quitting is not an option (e.g., in a bad economy) and if customers cannot be avoided easily (e.g., in retail settings), salespeople are thought to behave helplessly by way of exhibiting little or no persistence during their interactions with

customers (e.g., by acquiescing to customers' objections or by avoiding trial closes; Seligman and Schulman 1986, p. 832).

We contend that salespeople also behave helplessly during their interactions with customers by way of engaging in sales-oriented behaviors, which, unlike the avoidance behaviors studied to date, aim to make a sale. Why might salespeople engage in sales-oriented behaviors at all if they perceive their selling task to be uncontrollable? First, "the vast majority of sales force incentives...are tied to short-term, individual, results-focused metrics" (Zoltners, Sinha, and Lorimer 2011). That is, salespeople are incentivized not only to interact with customers, but also to persuade them to buy. As the proverbial saying goes, salespeople do not eat unless they sell. Second, whether it be (a) suggesting popular products to customers rather than uncovering their unique needs through questioning techniques, (b) recommending expensive products to customers by default solely to increase the size of their bills, or (c) telling customers what they want to hear in order to close a sale, sales-oriented behaviors represent low-effort attempts to increase immediate sales performance (Saxe and Weitz 1982). As such, these low-effort sales behaviors represent a preliminary form of avoidance behavior, which falls in line with the traditional way learned helplessness is conceptualized in the literature (Seligman 1975).

Furthermore, sales-oriented selling falls within the realm of learned helplessness, because it can be classified as a low response initiation (Seligman 1975). Compared to customer-oriented selling (the other approach in Saxe and Weitz's SOCO scale), sales-oriented selling is far less effortful, as it does not involve the collection of customer need knowledge (Homburg, Wieseke, and Bornemann 2009). To this end, sales-oriented selling is also passive and maladaptive, the two adjectives Martinko and Gardner (1982)



use to define learned helplessness in organizations. It is passive insofar as sales-oriented behaviors do not involve the collection of customer need knowledge and maladaptive insofar as this lack of knowledge prevents salespeople from offering tailored solutions to meet customers' unique needs.

Next, we develop our first two hypotheses and proceed to test them in a longitudinal field study that spans six months of a sales force's socialization process.

***The Effect of Cumulative Periods of Sales Performance Failure on Newly Hired Salespeople's Sales-Oriented Behavior Intentions***

In the original experiments that developed the concept of learned helplessness (e.g., Overmier and Seligman 1967), dogs were immobilized, repeatedly shocked by small doses of electricity, and observed in a subsequent situation where they were shocked but left free to escape. When the dogs remained inert (despite being unrestrained), Overmier and Seligman (1967) inferred that learned helplessness had interfered with their instinctive escape responses. In sales, an analogous inference could be made if multiple periods of sales performance failure influenced newly hired salespeople to use product-focused pitches aimed at stimulating immediate demand. These sales pitches do not actively uncover customers' idiosyncrasies, nor do they tailor solutions to fit customers' unique needs, which violates the fundamental principles of the marketing concept and represents a form of salesperson helplessness. Much like the inert dogs in Overmier and Seligman's (1967) experiment, these salespeople would be demonstrating a low response initiation that is both passive and maladaptive.

Therefore, following the learned helplessness paradigm (Seligman 1975), we expect cumulative periods of sales performance failure to have a debilitating effect on

newly hired salespeople, and we hypothesize that these missed sales goals will increase their intentions to engage in sales-oriented behaviors. Formally, we hypothesize the following:

*H1: There is a positive relationship between cumulative periods of sales performance failure and newly hired salespeople's sales-oriented behavior intentions.*

### ***The Moderating Role of Core Transformational Leadership***

As we mentioned in our introduction, we also aim to test the efficacy of managerial actions during early and late stages of sales performance failure. Sales-oriented behaviors have been shown to lower customers' trust in salespeople (e.g., Hansen and Riggie 2009) and have undoubtedly contributed to the sales profession's poor reputation (Gallup 2012). Accordingly, understanding how sales managers can ameliorate the relationship between cumulative periods of sales performance failure and newly hired salespeople's intentions to engage in sales-oriented behaviors is of utmost importance. In this pursuit, we decided to examine the efficacy of core transformational leadership because of its relevance to the sales profession and its prominence in the sales literature (e.g., MacKenzie, Podsakoff, and Rich 2001; Schwepker and Good 2010).

Podsakoff et al. (1990) outline that core transformational leadership embodies a set of managerial actions that articulate a vision, lead by example, and foster the acceptance of group goals. For the purposes of our investigation, the first provides new hires with a clear roadmap, the second shows them how to sell, and the third creates a team atmosphere where individual salespeople are not supposed to be left behind. Notably, this set of actions aims to guide new hires through the sales force socialization process in a learning environment filled with success. That is, articulating a vision

provides the direction, leading by example provides the model of desired behavior, and fostering the acceptance of group goals pushes for the entire team to win “not just a handful of hotshots” (Pacetta 1994, p. 57). In this guided learning environment, we expect new hires to be more likely to pursue customer satisfaction concurrently with their sales goals when they are successful or experiencing early-stage sales performance failure, because they have the direction, mental model, and support needed to do so.

However, the problem with this style of leadership in failure-prone environments is that it loses its credibility when periods of failure accumulate. After multiple periods of sales performance failure, newly hired salespeople who are exposed to core transformational leadership are bound to think failure should have already given way to success, rendering its provision ineffective. In other words, this leadership style is more likely to be efficacious when newly hired salespeople have experienced few (as opposed to many) periods of sales performance failure. That is, we expect core transformational leadership to curb newly hired salespeople’s sales-oriented behavior intentions during early-stage, but not during late-stage, sales performance failure. In sum, we predict the following:

*H2: Core transformational leadership moderates the relationship between cumulative periods of sales performance failure and newly hired salespeople’s sales-oriented behavior intentions in such a way that its effect diminishes as cumulative periods of sales performance failure increase.*

## Study 1

In order to test these first two hypotheses, we collected panel data from a cohort of salespeople that was hired by a furniture retailer in the Southern United States. The company hired these salespeople to sell mattresses to consumers in large box stores, and, as is typical in sales, their pay is based on salary and commissions (Ahearne et al. 2012). This research setting was ideal for our study in four important ways. First, the retailer expanded its sales force considerably at the time our data were collected, which allowed us to study a sampling frame of 537 newly hired salespeople. Second, these salespeople were bound to experience sales performance failure in the competitive retail furniture industry, a necessary condition for the study of salesperson helplessness. Third, the company's sales force is dispersed across its various locations, entailing that the newly hired salespeople in our sample would be exposed to sales managers with varying leadership styles. Fourth, the company's stores have sufficient lapses in inactivity, which gave the new hires downtime to complete our recurring surveys.

In all, we studied this incoming wave of salespeople over six months of the company's sales force socialization process. Every two weeks, we asked these newly hired salespeople whether they hit or missed their sales goal over the previous two-week period, how their sales managers behaved, and how they intended to behave toward customers in the upcoming two-week period. This two-week time interval was selected based on the company's pre-existing standard that asked new hires to set biweekly sales goals.

At the end of this six-month exercise, the salespeople in our sampling frame had been given twelve opportunities to fill out a survey. We used twelve biweekly drawings

for \$50 American Express gift cards and two quarterly drawings for \$100 American Express gift cards to encourage responses. In addition, we secured the top management team's support in order to motivate strong participation rates. As a result of these efforts, we obtained responses from 221 salespeople (an effective response rate of 41%). On average, these salespeople completed between four and five surveys each, affording us 1,015 discrete-time observations in a time-unstructured, longitudinal dataset. Of these data points, approximately 50% were characterized as "periods of failure," where sales performance goals were not met.

From a demographics standpoint, the salespeople in our final sample are approximately 29 years old and 56% of them are female. In addition, at the time they entered the participating organization, they had approximately six years of sales experience.

### ***Measures***

*Cumulative periods of sales performance failure.* As mentioned previously, the participating organization requires its new hires to set biweekly sales goals. In each survey, we asked respondents to report what their revenue goal was for the last two weeks and to indicate whether they met or fell short of this goal. From this latter question, we coded a variable named *sales performance failure* as zero if a salesperson hit his or her sales goal and one if he or she fell short of it. From here, we computed a *cumulative periods of sales performance failure* variable by summing a given salesperson's sales performance failures across all previous time periods.

*Core transformational leadership.* Of interest to our model is the leadership style a salesperson's manager adopted during the previous two weeks. Accordingly, we

adapted Podsakoff et al.'s (1990) widely used scale of core transformational leadership to our setting by basing each scale item on salespeople's exposure to their manager over the past two weeks. For a full list of the scale items used in Study 1, see Appendix A.

*Sales-oriented behavior intentions.* As a form of salesperson helplessness, we measured salespeople's intentions to engage in sales-oriented behaviors (Saxe and Weitz 1982). This measure focuses on salespeople's behavioral intentions for the upcoming two-week period. The items reflect sales-oriented behaviors insofar as the behaviors we capture aim to stimulate immediate demand without appealing to customers' idiosyncrasies and they reflect acts of helplessness insofar as they are passive and maladaptive (Martinko and Gardner 1982).

*Covariate.* Prior sales experience was entered into our model as a covariate in order to control for salesperson heterogeneity at the time new hires entered the participating company's sales force. In particular, the question "How many years of experience do you have as a salesperson?" was asked during the company's orientation and training course, which all newly hired salespeople attended. Based on previous research, we expected prior sales experience to impact new hires' susceptibility to sales performance failure, as well as their subsequent responses to sales performance failure (Dixon, Spiro, and Forbes 2003).

### ***Analytical Procedures***

*Measurement model.* We assessed the factor structure and validity of the latent variables in our model (i.e., core transformational leadership and sales-oriented behavior intentions) through a confirmatory factor analysis (Gerbing and Anderson 1988). Representing core transformational leadership as a reflective, higher-order factor of its

three first-order factors and sales-oriented behavior intentions as a separate factor, our model demonstrated good fit to the data ( $\chi^2 = 724.7$ , d.f. = .86, GFI = .91, CFI = .98, RMSEA = .08). Further, articulating a vision (.94), leading by example (.95), and fostering the acceptance of group goals (.97) estimated core transformational leadership as a second-order construct very well, providing empirical evidence for the aggregation of core transformational leadership's three first-order factors into a second-order construct (Brown 2006). As such, when we test our hypotheses in the next section, we enter core transformational leadership into our hypothesized model as a second-order construct, an approach that is consistent with the extant literature (MacKenzie, Podsakoff, and Rich 2001; Podsakoff et al. 1990). In addition, the data pass the tests discussed by Fornell and Larcker (1981), demonstrating that the measures we employ for core transformational leadership and sales-oriented behavior intentions satisfy the necessary conditions for convergent and discriminant validity. Table 1.1 displays descriptive statistics, intercorrelations, as well as reliabilities and validity estimates where applicable for the variables used in Study 1.

*Common method variance.* Defined as artificial correlation among constructs due to the measurement method employed, common method variance (CMV) has the potential to bias results in survey-based research (Podsakoff et al. 2003). In our context, this concern is partially alleviated since our independent variable, cumulative periods of sales performance failure, is longitudinal and rather concrete in nature (Frazier et al. 2009). Further, researchers have demonstrated that “interaction effects cannot be artifacts of CMV” (Siemens, Roth, and Oliveira 2010, p. 456), which protects our second hypothesis from contamination. Nevertheless, we still wanted to assess the potential bias

**Table 1.1: Intercorrelations, Descriptive Statistics, Reliabilities, and  
Validity Estimates for Study 1**

<b>Variables</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Prior Sales Experience <sup>a</sup>					
2. Cumulative Periods of Sales Performance Failure <sup>b</sup>		.09*			
3. Core Transformational Leadership <sup>b</sup>		-.09*	-.09*		
4. Sales-Oriented Behavior Intentions <sup>b</sup>		-.04	-.01	-.13*	
<b>Descriptive Statistics</b>	Means	6.28	2.14	5.87	2.81
	Standard Deviations	7.46	2.17	1.36	1.61
<b>Reliability and Validity Estimates</b>	Cronbach Alphas	-	-	.98	.83
	Composite Reliabilities	-	-	.97	.83
	Average Variance Extracted Values	-	-	.91	.62

\*  $p < .05$ .

<sup>a</sup>  $n = 221$  (salespeople; level 2).

<sup>b</sup>  $n = 1015$  (discrete-time observations; level 1).

Notes: Cross-level correlations are calculated by assigning salespeople's prior sales experience to each of their discrete-time observations and are not adjusted for lack of independence. Reliability and validity estimates do not apply to manifest variables (prior sales experience) or to count data (cumulative periods of sales performance failure).

of CMV in our research, so we followed a diagnostic technique developed by Lindell and Whitney (2001). These authors suggest that CMV can be conservatively estimated and accounted for using the observed correlation between two theoretically unrelated constructs, one coming from the researcher's hypothesized model and the other being a marker variable.

The marker variable we use is continuance commitment (i.e., perceived costs associated with leaving an organization; Meyer, Allen, and Smith 1993). We propose that this form of commitment, which is governed largely by external factors (e.g., the economy or one's family situation), should be unrelated to the form of leadership a salesperson's manager adopts. Therefore, we included a three-item measure of this construct, adapted from Meyer, Allen, and Smith (1993), in each biweekly survey and used its correlation with



core transformational leadership as an estimate of method variance ( $r_m = .02$ ). We then entered this estimate into an equation that adjusted the correlations in Table 1.1 for CMV (see Lindell and Whitney 2001 for application details). Importantly, since the significant correlations in Table 1.1 remained significant after they were adjusted, this test provided empirical support for the argument that CMV does not inflate the relationships among the constructs in our model.

*Model specification.* The data in this study follow a two-level framework, where our criterion, sales-oriented behavior intentions, and our predictor, cumulative periods of sales performance failure, represent intra-individual (i.e., time-varying), level 1 variables. Sales manager core transformational leadership, while conceptually a level 2 variable, is also included in our level 1 model because we measured it over time. The inter-individual (i.e., time-invariant), level 2 variable in our model is the prior sales experience a salesperson brought into the participating company, which we use as a control.

We analyzed these data using HMLM (Raudenbush and Bryk 2002), which is best suited for the time-unstructured dataset we collected for this study (Cohen et al. 2002). Similar analytical procedures have been discussed in the literature in detail (e.g., Ahearne et al. 2010), so we only describe ours briefly here. Our level 1 model is specified as follows:

$$Y_{ti} = \pi_{0i} + \pi_{1i}(CF_{ti}) + \pi_{2i}(CTL_{ti}) + \pi_{3i}(CF_{ti} * CTL_{ti}) + e_{ti}$$

where the dependent variable,  $Y_{ti}$ , is salesperson  $i$ 's sales-oriented behavior intentions at time  $t$ . This value is determined by this salesperson's cumulative periods of sales performance failure ( $CF_{ti}$ ), his or her sales manager's core transformational leadership

(CTL<sub>ti</sub>), and the interaction between these two terms. Further, our level 2 equations are specified as follows:

$$\pi_{0i} = \beta_{00} + \beta_{01}(\text{EXP}_i) + r_{0i}$$

$$\pi_{1i} = \beta_{10} + r_{1i}$$

$$\pi_{2i} = \beta_{20} + r_{2i}$$

$$\pi_{3i} = \beta_{30} + r_{3i}$$

where the intercept in our level 1 model is predicted by salesperson *i*'s sales experience (EXP<sub>*i*</sub>). The level 2 equations for  $\pi_{1i}$ ,  $\pi_{2i}$ , and  $\pi_{3i}$  simply allow the effects at level 1 to vary between salespeople.

### ***Hypotheses Testing***

We present our estimation results in Table 1.2. Reading from Model 1, the control variable prior sales experience was found to account for significant variance in salespeople's sales-oriented behavior intentions ( $\beta = -.029, p < .001$ ). That is, the more experienced a salesperson was coming into the position, the less he or she intended to behave in a sales-oriented manner with customers over the course of the company's sales force socialization process. Then, staying within this column, the results suggest that cumulative periods of unmet sales performance goals were associated with increased levels of sales-oriented behavior intentions ( $\beta = .120, p < .001$ ), supporting H<sub>1</sub>.

Moving to Model 2, the estimates suggest that the initial effect of core transformational leadership is negative ( $\beta = -.233, p < .001$ ) and that the interaction effect between cumulative periods of sales performance failure and core transformational leadership is positive ( $\beta = .037, p < .001$ ), which both support H<sub>2</sub>. Here, we expected core transformational leadership to reduce the extent to which sales performance failure was

**Table 1.2: Hierarchical Multivariate Linear Modeling Results for Study 1**

	Model 1	Model 2
	$\beta$ (S.E.)	$\beta$ (S.E.)
Intercept	2.588*** (.09000)	2.588*** (.00100)
Sales Experience	-.029*** (.00733)	-.017*** (.00004)
Cumulative Periods of Sales Performance Failure	.120*** (.01401)	.134*** (.00010)
Core Transformational Leadership		-.233*** (.00020)
Cumulative Periods of Sales Performance Failure x Core Transformational Leadership		.037*** (.00005)
-2LL	2983.31	2879.69
$\Delta$ Chi-Square	12.28(1)***	103.62(1)***

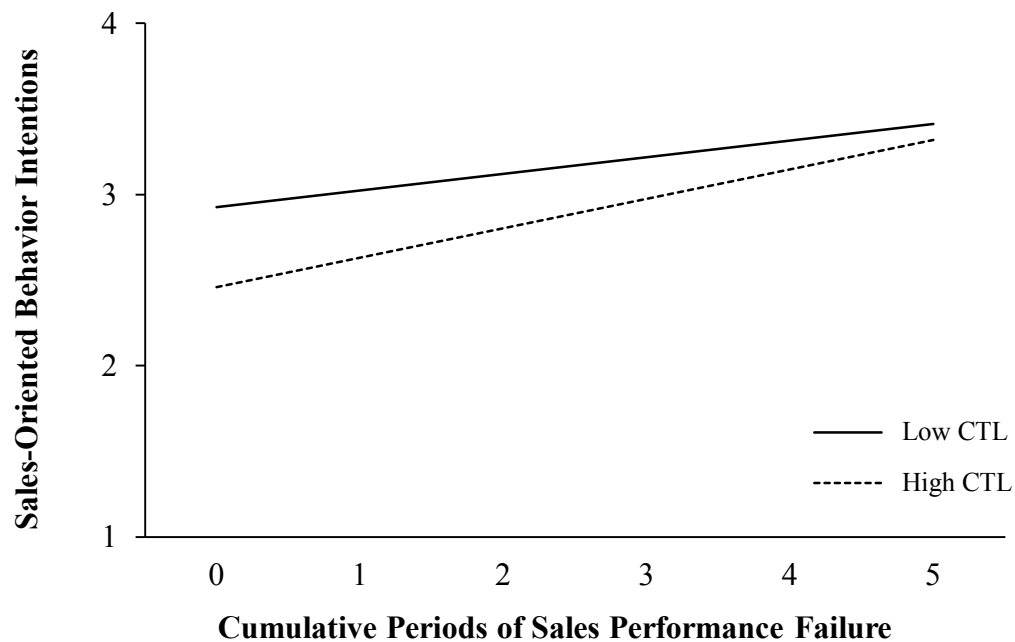
\*\*\*  $p < .001$ .

Notes: Dependent variable = sales-oriented behavior intentions. The change in chi-square calculations for Models 1 and 2 compare their respective fits to those of unreported models that include all of their coefficients except for the ones of interest (i.e., cumulative periods of sales performance failure for Model 1 and cumulative periods of sales performance failure x core transformational leadership for Model 2).

associated with sales-oriented behavior intentions initially, but for this effect to diminish as periods of sales performance failure accumulated. We examined whether this expected effect was present in the data by plotting the interaction at high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of core transformational leadership. Figure 1.2 presents this visual representation. Indeed, the hypothesized relationship is apparent in the figure, providing further support for H<sub>2</sub>.

### ***Discussion***

Our goals in Study 1 were twofold: (1) to examine whether cumulative periods of sales performance failure are associated with increased levels of sales-oriented behavior intentions and (2) to understand the role core transformational leadership plays in this process. Stepping back and assessing the results, we believe that sales managers can



Notes: CTL = core transformational leadership. Zero and five bound the x-axis because 90% of the data fall within this range.

**Figure 1.2: The Moderating Effect of Core Transformational Leadership**

alleviate the deleterious effect that unmet sales goals have on newly hired salespeople's sales-oriented behavior intentions initially by articulating a vision, leading by example, and fostering the acceptance of group goals. However, the efficacy of this leadership style appears to be fleeting when instances of sales performance failure accumulate. Therefore, two additional questions beg research attention: (1) what underlying mechanism governs salesperson learned helplessness? and (2) how can sales managers curb sales-oriented behavior intentions during the latter stages of sales performance failure?

In order to address these two questions, we explore newly hired salespeople's failure attributions and sales managers' error framing practices based on theoretical grounds derived from the learned helplessness paradigm (Seligman 1975). The next

section builds three additional hypotheses toward this end and the subsequent section describes a scenario-based experiment we designed to test the resulting conceptual framework (see Figure 1.1).

## **Hypotheses Development Revisited**

### ***The Mediating Role of Perceived Task Difficulty***

Attributional styles have long been considered central to the theory of learned helplessness (Abramson, Seligman, and Teasdale 1978; Seligman and Schulman 1986) and deemed promising in the study of salesperson behavior (Sujan 1986). Among them are controllability, globality, internality, and stability, though the latter is thought to be the dimension that is most aligned with the learned helplessness paradigm (Sujan 1999). According to Heider's (1958) original schema, stability represents the degree to which a cause is believed to be recurrent or long-lived over time, and perceived task difficulty is a stable cause of failure. In turn, perceived task difficulty in our setting represents the degree to which sales performance failure is believed to be recurrent or long-lived over time due to stable situational deficiencies (e.g., a low-traffic store location or an unresponsive customer base).

We adopt this framework and hypothesize that newly hired salespeople are likely to succumb to feelings of defeatism after they encounter multiple instances of missed sales goals. That is, as instances of sales performance failure accumulate, we expect newly hired salespeople to attribute their historically poor results in their new role to the perceived difficulty of the task at hand. For instance, it is unlikely that the newly hired salespeople in our field study believed that selling mattresses was unattainable in their particular store locations or during their particular shifts after one or two failed attempts

to meet their sales goals. However, as instances of sales performance failure accumulated, they likely felt increasingly disadvantaged with regards to their selling situation (e.g., store location or customer base). We expect this stable failure attribution to increase newly hired salespeople's sales-oriented behavior intentions. According to learned helplessness, the more new hires perceive sales goals to be destined for failure due to circumstance, the more likely they are to behave helplessly (Sujan 1999). Based on the above logic, we arrive at the following mediation hypothesis:

*H3: Perceived task difficulty mediates the relationship between cumulative periods of sales performance failure and newly hired salespeople's sales-oriented behavior intentions.*

### ***The Moderating Role of Error Management***

Until now, we have focused on the moderating role of core transformational leadership and explicated its limitations in failure-prone environments. Next, we propose that encouraging new hires to make errors during their interactions with customers overcomes these limitations. A form of leadership that captures this notion is error management, which involves the explicit encouragement of errors due to the feedback they provide novices (Keith and Frese 2008). Importantly, whereas sales forces are known for their short-term orientation (Homburg and Jensen 2007), error management deemphasizes short-term performance in favor of active learning (Bell and Kozlowski 2008).

This atypical focus can be contrasted with leadership styles that promote a “guided and error-free learning environment” (Keith and Frese 2008, p. 59). For example, it can be argued that articulating a vision, leading by example, and fostering the

acceptance of group goals intend to help followers avoid errors by way of providing the direction, desired model, and coworker support needed to succeed. As alluded to previously, the problem with these styles of leadership is that errors tend to be “associated with stress, frustration, and increased perceptions of learned helplessness” (Gully et al. 2002, p. 143) when they occur.

In response, an impressive body of research has developed that supports the efficacy of error management (Keith and Frese 2008). In these studies, error management is defined as a training method that provides minimal guidance, deemphasizes short-term performance, promotes exploratory behavior, and, ultimately, frames errors as natural by-products of exploration that are encouraged and instrumental to learning (Bell and Kozlowski 2008). In addition, a relevant finding in this literature is that framing errors positively increases learner-controlled practice difficulty (Hughes et al. 2013).

Linking this finding to our research, we expect newly hired salespeople to be more likely to actively attempt to satisfy customers’ needs when errors are encouraged. This selling approach is more difficult to apply than one that relies on quick, suggestive sales, but we believe it will be adopted more frequently in response to error management because short-term performance is deemphasized when errors are encouraged. Essentially, error management reduces the shock associated with sales performance failure (drawing reference to Overmier and Seligman’s original experiments with dogs). In contrast, when errors are discouraged, sales managers convey that sales goals should be reached and that errors should be avoided, which creates a setting that is conducive to learned helplessness. Therefore, we expect the salesperson learned helplessness process

to begin when errors are discouraged (but not when errors are encouraged), which leads to the following hypothesis:

*H4: Error management moderates the relationship between cumulative periods of sales performance failure and newly hired salespeople's sales-oriented behavior intentions in such a way that its effect strengthens as cumulative periods of sales performance failure increase.*

### ***The Moderating Roles of Core Transformational Leadership and Error Management***

So far, we have conceptualized core transformational leadership as a leadership style that aims to help newly hired salespeople avoid errors and error management as a leadership style that advocates the beneficial role errors play in learning. The former suggests that novices should be “spared the costs and pain of faulty effort” (Bandura 1986, p. 47), whereas the latter holds that “errors have an informative function for the learner” (Keith and Frese 2008, p. 59). Next, we hypothesize that these leadership styles act as complements when applied in unison, such that core transformational leadership's efficacy should be restored during late-stage sales performance failure when it is applied in environments that encourage errors.

Ultimately, core transformational leadership is likely to complement error management because it provides direction, demonstration, and support, facets that error management lacks (Bell and Kozlowski 2008). Further, error management creates an environment where newly hired salespeople can use this guidance as a resource, since it alleviates their concerns about short-term performance to a certain degree. Therefore, when instances of sales performance failure have accumulated, this guidance is likely to help newly hired salespeople use exploratory behaviors during their interactions with



customers. In turn, it should further thwart the salesperson learned helplessness process, leading us to hypothesize the following:

*H5: During late-stage sales performance failure, core transformational leadership has a reducing effect on newly hired salespeople's sales-oriented behavior intentions when errors are encouraged.*

## Study 2

As a test of our entire conceptual framework (see Figure 1.1), we conducted an experiment with participants from the online labor system MTurk (cf. Goodman, Cryder, and Cheema 2012). This experiment represents a 2 (sales performance failure: early-stage/late-stage) x 2 (core transformational leadership: low/high) x 3 (error management: avoid/encourage/control) between-subjects factorial design with random assignment. The context we chose to investigate for this test is business-to-business insurance sales. Importantly, this setting is distinct from the retail furniture industry and outside the realm of business-to-consumer sales, which was the testing ground for Study 1.

For this experiment, we aimed to recruit 720 participants (60 observations per cell) with one-dollar inducements. After speaking with a sales director in the insurance industry, we discovered that insurance companies often target individuals who are currently employed in full-time, non-sales positions as new hires. Many of these individuals, despite being well qualified, are burnt out in their current positions and interested in the variable component of pay in insurance sales. Accordingly, since these individuals are of practical interest to the industry, we limited participation in our study

to clerical staff, factory workers, teachers, and the like. Then, based on this screening criterion, we were able to collect 635 usable responses.

### ***Experimental Materials and Measures***

Our MTurk description stated that faculty members in the business schools of two public universities in the United States were conducting research on behalf of an insurance company. The objective of the market research was ostensibly to understand how new insurance agents are likely to behave during the company's launch into the North American market. Further, we stated that although we disguised the name of the company in the survey to avoid contaminating the results, the information provided is factual. These measures were taken in order to increase the mundane, experimental, and psychological realism of the scenario (Wilson, Aronson, and Carlsmith 2010). Albeit imperfect, we are confident in the external validity of our experimental design, and we believe the realism of our scenario is comparable to that of related applications in the marketing literature (e.g., Ganesan et al. 2010).

For the purposes of our experiment, participants were asked to imagine they made the decision to join the focal insurance company's sales force on a full-time basis and to imagine their initial goal was to make at least as much money per month in their new position as they currently make in their non-sales position. Subsequently, they were shown four passages related to their new employment situation in sequence (see Appendix B). While the first passage exposed all participants to the same general description of the insurance company, the second passage exposed participants to either a low or a high version of a core transformational leadership script. This script was

developed based on MacKenzie, Podsakoff, and Rich (2001), drawing largely from the practical examples of core transformational leadership these authors highlight (p. 130).

In the third passage, participants received hypothetical sales performance feedback for a certain number of months. That is, they were exposed to either early- or late-stage sales performance failure. In order to remain consistent with our field study, we defined these stages as one period and five periods of sales performance failure, respectively. Then, in either case, participants were asked to indicate the degree to which they attributed their failure to perceived task difficulty with a three-item measure adapted from Dixon, Spiro, and Jamil (2001). For a full list of the scale items used in Study 2, see Appendix C.

In the fourth passage, participants were offered advice from their sales manager before they proceeded to sell in the upcoming month. The content of this advice amounted to the error management manipulation, which we adapted from Hughes et al. (2013). Therein, we positioned the process of making errors during customer interactions as being negative (error avoidance condition), positive (error encouragement condition), or neutral (control condition). Finally, following this fourth passage, participants were asked to indicate their likelihood of engaging in sales-oriented behaviors during their next month on the job. The company description in the first passage was crafted to include a popular product (i.e., dental insurance); with this inclusion, our measurement items from Study 1 could be directly adapted to this experimental setting.

Our manipulation checks indicate that we successfully manipulated low and high core transformational leadership, early- and late-stage sales performance failure, as well as error avoidance and error encouragement (for details related to these tests, see

Appendix D). In addition, based on the results of a post-hoc check, we are confident that participants deemed our experiment to be realistic ( $M = 5.47$  out of 7 for the question “How realistic was the situation described in the four passages at the beginning of this survey?”). These participants are predominantly female (57%), with an average age of 33 years old. In line with the scenario depicted in the experiment, we limited participation to residents of the United States. The most frequent employment categories these participants came from are teaching (28%), manufacturing (16%), and information technology (7%).

### ***Analytical Procedures***

*Measurement model.* Identical to our approach in Study 1, we assessed the factor structure and validity of the latent variables measured in this experiment (i.e., perceived task difficulty and sales-oriented behavior intentions) through a confirmatory factor analysis (Gerbing and Anderson 1988). Here, the constructs were represented as separate, reflective factors of their respective scale items. The resulting model demonstrated excellent fit to the data ( $\chi^2 = 4.5$ , d.f. = 8, GFI = 1.00, CFI = 1.00, RMSEA = .00). The data also passed Fornell and Larcker’s (1981) tests, demonstrating convergent and discriminant validity. Table 1.3 displays descriptive statistics, intercorrelations, as well as reliabilities and validity estimates where applicable for the variables used in Study 2.

*Methodological approach.* In order to analyze this experiment’s data and to test our conceptual framework (Figure 1.1), we estimated an indirect effects model with bootstrapping methods (Hayes 2013; Zhao, Lynch, and Chen 2010). Operationally, we followed a stepwise, hierarchical linear regression approach for hypotheses testing.

**Table 1.3: Intercorrelations, Descriptive Statistics, Reliabilities, and Validity****Estimates for Study 2**

<b>Variables</b>		1	2	3	4	5
1. Sales Performance Failure						
2. Perceived Task Difficulty		.56*				
3. Core Transformational Leadership		-.03	.01			
4. Error Management		.02	.06	.00		
5. Sales-Oriented Behavior Intentions		.14*	.22*	-.09*	-.34*	
<b>Descriptive Statistics</b>	Means	.49	4.23	.50	.00	3.06
	Standard Deviations	.50	1.20	.50	.82	1.52
<b>Reliability &amp; Validity</b>	Cronbach Alphas	-	.87	-	-	.89
<b>Estimates</b>	Composite Reliabilities	-	.87	-	-	.90
	Average Variance Extracted Values	-	.68	-	-	.75

\*  $p < .05$ .

Notes: Early-stage (late-stage) sales performance failure is coded as zero (one). Low (high) core transformational leadership is coded as zero (one). Error management is coded as negative one for the error avoidance condition, zero for the control condition, and one for the error encouragement condition. Reliability and validity estimates do not apply to variables that are manipulated (sales performance failure, core transformational leadership, and error management).  $n = 635$ .

In Table 1.4, where we report our results for Study 2, unstandardized path coefficients are presented in Models 1 through 5, with each model testing a separate hypothesis.

### ***Hypotheses Testing***

The first two models of Table 1.4 report results that are substantively similar to those found in Study 1. Specifically, in support of  $H_1$ , participants in the late-stage sales performance failure conditions exhibited greater levels of sales-oriented behavior intentions than those in the early-stage conditions (Model 1,  $\beta = .425$ ,  $p < .001$ ). Further, the interaction effect of sales performance failure and core transformational leadership is significant and positive (Model 2,  $\beta = .617$ ,  $p < .01$ ), supporting  $H_2$  (see also Figure 1.3a for a graphical depiction of this hypothesis). Taken together, these results reaffirm that greater instances of sales performance failure are associated with heightened intentions to

engage in sales-oriented behaviors and that core transformational leadership alleviates this effect to a certain degree during early stages (but not during late stages) of sales performance failure.

**Table 1.4: Estimation Results for Study 2**

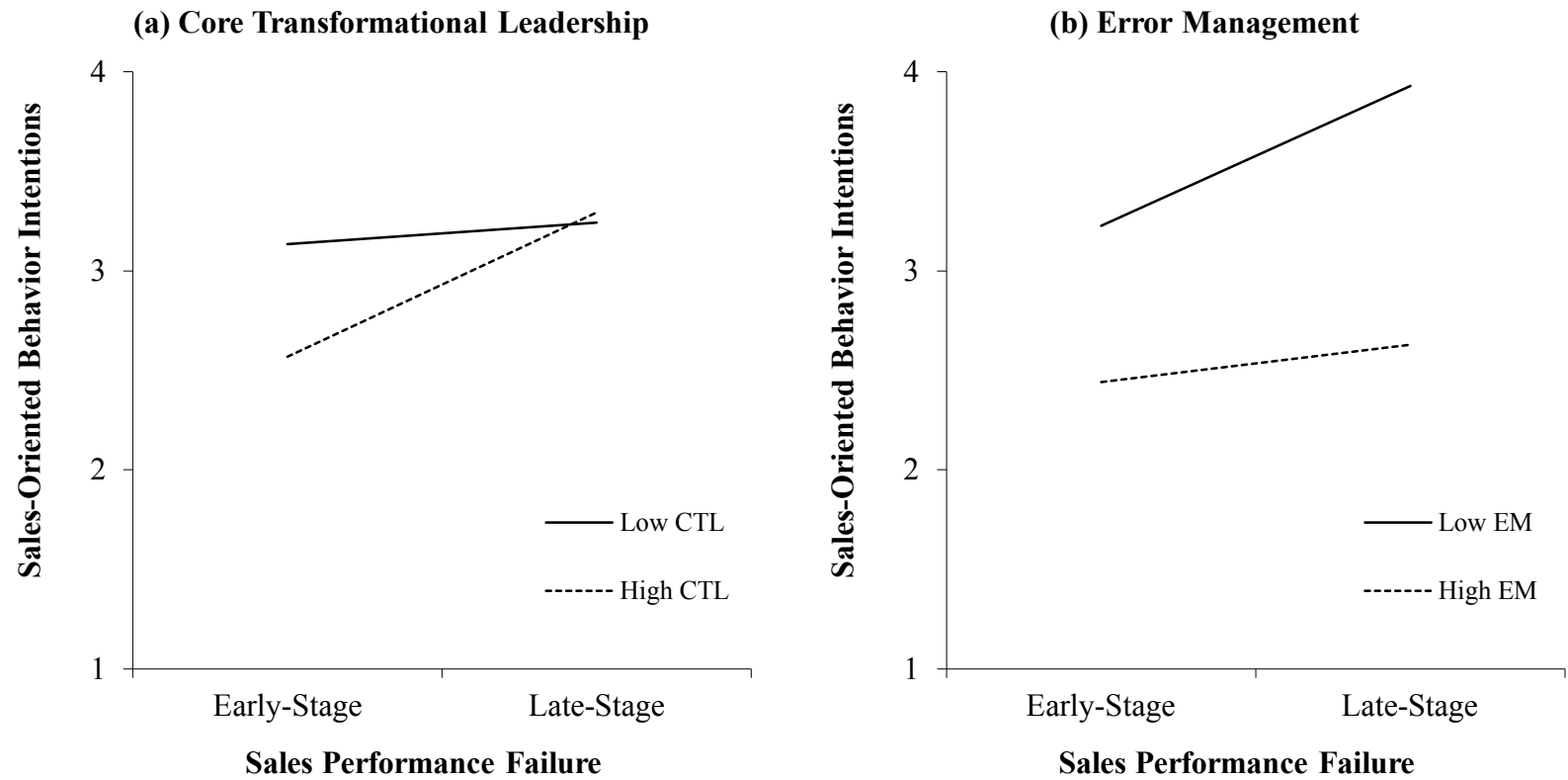
	Model 1	Model 2	Model 3	Model 4	Model 5
	$\beta$ (S.E.)	$\beta$ (S.E.)	$\beta$ (S.E.)	$\beta$ (S.E.)	$\beta$ (S.E.)
<i>Dependent Variable: Perceived Task Difficulty</i>					
Intercept			-.661*** (.056)		
Sales Performance Failure (SPF)			1.350*** (.079)		
<i>Dependent Variable: Sales-Oriented Behavior Intentions</i>					
Intercept	2.846*** (.084)	3.134*** (.120)	3.017*** (.092)	2.838*** (.079)	3.108*** (.111)
Sales Performance Failure	.425*** (.120)	.109*** (.168)	.076 (.142)	.446 (.112)	.155 (.155)
Perceived Task Difficulty			.259*** (.059)		
Core Transformational Leadership (CTL)		-.559* (.167)			-.526** (.154)
Error Management (EM)				-.483*** (.096)	-.502*** (.136)
SPF x CTL		.617** (.238)			.547* (.220)
SPF x EM				-.317* (.137)	.051 (.188)
CTL x EM					.064 (.189)
SPF x CTL x EM					-.846** (.271)
R <sup>2</sup> adjusted	.02	.03	.05	.14	.17
$\Delta R^2$		6.74(1)***		5.34(1)*	9.78(1)**

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

Notes: Model fit statistics are shown for the models predicting sales-oriented behavior intentions. The change in R-squared calculations for the interaction models compare their respective fits to those of unreported models that include all of their coefficients except for the ones of interest (i.e., cumulative periods of sales performance failure x core transformational leadership for Model 2, cumulative periods of sales performance failure x error management for Model 4, and cumulative periods of sales performance failure x core transformational leadership x error management for Model 5).



Notes: CTL = core transformational leadership. EM = error management. The low and high error management slopes approximate the error avoidance and error encouragement conditions, respectively.

**Figure 1.3: The Moderating Effects of Core Transformational Leadership and Error Management (Two-Way Interactions)**

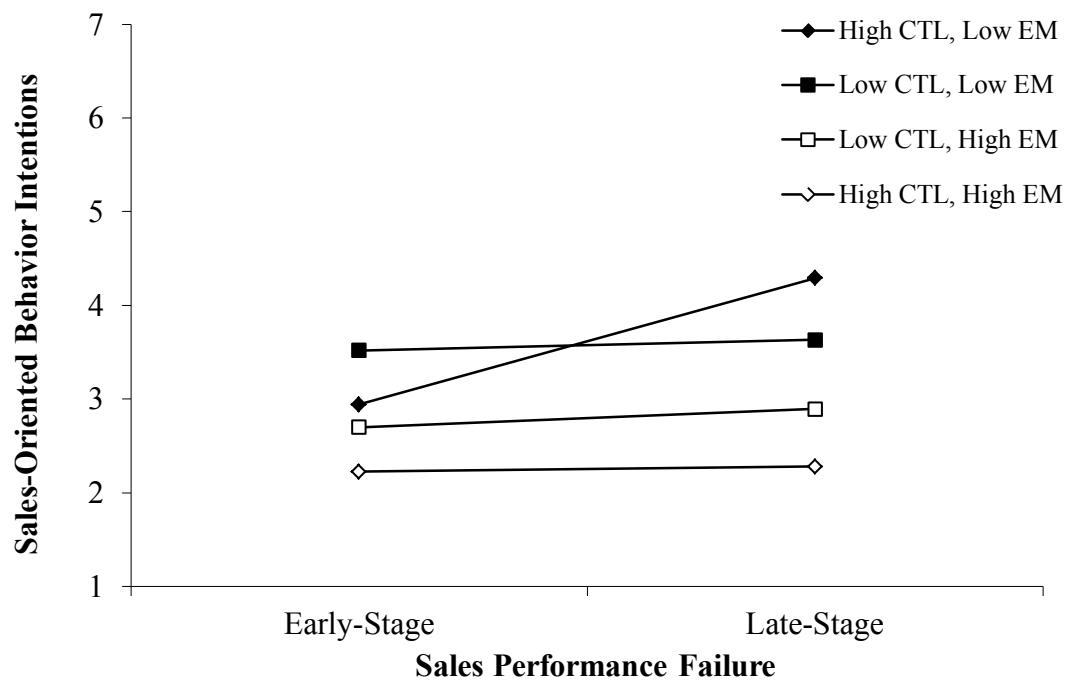
Moving to Model 3, we expected perceived task difficulty to mediate the relationship between sales performance failure and sales-oriented behavior intentions. As suggested by Preacher, Rucker, and Hayes (2007), we focus on the indirect effect in this model, rather than the individual estimates shown in Model 3. Accordingly, we found support for H<sub>3</sub> since the indirect effect through perceived task difficulty is positive and differs significantly from zero (total indirect effect = .349, S.E. = .077; 95% CI: [.191 – .496]).

Finally, Model 4 tests the moderating role of error management and Model 5 tests the three-way interaction effect of core transformational leadership and error management. From H<sub>4</sub>, we expected the salesperson learned helplessness process to begin in the error avoidance conditions, but not in the error encouragement conditions. In support of this hypothesis, the interaction term between sales performance failure and error management is negative and significant (Model 4,  $\beta = -.317, p < .05$ ). Further, Figure 1.3b visually shows that the learned helplessness process was thwarted in the error encouragement conditions, but not in the error avoidance conditions.

Then, from H<sub>5</sub>, we expected core transformational leadership and error management to act as complements during late-stages of sales performance failure and, therefore, to lessen participants' sales-oriented behavior intentions. Since the three-way interaction in Model 5 is negative and significant ( $\beta = -.846, p < .01$ ), we plotted it in Figure 1.4. In this visual depiction, the right-hand side of the graph shows that core transformational leadership reduced participants' sales-oriented behavior intentions when errors were framed positively, supporting H<sub>5</sub>. We then further examined this effect in a post-hoc manner by comparing the mean differences of our conditions using Tukey's



honestly significant differences test. Of interest, core transformational leadership only led to a significant decrease in sales-oriented behavior intentions during late-stage sales performance failure when errors were encouraged (mean difference =  $-.930, p < .05$ ). In all other relevant situations (i.e., error avoidance and the control condition), sales-oriented behavior intentions did not significantly differ across the two core transformational leadership conditions.



Notes: CTL = core transformational leadership. EM = error management. The low and high error management slopes approximate the error avoidance and error encouragement conditions, respectively.

**Figure 1.4: The Moderating Effects of Core Transformational Leadership and Error Management (Three-Way Interaction)**

### *Discussion*

These results provide greater support for those found in Study 1 and extend them in two interesting ways. First, in line with the learned helplessness paradigm, perceived task difficulty was found to mediate the relationship between sales performance failure

and sales-oriented behavior intentions. Second, error management was found to be a managerial approach that sales managers can use to restore the efficacy of core transformational leadership during the sales force socialization process. Importantly, both support a learned helplessness perspective of the sales profession and the latter offers a viable approach for sales managers interested in lessening newly hired salespeople's sales-oriented behaviors. We discuss the contributions we intend to make with this essay in the following section as well as its limitations and fruitful areas for future research.

### **General Discussion**

The theory of learned helplessness proposes a sobering thought for the sales profession: newly hired salespeople are likely to adopt sales-oriented behaviors during the sales force socialization process due to the failure-prone nature of sales jobs. Further, this perspective provides a possible explanation for the behavior of salespeople in many industries, which has led to the sales profession's poor reputation in the public (Gallup 2012). In this essay, we aimed to study this phenomenon in the field during the sales force socialization process of a retail furniture chain and in a scenario-based experiment involving the description of a real world business-to-business insurance company.

The results suggest that cumulative periods of sales performance failure are associated with increased sales-oriented behavior intentions. In addition, core transformational leadership, a leadership style that is widely researched in the sales management literature (e.g., MacKenzie, Podsakoff, and Rich 2001; Schwepker and Good 2010), was found to be of limited use as periods of sales performance failure accumulated. Evidently, when newly hired salespeople's attributions about the causes of their sales performance failure are stable in nature, articulating a vision, leading by

example, and fostering the acceptance of group goals is ineffective on its own. We find that a more efficacious approach involves pairing this “error-free learning” style of leadership with error management (Keith and Frese 2008), which communicates to salespeople that making errors during their interactions with customers is positive and encouraged.

### ***Theoretical Implications***

This study contributes to the sales and learned helplessness literatures in four important ways. First, the extant literature bridging these two areas of study has focused on the notion that pessimism potentiates acts of helplessness (Anderson 1983; Schulman 1999; Seligman and Schulman 1986). We add a longitudinal perspective to this body of research that demonstrates how sales performance failure in itself contributes to salesperson helplessness over time. Specifically, the results of this essay provide support for Sujan (1999)’s contention that the stability of salespeople’s failure attributions underlies salesperson helplessness. Related to this point, the sales literature to date offers rich theoretical insights regarding salespeople’s attributional and behavioral responses to failure (e.g., Dixon and Schertzer 2005; Dixon, Spiro, and Forbes 2003; Dixon, Spiro, and Jamil 2001), but it lacks longitudinal studies. Because we diverged from cross-sectional research in this essay, we believe our work addresses this gap in the literature.

Second, this essay derives insights from a large-scale empirical investigation of a sales force’s socialization process. Dubinsky et al. (1986) included the following statement in the abstract of their foundational article (p. 192): “Successfully assimilating salespeople into an organization is a critical responsibility of sales managers, but little published research has explored this topic.” Unfortunately, this statement still holds true

today, nearly three decades later. We orchestrated a six-month data collection effort involving a large cohort of newly hired salespeople in a furniture retailer to overcome this shortcoming in the literature and to examine our hypotheses in a temporal manner.

Third, we demonstrate that core transformational leadership is potentially ill suited for the sales force socialization process. This contribution adds to the existing literature, which has identified the performance benefits of transformational leadership (MacKenzie, Podsakoff, and Rich 2001), but has not examined its application with newly hired salespeople. Similarly, we offer experimental evidence that supports the use of error management to leverage core transformational leadership in failure-prone circumstances. This perspective introduces the study of error management, which has largely been examined in the information technology and management domains (Keith and Frese 2008), to the sales literature.

Fourth, focusing our study on sales-oriented behaviors contributes to the body of work that has followed the SOCO scale (Saxe and Weitz 1982). Much of this research has focused on employees' customer orientation (Zablah et al. 2012); however, given the prevalence of sales-oriented behaviors in practice, directly examining their provision is an important endeavor. Further, in this respect, conceptualizing sales-oriented behaviors as a form of salesperson helplessness is a core contribution of this essay. Through advancing this perspective, we hope our work will bring the sales and learned helplessness literatures closer together as well as develop future insights in the area of sales performance failure.

### ***Managerial Implications***

We hope that sales managers will be able to extract at least three key insights from this research. First, our work demonstrates the importance of setting achievable sales goals. Sales organizations are notorious for being short-term oriented and driven by immediate results (Homburg and Jensen 2007). However, according to our results, problems associated with this practice arise when salespeople fall short of their sales goals, and missing target is commonplace in the sales profession (Ahearne et al. 2012). From our studies, one can see that salespeople are more likely to act in a manner that runs contrary to the marketing concept as instances of sales performance failure accumulate. Sales managers should work closely with their salespeople to set reasonable sales goals, and we advise them to revise such goals throughout the sales force socialization process based on new hires' performance records.

Second, sales managers can learn from our results that articulating a vision, leading by example, and fostering the acceptance of group goals have a fleeting effect as periods of sales performance failure accumulate. We suspect that many sales managers adopt a core transformational leadership approach based on its intuitive appeal. It seems universally advantageous to change "the values, goals, and aspirations of followers, so that they perform their work because it is consistent with their values" (Mackenzie, Podsakoff, and Rich 2001, p. 116). However, the stable failure attributions salespeople hold after they have missed multiple sales goals evidently counter the guided learning nature of such appeals. Our results suggest that an approach more suitable for the sales force socialization process is warranted.

In this sense, the approach we recommend to sales managers who oversee failure-prone environments combines error management with core transformational leadership. Newly hired salespeople need to know they are likely to make errors as they actively seek to uncover customers' needs. Whether it be asking the wrong questions or revealing themselves as novices because they do not have all the answers, such errors should be encouraged for developmental purposes. Further, missing sales goals during the sales force socialization process should be downplayed in favor of these developmental benefits. Our results suggest that salespeople are less likely to behave helplessly in pursuit of their sales goals by way of engaging in sales-oriented behaviors when this mindset is communicated to newly hired salespeople and core transformational leadership behaviors are performed.

### ***Limitations and Future Research Directions***

We consider the topic of sales performance failure to be a burgeoning research area with substantial practical relevance. While this essay studied the adoption of sales-oriented behaviors following sales performance failure, other forms of salesperson helplessness offer interesting avenues for future research as well. For instance, salespeople may acquiesce to customers' objections or avoid trial closes in response to cumulative periods of unmet sales goals. These forms of salesperson helplessness are likely to be more appropriate areas of study in sales jobs that do not tie monetary incentives to sales performance (i.e., straight salary positions). In any case, we recommend using the criteria set forth by Martinko and Gardner (1982) to determine whether a particular salesperson behavior should be considered an act of helplessness. That is, the behavior should be both passive and maladaptive.

In addition, we defined sales performance failure to be the lack of achieving self-defined sales goals in this research. Nevertheless, investigating salespeople's attributional and behavioral responses to missing sales targets that are set by organizations is a worthwhile extension. Salesperson failure could also be defined at a more granular level (e.g., down to the individual sales call level), and understanding how failure contributes to salesperson helplessness on a day-to-day basis is an area that deserves more attention.

Finally, although we found that core transformational leadership paired with error management curbs the adoption of sales-oriented behavior intentions, our research should be considered first insights in an important topic. Whether salesperson helplessness can be “unlearned” in organizations is still an open question (Martinko and Gardner 1982). Addressing this issue will require researchers to study the manipulation of managerial interventions after salesperson helplessness is already induced. We consider this research endeavor to be particularly attractive given the degree to which salesperson helplessness permeates the sales profession.

## Appendix A: Measures for Study 1

### ***Core Transformational Leadership***

(Adapted from MacKenzie et al. 2001; 1 = “Strongly Disagree” and 7 = “Strongly Agree” for scale end-points.)

Based on my exposure to my manager over the past two weeks, I believe he or she...

1. ...has a clear understanding of where we are going.
2. ...paints an interesting picture of the future for our group.
3. ...is always seeking new opportunities for the organization.
4. ...inspires others with his/her plan for the future.
5. ...is able to get others committed to his/her dream.
6. ...leads by “doing”, rather than simply “telling.”
7. ...provides a good model for me to follow.
8. ...leads by example.
9. ...fosters collaboration among the organization’s employees.
10. ...encourages the organization’s employees to be team players.
11. ...gets the organization’s employees to work together for the same goal.
12. ...develops a team attitude and spirit among employees.

### ***Sales-Oriented Behavior Intentions***

(Adapted from Saxe and Weitz 1982; 1 = “Never” and 7 = “Always” for scale end-points.)

In the next two weeks, how frequently do you intend to...

1. ...emphasize [company name’s] most popular products rather than spend a lot of time looking for the exact product that meets a customer’s unique needs?
2. ...sell customers more expensive products even if they don’t completely match their expressed preferences?
3. ...say what a customer wants to hear, even if it’s not 100% accurate?



## Appendix B: Experimental Materials for Study 2

Participants identified their current state of residence in the United States as well as their sales goal prior to reading the four passages below. These inputs were inserted as piped text into the experiment where |State| and |sales goal| appear. The months May – September are used in the passages below because participants were asked to imagine that their start date for the employment situation discussed in the experiment was May 1.

### *Company Description (Passage 1)*

Since 1946, insurance agents have sold First Response Insurance (FRI) products to more than 45 million people in Europe and Asia. These products include disability insurance, dental insurance, and critical illness insurance, with FRI's dental insurance being its most popular product on the market. Many of FRI's current agents are former coaches, firefighters, production line workers, and teachers who initially came to FRI looking to supplement their incomes and engage in a career that puts them in control. These agents now collectively make up FRI's sales force, which operates on a straight-commission basis (FRI agents earn 20% of every policy they sell).

First Response Insurance recently gained government approval to extend its operations into North America. The company has organized a network of State Agent Supervisors (SASs) in the United States that will oversee new insurance agents during the North American launch. These SASs will earn commissions from their own policy sales (at a rate of 20%) and override commissions from the sales made by agents they oversee in their respective states (at a rate of 2%). Their primary responsibilities will be to recruit and train new insurance agents, though they may still choose to sell FRI products to customers.

The core responsibility of FRI agents is to sell insurance policies in the business-to-business (B2B) market, which differs from the more common business-to-consumer (B2C) market. In B2C markets, companies such as Allstate create awareness for their products and communicate with consumers primarily through advertising and social media. In B2B markets, insurance agents act as the primary mode of communication between insurance companies and their business customers. Typically, FRI agents call on human resource professionals in businesses, as they aim to influence these individuals to include FRI products in the menu of insurance options that are made available to their employees. Agents then earn commissions when employees in these businesses select FRI for their insurance needs.

### *Low Core Transformational Leadership (Passage 2a)*

Welcome to FRI! I have to say that the state of |State| has many businesses that you can call on. In fact, the reality is that you can enter any company in |State| and achieve your goals on your own. During this initial point of contact with you, I'd like to bring two facts about working in the insurance industry as an FRI agent to your attention.

First, I believe in the power of recruitment. From day one, I will be focused on recruiting new agents to join FRI, not on selling policies alongside you on the streets. In fact, perhaps the most effective way I plan to enlarge FRI's reach is through recruitment. This means I will not be able to show you the most effective way to get results, so always remember the job of selling is yours and yours alone.

Second, in the insurance business, a lone wolf succeeds – that is, individuals succeed. Not every FRI agent in |State| needs to actively sell policies, just a few hotshots. If one agent falls short of his or her goals, another agent won't be dragged down. Furthermore, I don't expect the strongest agents to help energize the not-so-strong. You probably want to be part of something on your own and that's exactly what you can do as an FRI agent. There will be no better feeling than being out in the field on your own. Go get started!

### ***High Core Transformational Leadership (Passage 2b)***

Welcome to our team! I have to say that I foresee many opportunities available to us in the |State| market. My dream is for you, your fellow FRI agents of |State|, and I to enter companies across this state of ours and achieve our goals as a team. During this initial point of contact with you, I'd like to share my vision of how I believe we can succeed within the insurance industry as a team.

First, I believe in the power of leading by example. From day one, I will balance my time between (a) recruiting new agents to join our team and (b) selling policies alongside you on the streets. In fact, perhaps the most effective way I plan to inspire our team is through demonstration. This means I will be able to show our team the most effective way to get results, so always remember the job of selling is ours and not yours alone.

Second, in the insurance business, a lone wolf does not succeed – instead, teams succeed. We need our whole unit to actively sell policies, not just a few hotshots. If one agent falls short of his or her goals, our whole team will be dragged down. Furthermore, I expect the strongest agents in our group to help energize the not-so-strong. You probably want to be part of something larger than yourself and that's exactly what I envision building for our team. There will be no better feeling than being a member of our collaborative effort. Let's get started!

### ***Early-Stage Sales Performance Failure (Passage 3a)***

Now please fast forward one month and suppose you fell short of earning |sales goal|. That is, you missed your monthly income goal your first month as an FRI agent since you did not earn |sales goal| in May. This means you failed to sell enough insurance to earn commissions commensurate with your previous occupation's monthly salary. Nevertheless, you should consider this performance record a relatively small number of failed monthly income goals, seeing as it only represents one failed attempt to earn |sales goal| a month.

### ***Late-Stage Sales Performance Failure (Passage 3b)***

Now please fast forward five months and suppose you fell short of earning |sales goal| every month. That is, you missed your monthly income goal your first five months as an FRI agent since you did not earn |sales goal| in May, June, July, August, or September. This means you failed to sell enough insurance to earn commissions commensurate with your previous occupation's monthly salary five months in a row. You should consider this performance record a relatively large number of failed monthly income goals, seeing as it represents a consistent pattern of failed attempts to earn |sales goal| a month.

***Error Management Avoidance Condition (Passage 4a)***

While actively discovering customers' needs, it is likely that you will make errors. In fact, many of these errors will result in you failing to hit your monthly income goals. Try not to let this happen. Avoiding these errors and not missing your monthly income goal is a good thing! Your initial months with FRI are meant for you to improve as an insurance agent, and these mistakes are a negative part of this process!

Avoid making these mistakes and falling short of your monthly income goals during your developmental months with FRI. It's helpful to avoid these errors early in your career when you're interacting with potential customers. Likewise, it's good to avoid these errors and to avoid falling short of your monthly income goals while visiting new businesses, as well as existing clients. Avoiding these errors while you're in front of customers is the best way to ultimately get better in the sales profession.

Remember, in the next month, avoid making these errors and falling short of your income goal. In the long run, the more you avoid making these mistakes and avoid falling short of your monthly income goals, the better you will be as an FRI agent by the end of your onboarding experience.

***Error Management Encouragement Condition (Passage 4b)***

While actively discovering customers' needs, it is likely that you will make errors. In fact, many of these errors will result in you failing to hit your monthly income goals. Do not worry when this happens. If you make these errors and miss your monthly income goal, that's a good thing! Your initial months with FRI are meant for you to improve as an insurance agent, and these mistakes are a positive part of this process!

Be willing to make these mistakes and fall short of your monthly income goals during your developmental months with FRI. It's helpful to make these errors early in your career when you're interacting with potential customers. Likewise, it's good to make these errors and to fall short of your monthly income goals while visiting new businesses, as well as existing clients. Making these errors while you're in front of customers is the best way to ultimately get better in the sales profession.

Remember, in the next month, be willing to make these errors and fall short of your income goal. In the long run, the more willing you are to make these mistakes and fall short of your monthly income goals, the better you will be as an FRI agent by the end of your onboarding experience.

***Error Management Control Condition (Passage 4c)***

While actively discovering customers' needs, keep in mind that your initial months are meant for you to improve as an insurance agent.

During your developmental months with FRI, interact with potential customers. Likewise, visit new businesses, as well as existing clients. Being in front of customers is the best way to ultimately get better in the sales profession.

Remember, in the next month, the more you see customers the better you will be as an FRI agent by the end of your onboarding experience.

## Appendix C: Measures for Study 2

### ***Perceived Task Difficulty***

(Adapted from Dixon, Spiro, and Jamil 2001; 1 = “Strongly Disagree” and 7 = “Strongly Agree” for scale end-points. That which appears in square brackets was only visible to participants in the late-stage sales performance failure conditions.)

If I were in this situation, I would reflect on this performance record and think my failure[s] in May[, June, July, August, and September] is [are] likely attributed to...

1. ...the fact that FRI insurance sales calls are difficult for anyone who tries to sell FRI products.
2. ...the fact that anyone would find selling FRI products in North America to be a tough selling situation.
3. ...the fact that selling FRI products in North America is a difficult selling situation.

### ***Sales-Oriented Behavior Intentions***

(Adapted from Saxe and Weitz 1982; 1 = “Never” and 7 = “Always” for scale end-points.)

Moving forward, imagine that you are about to embark on your next month on the job. Over the course of the next month, how frequently do you think you will...

1. ...emphasize dental insurance to human resource managers (since it is FRI's most popular product) rather than spend a lot of time determining the exact product that meets their firms' unique needs?
2. ...sell more expensive insurance options to human resource managers even if it doesn't completely match the expressed preferences of their employees?
3. ...say what human resource managers want to hear, even if it's not 100% accurate?

## Appendix D: Manipulation Checks for Study 2

### ***Manipulation Check for Core Transformational Leadership***

(Adapted from MacKenzie, Podsakoff, and Rich 2001; 1 = “Strongly Disagree” and 7 = “Strongly Agree” for scale end-points.)

Based on the above welcoming message from my State Agent Supervisor, I believe he or she...

1. ...has a clear understanding of where we are going.
2. ...paints an interesting picture of the future for our group.
3. ...appears to always be seeking new opportunities for the organization.
4. ...inspires others with his/her plan for the future.
5. ...will be able to get others committed to his/her dream.
6. ...will lead by “doing”, rather than simply “telling”.
7. ...will provide a good model for me to follow.
8. ...will lead by example.
9. ...will foster collaboration among the organization’s employees.
10. ...will encourage the organization’s employees to be team players.
11. ...wants FRI employees to work together for the same goal.
12. ...will develop a team attitude and spirit among employees.

### ***Manipulation Check for Sales Performance Failure***

(The text in square brackets was only visible to participants in the late-stage sales performance failure conditions.)

On a scale ranging from 1 (small) to 10 (large), please respond to the following statement.

1. I consider failing to meet my monthly income goal[s] in May[, June, July, August, and September] to be a relatively \_\_\_\_\_ number of failed monthly income goals.

### ***Manipulation Check for Error Management***

(Adapted from Hughes et al. 2013; 1 = “Strongly Disagree” and 7 = “Strongly Agree” for scale end-points.)

Based on the above statement from my State Agent Supervisor, I believe he or she...

1. ...encourages FRI agents in |State| to make errors.
2. ...encourages FRI agents in |State| not to make errors.

### ***Manipulation Check Results for Study 2***

The core transformational leadership, sales performance failure, and error management manipulations were successful. As we expected, participants in the high core transformational leadership conditions rated their manager to be more transformational than those in the low core transformational leadership conditions (6.04 vs. 3.39,  $t = 30.96$ ,  $p < .001$ ). In a similar fashion, participants in the late-stage sales performance failure conditions considered failing to meet their monthly income goals in

May, June, July, August, and September to be a larger number of failures than those in the early-stage sales performance failure conditions whose failure was limited to the month of May (8.64 vs. 2.87,  $t = 34.72$ ,  $p < .001$ ). Finally, participants in the error encouragement conditions perceived that their manager encouraged errors more than those in the error avoidance (5.39 vs. 1.40,  $t = 29.15$ ,  $p < .001$ ) and control conditions (5.39 vs. 3.49,  $t = 12.09$ ,  $p < .001$ ).

### List of References

- Abramson, Lyn Y., Martin E. Seligman, and John D. Teasdale (1978), "Learned Helplessness in Humans: Critique and Reformulation," *Journal of Abnormal Psychology*, 87 (1), 49-74.
- Ahearne, Michael, Jeffrey P. Boichuk, Craig J. Chapman, and Thomas J. Steenburgh (2012), "Earnings Management Practices in Sales and Strategic Accounts Survey Report," (accessed September 11, 2013), [available at <http://ssrn.com/abstract=2324325>].
- Ahearne, Michael, Son K. Lam, John E. Mathieu, and Willy Bolander (2010), "Why Are Some Salespeople Better at Adapting to Organizational Change?," *Journal of Marketing*, 74 (3), 65-79.
- Anderson, Craig A. (1983), "Motivational and Performance Deficits in Interpersonal Settings: The Effect of Attributional Style," *Journal of Personality and Social Psychology*, 45 (5), 1136-47.
- Bandura, Albert (1986), *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bell, Bradford S. and Steve W. J. Kozlowski (2008), "Active Learning: Effects of Core Training Design Elements on Self-Regulatory Processes, Learning, and Adaptability," *Journal of Applied Psychology*, 93 (2), 296-316.
- Brown, Timothy A. (2006), *Confirmatory Factor Analysis for Applied Research*. New York, NY: The Guilford Press.
- Camerer, Colin, Linda Babcock, George Loewenstein, and Richard Thaler (1997), "Labor Supply of New York City Cabdrivers: One Day at a Time," *Quarterly Journal of Economics*, 112 (2), 407-41.
- Cohen, Jacob, Patricia Cohen, Stephen G. West, and Leona S. Aiken (2002), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Mahwah, NJ: Erlbaum.
- Dixon, Andrea L. and Susan M. B. Schertzer (2005), "Bouncing Back: How Salesperson Optimism and Self-Efficacy Influence Attributions and Behaviors Following Failure," *Journal of Personal Selling and Sales Management*, 25 (4), 361-69.
- Dixon, Andrea L., Rosann L. Spiro, and Lukas P. Forbes (2003), "Attributions and Behavioral Intentions of Inexperienced Salespersons to Failure: An Empirical Investigation," *Journal of the Academy of Marketing Science*, 31 (4), 459-67.

- Dixon, Andrea L., Rosann L. Spiro, and Maqbul Jamil (2001), "Successful and Unsuccessful Sales Calls: Measuring Salesperson Attributions and Behavioral Intentions," *Journal of Marketing*, 65 (3), 64-78.
- Dubinsky, Alan J., Roy D. Howell, Thomas N. Ingram, and Danny N. Bellenger (1986), "Salesforce Socialization," *Journal of Marketing*, 50 (4), 192-207.
- Fornell, Claes and David F. Larcker (1981), "Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics," *Journal of Marketing Research*, 28 (3), 382-88.
- Frazier, Gary L., Elliot Maltz, Kersi D. Antia, and Aric Rindfleisch (2009), "Distributor Sharing of Strategic Information with Suppliers," *Journal of Marketing*, 73 (4), 31-43.
- Gallup (2012), "Honesty/Ethics in Professions," (accessed January 31, 2013), [available at [www.gallup.com/poll/1654/honesty-ethics-professions.aspx](http://www.gallup.com/poll/1654/honesty-ethics-professions.aspx)].
- Ganesan, Shankar, Steven P. Brown, Babu John Mariadoss, and Hillbun Ho (2010), "Buffering and Amplifying Effects of Relationship Commitment in Business-to-Business Relationships," *Journal of Marketing Research*, 47 (2), 361-73.
- Gerbing, David W. and James C. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," *Journal of Marketing Research*, 25 (2), 186-92.
- Goodman, Joseph K., Cynthia E. Cryder, and Amar Cheema (2012), "Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples," *Journal of Behavioral Decision Making*.
- Gully, Stanley M., Stephanie C. Payne, K. Lee Kiechel Koles, and Jon-Andrew K. Whiteman (2002), "The Impact of Error Training and Individual Differences on Training Outcomes: An Attribute-Treatment Interaction Perspective," *Journal of Applied Psychology*, 87 (1), 143-55.
- Hansen, John D. and Robert J. Riggle (2009), "Ethical Salesperson Behavior in Sales Relationships," *Journal of Personal Selling and Sales Management*, 29 (2), 151-66.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.
- Heider, Fritz (1958), *The Psychology of Interpersonal Relations*. New York, NY: Wiley.
- Homburg, Christian and Ove Jensen (2007), "The Thought Worlds of Marketing and Sales: Which Differences Make a Difference?," *Journal of Marketing*, 71 (3), 124-42.



- Homburg, Christian, Jan Wieseke, and Torsten Bornemann (2009), "Implementing the Marketing Concept at the Employee-Customer Interface: The Role of Customer Need Knowledge," *Journal of Marketing*, 73 (4), 64-81.
- Hughes, Michael G., Eric Anthony Day, Xiaoqian Wang, Matthew J. Schuelke, Matthew L. Arsenault, Lauren N. Harkrider, and Olivia D. Cooper (2013), "Learner-Controlled Practice Difficulty in the Training of a Complex Task: Cognitive and Motivational Mechanisms," *Journal of Applied Psychology*, 98 (1), 80-98.
- Keith, Nina and Michael Frese (2008), "Effectiveness of Error Management Training: A Meta-Analysis," *Journal of Applied Psychology*, 93 (1), 59-69.
- Lindell, Michael K. and David J. Whitney (2001), "Accounting for Common Method Variance in Cross-Sectional Research Designs," *Journal of Applied Psychology*, 86 (1), 114-21.
- Louis, Meryl Reis (1980), "Surprise and Sense Making: What Newcomers Experience in Entering Unfamiliar Organizational Settings," *Administrative Science Quarterly*, 25 (2), 226-51.
- MacKenzie, Scott B., Philip M. Podsakoff, and Gregory A. Rich (2001), "Transformational and Transactional Leadership and Salesperson Performance," *Journal of the Academy of Marketing Science*, 29 (2), 115-34.
- Martinko, Mark J. and William L. Gardner (1982), "Learned Helplessness: An Alternative Explanation for Performance Deficits," *Academy of Management Review*, 7 (2), 195-204.
- Meyer, John P., Natalie J. Allen, and Catherine A. Smith (1993), "Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization," *Journal of Applied Psychology*, 78 (4), 538-51.
- Overmier, J. Bruce and Martin E. Seligman (1967), "Effects of Inescapable Shock upon Subsequent Escape and Avoidance Responding," *Journal of Comparative and Physiological Psychology*, 63 (1), 28-33.
- Pacetta, Frank. (1994), *Don't Fire Them, Fire Them Up: A Maverick's Guide to Motivating Yourself and Your Team*. New York, NY: Simon and Schuster.
- Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nathan P. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88 (5), 879-903.
- Podsakoff, Philip M., Scott B. MacKenzie, Robert H. Moorman, and Richard Fetter (1990), "Transformational Leader Behaviors and their Effects on Followers' Trust in Leader, Satisfaction, and Organizational Citizenship Behaviors," *Leadership Quarterly*, 1 (2), 107-42.

- Preacher, Kristopher J., Derek D. Rucker, and Andrew F. Hayes (2007), "Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions," *Multivariate Behavioral Research*, 42 (1), 185-227.
- Raudenbush, Stephen W. and Anthony S. Bryk (2002), *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks: Sage Publications.
- Saxe, Robert and Barton A. Weitz (1982), "The SOCO Scale: A Measure of the Customer Orientation of Salespeople," *Journal of Marketing Research*, 19 (3), 343-51.
- Schulman, Peter (1999), "Applying Learned Optimism to Increase Sales Productivity," *Journal of Personal Selling and Sales Management*, 19 (1), 31-37.
- Schweper, Charles H. and David J. Good (2010), "Transformational Leadership and its Impact on Sales Force Moral Judgment," *Journal of Personal Selling and Sales Management*, 30 (4), 299-318.
- Seligman, Martin E. P. (1975), *Helplessness: On Depression, Development, and Death*. San Francisco, CA: W.H. Freeman.
- Seligman, Martin E. and Peter Schulman (1986), "Explanatory Style as a Predictor of Productivity and Quitting among Life Insurance Sales Agents," *Journal of Personality and Social Psychology*, 50 (4), 832-38.
- Siemsen, Enno, Aleda Roth, and Pedro Oliveira (2010), "Common Method Bias in Regression Models With Linear, Quadratic, and Interaction Effects," *Organizational Research Methods*, 13 (3), 456-76.
- Sujan, Harish (1999), "Extending the Learned Helplessness Paradigm: A Critique of Schulman's 'Learned Optimism'," *Journal of Personal Selling and Sales Management*, 19 (1), 39-42.
- (1986), "Smarter versus Harder: An Exploratory Attributional Analysis of Salespeople's Motivation," *Journal of Marketing Research*, 23 (1), 41-49.
- Wilson, Timothy D., Elliot Aronson, and Kevin Carlsmith (2010), "The Art of Laboratory Experimentation," in *Handbook of Social Psychology (5th ed.)*, Susan T. Fiske and Daniel T. Gilbert and Gardner Lindzey, eds. Hoboken, NJ: Wiley.
- Zablah, Alex R., George R. Franke, Tom J. Brown, and Darrell E. Bartholomew (2012), "How and When Does Customer Orientation Influence Frontline Employee Job Outcomes? A Meta-Analytic Evaluation," *Journal of Marketing*, 76 (3), 21-40.
- Zhao, Xinshu, John G. Lynch, Jr., and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis," *Journal of Consumer Research*, 37 (2), 197-206.

Zoltners, Andris A., P. K. Sinha, and Sally E. Lorimer (2011), "Is Your Sales Force Addicted To Incentives?," (accessed August 28, 2013), [available at [http://blogs.hbr.org/cs/2011/07/is\\_your\\_sales\\_force\\_addicted.html%5D](http://blogs.hbr.org/cs/2011/07/is_your_sales_force_addicted.html%5D)].

SOCIAL EFFECTS ON TURNOVER ACROSS DIFFERENT STAGES OF THE  
SALES FORCE SOCIALIZATION PROCESS

## Introduction

According to the *Bureau of Labor Statistics* (2013), 11% of workers in the United States are in sales and related occupations. This statistic makes sales the second largest industry in the U.S. economy, so it should be no surprise that U.S. companies spend over \$800 billion per year on sales forces (Zoltners, Sinha, and Lorimer 2013). However, this dollar amount could be reduced substantially if the industry was less fluid. Estimates suggest that more than 20% of workers in sales leave their companies each year (Darmon 2008; Oyer 1998), a turnover percentage that far exceeds the national average. Such exodus adds significantly to companies' bottom lines by way of recruiting and new hire training costs (Futrell and Parasuraman 1984). Since sales agents typically get paid for performance (e.g., by commission), they are relatively inexpensive to employ, but expensive to hire and train. This concept is analogous to the heuristic that acquiring new customers is costlier than retaining existing customers (Reichheld and Sasser 1990). Companies' top lines take a hit from sales force turnover as well, since missed sales opportunities can accumulate after agents leave their companies due to insufficient floor coverage in retail stores and vacant territories in field sales (Darmon 1990). It follows that sales force turnover hurts both bottom and top line results.

In turn, researchers have sought to predict sales force turnover so it can be remedied, with most inquiry thus far focused on individual-level predictors (see Table 1). A consistent finding from this research is that job satisfaction and organizational commitment are inversely related to agents' propensities to leave their companies (e.g., Brown and Peterson 1993; Futrell and Parasuraman 1984; Singh 1998). But research

**Table 2.1: A Representation Of Empirical Studies On Sales Force Turnover**

Authors	Year	Relevant Predictors	Criterion	Research Design	Analytic Technique
Futrell and Parasuraman	1984	JS and PERF	Propensity to leave	Cross-sectional	Regression
Lucas et al.	1987	JS	Turnover Duration	Lagged	Regression
Johnston et al.	1990	OC and PTL	Turnover	Lagged	Structural equation model
Sager	1991	JS and PTL	Turnover	Lagged	Discriminant analysis
Brown and Peterson	1993	JS, OC, and PERF	Propensity to leave	Cross-sectional	Meta-analysis
Tyagi and Wotruba	1993	JS and OC	Propensity to leave	Lagged	Cross-lagged correlation
MacKenzie et al.	1998	JS, OC, and PERF	Turnover	Lagged	Structural equation model
Singh	1998	JS and OC	Propensity to leave	Cross-sectional	Regression
Chandrashekar et al.	2000	PTL	Turnover Duration	Lagged	Hazard model
Alexandrov et al.	2007	JS and OC	Propensity to leave	Cross-sectional	Structural equation model
Tang et al.	2014	OC	Turnover	Lagged	Structural equation model

Notes: In column (3), JS = job satisfaction; PERF = performance; OC = organizational commitment; and PTL = propensity to leave. In column (4), “Propensity to leave” means the study’s criterion was an agent’s self-reported intention to turnover; “Turnover” means the study’s criterion was a dummy variable that indicated whether or not an agent had exited by the end of the study; “Turnover duration” means the study’s criterion was the length of time an agent stayed with a company before exiting. In column (5), “Cross-sectional” means the study analyzed data from a single point in time; and “Lagged” means the criterion data were collected sometime after the predictor data. In column (6), the primary analytic techniques used in the studies are identified. The table is not an exhaustive list of studies; rather, it is a representation of the research on sales force turnover that exists in the literature.

attention has waned in recent years and scholarship on sales force turnover has not advanced past these initial insights. More detrimental, this research has been critiqued (see Chandrashekar et al. 2000; Lucas et al. 1987; Sager 1991; Tyagi and Wotruba 1993) for its focus on agents' self-reported propensities to leave rather than actual turnover and its reliance on cross-sectional data. In this essay, we aim to answer the call for a "broadening of the traditional research focus to include... environmental determinants of salesforce [sic] turnover" (Lucas et al. 1987, p. 56) and to overcome the literature's criticisms by studying a unique, longitudinal dataset from a U.S. household durables retailer.

Specifically, we focus on the effects of peers (i.e., coworkers) and managers on sales force turnover over time. Such an extension accounts for interdependencies among agents' turnover decisions as well as the dynamic nature of sales force turnover. In contrast, previous research assumes that agents make turnover decisions independently and fails to examine the influence of predictors over the course of agents' tenures. Why might sales force turnover be an interdependent process and why might predictors vary over time? Social information processing theory holds that cues in our environments influence our perceptions, attitudes, and behaviors, depending on the relevance and salience of such cues, which is likely to vary temporally (Salancik and Pfeffer 1978).

The social cues we consider herein are the number, seniority, and performance of exiting peers, the gender and ethnic diversity of sales districts, and the core transformational leadership behaviors of managers (i.e., the degree to which managers articulate a vision, lead by example, and foster the acceptance of group goals; MacKenzie, Podsakoff, and Ahearne 1998). While sparse research in the management

literature supports the relationship between peer exits and employee turnover (e.g., Felps et al. 2009; Krackhardt and Porter 1986), many extensions exist that could advance the sales force turnover literature.

From a conceptual standpoint, the first need is a comprehensive study of social effects on turnover in sales, which differs from the service settings already studied in management. As is well known, several characteristics of sales make it distinct from other contexts (Churchill, Ford, and Walker 1974). Second, Felps et al. (2009) recommend studying peer exits alongside “leadership quality” (p. 557), since doing so allows the researcher to identify how these two influences act in concert. Thus far, the influence of managers on sales force turnover is mixed, with some studies finding an effect (e.g., Eisenberger et al. 2002) and others not (e.g., Johnston et al. 1990; Lucas et al. 1987). Third, the influence of peers and managers on sales force turnover has not been studied longitudinally to understand when these reference points are most important in agents’ tenures. Such an exercise has the potential to uncover meaningful nuance and to explain the inconsistencies reported in the literature.

The remainder of this essay is organized as follows. First, we review the extant literature on sales force turnover, motivate the research problem being addressed, and outline social information processing theory. Then, we build a set of formal hypotheses, describe the empirical context within which we collected data, and detail the variables under investigation. We follow this setup with a summary of the method and results, and we conclude with a discussion of substantive contributions, limitations, and directions for further research.



## Theoretical Background

### *The Sales Force Turnover Literature*

Table 1 summarizes the sales force turnover literature with a chronological list of representative articles and characterizes these empirical studies along four lines: relevant predictors studied, criterion variables assessed, research designs employed, and analytic techniques applied. In what follows, we argue that the literature would benefit from evolving along these lines and position this essay at the forefront of each.

To begin, research until now has primarily focused on individual-level predictors (e.g., job satisfaction, organizational commitment, performance, and propensity to leave) of sales force turnover (see Table 1, column 3). Early work found job satisfaction to be an “important influence on the decision to leave...for low performers” (Futrell and Parasuraman 1984, p. 38). Brown and Peterson’s (1993) meta-analysis found job satisfaction to have an indirect effect on agents’ propensities to leave their companies through organizational commitment. MacKenzie, Podsakoff, and Ahearne (1998) found job satisfaction and performance to be inversely related to turnover with a sample of insurance agents.

These studies consider turnover, in the words of Pfeffer (1991, p. 795), to be “the consequence of an individual decision process, with the individual acting in isolation.” It is a necessary foundation to establish, but research on sales force turnover is now at a standstill in this respect. A review of the marketing literature since the turn of the 21<sup>st</sup> century shows that studies continue to focus on job satisfaction and organizational commitment (e.g., Alexandrov, Babakus, and Yavas 2007; Tang et al. 2014), with no new findings to boot. This essay aims to reinvigorate the literature by studying how social

effects influence sales force turnover, a posture that moves from micro-level research to meso-level research, where “individuals are studied in their social contexts” (Felps et al. 2009, p. 545).

With respect to the criterions that researchers have studied (Table 1, column 4), they fall into three categories. “Propensity to leave” is an agent’s self-reported behavioral intention to leave a company, which researchers have often used as a surrogate of actual turnover (e.g., Brown and Peterson 1993). “Turnover” is a dummy variable that equals one for agents who exit a company during a given study period, zero otherwise (e.g., Johnston et al. 1990). “Turnover duration” is the length of time agents stay with a company before exiting (e.g., Chandrashekar et al. 2000).

It should be clear that turnover-duration data are more granular than the others, but as can be seen from Table 1 most studies stop short of analyzing this type of data. Should researchers continue down this path or does the information available in turnover duration make it deserving of more attention? Intuition and research provide direction. First, factors such as a lack of alternative employment options interrupt the withdrawal process, so there is no question that propensity to leave is an imperfect surrogate of turnover. Second, Chandrashekar et al. (2000) found that the relationship between propensity to leave and turnover duration is non-linear, dependent upon information that propensity to leave measures do not capture (i.e., uncertainty). As such, meaningful information is lost when researchers study propensity to leave as a criterion in place of turnover duration. But even still, research supports the predictive reliability of agents’ propensities to leave (Johnston et al. 1990; Sager 1991). Is propensity to leave not good enough?

The answer lies in the realm of research design (Table 1, column 5). With a lagged research design, Tyagi and Wotruba (1993) found propensity to leave to be a stronger predictor of future period job satisfaction and organizational commitment than vice versa. This result suggests that the causal order of traditional withdrawal models can also work backwards, thereby bringing the results of previous cross-sectional studies into question. By contrast, since turnover marks an agent's departure from a company, comparable reverse-causality arguments cannot be made for lagged research designs that examine turnover duration, an advantage that makes it superior to propensity to leave.

How does turnover compare to turnover duration? For this contrast, the research questions these criteria allow researchers to address provide direction. Being an agent-level variable, turnover data only allow researchers to answer static research questions. For instance, researchers can compare the profiles of stayers and leavers, but cannot uncover whether different factors influence agents to leave during different tenure stages (i.e., months 1-6, 7-12, etc.). For this research question to be addressed, turnover-duration data need to be paired with an appropriate analytic technique.

As can be seen in Table 1 (column 6), the most popular analytic techniques used to study sales force turnover are structural equation modeling and regression. In fact, researchers have used these methodologies to analyze all three types of criteria introduced above. With regression analysis, Futrell and Parasuraman (1986) examined the interaction of job satisfaction and performance on propensity to leave. Johnston et al. (1990) used a structural equation model to link propensity to leave to turnover. Finally, Lucas et al. (1987) analyzed turnover-duration data in a regression framework, finding that tenure and education influence the length of time agents stay with a company before

exiting. However, these standard procedures have limitations that do not allow them to handle time-varying predictors, a feature that only hazard models can accommodate (Allison 1984). For the purposes of this essay, since many of the variables under investigation are time-varying covariates, a hazard model is needed.

Summing up, we have argued that the literature would benefit from extending beyond the study of individual-level predictors to understand the influence of social effects on sales force turnover. Building from the strong foundation that previous research has established, we utilize a hazard model to analyze a longitudinal dataset with turnover duration as the criterion of interest. Next, we introduce the concept of social effects and acknowledge the identification challenges that need to be overcome to study this phenomenon.

### ***Social Effects and Identification Challenges***

Far from operating in a vacuum, agents enter sales forces made up of peers and shared institutional environments. Given this context, social effects arise when interdependencies between individuals' decisions exist (Brock and Durlauf 2001). Following Manski (1993), social effects can come in three forms (endogenous effects, contextual effects, and correlated effects), which all have the potential to drive sales force turnover in a neighborhood of agents, such as a sales district. *Endogenous* effects are at play when the actions of peers influence agents' decisions to stay or leave. The mechanism through which this influence operates can vary, but candidates include contagion, conformity, and social learning (Young 2009). For example, if the mechanism were social learning, hearing that the "grass is greener on the other side" from peers who have exited could be what is driving endogenous effects. Nevertheless, irrespective of the

underlying mechanism, endogenous effects imply that agents perceive quitting to be a better decision as peers quit. *Contextual* effects, on the other hand, arise ex ante when the exogenous characteristics of agents in a sales district compositionally contribute to turnover. In this respect, it is the makeup of agents in a sales district that drives sales force turnover, not the actions of peers. For example, contextual effects would be at play if turnover rates were higher in more demographically diverse sales districts. Finally, *correlated* effects occur when the risk of turnover for agents and peers varies because of some third variable. Rather than contagion, conformity, social learning, or the exogenous characteristics of agents, exodus from a sales district may be a function of some common factor, such as a manager's poor leadership skills.

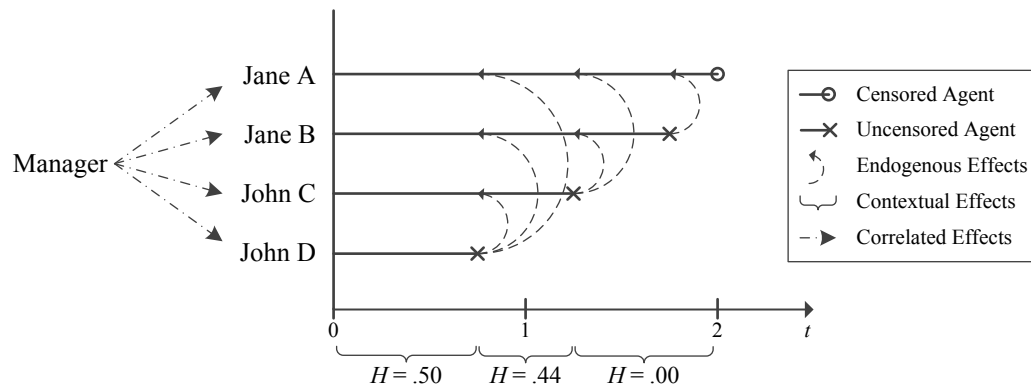
An important note is that these social effects must be teased out from one another for identification purposes, as research cannot attribute turnover rates in neighborhoods of agents to endogenous, contextual, or correlated effects without controlling for the others. To demonstrate this point graphically, Figure 1 plots the influence of these social effects on sales force turnover in a hypothetical sales district composed of four agents: Jane A, Jane B, John C, and John D.

For each exit represented in the plot by an "X", multiple explanations are readily available. Take the departure of John D in period one, for example. While his exit cannot be attributed to endogenous effects, because none of his peers exited during his tenure, contextual effects and correlated effects are possible. First, since contextual effects arise from the composition of agents in a risk set,<sup>1</sup> they could explain John D's exit if gender diversity (captured by Blau's [1977] index of heterogeneity) inhibited the social

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<sup>1</sup> Risk sets include agents who are at risk of turnover at a given point in time.

cohesiveness of his work group and influenced his decision to leave. Second, since correlated effects occur when a common third variable influences individual behavior, they offer an alternative explanation if John D's exit was a function of his manager being incompetent. In either case, this example shows why research designs that fail to measure all three forms of social effects run the risk of making Type I and Type II errors.



Notes:  $H$  = Blau's index of heterogeneity, used here to capture gender diversity and calculated as  $1 - \sum P_i^2$ , where  $P$  equals the percentage of agents in a given sex category and  $i$  equals 2 (male, female).

**Figure 2.1: Plot of Social Effects**

These social effects from peers to agents do not operate in a vacuous environment either, though. For example, turnover rates need not be monotonic over time (agents' risk of turnover may start low, gradually increase, and then decrease). Further, social effects may not be linearly related to turnover rates, as would be the case if sequentially exiting peers influenced remaining agents differently. A model that takes into account the interdependent, dynamic, and non-linear nature of sales force turnover among agents is therefore needed to identify social effects. We build such a model in the method section, but first outline social information processing theory, a framework that supports the role of social effects in agents' decisions to stay or leave.

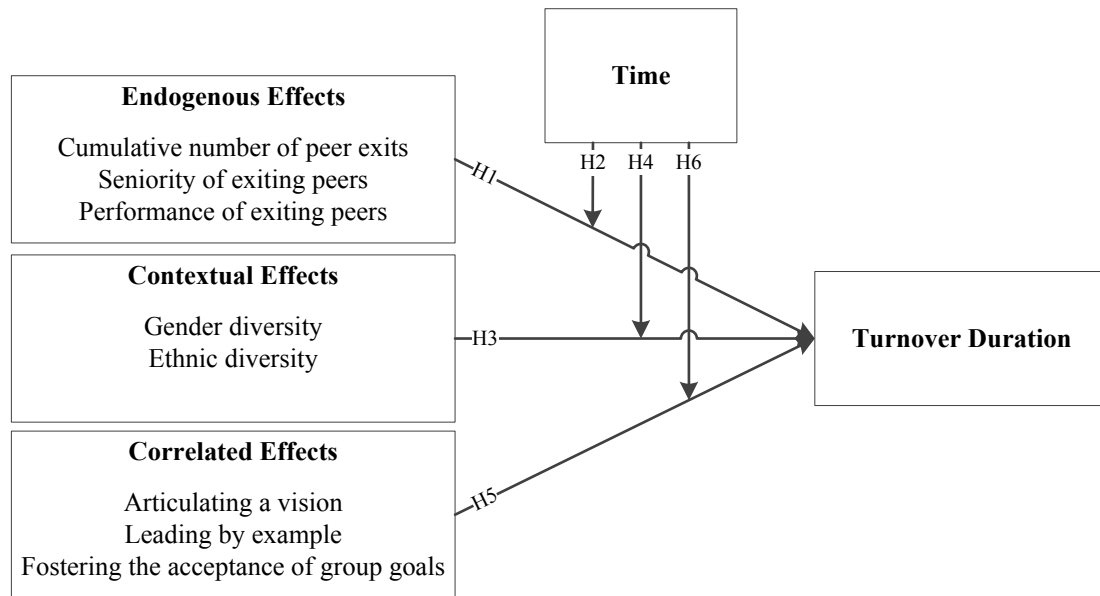
### ***Social Information Processing Theory***

The central premise of social information processing (SIP) theory deviates from traditional models that “emphasize individual dispositional explanations for behavior rather than situational factors” (Salancik and Pfeffer 1978, p. 224) and recognizes that individuals adapt to their social contexts. Accordingly, social effects fit well into this framework, being that they aim to explain why “individuals belonging to the same group tend to behave similarly” (Manski 1993, p. 532). In the words of SIP theory, individuals selectively perceive and interpret social information in their environments, which in turn influences their perceptions, attitudes, and behaviors (Salancik and Pfeffer 1978; Zalesny and Ford 1990).

From a social effects perspective, actions and attributes of peers, as well as institutional factors that commonly influence individuals’ behaviors correspond to endogenous, contextual, and correlated effects, respectively, and represent the social information from SIP theory that individuals perceive and interpret. Further, within these three sources of social information, SIP theory tells that individuals perceive and interpret the social cues in their environments that are salient (i.e., easily perceived) and relevant (i.e., unambiguously interpretable; Salancik and Pfeffer 1978). We rely on these two criteria to guide the social stimuli we study and to hypothesize at which time during the sales force socialization process these cues should play particularly influential roles.

## Hypotheses Development

In this section, we build formal hypotheses with respect to the influence of social effects on agents' risk of turnover. As can be seen in Figure 2.2, these hypotheses pertain to endogenous, contextual, and correlated effects.



**Figure 2.2: Conceptual Model**

*Endogenous effects.* Endogenous effects emit from instances of peer turnover and imply that agents perceive quitting to be a better decision as peers quit. In support of such, Krackhardt and Porter (1986) found that the turnover patterns among employees of three fast food restaurants travelled predictably through their advice networks rather than stochastically, suggesting that turnover spreads like an epidemic. Relatedly, Felps et al. (2009) found the turnover of individual employees to be related to the job search behaviors of peers. We propose that the cumulative number of peers who exit will, in



some manner (e.g., contagion, conformity, or social learning; Young 2009), influence agents to leave. In addition, we also expect the seniority and performance of peers who exit to contribute to agents' decisions to stay or leave. From a SIP theory perspective, these attributes of peers who exit should affect the salience and relevance of an exit. Since high performers are celebrated in sales forces and found at the top of performance rankings, they should be top-of-mind for agents. Similarly, the salience of senior peers should be higher insofar as seniority carries with it more time for strong relationships to form. When these peers leave, it should stand out in the sales force. The exits of high performing, senior peers should also be more relevant (i.e., unambiguous), since the decisions of these peers more readily signal the superiority of alternative employment options. Whereas low performers and rookies can be expected to quit for idiosyncratic reasons, high performers and senior peers are more likely to leave on the basis of rational judgments. The following hypothesis stems from this reasoning:

*H1: As the (a) cumulative number of peer exits, (b) seniority of exiting peers, and (c) performance of exiting peers increase, an agent's risk of turnover increases.*

However, the salience and relevance of peer exits need not be uniform across the sales force socialization process. Sociological research supports the notion that individuals rely on observations of others' actions more so after they become acquainted with them (Jackson, Stone, and Alvarez 1992; Newcomb 1961). Similarly, SIP theory holds that in order to "obtain information from an environment, the individual must orient himself to aspects of that environment" (Salancik and Pfeffer 1978, p. 228). As such, we propose that endogenous effects will grow stronger as the sales force socialization process progresses. As agents become more familiar with the peers around them, the

salience and relevance of peer exits should increase. For a newcomer, a peer's exit may go unnoticed and the performance level and seniority of that peer may be unknown, but these attributes of peer exits should be easier to recall and should be more interpretable as agents gain experience. Therefore, we hypothesize:

*H2: The effects of the (a) cumulative number of peer exits, (b) seniority of exiting peers, and (c) performance of exiting peers on an agent's risk of turnover will grow stronger as the sales force socialization process progresses.*

*Contextual effects.* Exogenous characteristics of individuals produce contextual effects when they compositionally contribute to individual behavior in a group. In this regard, organizational research has studied the adverse effects of demographic diversity on social integration and turnover (e.g., O'Reilly, Caldwell, and Barnett 1989). The central premise of this relational demography literature is that "differences among group members have a negative impact on group functioning" (Harrison, Price, and Bell 1998, p. 96). This lack of functionality in turn acts as a catalyst of turnover in neighborhoods of employees. In a sales district of agents, for instance, we could expect diversity with respect to characteristics such as gender and ethnicity to increase the likelihood with which its agents turnover. Accordingly, we hypothesize the following:

*H3: As the (a) gender and (b) ethnic diversity of peers increase, an agent's risk of turnover increases.*

Yet, again, there is reason to believe that contextual effects will vary over time. Whereas the overt characteristics that give rise to contextual effects tend to play an important role in initial judgments, experiences with out-group members tend to weigh

heavier as time progresses (Turner 1987). This supposition is central to the *contact hypothesis*, which holds that “intergroup contact tends to produce better intergroup attitudes and relations” (Amir 1969, p. 319). The assumption, of course, is that repeated exposure to out-group members over time brings rise to underlying commonalities that enhance social integration. Based on this assumption, we hypothesize the following:

*H4: The effects of the (a) gender and (b) ethnic diversity of peers on an agent’s risk of turnover will diminish as the sales force socialization process progresses.*

*Correlated effects.* When institutional factors influence the individual behavior of group members, correlated effects exist, and arguably one of the most salient and relevant factors of this kind in sales force settings is the leadership of managers. From the lens of core transformational leadership research (e.g., MacKenzie, Podsakoff, and Rich 2001), managers can alter their agents’ social environments by way of articulating a vision, leading by example, and fostering the acceptance of group goals. Notably, these three components are pertinent to the study of social effects, as they cover both auditory and visual spectrums of the stimuli agents receive from managers.

Managers who articulate a vision, inspire agents by giving them a clear, interesting picture of what their future could look like in a company. Those who lead by example, give agents a role model of desired behavior, thereby showing them how they can sell effectively. Finally, managers who foster the acceptance of group goals, create sales environments that offer social support and provide a team atmosphere. In all three cases, managers construct a social environment that brings meaning to sales, focuses agents’ attention on positive aspects of sales, and connects sales to desired outcomes. As

such, we expect the degree to which managers practice these components of core transformational leadership to reduce the likelihood with which agents quit. Formally:

*H5: The more a manager (a) articulates a vision (b) leads by example, and (c) fosters the acceptance of group goals, the more an agent's risk of turnover decreases.*

When will the influence of managers be most salient and relevant during the sales force socialization process? SIP theory suggests that individuals' sense making activities are heightened when social settings are novel, as is the case for new work environments (Salancik and Pfeffer 1978). Given the relatively high frequency of contact between managers and new hires during their initial days on the job, managers are considered both salient and relevant early on. The imprinting hypothesis (Stinchcombe 1965) further suggests that new hires are likely to follow and be susceptible to the influence of managers, much like geese flock to the first object they see move (Gast and Patinka 1983). In this respect, we propose that correlated effects emanating from managers will diminish over an agent's tenure. Subsequently:

*H6: The effects of the extent to which a manager (a) articulates a vision, (b) leads by example, and (c) fosters the acceptance of group goals on an agent's risk of turnover will diminish as the sales force socialization process progresses.*

## **Research Design**

### ***Empirical Context***

The empirical setting is a national retailer located in the United States. It sells durable goods in stores that geographically span 962 zip codes and are organized into 80

company-defined districts. Each district is overseen by a manager and covered by the retailer's agents. The study period spans 40 months (October 2010 – April 2013), during which time the retailer employed a total of 3,832 agents.

These agents are paid based on 5% commissions from the sale of the retailer's products. Yet agents also have monthly quotas, which quantify the retailer's expectations for agent-level dollar sales each month. The retailer's quota-setting process has two steps. First, districts are assigned monthly quotas based on factors such as same-district dollar sales in the same period last year. Second, district quotas are divvied up among agents based on their scheduled hours and store locations. If districts hit their quota, district managers, who are otherwise paid a salary, receive a bonus.

### ***Data***

The data stem from internal (e.g., personnel records and manager assessments) as well as external sources (e.g., the U.S. Census) that span across the 40-month study period. The personnel records were extracted from the retailer's human resource and performance-tracking databases. The manager assessments were collected monthly and included measures of core transformational leadership.

While most of the sources are secondary (e.g., the personnel records and U.S. Census data), the manager assessments are primary. Despite the retailer's best efforts to gain uniform adoption, non-response still arose. While 80% of the district managers completed at least one of the monthly surveys, they only completed the assessment 19% of the time across periods. In order to gauge whether these non-responses bias the sample, we tested whether the aggregate performance of districts (i.e., sales-to-quota) overseen by non-responding managers differed from those overseen by responding

managers. If non-responders oversee relatively poorer performing districts, for instance, it would be false to assume that the data are missing at random and the results of subsequent analyses could be biased. Nevertheless, the performance of these two groups is not substantively different (non-responders = .94 vs. responders = .92), thereby calming concerns related to non-response bias. Next, we will outline the variables included in the three data sources being exploited in this essay (see Table 2.2 for a summary).

*Personnel records.* The data extracted from the retailer's human resource and performance-tracking databases include the following variables. *Female* is coded one for females, zero for males. *Ethnicity* is coded one for white, two for black, three for Asian, four for Hispanic, and five for all other ethnicities. These categorical variables allow us to form diversity scores for *gender diversity* and *ethnic diversity*, using Blau's (1977) index of heterogeneity, which is defined as  $(1 - \sum P_i^2)$  at month  $t$ , where  $P$  is the proportion of a district's agents in a category and  $i$  is the number of categories (i.e., two for gender and five for ethnicity).

Staying within the human resource database, *hire date* documents an agent's first day as an employee and *exit date* documents an agent's last day as an employee (for non-censored cases, missing otherwise). From this information, *turnover duration*, our dependent variable of interest, is updated monthly as the difference between the last day of a given month (or an agent's exit date, whichever comes first) and an agent's start date; *cumulative number of peer exits* is updated monthly as a count of the number of peers who have exited an agent's district between an agent's start date and the end of month  $t$  (or the day before an agent's exit date, whichever comes first); and *seniority of*

**Table 2.2: Variable Definitions**

Variable	Description	Variable Level
<i>Individual Characteristics</i>		
Female	A dummy variable equal to one for females, zero otherwise.	Agent
Ethnicity	A set of five dummy variables denoting ethnicity (white, black, Hispanic, Asian, other).	Agent
<i>Endogenous Effects</i>		
Cumulative Number of Peer Exits	The number of peers that have exited an agent's district between an agent's start date and the end of month $t$ (or the day before an agent's exit date, whichever comes first).	Agent-time
Seniority of Exiting Peers	The average experience of peers who exited an agent's district between the beginning of month $t-1$ and the end of month $t$ (or the day before an agent's exit date, whichever comes first).	Agent-time
Performance of Exiting Peers	The average performance of peers who exited an agent's district during month $t-1$ , with the average performance of these peers calculated over their entire tenure.	Agent-time
<i>Contextual Effects</i>		
Gender Diversity	Blau's index of heterogeneity for gender ( $1 - \sum P_i^2$ ) in month $t$ , where $P$ is the proportion of an agent's peers in a category and $i$ is 2 (male, female).	District-time
Ethnic Diversity	Blau's index of heterogeneity for ethnicity ( $1 - \sum P_i^2$ ) in month $t$ , where $P$ is the proportion of an agent's peers in a category and $i$ is 5 (white, black, Hispanic, Asian, other).	District-time
<i>Correlated Effects</i>		
Articulating a Vision	The extent to which a manager articulates a vision, averaged across all of a manager's monthly responses and applied to all agents in a manager's district.	District
Leading by Example	The extent to which a manager leads by example, averaged across all of a manager's monthly responses and applied to all agents in a manager's district.	District
Fostering Group Goals	The extent to which a manager fosters the acceptance of group goals, averaged across all of a manager's monthly responses and applied to all agents in a manager's district.	District

*peers who exit* is updated monthly as the average tenure of peers who exited an agent's district between the beginning of month  $t-1$  and the end of month  $t$  (or the day before an agent's exit date, whichever comes first).

From the retailer's performance-tracking database, agents' monthly performance, defined as the dollar amount they sold in a given month divided by the quota assigned to them, is available. As mentioned previously, quotas are assigned at the district level and divvied up among agents based on their scheduled hours and store locations. Thus, agents' quotas constitute the retailer's expectations for dollar sales each month for a given agent and sales-to-quota represents an agent's performance relative to expectations. It is a measure of performance with a history of use in the sales literature (e.g., Ahearne et al. 2008). From this information, the *performance of exiting peers* is updated monthly as the average performance of peers who exited an agent's district during month  $t-1$ , with the average performance of these peers calculated over their entire tenure.

*Manager Assessments.* We also leverage information the retailer collected from its district managers on a monthly basis. In particular, district managers were asked to record the management behaviors they practice in a structured survey. Within it, multi-item scales adapted from MacKenzie, Podsakoff, and Rich (2001) were used to measure the three components of core transformational leadership: *articulating a vision*, *leading by example*, and *fostering the acceptance of group goals*. These scales are included in the appendix. In all three cases, the measures we use are averaged across all of a manager's monthly responses and applied to all agents in a manager's district.



*U.S. Census data.* As a control for the economic climate in agents' external environments, we rely on the *unemployment rate* in a district at month  $t$ , collected from the U.S. Census Local Area Unemployment Statistics program.

## **Method**

In this section, we outline a duration model that aims to identify the influence of social effects on sales force turnover by statistically separating out endogenous, contextual, and correlated effects.

### ***Model Rationale***

Duration models have become the method of choice for employee turnover empiricists (e.g., Becker and Cropanzano 2011). Foundationally, they assess and quantify the influence of covariates on agents' risk of turnover, using tenure as the criterion of interest. This setup distinguishes between agents who quit at different times, thereby extending beyond logistic regression, which uses dichotomous turnover as a criterion. It also accounts for right-censored data, which may arise due to the end of a study period or involuntary turnover, by leaving censored agents in the analyses during their tenures. Next, we build from a time-invariant setup to a time-varying, piece-wise hazard model.

### ***Time-Invariant Duration Model***

We are interested in examining social effects and their influence on sales force turnover. Also, we are interested in assessing the relative influence of peers and managers on the turnover rates of agents. To this end, we model turnover following prior literature on social effects (Brock and Durlauf 2001; Sirakaya 2006). Our dependent variable is tenure duration (in days); thus, we examine factors affecting the likelihood with which an

agent will transition out of the retailer. Let us assume that an agent  $i$  joins the retailer at time  $t = 0$ . Let  $T$  denote the period of time the given agent serves the retailer starting from the time of entry. Let the probability that agent  $i$  exits prior to any time,  $P(T < t)$ , be represented as the function  $F(t)$ . Thus, for any given interval,  $\delta t$ , the probability of an agent quitting at time  $t + \delta t$  is given by:

$$P(t \leq T < t + \delta t | T \geq t) = \frac{P(t \leq T < t + \delta t, T \geq t)}{P(T \geq t)} \quad (1)$$

Hence, the hazard function of an agent turnover can be defined as,

$$\lambda(t) = \lim_{\delta t \rightarrow 0} \frac{P(t \leq T < t + \delta t, T \geq t)}{\delta t} = \frac{F'(t)}{1 - F(t)} \quad (2)$$

And the corresponding survival function  $S(t)$  is defined as

$$S(t) = 1 - F(t) = \exp \left[ - \int_0^t \lambda(z) dz \right], \quad (3)$$

The proportional hazard specification for an individual  $i$  with covariate vector  $z_i$  is given by

$$\lambda(t, z_i) = \lambda_0(t) \exp(\theta' z_i), \quad (4)$$

where  $\lambda_0(t)$  is the baseline hazard function at time  $t$  that is assumed to be distributed according to a parametric distribution and  $\theta$  is a vector of unknown parameters that is to be estimated. It should be noted that this model does not account for time-varying covariates or parameters. Again, we are first discussing the construction of a time-invariant model and then extending it to a time-variant model.

The hazard of a given agent  $i$  to turnover is assumed to be influenced by the agent's individual characteristics ( $x_i$ ), the subjective expectation of agent  $i$  about the behavioral characteristics of peers ( $w_{-id}$ ), the general characteristics of peers who are supervised by the same manager as agent  $i$  ( $v_{-id}$ ), and district-level characteristics ( $u_{id}$ ). The  $-i$  subscript denotes that the variable is calculated for peers, excluding agent  $i$ . It should also be noted that managers singly oversee districts. Hence, manager- and district-level parameters can be used interchangeably. The vector  $x_i$  comprises the gender and ethnicity of the agent. The vector  $w_{-id}$  comprises the agent  $i$ 's subjective expectation of the behavior of peers who quit at any given time period (month). Specifically, it captures the expectation of the quitting behavior of peers (measured as the cumulative number of agents who have quit), the expectation of the turnover for peers (measured as the mean time to quit for the peers in a given time period), and the expected performance of peers (measured as the average performance of quitting peers agents in the previous time period). We take the performance of the peers in the time period  $t-1$ , as it is the metric of performance that agents use to base their subjective expectations of the performance of peers. The current time period's performance is not known to the agent to arrive at the subjective expectations. It is assumed that agents are not transferred during the time period of the study, an assumption that is supported in the data.

The vector  $v_{-id}$  comprises the characteristics of the peers in a given district and under the same supervisor. It mainly measures the heterogeneity prevalent across peers measured as the diversity in gender and ethnicity. The vector  $u_{id}$  is represented here as leadership characteristics, namely articulating a vision, leading by example, and fostering the acceptance of group goals. We also include the unemployment rate in the district to

account for any variation in the labor environment, thus controlling for macroeconomic changes.

Given these factors that could possibly influence the agent's turnover, we can rewrite the hazard function in (4) as a function of these covariates.

$$\lambda(t, x_i, w_{-id}, v_{-id}, u_{id}) = \lambda_0(t) \exp(\alpha' x_i + \beta_1' w_{-id} + \beta_2' v_{-id} + \beta_3' u_{id}) \quad (5)$$

where  $\alpha, \beta_1, \beta_2$ , and  $\beta_3$  are the vector of unknown parameters. The probability that agent  $i$  quits by duration  $t$  could then be written as:

$$F(t | x_i, w_{-id}, v_{-id}, u_{id}) = 1 - \exp[-\Lambda_0(t) \exp(\alpha' x_i + \beta_1' w_{-id} + \beta_2' v_{-id} + \beta_3' u_{id})], \quad (6)$$

where  $\Lambda_0 = \int_0^t \lambda_0(z) dz$  is the baseline hazard.

Hence, the density for the time to quit of an agent would be:

$$f(t | x_i, w_{-id}, v_{-id}, u_{id}) = \lambda_0(t) \exp(\alpha' x_i + \beta_1' w_{-id} + \beta_2' v_{-id} + \beta_3' u_{id}) \exp[-\Lambda_0(t) \exp(\alpha' x_i + \beta_1' w_{-id} + \beta_2' v_{-id} + \beta_3' u_{id})] \quad (7)$$

Thus, the expected time to quit for any agent conditional on the individual, peer, district, and manger characteristics is:

$$F(t | x_i, w_{-id}, v_{-id}, u_{id}) = 1 - \exp[-\Lambda_0(t) \exp(\alpha' x_i + \beta_1' w_{-id} + \beta_2' v_{-id} + \beta_3' u_{id})], \quad (8)$$

$$E(t | x_i, w_{-id}, v_{-id}, u_{id}) = \int_0^\infty t f(t | x_i, w_{-id}, v_{-id}, u_{id}) dt \quad (9)$$

Identification of the peer effects is an important issue in social interaction models, since it is difficult to delineate the individual effects from the group effects as they might be correlated (Brock and Durlauf 2001). Using a hazard specification addresses the reflection problem discussed by Manski (2000) because the richness of the panel data

allows us to specify the likelihood of the agent quitting as a function of the peers' recent turnover behavior. Specifically, we assume that all agents have rational expectations based on the quitting behavior of peers at every time period. When agents directly observe the turnover of peers, it has a direct influence on their risk of turnover. Moreover, agents also observe the characteristics of exiting peers, such as their historical performance and their length of experience with the organization that also influences the agents' propensities to quit.

### ***Time-Variant Model***

It should be noted that Equation 5 assumes that the hazard of agents quitting at time  $t$  is proportional to the baseline hazard. The important explicit assumption made in the model is that of the baseline hazard specification. There is a particularly important problem with estimating the hazard model directly. That is, since we do not have any prior institutional knowledge that could indicate the distribution of the baseline hazard, we cannot adopt the semi-parametric proportional hazard specification. The proportional hazard model overcomes this shortcoming of calculating the baseline hazard by assuming a constant ratio of hazards for any two agents with distinct values of covariates. Nevertheless, the standard proportional hazard specification has only a time-constant proportional hazard; thus, it does not account for changes in the values of covariates over time. Hence, we estimate a piece-wise continuous hazard model with step-functions that help us attain consistent and efficient estimates without increased computational complexity. Specifically, we account for the time-varying nature of the covariates in our model and also allow our estimated coefficients to vary over time. Specifying the coefficients as time varying  $\beta_k(t)$ , also helps us capture changes in the marginal effects

over time. For example, the values of the number of peers or the compositional characteristics of the peers (e.g. diversity in terms of gender or ethnicity) change over time and the effects of these changes would be ignored if we did not account for the time-varying nature of these variables. We specify the model as piecewise regression by specifying each of the covariates with time-varying coefficients according to the following functional form:

$$\beta_k(t) = \sum_{n=1}^7 \beta_{nk} I(t > \tau), \quad (10)$$

where  $\tau$  is defined as 0, 6, 12, 18, 24, 30, or 36 months and  $I$  is an indicator function that takes the value of 1 when the condition is satisfied. This piecewise estimation is in-line with the institutional context of the retailer under study, since it subjects agents to biannual appraisals, calculated from the time of entry.

## Results

### *Measurement Model and Aggregation*

We evaluated the dimensionality and validity of the core transformational leadership components (i.e., articulating a vision, leading by example, and fostering the acceptance of group goals) captured in the manager assessment by means of a multilevel confirmatory factor analysis (Dyer, Hanges, and Hall 2005). Overall, the three-component factor model fit the data adequately ( $\chi^2 = 2085.8$ , d.f. = 126, root mean square error of approximation = .07). In addition, we ran Fornell and Larker's (1981) tests for convergent and discriminant validity and found further support for a three-factor model.

The descriptive statistics in Table 2.3 include the reliability and validity estimates that informed these tests.

**Table 2.3: Descriptive Statistics**

Variable	Range	Mean	Reliability and Validity Estimates
Female	0 $\equiv$ male, 1 $\equiv$ female	.31	
Ethnicity	1 $\equiv$ white, 2 $\equiv$ black 3 $\equiv$ Hispanic 4 $\equiv$ Asian, 5 $\equiv$ other	1.44	
Unemployment Rate	4.33–14.30	8.21	
Cumulative Number of Peer Exits	0–71	6.70	
Seniority of Exiting Peers (days)	0–5068	605.99	
Performance of Exiting Peers	0–5.22	.35	
Gender Diversity	0–.50	.40	
Ethnic Diversity	0–.73	.38	
Articulating a Vision	3.20–7	6.00	$\alpha = .83$ , CR = .92, AVE = .69
Leading by Example	4.33–7	6.42	$\alpha = .83$ , CR = .78, AVE = .55
Fostering the Acceptance of Group Goals	2.75–7	6.24	$\alpha = .87$ , CR = .88, AVE = .64

Notes: In column (4): Reliability and validity estimates only apply to latent variables;  $\alpha$  = Cronbach's alpha; CR = composite reliability; and AVE = average variance extracted.

While the core transformational leadership scales in the manager assessments pertain to chronic management styles (i.e., general tendencies to articulate a vision, lead by example, and foster the acceptance of group goals), managers' responses may have varied temporally if their approaches to leadership changed over the course of our study. In order to test whether consistency across managers' multiple responses was sufficiently high, we calculated indexes of within-group agreement (articulating a vision: median  $r_{wg}$  = .91, ICC[1] = .99, and ICC[2] = .99; leading by example: median  $r_{wg}$  = .96, ICC[1] = .97, and ICC[2] = .97; and fostering the acceptance of group goals: median  $r_{wg}$  = .93,

ICC[1] = .98, and ICC[2] = .98). These results justify aggregation based on conventional thresholds in the literature (Bliese 2000; James, Demaree, and Wolf 1984).

### ***Hypothesis Testing***

Model estimates are presented in Table 2.4 and Table 2.5. The reference category for the coefficients is male, white agents. As specified in equation (10), these models include baseline hazard functions that were estimated in six-month steps. For ease of exposition, we report hazard ratios for all variables and denote whether they differ significantly from one with 95% confidence, using the delta method to estimate standard errors. One is used as the reference point for significance tests because hazard ratios are interpretable according to the following formula:  $100(HR - 1)\%$ . For example, see the hazard ratio for the covariate female in Table 2.4. Its value of 1.04 indicates that the conditional probability of turnover for females is 4% more than that for males. By comparison, since the hazard ratio for the unemployment rate is .84 (a value less than one), we can say that a one-unit increase in the unemployment rate decreases the hazard by 16%.

With this background established, we subsequently report the results of our hypothesis tests, using the time-invariant coefficients model (Table 2.4) for  $H_1$ ,  $H_3$ , and  $H_5$  and the time-varying coefficients model (Table 2.5) for  $H_2$ ,  $H_4$ , and  $H_6$ . Recall that our hypotheses with odd numbers pertain to general effects, whereas our hypotheses with even numbers pertain to time-varying effects. This approach to hypothesis testing is appropriate since coefficients in the time-invariant model are averaged across the six-month tenure stages in the time-varying model.



**Table 2.4: Hazard Ratios with Time-Invariant Coefficients**

Variable	Hazard Ratio
Covariates	
Female	1.04*
Ethnicity Dummies	Yes
Unemployment Rate	.84*
Endogenous Effects	
Cumulative Number of Peer Exits	1.36*
Seniority of Exiting Peers	1.25*
Performance of Exiting Peers	2.89*
Contextual Effects	
Gender Diversity	1.25
Ethnic Diversity	1.65*
Correlated Effects	
Articulating a Vision	.68*
Leading by Example	.95*
Fostering the Acceptance of Group Goals	.89*

\*  $p < .05$ .

Notes: Dummy variables for ethnicity (white, black, Hispanic, Asian, other) are included, but not reported. These models also control for seniority diversity and the proportion of exiting peers who were employed by the retailer prior to the study period.

H<sub>1</sub> predicts that endogenous effects will play a role during the sales force socialization process. In support of this hypothesis, increases in the (a) cumulative number of peer exits, (b) seniority of exiting peers, and (c) performance of exiting peers increase the conditional probability of turnover by 36%, 25%, and 189%, respectively. Scanning across these variables' coefficients in Table 2.5, endogenous effects consistently grow stronger from one tenure stage to the next, providing support for H<sub>2</sub>.

From H<sub>3</sub>, we expected contextual effects in the form of gender and ethnic diversity to manifest and increase agents' risk of turnover. This hypothesis received partial support, with a one-unit change in gender and ethnic diversity shifting the hazard

**Table 2.5: Hazard Ratios with Time-Varying Coefficients**

Variable	$0 < t < 6$	$6 \leq t < 12$	$12 \leq t < 18$	$18 \leq t < 24$	$24 \leq t < 30$	$30 \leq t < 36$	$t \geq 36$
	$I = 1$	$I = 2$	$I = 3$	$I = 4$	$I = 5$	$I = 6$	$I = 7$
Covariates							
Female	1.05*	1.02*	1.02*	1.01*	1.01*	1.01*	1.01*
Ethnicity Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unemployment Rate	.92*	.90*	.87*	.85*	.84*	.83*	.83*
Endogenous Effects							
Cumulative Number of Peer Exits	1.34*	1.36*	1.42*	1.47*	1.47*	1.48*	1.50*
Seniority of Exiting Peers	1.18	1.19	1.23	1.27	1.28*	1.29*	1.29*
Performance of Exiting Peers	2.32*	2.45*	2.67*	2.87*	2.89*	2.91*	2.97*
Contextual Effects							
Gender Diversity	0.95	0.87	1.09	1.19	1.36	1.45	1.36
Ethnic Diversity	1.35	1.42	1.45	1.63*	1.64*	1.65*	1.68*
Correlated Effects							
Articulating a Vision	.56*	.63*	.71*	.82	.87*	.87	.87
Leading by Example	.95*	.96*	.97*	.97*	.96	.97	.97
Fostering the Acceptance of Group Goals	.95*	.93*	.89*	.87*	.85*	.83*	.79*

\*  $p < .05$ .

Notes: Dummy variables for ethnicity (white, black, Hispanic, Asian, other) are included, but not reported. These models also control for seniority diversity and the proportion of exiting peers who were employed by the retailer prior to the study period.

by a non-significant amount and 65%, respectively. Thus, we found supporting evidence for our prior with respect to ethnic diversity. Additionally, contextual effects varied across the sales force socialization process, but not in the manner predicted by H<sub>4</sub>. Rather than having a diminishing effect, a higher preponderance of significant coefficients can be found in later tenure stages for contextual effects. The implications of these findings for theory and practice are discussed in the general discussion section.

In terms of the correlated effects we studied, we expected agents working for managers who articulate a vision, lead by example, and foster the acceptance of group goals to have lower conditional probabilities of turnover (H<sub>5</sub>). From Table 2.4, we can see that these factors decreased agents' hazards by 32%, 5%, and 11%, respectively, over the course of the sales force socialization process. These results provide consistent support for H<sub>5</sub>. Were these effects imprinted early on in agents' tenures, in line with H<sub>6</sub>? The results suggest that it depends on the component of core transformational leadership. Whereas the time-varying effects of articulating a vision and leading by example in Table 2.5 are consistent with expectations, the effects of fostering the acceptance of group goals persist over time and even grow stronger. In turn, H<sub>6</sub> is partially supported, though our results offer interesting insights that pose to advance social information processing theory and sales management scholars' understanding of the sales force socialization process. These implications are discussed subsequently.

## **Discussion**

In this essay, we study the influence of social effects on sales force turnover during the sales force socialization process. Our empirical context is the sales organization of a national U.S. retailer that sells household goods. We followed its new

hires during the period January 2010 to April 2013, observing times when peers exited, the characteristics of peer groups, and the leadership styles of managers. We owe this encompassing perspective to Manski (1993), who proposed a framework of endogenous, contextual, and correlated effects. Also, SIP theory (Salancik and Pfeffer 1978) informed our expectations with respect to these social effects. The discussion below highlights how our findings contribute to these foundations as well as the practice of sales force management.

### ***Theoretical Implications***

From a theoretical perspective, we expand the lens that sales force researchers have assumed in their study of sales force turnover. Whereas previous research (see Table 2.1) has predominantly focused on the antecedent role of attitudinal factors and other individual-level characteristics, we adopt Manski's (1993) framework in the context of sales force turnover to comprehensively examine the influence of social effects on the turnover rates of agents. Accordingly, we believe that a core contribution of this essay is the introduction of endogenous, contextual, and correlated effects to the sales force literature.

Further, as a result of this effort, broad support was found for the influence of social cues on the turnover behavior of agents, which lends credence to a central tenet of SIP theory. Yet our findings also offer several nuances worth additional discussion. First, endogenous effects, emitting from peers who exit, were found to increase the risk of turnover for agents at an increasing rate over the sales force socialization process. This result suggests that agents become more susceptible to the influence of peer behaviors as they become more acquainted with their work environments.

Second, contextual effects, driven by gender and ethnic diversity, were also found to play an increasingly influential role. Making sense of this unexpected finding, we learn that overt characteristics, such as ethnicity, can operate temporally counter to our expectations. Based on the contact hypothesis, diversity was expected to influence agents' superficial evaluations of their work groups, but give way to deeper-level similarities (e.g., personalities) over time. We suspect that the opposite may have occurred as a result of the remoteness of retail stores. Since store locations are dispersed geographically, contextual effects may take time to resonate, as agents meet one another through store rotations and district meetings. Unfortunately, the retailer's store rotation schedule is unobservable to us, so we are unable to test this supposition directly.

Third, correlated effects, studied herein as outcomes of managers' leadership, were found to depend on the type of leadership in question. As expected, articulating a vision and leading by example were found to have a marginally decreasing influence on agents' risk of turnover. These results are consistent with the expectations we formed based on the imprinting hypothesis, thereby aligning well with prior organizational theory (Stinchcombe 1965). However, contrary to expectations, fostering the acceptance of group goals had an increasing effect over time, suggesting that it may have a trickle-down contextual effect since it primarily functions through behavioral changes at the district-level.

### ***Managerial Implications***

Social effects pose several opportunities and challenges for sales managers, and this essay may help practitioners retain new hires during the sales force socialization process. Principal among our findings is the result that peer exits play an increasingly

more influential role as tenure stages advance. Managers can use this insight to, for example, adopt policies that aim to retain agents. If endogenous effects exist, companies benefit not only from the retention of a given agent, but also from the retention gains they will reap from a neighborhood of agents. Examples of such policies will depend on idiosyncrasies of organizations and retention opportunities, but may include such efforts as retainer bonuses.

Next, when measured, contextual effects pose to offer managers scheduling and assignment practices. For example, the retailer studied here would benefit from decreasing ethnic diversity. Such a practice is often unattainable in the hiring process for legal purposes, but shift assignment can be beneficially informed by demographic diversity, on the basis of equal opportunity. On top of advancing these procedural recommendations, this research suggests that managers could benefit from understanding the underlying characteristics that influence sales force turnover. In this sense, hiring practices can be used to select agents that ultimately remain in their positions at higher rates.

Finally, this research joins a body of work that has studied the influence of core transformational leadership (e.g., MacKenzie, Podsakoff, and Rich 2001). Managers versed in this literature will already understand many benefits associated with imbuing work with purpose. Nevertheless, this essay contributes to the discussion insofar as it demonstrates the fleeting nature of articulating a vision and leading by example and the sustained influence of fostering the acceptance of group goals throughout the sales force socialization process. Facilitating a team atmosphere appears to be more influential over

time than providing interesting directions for professional growth and showing agents how to sell.

### ***Limitations and Further Research***

The limitations of this essay open doors for further research. First, although social effects arise when interdependencies between individuals exist, they need not influence individuals homogeneously. For example, the endogenous, contextual, and correlated effects we find may influence agents differently depending on factors such as social connections, demographic similarity, and leader-member exchange relationships. These contingencies represent useful areas for further research. In addition, a truly dynamic approach could take feedback effects into account, a phenomenon that is absent from our model. Central to this extension is the relationship between performance and turnover. Since the performance of agents' peers has itself been found to be a function of peer effects (Chan, Li, and Pierce 2014), a model that jointly examines social effects with respect to performance and turnover would be useful.

## Appendix

### ***Core Transformational Leadership***

(Adapted from MacKenzie et al. 2001; 1 = “Strongly Disagree” and 7 = “Strongly Agree” for scale end-points.)

When I interact with my sales agents, I...

1. ...project a clear understanding of where we are going.
2. ...paint an interesting picture of the future for our group.
3. ...am always seeking new opportunities for the organization.
4. ...inspire them with my plans for the future.
5. ...am able to get them committed to my dreams for our group.
6. ...lead by “doing,” rather than simply “telling.”
7. ...provide a good model for them to follow.
8. ...lead by example.
9. ...foster collaboration among the them.
10. ...encourage them to be team players.
11. ...get them to work together for the same goal.
12. ...develop a team attitude and spirit among them.



## List Of References

- Ahearne, Michael, Eli Jones, Adam Rapp, and John Mathieu (2008), "High Touch Through High Tech: The Impact of Salesperson Technology Usage on Sales Performance via Mediating Mechanisms," *Management Science*, 54 (4), 671-85.
- Alexandrov, Aliosha, Emin Babakus, and Ugur Yavas (2007), "The Effects of Perceived Management Concern for Frontline Employees and Customers on Turnover Intentions: Moderating Role of Employment Status," *Journal of Service Research*, 9 (4), 356-71.
- Allison, Paul D (1984), *Event History Analysis: Regression for Longitudinal Event Data*. Newbury Park, California: Sage.
- Amir, Yehuda (1969), "Contact Hypothesis in Ethnic Relations," *Psychological Bulletin*, 71 (5), 319-42.
- Becker, William J. and Russell Cropanzano (2011), "Dynamic Aspects of Voluntary Turnover: An Integrated Approach to Curvilinearity in the Performance–Turnover Relationship," *Journal of Applied Psychology*, 96 (2), 233-46.
- Blau, Peter (1977), *Inequality and Heterogeneity*. New York: Free Press.
- Bliese, Paul D. (2000), "Within-Group Agreement, Non-Independence, and Reliability: Implications for Data Aggregation and Analyses," in *Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions*, Katherine J. Klein and Steve W. J. Kozlowski, eds. San Francisco, CA: Jossey-Bass.
- Brock, William A. and Steven N. Durlauf (2001), "Interactions-Based Models," in *Handbook of Econometrics*, J. J. Heckman and E. Leamer, eds. Vol. Volume 5: Elsevier.
- 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 (1), 63-77.
- Chan, Tat Y., Jia Li, and Lamar Pierce (2014), "Learning from Peers: Knowledge Transfer and Sales Force Productivity Growth," *Marketing Science*, 33 (4), 463-84.
- Chandrashekar, Murali, Kevin McNeilly, Frederick A. Russ, and Detelina Marinova (2000), "From Uncertain Intentions to Actual Behavior: A Threshold Model of Whether and When Salespeople Quit," *Journal of Marketing Research*, 37 (4), 463-79.

- Churchill, Gilbert A., Jr., Neil M. Ford, and Orville C. Walker, Jr. (1974), "Measuring the Job Satisfaction of Industrial Salesmen," *Journal of Marketing Research*, 11 (3), 254-60.
- Darmon, René Y. (2008), "The Concept of Salesperson Replacement Value: A Sales Force Turnover Management Tool," *Journal of Personal Selling & Sales Management*, 28 (3), 211-32.
- (1990), "Identifying Sources of Turnover Costs: A Segmental Approach," *Journal of Marketing*, 54 (2), 46-56.
- Dyer, Naomi G., Paul J. Hanges, and Rosalie J. Hall (2005), "Applying Multilevel Confirmatory Factor Analysis Techniques to the Study of Leadership," *Leadership Quarterly*, 16 (1), 149-67.
- Eisenberger, Robert, Florence Stinglhamber, Christian Vandenberghe, Ivan L. Sucharski, and Linda Rhoades (2002), "Perceived Supervisor Support: Contributions to Perceived Organizational Support and Employee Retention," *Journal of Applied Psychology*, 87 (3), 565-73.
- Felps, Will, Terence R. Mitchell, David R. Hekman, Thomas W. Lee, Brooks C. Holtom, and Wendy S. Harman (2009), "Turnover Contagion: How Coworkers' Job Embeddedness and Job Search Behaviors Influence Quitting," *Academy of Management Journal*, 52 (3), 545-61.
- Fornell, Claes and David F. Larcker (1981), "Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics," *Journal of Marketing Research*, 28 (3), 382-88.
- Futrell, Charles M. and A Parasuraman (1984), "The Relationship of Satisfaction and Performance to Salesforce Turnover," *Journal of Marketing*, 48 (4), 33-40.
- Gast, Michael F. and Paul J. Patinka (1983), "Imprinting the Young Employee," *Business Horizons*, 26 (4), 11-13.
- Harrison, David A., Kenneth H. Price, and Myrtle P. Bell (1998), "Beyond Relational Demography: Time and the Effects of Surface-and Deep-Level Diversity on Work Group Cohesion," *Academy of Management Journal*, 41 (1), 96-107.
- Jackson, Susan E, Veronica K Stone, and Eden B Alvarez (1992), "Socialization Amidst Diversity: The Impact Demographics on Work Team Oldtimers and Newcomers," in *Research in Organizational Behavior*, L L Cummings and B M Staw, eds. Vol. 15. Greenwich, CT: JAI Press.
- James, Lawrence R., Robert G. Demaree, and Gerrit Wolf (1984), "Estimating Within-Group Interrater Reliability With and Without Response Bias," *Journal of Applied Psychology*, 69 (1), 85-98.

- Johnston, Mark W., A. Parasuraman, Charles M. Futrell, and William C. Black (1990), "A Longitudinal Assessment of the Impact of Selected Organizational Influences on Salespeople's Organizational Commitment during Early Employment," *Journal of Marketing Research*, 27 (3), 333-44.
- Krackhardt, David and Lyman W. Porter (1986), "The Snowball Effect: Turnover Embedded in Communication Networks," *Journal of Applied Psychology*, 71 (1), 50-55.
- Lucas, George H., Jr., A. Parasuraman, Robert A. Davis, and Ben M. Enis (1987), "An Empirical Study of Salesforce Turnover," *Journal of Marketing*, 51 (3), 34-59.
- MacKenzie, Scott B., Philip M. Podsakoff, and Michael Ahearne (1998), "Some Possible Antecedents and Consequences of In-Role and Extra-Role Salesperson Performance," *Journal of Marketing*, 62 (3), 87-98.
- MacKenzie, Scott B., Philip M. Podsakoff, and Gregory A. Rich (2001), "Transformational and Transactional Leadership and Salesperson Performance," *Journal of the Academy of Marketing Science*, 29 (2), 115-34.
- Manski, Charles F (2000), "Economic Analysis of Social Interactions," *The Journal of Economic Perspectives*, 14 (3), 115-36.
- Manski, Charles F. (1993), "Identification of Endogenous Social Effects: The Reflection Problem," *Review of Economic Studies*, 60 (3), 531-42.
- Newcomb, Theodore M (1961), *The Acquaintance Process*. New York, NY: Holt, Rinehart and Winston.
- O'Reilly, Charles A, III, David F Caldwell, and William P Barnett (1989), "Work Group Demography, Social Integration, and Turnover," *Administrative Science Quarterly*, 34 (1), 21-37.
- Oyer, Paul (1998), "Fiscal Year Ends and Nonlinear Incentive Contracts: The Effect on Business Seasonality," *Quarterly Journal of Economics*, 113 (1), 149-85.
- Pfeffer, Jeffrey (1991), "Organization Theory and Structural Perspectives on Management," *Journal of Management*, 17 (4), 789-803.
- Reichheld, Frederick F. and W. Earl Sasser, Jr. (1990), "Zero Defections: Quality Comes to Services," *Harvard Business Review*, 68 (5), 105-11.
- Sager, J.K. (1991), "A Longitudinal Assessment of Change in Sales Force Turnover," *Journal of the Academy of Marketing Science*, 19 (1), 25-36.
- Salancik, Gerald R. and Jeffrey Pfeffer (1978), "A Social Information Processing Approach to Job Attitudes and Task Design," *Administrative Science Quarterly*, 23 (2), 224-53.

- Singh, Jagdip (1998), "Striking a Balance in Boundary-Spanning Positions: An Investigation of Some Unconventional Influences of Role Stressors and Job Characteristics on Job Outcomes of Salespeople," *Journal of Marketing*, 62 (3), 69-86.
- Sirakaya, Sibel (2006), "Recidivism and Social Interactions," *Journal of the American Statistical Association*, 101 (475), 863-77.
- Stinchcombe, Arthur L. (1965), "Organizations and Social Structure," in *Handbook of Organizations*, James G. March, ed. Chicago, IL: Rand-McNally.
- Tang, Chuanyi, Yongmei Liu, Hyunjoo Oh, and Barton Weitz (2014), "Socialization Tactics of New Retail Employees: A Pathway to Organizational Commitment," *Journal of Retailing*, 90 (1), 62-73.
- Turner, John C (1987), *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Basil Blackwell.
- Tyagi, Pradeep K. and Thomas R. Wotruba (1993), "An Exploratory Study of Reverse Causality Relationships Among Sales Force Turnover Variables," *Journal of the Academy of Marketing Science*, 21 (2), 143-53.
- U.S. Bureau of Labor Statistics (2013), "Occupational Employment Statistics Survey," (accessed September 23, 2014), [available at <http://www.bls.gov/news.release/ocwage.t01.htm%5D>].
- Young, H. Peyton (2009), "Innovation Diffusion in Heterogeneous Populations: Contagion, Social Influence, and Social Learning," *American Economic Review*, 99 (5), 1899-924.
- Zalesny, Mary D. and J. Kevin Ford (1990), "Extending the Social Information Processing Perspective: New Links to Attitudes, Behaviors, and Perceptions," *Organizational Behavior and Human Decision Processes*, 47 (2), 205-46.
- Zoltners, Andris A., Prabhakant Sinha, and Sally E. Lorimer (2013), "Are You Paying Enough Attention to Your Sales Force?," (accessed September 23, 2014), [available at <http://blogs.hbr.org/2013/04/are-you-paying-enough-attention-to/%5D>].

