

THE IMPACT OF RELATIONSHIP-SPECIFIC ADAPTATIONS AND INFORMATION EXCHANGE ON SALES AGENTS' ROLE SALIENCE

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Independent sales agents, represented by brokers, manufacturer representatives, and agent firms, are an important population for researchers and business principals alike. However, there is scarce available research that sheds light on factors influencing exchange relationships and performance of sales agents. This study addresses this research gap by conceptualizing and testing a framework wherein information exchange by sales agents and relationship-specific adaptations made by sales agents and their exchange partners are posited to influence sales agents' role salience in exchange relationships. Results of the study indicate that certain types of informational interactions and adaptations made by sales agents may enhance their salience in their relationships with the manufacturers they represent and the customers they serve.

INTRODUCTION

There are more than half a million channel intermediaries comprising manufacturer representatives, broker or agent firms in North America (Manufacturer Representatives Educational Research Foundation 2002). These numbers become even more significant when we consider the fact that these firms are not only owned and managed by independent sales agents but also that these agents may employ additional salespeople (ranging from fewer than 10 to more than a 100) to efficiently and effectively represent manufacturers and locate and sell to a variety of business firms. For organizations, these intermediaries may represent a viable and oftentimes more profitable alternative to employing a direct (proprietary) sales force (cf. Anderson and Weitz 1992; Weiss and Anderson 1992). Such intermediaries, therefore, constitute an important sales population for both researchers and principals alike.

Prior research on independent sales agents has, nevertheless, largely formulated and tested re-

search questions from the perspective of manufacturers and other principals. Such research includes investigations of factors that influence a manufacturer's choice between independent sales agents and employee sales force (e.g., Anderson 1985; Anderson and Schmittlein 1984; Dutta et al. 1995; John and Weitz 1988; Weiss and Anderson 1992). Some factors that have been empirically demonstrated to influence such choices include trade-offs between costs and benefits (Anderson 1985; Anderson and Coughlan 1987; Coughlan 1985; Day and Klein 1987; John and Weitz 1988; Klein, Frazier, and Roth 1990), and asset specificity and environmental uncertainty (e.g., John and Weitz 1988; Klein, Frazier and Roth 1990; Weiss and Anderson 1992).

The relatively scarce body of literature that has focused on sales agents includes, amongst others, studies that have examined the relationship between (a) distributors' investments in transaction specific assets and their dependence on principals (Heide and John 1988), (b) idiosyncratic investments by representatives and manufacturer satisfaction (Weiss and Anderson 1992), idiosyncratic investments by both manufacturer and distributor and their commitment to each other (Anderson and Weitz 1992), Internet use, environmental and relationship specific

factors, and the sales agents' satisfaction with principals and their fear of disintermediation (Gulati, Bristow and Dou 2002), and the impact of personality variables, prior experience, and training on sales agents' Internet utilization and performance (Gulati, Bristow and Dou 2004). These studies serve to emphasize the importance of sales agents as a research population and highlight significant gaps in extant research with respect to, amongst others, the examination of factors that relate to sales agents' viability, relationships with their exchange partners, and performance.

The need for research that is focused toward the examination of one or more issues pertinent to salience and performance of sales agents becomes even more pertinent in the current business environment. A greater number of suppliers are now conducting business with their customers directly over the Internet. This is highlighted by forecasts of business to business sales over the Internet that range from \$2.7 trillion (Blackmon 2000) to \$7.3 trillion (Shaw 2001). Not surprisingly, this trend has raised concerns of disintermediation among independent sales agents (Gulati, Bristow and Dou 2002).

This study seeks to address the above identified gaps in sales literature by evaluating the influence of selected factors on a sales agent's importance to both the manufacturer (principal) and the customer (buyer business firm). This study maintains that positive consequences accrue to a sales agent who manages to increase his/her importance in triadic relationships involving the sales agent, manufacturers and business clients in terms of stability, continuity, and satisfaction with exchange relationships. Some supporting evidence is available in a study conducted by Gulati, Bristow and Dou (2002), where the authors found a positive relationship between role salience of sales agents and their satisfaction with their principals. The study also found that greater interaction with manufacturers had a positive influence on the extent to which sales agents considered themselves to be important to their principals. This

study extends these findings and seeks answers to the following research questions:

1. What is the influence, if any, of a sales agent's level of information exchange with (a) a manufacturer (principal), and (b) a customer (business firm) that purchases that manufacturer's product and that sales agent's perceived importance in the triadic relationship (relationship between manufacturer, business customer, and sales agent)?
2. What is the influence, if any, of a manufacturer's relationship-specific adaptations for a sales agent and that sales agent's perceived importance in a triadic relationship (relationship between manufacturer, business customer, and sales agent)?
3. What is the influence, if any, of a customer's (business firm) relationship-specific adaptations for a sales agent and that sales agent's perceived importance in a triadic relationship (relationship between manufacturer, business customer, and sales agent)?
4. What is the influence, if any, of a sales agent's relationship-specific adaptations, and that sales agent's perceived importance in a triadic relationship (relationship between a manufacturer, business customer that purchases that manufacturer's product, and the sales agent)?

Utilizing insights from resource dependence theory (Pfeffer and Salancik 1978), transaction-cost framework (Williamson 1975, 1985), and related empirical studies, this paper hypothesizes and tests five specific relationships in order to answer the above stated research questions. The next section introduces the conceptual model that relates (a) relationship-specific adaptations by a sales agent, business customer, and manufacturer and (b) information exchanges the sales agent has with the principal and customer to the importance the sales agent ascribes to his/her role in that triadic relationship (the Sales Agent's Adaptation, Information Exchange, and Role Salience Model, abbreviated as the Sales Agent's AIR Model). The constructs the model includes are defined and the hypothesized relationships the model implies

are developed. Subsequently, the paper presents descriptions of the procedures involved in developing the survey instrument, collecting the data, and analyzing the procured data. The final section lists some limitations of this study and suggests avenues for related future research.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

The Sales Agent's Adaptation, Information Exchange, and Role Salience Model (i.e., the Sales Agent's AIR Model; Figure 1) forwards several constructs that influence directly the perceived role salience of a sales agent. As Figure 1 depicts, a sales agent's relationship-specific adaptations, a manufacturer's relationship-specific adaptations for the sales agent, a business firm's (the manufacturer's customer who is serviced by the sales agent) relationship-specific adaptations for the sales agent, a sales agent's information exchange with the manufacturer, and a sales agent's information exchange with the customer, all influence directly and positively that sales agent's perceived role salience in the triadic relationship between the agent, the manufacturer, and the buyer.

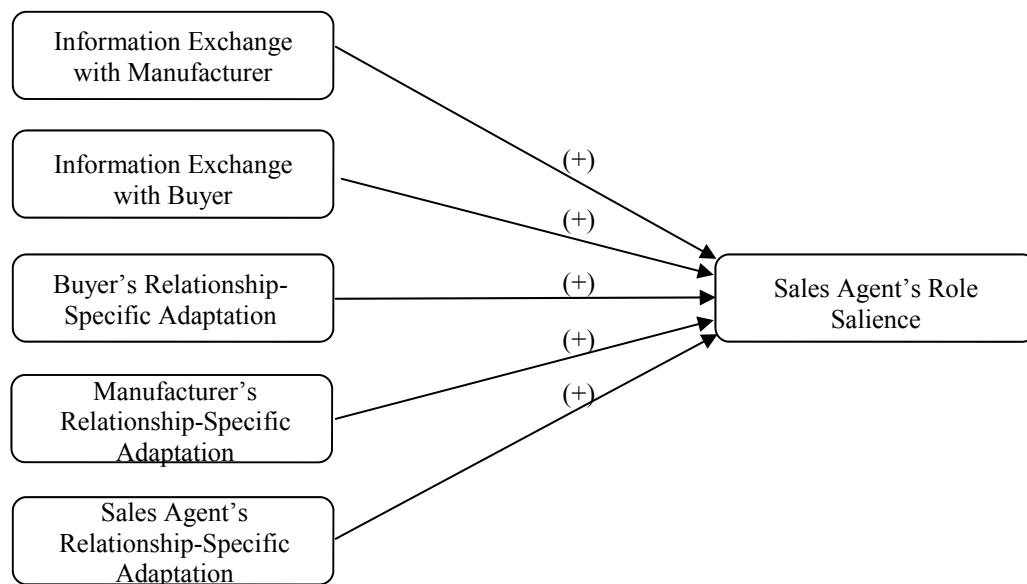
Relationship-Specific Adaptations

Cannon and Perreault, Jr. (1999) define relationship-specific adaptations as "investments in adaptations to process, product, or procedures specific to the needs or capabilities of an exchange partner...Williamson's (1985) notion of asset specificity is also closely related to the idea of relation-specific adaptations" (p. 443-444). Gulati, Bristow and Dou (2002) utilize this definition of relationship-specific adaptations to represent adaptations made by a manufacturer on behalf of a buyer with idiosyncratic requirements. In this study we use this definition to represent (a) the adaptations made by a sales agent on behalf of the manufacturer and one identified customer in order to better meet the needs of the manufacturer and the buyer, (b) the adaptations made by the manufacturer for the sales agent, and (c) the adaptations made by the business customer on behalf of the sales agent.

Information Exchange

Cannon and Perreault, Jr. (1999) define information exchange as "expectations of open shar-

FIGURE 1
A Sales Agent's Adaptation, Information Exchange and Role Salience Model
(The Sales Agent's AIR Model)



ing of information that may be useful to both parties” (p. 441). Such an exchange of information includes the sharing of proprietary information, and product and market related information, and is linked closely to the concept of communication (Cannon and Perreault, Jr. 1999). This study utilizes this definition of information exchange to represent the type of information as well as the extent to which such information is exchanged between (a) the sales agent and the manufacturer, and (b) the sales agent and the buyer.

Role Salience

As defined by Gulati, Bristow and Dou (2002), role salience is “the importance of one channel member to the other as determined by the incremental value provided by the first channel member. A sales agent’s role-salience, would refer, in part, to the extent to which a manufacturer seeks out the sales agent’s advice and knowledge in the course of customizing/adapting products to match a buyer’s requirement” (p. 55). We adopt this definition of role salience in this study and apply it to the importance a sales agent ascribes to his role both as a representative of the manufacturer and a seller to the customer.

Information Exchange and Role Salience

When a buyer provides a supplier access to proprietary knowledge of new product designs, technology innovations, and confidential information about the market, the buyer enhances the relational commitment of that supplier (Feldman 1998). Such information exchange influences positively the relational bonding the supplier develops with the buyer (Gundlach et al. 1995). In fact, informal mechanisms such as information sharing and joint planning between exchange partners in channel relationships may serve to remove the need for vertical integration by channel members (Noordewier, John and Nevin 1990; Palay 1984). The above findings with respect to outcomes arising from free exchange of vital, proprietary information between channel members suggests that sales

agents who are able to share such information and have access to such information from a buyer are likely to be committed to the relationship, and are likely to develop strong relationships with the buyer. An associated consequence of such information exchange is that the sales agent who in actively shares in, and is privy to, confidential information is likely to feel salient, important, and useful in the exchange relationship with the buyer.

A similar consequence can be posited for sales agents who are involved in free exchange of proprietary information with their manufacturer principals. As suggested by Gulati, Bristow and Dou (2002), exchange of confidential information regarding product specifications and the like are likely to reduce adverse asymmetry in the sales agent-manufacturer exchange relationship and render the sales agent a “vital conduit between the manufacturer and the buyer.” (p. 57) When considered together with the findings reported and conclusions arrived at in the previous paragraph, an obvious conclusion is that enhanced information exchange between sales agents and manufacturers impacts positively the sales agents’ role salience in the exchange relationship.

H₁: A sales agent’s extent of information exchange with a buyer relates directly and positively to that sales agent’s perception of his/her role salience in the triadic relationship between the sales agent, manufacturer, and buyer.

H₂: A sales agent’s extent of information exchange with a manufacturer relates directly and positively to that sales agent’s perception of his/her role salience in the triadic relationship between the sales agent, manufacturer, and buyer.

Relationship-Specific Adaptations and Role Salience: The relationship between a sales agent and a manufacturer is typically asymmetric in favor of the manufacturer (Gulati, Bristow and Dou 2002). For example, a manufacturer has the final say as regards product speci-

fications, product quantities, and prices. Further, a manufacturer enters into contractual relationships with a sales agent and, as such, can choose to rescind or not renew such contracts. In such an asymmetric relationship, a manufacturer who invests in relationship-specific adaptations on behalf of the sales agent sends signals to that sales agent that the manufacturer desires continuity in the exchange relationship (cf., Feldman 1996; Ganesan 1994), and as such is committed to the relationship (cf., Anderson and Weitz 1992; Heide and John 1990). Such investments by a manufacturer on behalf of a sales agent are, therefore, likely to reduce the asymmetry in the exchange relationship as perceived by the sales agent.

This study contends that in addition to (a) reduced perceived asymmetry in the exchange relationship, (b) increased expectations with regard to continuity of the relationship, and (c) enhanced perceived commitment of manufacturer, the sales agent is also likely to perceive a manufacturer's investment in relationship-specific assets as a sign that the agent is important to the manufacturer and the manufacturer recognizes the salient role performed by the sales agent.

A similar logic can be forwarded with respect to a sales agent's perceptions regarding his/her role salience in response to a buyer's investment in relationship-specific investments for the sales agent. A buyer's relationship with a seller (the sales agent, in this instance) is also likely to be asymmetric in favor of the buyer as the performance and earnings of a sales agent are dependent, to an extent, on that sales agent's ability to effectively satisfy the needs of the buyer. As in the case of the manufacturer, a buyer's investment in relationship-specific adaptations, then, sends a signal to the sales agent that the buyer considers the relationship to be important and valuable and that the buyer desires to continue purchasing from the sales agent (cf., Anderson and Weitz 1992; Feldman 1996; Ganesan 1994; Heide and John 1990).

H₃: A sales agent's perception of a manufacturer's investment in relationship-specific adaptations relates directly and positively to that sales agent's perception of his/her role salience in the triadic relationship between the sales agent, manufacturer, and buyer.

H₄: A sales agent's perception of a buyer's investment in relationship-specific adaptations relates directly and positively to that sales agent's perception of his/her role salience in the triadic relationship between the sales agent, manufacturer, and buyer.

Resource dependence theory (Heide 1994; Pfeffer and Salancik 1978) suggests that in business relationships, exchange partners will respond to adverse dependence asymmetry by taking actions to reduce it. In the context of sales agents, who are likely to have asymmetric relationships with both their principals (by virtue of the nature of relationship), and with their business customers (because their revenues depend on gaining and maintaining customers), resource dependence theory would suggest that sales agents would be motivated to take actions to reduce such asymmetries.

Heide and John (1988) did find evidence indicating that manufacturer's representatives who had invested in specific assets on behalf of their principals were also likely to invest in specific assets for their customers to offset their dependence on the manufacturers arising out of their initial investments. This finding by Heide and John (1988), when applied to the context of this study, suggests that sales agents who have invested in relationship-specific assets on behalf of the manufacturer are likely to also invest in relationship-specific assets on behalf of the customers to reduce their consequent dependence on the manufacturer. A likely useful outcome of such efforts to reduce relationship dependence by sales agents is that sales agents become more knowledgeable about the business operations of their principals and customers, and increase their expertise to the point where they can render professional advice to both manufac-

turers and customers. Thus, specific adaptations on behalf of a principal and customer should make a sales agent more relevant and important in the triadic exchange relationship.

H₅: A sales agent's investments in relationship-specific adaptations for both the manufacturer and a business customer who buys that manufacturer's products relates directly and positively to that sales agent's perception of his/her role salience in the triadic relationship between the sales agent, manufacturer, and buyer.

METHOD

This study utilized data from a survey of manufacturers' representatives that belong to a national manufacturers' agents association. The survey instrument tapped the sales agents' perceptions and behaviors concerning their relationships with manufacturers and their buyers.

Participants

Participants in the study were independent sales agents, randomly selected from the membership roster of a national manufacturer's agents association. A total of 1500 surveys were distributed, with 317 useable surveys being returned for a response rate of approximately 21 percent. We assessed non-response bias using early and late respondent comparison (see Armstrong and Overton 1977); no significant differences were found. On average, the participants had approximately 21 years of experience as manufacturers' representatives and employed four salespeople. Approximately 55 percent of the participants were college graduates and their average sales revenues for the last fiscal year were approximately \$8.24 million. These figures relate closely to the average figures reported by the national manufacturer's agents association, hence, the sample is considered to be representative of the national association.

Development of Survey Instrument and Testing

The process involved in developing the survey instrument included (a) in-depth discussions with the representatives of the national manufacturer's agents association, and (b) consultations with other marketing academicians regarding the issues of interest to the researchers. An iterative process assisted the development of the set of topics the survey addressed. Subsequently, the researchers reviewed relevant channels literature and other extant research in marketing to obtain the items that tapped the constructs of interest. Construct-measures that were available from literature were incorporated and/or adapted based on whether or not they exhibited desirable reliability and validity. The expertise and experience of the academicians and manufacturer's association representatives provided the framework from which several additional categories of survey items were developed. This process (a) led to the specification of items-sets to measure factors that were determined to be salient for the study undertaken but for which measures did not currently exist, and (b) provided the nomological net for the measures of these factors.

Item-sets that were posited to measure (a) a sales agent's extent of information exchange with a manufacturer, (b) a sales agent's extent of information exchange with the buyer who purchased that manufacturer's product through the sales agent, (c) the manufacturer's perceived relationship-specific adaptation for the sales agent, (d) the sales agent's relationship-specific adaptation in the triadic relationship, and (e) the buyer's perceived relationship-specific adaptation for the sales agent were adapted from similar measures developed by Cannon and Perreault (1999). Additionally, a 5 item-set was developed to represent a sales agent's role-salience. Initially, then, the survey instrument included twenty-eight items designed to represent the 6 constructs included in the Sales Agent's AIR model (Figure 1). All survey items were written into a 7-point Likert type format and were then reviewed by four

marketing academicians with expertise in the areas of professional selling, consumer behavior, and marketing research. The reviewers examined the survey items for potential problems in wording, phrasing, understandability, or redundancy. The review process resulted in the rewording and revision of several items. The revised items and demographic questions were reviewed by several manufacturers' representatives. This procedure revealed no problems with the understandability of the various item-sets.

Survey Administration

In an attempt to maximize response rate in the study, the researchers worked closely with the president and the director of membership of the national manufacturer's agents association. With the cooperation of those individuals, a letter was drafted which explained the nature of the research and clearly indicated the association's support of the study. The letter served as the cover page for the survey instrument and was also adapted and included in an issue of the association's monthly agency sales magazine. The magazine issue was sent to all association members approximately two weeks prior to the distribution of the survey instrument. In addition, prior to mailing the questionnaire to the participants in the study, the agency administrators sent an e-mail message to all members asking that they "watch" for an important questionnaire in their mail.

Three days after the e-mail message was posted, the researchers mailed the survey instrument (first class via the United States Post Office) to the 1500 randomly selected manufacturer's representatives. Ten days later, the director of membership of the manufacturer's agents association sent an e-mail message to each of the 1500 manufacturer's representatives who received the questionnaire. In that e-mail, the reps were reminded of the importance of the study and were encouraged to complete the questionnaire if they hadn't already done so and thanked them if they had returned their completed questionnaire. Finally, the e-mail mes-

sage included contact information so that, if necessary, the rep could request a second copy of the survey instrument.

MEASURE PURIFICATION AND ANALYSIS

After validating the data (i.e., ascertaining the correctness of the responses, reverse coding, etc.) a correlation matrix of the 28 items representing the six constructs depicted by the Sales Agent's AIR model (Figure 1) was generated. Inter-item correlations were examined to assess (a) the pattern of correlations between items representing unique constructs, and (b) the pattern of correlations between items representing different constructs. Dimensionality of the constructs was then assessed using the procedure listed by Gerbing and Anderson (1988). The 28 items were subjected to principal component analysis using the Kaiser criterion (eigenvalue, 1) with varimax rotation.

The resulting 8-factor structure was examined to assess the loadings and cross-loadings of the 28 items. Five items were observed to (a) either cross-load on more than one factor (loadings $>.4$), and/or (b) load on a factor that could not be identified. Further those five items exhibited low loadings (loading $<.5$) on the factor (construct) they represented. An examination of the correlation matrix indicated that those items had statistically significant correlations with items representing other constructs but weak correlations with items representing the same constructs. After examining the content of the items, it was determined that the understandability of each item was suspect, and that each was a poor representative of the associated construct. Consequently, those five items were deleted from further analysis. A second principal component analysis with the 23 remaining items yielded a 6-factor structure with eigenvalues >1 (total variance explained = 63.8 percent). The loadings of the items corresponded to the constructs they represented, suggesting that all the constructs were unidimensional.

LISREL 8.54 was used subsequently to conduct a confirmatory factor analysis aimed at purifying and assessing the unidimensionality of the construct-measures (see Anderson and Gerbing 1988; Gerbing and Anderson 1988). For the measurement model, the following values were observed for the various fit indices: λ^2 (215 N=317) = 501.31, $p = .00$; RMR = .17; GFI = .88; AGFI = .86; NFI = .83; NNFI = .87; and CFI = .89. Although the model exhibited acceptable values for several fit indices (see Bentler and Bonnet 1980; Williams and Hollahan 1994), one item representing role salience exhibited an unacceptably low squared multiple correlation coefficient (.16) and low standardized loading (.40). Anderson and Gerbing (1988) emphasize that (a) a re-specification of a converged measurement model may both be justifiable and necessary if items in any construct-measure have either been erroneously included or mis-specified, and that (b) any re-specification should be based on both statistical benchmarks and item content. After evaluating the content of the item with unacceptable indicators, the item was deleted from further analysis.

Table 1 summarizes the findings of the re-specified measurement model in which the 22 remaining items were hypothesized to represent the six constructs depicted in the Sales Agents AIR model (Figure 1). The fit indices (see Table 1) indicated an improvement in the fit of the re-specified measurement model over the first measurement model. The statistically significant standardized loadings exhibited by the 22 items representing the six constructs (see Table 1) established the convergent validity of the measures (see Anderson and Gerbing 1988). Table 2 presents the results of the analysis conducted to determine the discriminate validity of the six constructs depicted in the Sales Agent's AIR model. The λ^2 difference tests conducted between all possible pairs of constructs are statistically significant (overall $\alpha = .05$), implying that the different measures of the construct exhibit discriminant validity (see Anderson and Gerbing 1988). Table 1 and Table 2, therefore, together indicate that the measures of the six

constructs have both convergent and discriminant validity, i.e., the measures exhibit construct validity (Kerlinger 1986).

Table 3 reports (a) the purified item-sets representing the unidimensional constructs in the Sales Agent's AIR model, and (b) the reliabilities of those item-sets (Cronbach α ranging between .71 and .83). All the measures exhibit acceptable consistency in light of the fact that that direct measures of some constructs are not available (see Nunnally 1978).

The relationships depicted in the Sales Agent's AIR model were tested using structural equation modeling in LISREL 8.54. Table 4 reports the results of such testing through model fit indices, standardized coefficients, t-values, and significance levels. As Table 4 indicates, the analysis provided support for three of the five hypothesized relationships.

RESULTS AND DISCUSSION

The analysis did not find support for Hypothesis 1 (Table 4) which posited a positive relationship between a sales agent's information exchange with a buyer and that sales agent's perceived role salience ($\gamma = .09$, $t = 1.17$, $p > .05$). For sales agents who participated in this study, then, their perceptions of the extent to which they exchanged important, confidential, and proprietary information with the buyers had marginal, if any, effect on their perceived importance as intermediaries between manufacturers and customers.

A positive and statistically significant relationship ($\gamma = .40$, $t = 4.84$, $p < .025$) between a sales agent's extent of information exchange with the manufacturer and that sales agent's perceived role salience suggested support for Hypothesis 2 (Table 4). For the sampled sales agents, then, the extent to which these intermediaries engaged in open and important exchange of information with their principals related directly and positively to their felt level of importance in the triadic relationships between manufacturers, themselves, and their business

TABLE 1
Summary of Findings for the Respecified Measurement Model

Constructs and Items	Sq. Multiple R	Std. Loadings	t- Value	p <
<i>Agent's Role Salience</i>				
This manufacturer seeks my firm's advice when developing product specifications for the buyer	0.72	0.85	15.80	.001
This manufacturer seeks my firm's advice when customizing products to the buyers requirements	0.63	0.80	14.76	.001
We advise the buyer during the development of product specifications for this manufacturer's products	0.34	0.58	10.35	.001
<i>Information Exchange with Manufacturer</i>				
We share proprietary information	0.39	0.63	11.75	.001
We share relevant customer information	0.69	0.83	17.22	.001
We share relevant product information	0.77	0.88	18.74	.001
We share supply and demand related information	0.57	0.75	15.07	.001
<i>Information Exchange with Buyer</i>				
We share proprietary information	0.27	0.52	8.96	.001
We share supply and demand related information	0.69	0.83	14.76	.001
We share relevant product information	0.61	0.78	13.85	.001
<i>Agent's Relationship-Specific Adaptation for the Exchange Partners</i>				
Just for this manufacturer, sales agents were hired or trained	0.48	0.69	13.01	.001
Just for this manufacturer, business related investments were made	0.60	0.77	15.10	.001
Just for this buyer, my firm allocated resources to obtain product and market knowledge	0.43	0.66	12.16	.001
Just for this buyer, sales agents were hired or trained	0.50	0.71	13.35	.001
Just for this buyer, business related investments were made	0.51	0.72	13.62	.001
<i>Manufacturer's Relationship-Specific Adaptation for the Sales Agent</i>				
Just for my firm, this manufacturer changed its personnel	0.31	0.55	9.34	.001
Just for my firm, this manufacturer changed its inventory policies	0.63	0.79	13.77	.001
Just for my firm, this manufacturer invested in capital equipment	0.48	0.69	11.99	.001
<i>Buyer's Relationship-Specific Adaptation for the Sales Agent</i>				
Just for my firm, the buyer changed its buying process	0.52	0.72	13.05	.001
Just for my firm, the buyer provided product training	0.36	0.60	10.52	.001
Just for my firm, the buyer changed its inventory policies	0.62	0.79	14.56	.001
Just for my firm, the buyer invested in capital equipment	0.27	0.52	8.91	.001

Descriptive Goodness of Fit Indices:

 χ^2 (194 N = 317), p=.00 454.06

Standardized RMR 0.059

GFI0 .89

AGFI1 0.86

NFI 0.84

CFI 0.90

AIC 572.06

RMSEA 0.065

TABLE 2
Assessing Discriminant Validity: Chi-Square Difference Tests

Models/ Construct Pairs	Model $\times 2$	Δ Model $\times 2$	p
Unconstrained Measurement Model (d.f = 194)	454.06		
Constrained Models (d.f = 195)			
Information Exchange (Manufacturer) & Agent's Role Salience	678.87	224.81	<.001
Information Exchange (Buyer) & Agent's Role Salience	702.04	247.98	<.001
Information Exchange (Buyer) & Information Exchange (Manufacturer)	621.72	167.66	
Agent's Adaptation & Agent's Role Salience	724.35	270.29	<.001
Agent's Adaptation & Information Exchange (Manufacturer)	1013.00	558.94	<.001
Agent's Adaptation & Information Exchange (Buyer)	685.69	231.63	<.001
Manufacturer's Adaptation & Agent's Role Salience	741.50	287.44	<.001
Manufacturer's Adaptation & Information Exchange (Manufacturer)	Did Not Converge		<.001
Manufacturer's Adaptation & Information Exchange (Buyer)	637.38	183.32	<.001
Manufacturer's Adaptation & Agent's Adaptation	592.79	138.73	<.001
Buyer Adaptation & Agent's Role Salience	739.52	285.06	<.001
Buyer's Adaptation & Information Exchange (Manufacturer)	Did Not Converge		
Buyer's Adaptation & Information Exchange (Buyer)	Did Not Converge		
Buyer's Adaptation & Agent's Adaptation	689.75	235.69	<.001
Buyer's Adaptation & Manufacturer's Adaptation	545.23	91.17	<.001

Note: Critical $\chi^2_{(1 \text{ d.f., } p = .001)} = 10.828$; p = significance level.

customers. Generalized across all sales agents, this result indicates that sales agents who enhance their informational interactions with their manufacturers are likely to become more important and relevant in exchange-relationships involving manufacturers and buyers.

Hypothesis 3, which posited a direct and positive relationship between a sales agent's perceptions regarding a manufacturer's relationship-specific adaptations and the sales agent's role salience was not supported by the analysis ($\gamma = -.12$, $t = -1.29$, $p > .05$). Indeed, although not statistically significant, the analysis indicated a negative relationship between the two constructs. This finding is somewhat surprising, specially in light of the fact that various applications of transaction cost theory reported earlier in the paper suggest that an exchange partner's investment in transaction specific assets results in a reduction of dependence and other associ-

ated positive consequences for the other exchange partner. One plausible explanation for this lack of relationship is surmised below. A sales agent who perceives that a manufacturer has invested in relationship-specific assets may feel that he/she has become more relevant to the manufacturer. However, this perception may be tempered by the perception that, as the sales agent's role in the triadic relationship becomes more salient, the manufacturer may be motivated to take steps in order to increase his her importance in the relationship and reduce the consequent dependence on the sales agent.

The direct, positive relationship between a sales agent's perceptions regarding a buyer's relationship-specific adaptations and the sales agent's role salience as indicated by Hypothesis 4 was supported. ($\gamma = .17$, $t = 1.88$, $p < .05$). Results of this study, therefore suggest that relationship-specific adaptations by the customers consid-

TABLE 3
Reduced Scale Items and Reliabilities

Scale Items	Cronbach's Alpha
<i>Agent's Role Salience</i> This manufacturer seeks my firm's advice when developing product specifications for the buyer This manufacturer seeks my firm's advice when customizing products to the buyers requirements We advise the buyer during the development of product specifications for this manufacturer's products	.. .78
<i>Information Exchange with Manufacturer</i> We share proprietary information We share relevant customer information We share relevant product information We share supply and demand related information	.. .83
<i>Information Exchange with Buyer</i> We share proprietary information We share supply and demand related information We share relevant product information	.. .71
<i>Agent's Relationship-Specific Adaptation for the Exchange Partners</i> Just for this manufacturer, sales agents were hired or trained Just for this manufacturer, business related investments were made Just for this buyer, my firm allocated resources to obtain product and market knowledge Just for this buyer, sales agents were hired or trained Just for this buyer, business related investments were made	.. .83
<i>Manufacturer's Relationship-Specific Adaptation for the Sales Agent</i> Just for my firm, this manufacturer changed its personnel Just for my firm, this manufacturer changed its inventory policies Just for my firm, this manufacturer invested in capital equipment	.. .71
<i>Buyer's Relationship-Specific Adaptation for the Sales Agent</i> Just for my firm, the buyer changed its buying process Just for my firm, the buyer provided product training Just for my firm, the buyer changed its inventory policies Just for my firm, the buyer invested in capital equipment	.. .75

Note: For these scales, respondents were asked to think of one major manufacturer that his/her firm represented and on major customer to whom he/she sold that manufacturer's products.

TABLE 4
Results of Hypotheses Testing

Hypotheses	Direct Relationships	γ	t- Value	p-value
H ₁	Information Exchange (Buyer) $\square$ Role Salience	.09	1.17	> .05
H ₂	Information Exchange (Manufacturer) $\square$ Role Salience	.40	4.84	< .025
H ₃	Manufacturer's Adaptation $\square$ Role Salience	-.12	-1.29	> .05
H ₄	Buyer Adaptation $\square$ Role Salience	.17	1.88	< .05
H ₅	Agent's Adaptation $\square$ Role Salience	.14	1.86	< .05

Descriptive Goodness of Fit Indices:

χ^2 (194 N = 317), p=.00	429.87	NFI	0.89	RMSEA	0.062
Standardized RMR	0.059	NNFI	0.92		
GFI	0.89	CFI	0.94		
AGFI	0.86	AIC	547.87		

ered by the responding sales agents influenced positively the sales agents' perceived role salience. When generalized across sales agents, the results suggest that buyers' relationship-specific adaptations not only signals a desire for continuity in business relations (cf., Anderson and Weitz 1992; Feldman 1996; Ganesan 1994; Heide and John 1990) but also increases their reliance on sales agents and consequently enhances the importance of sales agents.

Hypothesis 5, which related a sales agent's relationship-specific adaptations for both the buyer and the manufacturer to that sales agent's perceived role salience in the triadic relationship was supported ($\gamma = .14$, $t = 1.86$, $p < .05$). The statistically significant standardized coefficient indicates that, for the sampled sales agents, their investments in relationship-specific adaptations for the manufacturers and customers increased their perceived importance in the exchange-relationships with the manufacturers and customers. Because these agents had invested in specific adaptations for manufacturers and customers, they felt they had enhanced their ability to serve these exchange partners and that consequently, their services were valued to a greater degree by their exchange partners.

In sum, hypotheses testing supported to a significant extent the conceptualized Sales Agent's AIR Model (Figure 1). A direct implication of the findings in this study is that sales agents can take certain actions to enhance their importance to both the customers and the manufacturers. Specifically, by encouraging and engaging in information exchange, and by investing in relationship-specific assets, sales agents can become more relevant to their exchange partners. Such improvements in the importance of sales agents should have positive consequences in terms of their stability and performance.

LIMITATIONS AND FUTURE RESEARCH

In order to collect data to test the proposed relationships, this study utilized a list of sales

agents belonging to one national manufacturer agents' association. Although a random sample of sales agents was generated for this purpose, the results of this study may not be generalizable to other populations of sales agents. A higher response rate would have added to the generalizability of this study. Data for this study was generated through self-reports by sales agents and therefore may suffer from respondent bias. Also, measures of relationship-specific adaptations by exchange partners were provided by sales agents and may, therefore, be colored by their perceptions. Another method related limitation is that some construct measures utilized here were conceptualized specifically for this study, and therefore, do not have previously established validity.

Because this study adopted a focused approach, the conceptual model tested here was consciously under-specified. For example, constructs that relate to structural characteristics of a sales agent's exchange relationships may also influence that sales agent's role salience (see Gulati, Bristow and Dou 2002). However, such constructs were not included in this study.

The study conducted here provides some useful insights for sales agents who may wish to enhance their importance and value to their exchange partners, however, several associated research questions still remain unanswered. For example, it would be useful to develop and test a conceptual framework that incorporates a more comprehensive set of antecedent constructs that influence a sales agent's role salience. Another extension of this study could involve conceptualizing and testing plausible consequences of a sales agent's role salience to the sales agent as well as to the sales agent's exchange partners. Some consequences that could be tested in such a study include (a) a sales agent's performance, dependence, satisfaction, and relationships stability, (b) a manufacturer's dependence, performance and satisfaction, and (c) a buyer's level of satisfaction with the sales agent.

This study supported the posited influence of relationship-specific adaptations by buyers on sales agents' role salience but failed to support a similar relationship arising from similar adaptations by manufacturers. It would be useful to examine if such relationships exist for those manufacturers that contribute the most to sales agents' sales revenues. These and other related studies could increase our understanding of the dynamics involved in triadic exchange relationships between sales agents, manufacturers, and buyers, as well as provide sales agents with tools and suggestions they can utilize to enhance their usefulness to exchange partners and increase their sales revenues.

REFERENCES

- Anderson, E. (1985), "The Salesperson as Outside Agent or Employee: A Transaction Cost Analysis," *Marketing Science*, 4 (Summer), 234-254.
- Anderson, E. and A. T. Coughlan (1987), "International Market Entry and Expansion Via Independent or Integrated Channels of Distribution," *Journal of Marketing*, 51 (January), 71-82.
- Anderson, E. and D. Schmittlein (1984), "Integration of The Sales Force: An Empirical Examination," *Rand Journal of Economics*, 15 (Autumn), 385-395.
- Anderson, E. and B. Weitz (1992), "The Use of Pledges to Build and Sustain Commitment in Distribution Channels," *Journal of Marketing*, 51 (January), 18-34.
- Anderson, J. C. and D. W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-step Approach," *Psychological Bulletin*, 103 (3), 411-423.
- Armstrong, S. J. and T. S. Overton (1977), "Estimating Non-response Bias in Mail Surveys," *Journal of Marketing Research*, 14 (August), 396-402.
- Bentler, P. M. and D. G. Bonnet (1980), "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures," *Psychological Bulletin*, 88, 588-606.
- Blackmon, D. A. (2000), "Where the Money Is," *Wall Street Journal*, (April 17), B1, B10.
- Cannon, J. P. and W. D. Perreault, Jr. (1999), "Buyer-seller Relationships in Business Markets," *Journal of Marketing Research*, 36 (November), 439-460.
- Coughlan, A. T. (1985), "Competition and Cooperation in Marketing Channel Choice: Theory and Application," *Marketing Science*, 4 (Spring), 110-129.
- Day, G. S. and S. Klein (1987), "Cooperative Behavior in Vertical Markets: The Influence of Transaction Costs and Competitive Strategies," In M. Houston (Ed), *Review of Marketing* (pp. 39-66), Chicago: American Marketing Association.
- Dutta, S., M. Bergen, J. B. Heide, and G. John (1995), "Understanding Dual Distribution: The Case of Reps and House Accounts," *Journal of Law, Economics, and Organization*, 11 (1), 189-204.
- Feldman, L. (1996), "Manufacturer-supplier Relationships and the Long-term Orientation: Developing an Effective Exchange Partner," Doctoral Dissertation, Nova Southeastern University.
- Feldman, L. (1998), "Industry Viewpoint: Relational Interdependency and Punctuated Equilibrium," *The Journal of Business and Industrial Marketing*, 13 (3), 288-.
- Ganesan, S. (1994), "Determinants of Long-term Orientation in Buyer-seller Relationships," *Journal of Marketing*, 58 (April), 1-19.
- Gerbing, D. W. and J. C. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," *Journal of Marketing Research*, 25 (May), 186-192.
- Gulati, R., D. Bristow and W. Dou (2002), "A Three-tier Model Representing the Impact of Internet Use and Other Environmental and Relationship-specific Factors on a Sales Agent's Fear of Disintermediation Due to the Internet Medium," *Journal of Marketing Channels*, 9 (3/4), 49-85.

- Gulati, R., D. Bristow and W. Dou (2004), "The Impact of Personality Variables, Prior Experience, and Training on Sales Agent's Internet Utilization and Performance," *Journal of Business to Business Marketing*, 11 (1/2), 153-179.
- Gundlach, G. T., R. S. Achrol and J. T. Mentzer (1995), "The Structure of Commitment in Exchange," *Journal of Marketing*, 59 (January), 78-92.
- Heide, J. (1994), "Interorganizational Governance in Marketing Channels," *Journal of Marketing*, 58 (January), 71-85.
- Heide, J. and G. John (1988), "The Role of Dependence Balancing in Safeguarding Transaction-specific Assets in Conventional Channels," *Journal of Marketing*, 52 (January), 20-35.
- Heide, J. and G. John (1990), "Alliances in Industrial Purchasing: The Determinants of Joint Action in Buyer-seller Relationships," *Journal of Marketing Research*, 27 (February), 24-36.
- John, G. and B. A. Weitz (1988), "Forward Integration into Distribution: An Empirical Test of Transaction Cost Analysis," *Journal of Law, Economics, and Organization*, 4 (Fall), 121-139.
- Kerlinger, F. N. (1986), *Foundations of Behavioral Research* (3rd ed.). Chicago, IL: Holt, Rinehart, and Winston, Inc.
- Klein, S., G. L. Frazier and G. Roth (1990), "A Transaction Cost Analysis Model of Channel Integration in International Markets," *Journal of Marketing Research*, 27 (May), 196-208.
- Noordewier, T. G., G. John and J. R. Nevin (1990), "Performance Outcomes of Purchasing Arrangements in Industrial Buyer-vendor Relationships," *Journal of Marketing*, 54 (October), 80-93.
- Nunnally, J. C. (1978), *Psychometric Theory* (2nd Edition). New York, NY: McGraw-Hills Inc.
- Palay, T. M. (1984), "Avoiding Regulatory Constraints: Contractual Safeguards and the Role of Informal Agreements," *Journal of Legal Studies*, 13 (June), 265-287.
- Pfeffer, J. and G. R. Salancik (1978), "The External Control of Organizations: A Resource Dependence Perspective," Harper & Row, New York, NY.
- Shaw, C. (2001), "The Rep and the Future - Which is Now," *Agency Sales*, 31 (January), 28-30.
- Weiss, A. M. and E. Anderson (1992), "Converting from Independent to Employee Salesforces: The Role of Perceived Switching Costs," *Journal of Marketing Research*, 29 (February), 101-115.
- Williams L. J. and P. J. Hollahan (1994), "Parsimony-based Fit Indices for Multiple-indicator Models: Do They Work?," *Structural Equation Modeling*, 1 (2), 161-189.
- Williamson, O. E. (1975), "Markets and Hierarchies: Analysis and Antitrust Implications," New York: The Free Press.
- Williamson, O. E. (1985), "The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting," New York: The Free Press.