

April 1993

Organizational Purchasing Theory: A Review and Assessment

Mark C. Hall
Mankato State University

C.P. Rao
University of Arkansas

Kevin M. Elliott
Mankato State University

Follow this and additional works at: <https://digitalcommons.georgiasouthern.edu/sbr>



Part of the [Business Commons](#), and the [Education Commons](#)

Recommended Citation

Hall, Mark C.; Rao, C.P.; and Elliott, Kevin M. (1993) "Organizational Purchasing Theory: A Review and Assessment," *Southern Business Review*. Vol. 19: Iss. 1, Article 5.

Available at: <https://digitalcommons.georgiasouthern.edu/sbr/vol19/iss1/5>

This article is brought to you for free and open access by the Journals at Digital Commons@Georgia Southern. It has been accepted for inclusion in Southern Business Review by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

ORGANIZATIONAL PURCHASING THEORY: A REVIEW AND ASSESSMENT

Mark C. Hall

C. P. Rao

Kevin M. Elliott

INTRODUCTION

In the most general sense, organizational purchasing knowledge can be classified into three components: the buying center, the buying process, and the factors affecting both buying centers and buying processes (Wind & Thomas, 1980). As indicated in Figure 1, outcomes in organizational buying are directly influenced by characteristics of the buying center, the buying process employed, and the interaction of these two. Additionally, outcomes in earlier buying situations have the potential to alter subsequent buying center characteristics and buying processes. Finally, both buying centers and buying processes are influenced directly by situational (buying situation characteristics) and contextual (personal, interpersonal, organizational, and environmental characteristics) factors.

FIGURE 1
ORGANIZATIONAL PURCHASING



The purpose of this paper is twofold. First, a classification and review of the existing literature dealing with Figure 1 concepts are provided. Second, an assessment is made of the present status of organizational purchasing conceptualization and research.

REVIEW

Situational Factors

An organization typically purchases a wide variety of industrial products. Situational factors describe the characteristics of the product being considered for purchase.

Robinson, Faris, and Wind (1967) were one of the earliest groups to bring to light these factors with their identification of: 1) new buy, 2) modified rebuy, and 3) straight rebuy situations. Their typology classified buying situations on the basis of how much information needed to be collected, the seriousness with which alternatives were considered, and how unfamiliar the purchase situation was.

Cardozo (1980) has also extensively examined situational factors and has developed

a four-dimensional classification scheme. These dimensions include: 1) the buyer's familiarity with the product task (new or rebuy), 2) the product type (product use or degree of standardization), 3) the importance of the purchase to the buying organization (exposure to loss, uncertainty), and 4) the principle type of uncertainty present in the purchase (need, technical, market, acceptance, transaction).

Contextual Factors

Industrial buying occurs within the context of a larger, often volatile, environment. Contextual factors describe the domain in which purchase consideration occurs.

Webster and Wind (1972), in their classic work, have identified four contextual dimensions: 1) individual influence (personality, role set, motivation, cognition, learning), 2) social influence (roles, interactions, group processes), 3) organizational influence (communication, authority, status, rewards, work flow, technology), and 4) environmental influence (values and norms, availability of goods and services, business conditions, information). This important conceptualization has since come to be recognized as the "standard" contextual taxonomy.

Buying Center

The "buying center" refers to all those organizational members who become involved in the purchase decision-making process (McDaniel & Darden, 1987). As observed by Johnston and Bonoma (1981), the term was first used by the team of Robinson, Faris, and Wind (1967). Even so, the initial recognition that more than just the purchasing staff was involved in buying decisions was made by Cyert, Simon, and Trow (1956).

The most common view of structure in the buying center is based primarily on role theory. As observed by Bonoma (1982), a buying center has a set of roles that buying center members can assume. This set of roles is the same regardless of the contextual or situational domain. These factors that change across contexts and situations are the numbers and names of individuals who fill the roles.

Another structural conceptualization has been proposed by Johnston and Bonoma (1981) in their examination of the buying center from a communications network perspective. Using this logic, they have specified and measured buying centers on the dimensions of: 1) vertical involvement, 2) lateral involvement, 3) extensivity, 4) connectedness, and 5) centrality (of the purchasing manager).

To fully understand buying centers, it becomes necessary to not only identify the structural elements but also to understand the interactions between them. This brings into play a number of sociological concepts.

One issue of interest to researchers is the question of who influences and has power over other buying center members. For example, relative power positions in the buying center have been attributed to "bases of power" by Bonoma (1982), Thomas (1984), and Kohli (1989). Two of these works (Thomas, 1984; Kohli, 1989) have concluded that expert power is the primary predictor of relative influence in purchasing situations.

Unfortunately, the issue of measuring who influences a purchase is one wrought with problems. As related by Silk and Kalwani (1982), the reliability and validity of methods currently used to measure the influence of various participants has yet to be established. The often-used self-reporting methods are subject to inflation and position bias.

Another area of research interest in buying center dynamics is the formation of coalitions. As observed by Morris and Freedman (1984), coalition formation is a strategy that is midway between purely competitive and purely cooperative efforts. In their conceptualization, coalitions can have bases of power and occupy role positions in a manner similar to individual participants.

Finally, the idea of buying center dynamics suggests the interaction of elements. Along with this interaction comes the almost inevitable conflict. Sheth (1973), for one, has addressed this and maintains that conflict resolution may be handled through the two rational means of problem-solving and persuasion or through the use of the irrational methods of bargaining and politicking. The first two methods are desirable, while the second two may have adverse consequences for the firm.

Situational impacts on the buying center. A number of examinations have been made of the impact of buying situation factors on the buying center. One study in this vein has been Johnston and Bonoma's (1981) empirical test of their communications perspective. They were able to show that the extensivity, lateral involvement, and vertical involvement dimensions of the buying center were affected by purchasing situation attributes (primarily importance).

Additional work in this context includes Cardozo's (1980) contention that the size and membership of the buying center changes across the situational states of new task, modified rebuy, and straight rebuy. He has also reviewed research that suggests the activities of the buying center (influence patterns, communications, interactions) vary across new task, modified rebuy, and straight rebuy situations.

Naumann (1981) has also shown that the dynamics of the buying center are affected by situational dimensions. He found that in modified and straight rebuy situations purchasing agents were typically more influential than in new buy situations. Other buying center members were relatively more influential in the new buy situation.

Recent role-playing research by Jackson, Keith, and Burdick (1984) has also addressed influences across buy class and product type. They found that the purchasing department's influence doesn't vary across buy class (new buy, modified rebuy, straight rebuy), but does vary across product type (major capital, minor capital, materials, component parts, supplies).

In a slightly different twist, McQuiston (1989) has examined the situational characteristics of "novelty," "complexity," and "importance" and their relationship to participation and influence in the organizational decision-making unit. His findings suggest that novelty can be used to predict participation in the unit while importance is capable of predicting both participation and influence.

Finally, Kohli (1989) has examined how situational characteristics moderate the link between power bases and influence. His findings suggest that expert power is more closely related to influence in high-time pressure situations than to influence in low-time cases.

Contextual impacts on the buying center. The impact of contextual factors on the buying center has also been looked at by several researchers. For example, Johnston and Bonoma (1981) were able to empirically show that the buying center dimensions of extensivity, lateral involvement, vertical involvement, and connectedness are all impacted to a degree by variables that reflect characteristics of the organization.

Another examination in this vein was made by McCabe (1987). He found support for the contention that buying centers operating under conditions of high environmental

uncertainty were more centralized (have a higher degree of hierarchy of authority) than those operating under low uncertainty. No support was found for the hypothesis that conditions of high uncertainty are related to more formalization or participation.

Other research has examined the relationship of buying center dynamics and contextual dimensions. Prominent in this regard is the work of Cooley, Jackson, and Ostrom (1977) who have shown that relative to production and engineering, purchasing had relatively more power in smaller companies than in larger companies in the selection of both products and suppliers.

Further work by Thomas (1984) has looked at both departmental membership and the French and Raven bases of power (referent, expert, and legitimate) as possible bases of power in purchasing. Their research, done primarily in the chemical and pharmaceutical industry, indicates that the importance of bases of power in influence are, in descending order, expertise, authority, referent, and departmental membership.

In a similar vein, Kohli (1989) has conducted an extensive study on the moderating effect of buying center characteristics on the power base-manifest influence link. He found evidence that expert power is more important not only in predicting manifest influence in large buying centers than in small but also in situations where buying center members cooperate rather than conflict. Additionally, he found that reinforcement power is more closely related to influence in small groups than in large.

Finally, Ronchetto, Hutt, and Reingen (1989) have taken a different approach in investigating influence in organizational buying by examining the impact of "structure" (both formal and network). Their research revealed that an individual's 1) centrality within the buying system, 2) formal rank within the system, and 3) departmental membership all impact relative influence.

Buying Process

The buying process describes the activities that take place between the time a need arises to the time a decision and subsequent evaluation takes place (Wind & Thomas, 1980). A primary concern in the buying process structure context has been in identifying the steps employed when a purchase is made. One example of this type of work is the Robinson, Faris, and Wind (1967) eight-step process. They identified the buying process steps as being: 1) recognize problems, 2) determine characteristics, 3) describe characteristics, 4) search for sources, 5) acquire proposals, 6) evaluate proposals, 7) select order routine, and 8) provide performance feedback.

A second example comes from Webster and Wind (1972) who described the buying process as a series of five steps. Specifically, they delineated stages in which purchasers 1) identify needs, 2) establish specifications, 3) identify alternatives, 4) evaluate alternatives, and 5) select suppliers.

Other researchers have focused on progression through buying-process stages. One work in this context is Cardozo's (1983) "sequence of decisions" paper. His approach allows each decision to be operationally defined, expressed as a probability, and then multiplied to arrive at a purchase probability. Although his model requires probability estimates of future events, it does afford an opportunity to quantify the buying process.

A second study focusing on progression through the buying process is Moriarty and Spekman's (1984) analysis of the importance of communication sources at different buying-process stages. Specifically, they found that personal commercial, personal noncommercial, and impersonal noncommercial sources were important at the recognition

and search-for-vendors stages. Impersonal commercial sources were important at the search for alternative stages but not so at the recognition and final-vendor selection stages.

Other work has been done by Crow, Olshavsky, and Summers (1980) who made use of "protocol analysis" in an attempt to develop a detailed analysis of the decision processes used in the quotation request and final supplier selection buy phases. They found that buyers typically employed noncompensatory models in both phases.

Vyas and Woodside (1984) had a similar purpose when they traced decision processes across the 1) identification, 2) qualification, 3) bid invitation, 4) bid evaluation, and 5) bid selection steps. Their findings suggest that buyers use a combination of decision rules at various stages in the process. Specifically, buyers used noncompensatory conjunctive rules in the early stages, disjunctive decision rules in the middle stages (price was the retaining factor), and compensatory decision rules in the final stage. Qualification criteria were most often capacity, location, and quality. Once the minimum requirements were met and bids solicited, price became an important criteria. The final selection from among those with comparable prices was made on a basis of weighing price with other criteria (experience with vendor).

Situational impacts on the buying process. The influence of situational dimensions on decision-making specifics has been the focus of some research efforts. LeBlanc (1981) found some evidence that the use of information processing strategies by organizational buyers in the selection of an evoked set of suppliers was related to the buying task (new buy, straight rebuy, modified rebuy). Specifically, he concluded that compensatory models were more likely to be used in modified rebuy and straight rebuy situations than in new task situations.

In a look at the value of different information sources during the buying process, Moriarty and Spekman (1984) found evidence that personal commercial sources of information were quite important in situations of high economic risk, low personal confidence, and high conflict potential. Personal noncommercial sources were found important in situations of high conflict potential, high economic risk, and high performance risk. Finally, more objective, impersonal noncommercial sources were found important in buying situations with high conflict potential.

A review of the literature by Cardozo (1980) has also touched on this issue by bringing to light the fact that differences occur in the description of characteristics; search for and qualification of sources; analysis of proposals; and evaluation of offers across new buy, modified rebuy, and straight rebuy situations. He has also cited research that suggests that the decision process stages may be compressed or the entire process shortened in straight rebuy situations.

Contextual impacts on the buying process. Contextual factors have also been shown to be capable of impacting the buying process. The environmental context and its effect on the buying process has been brought to light through the work of Bishop, Graham, and Jones (1984). They point out that purchasing agents act in anticipation of, and in response to, business cycles. During recessionary periods purchasing agents delay purchases to maintain low inventories and in anticipation of lower prices.

Other research has looked primarily at organizational contextual dimensions and their impact on the buying process. One stream of research in this regard has looked at organizational characteristics, role stress, and consequences of role stress. The assumption behind this line of research is that role stress impacts purchaser's performance and

satisfaction in his/her job, and role stress is, to a degree, a function of the organizational context.

Parasuraman (1981) has discovered a significant relationship between two organizational factors (number of employees in the purchasing department and number of product categories bought) and role clarity. He has also found a strong relationship between role clarity and job satisfaction. He posits a possible chain of events whereby role clarity leads to greater satisfaction which in turn leads to favorable outcomes.

A second study in this area has been conducted by Michaels, Day, and Joachimsthaler (1987). They examined how leadership style and organizational formalization impacts performance and satisfaction of the purchasing professional. Their findings indicate that goal clarifying leadership behavior leads to lower role stress (and indirectly greater satisfaction), while formalization decreases role ambiguity and increases role conflict (indirectly increasing performance in both cases).

Still other organizational characteristics have been looked at by Clopton (1984). He found some evidence that buyers whose bargaining behavior and outcomes are closely monitored will engage in behavior of a more competitive nature than buyers who have only the outcome monitored.

Finally, Moriarty and Spekman (1984) have looked at organizational characteristics and their impact on the importance of information sources. Personal commercial sources emerged as more important to those firms that were high in innovation and experience with a type of product than to those firms that were low in these criteria. Personal noncommercial sources were found more valuable by organizations that were more source loyal and by small rather than large firms. Impersonal commercial sources were perceived as more important by small firms than by large, while firms with more experience in the type of purchase tended to rely more on this source than did inexperienced firms. Impersonal noncommercial sources were found to be relied upon more by innovators than noninnovators.

Other work has focused on interpersonal contextual dimensions and their impact on buying-process dynamics. For example, Krapfel (1985) investigated the phenomenon of "advocacy" in purchasing. He was able to find evidence that a boundary person's possession of relevant, credible information increases problem-specific self-confidence. Likewise, increased self-confidence was related to higher levels of advocacy, and higher levels of advocacy were related to vendor choice.

Finally, some researchers have chosen to look at personal characteristics and their impact on buying process dynamics. Wynn (1986) found that the background characteristics of sex, race, age, education, and experience did not influence purchase intentions of a buyer.

Work by Crittenden, Scott, and Moriarty (1986) has empirically shown that greater experience of a buyer with a particular type of purchase (personal characteristic) tended to result in a larger evoked set of vendors, more vendors in the final set, a greater number of selection criteria, and a greater ability to discriminate among potential suppliers. The "experience" factor used by these researchers was not experience with a particular product per se (which would bring into issue the new buy, modified rebuy, straight rebuy idea), but rather the cognitive characteristics caused by a past purchase of this type of product.

Moriarty and Spekman (1984) looked at personal characteristics and their relation to information sources used in the buying process. Personal noncommercial sources were

found valued by administrative personnel and users, while impersonal commercial and impersonal noncommercial sources were found to be valued little by these same people. Individuals higher up in the organization were found to value impersonal noncommercial sources more so than those lower in the firm.

Buying Center/Buying Process Interaction

The buying center and the buying process are entirely different concepts, yet some research has focused on the interaction of the two. The examination of this interaction has traditionally involved an analysis of buying center dynamics as progress is made through the buying process.

In this regard, Bellizzi and Walter (1980) have found evidence that the influence of purchasing agents varies throughout the buying process. Specifically, they concluded that the purchasing agent had less influence in the stages of 1) problem recognition, 2) determination of general characteristics and quantity, 3) determination of specific description of characteristics, 4) analysis of information, and 5) evaluation of information and selection of supplier than they did in the stages of 1) search for and qualification of sources, 2) gathering of relevant purchase information, and 3) selection of an order routine. Additionally, very minimal influence was found in the performance feedback and evaluation stage.

Relative influence at different stages in the buying process has also been the focus of work done by Cooley, Jackson, and Ostrom (1977). They determined that engineering influence dominated product-selection decisions while purchasing dominated supplier-selection decisions. Subsequent work by Jackson, Keith, and Burdick (1984) has supported this by finding that the purchasing component of the organizational buying center is perceived to have more influence in supplier selection than in product selections.

Similar results were found in a study by Lilien and Wong (1984) who looked at purchasing decisions in the metalworking industry. Although their study was exploratory (and the generalizability of it must be questioned), evidence did seem to exist that the influence of job functions changes across buying phases. Production and engineering were more involved in early-decision stages while purchasing agents and managers were more involved in later stages.

ASSESSMENT

Buying Center

Even though the concept of the buying center is well accepted, it is not used often enough in the explanation of organizational buying behavior. A surprising number of studies reverts to the individual (often the purchasing agent) as the unit of analysis when it is obvious that the decision is the product of a group effort. The complex interactions of the buying center participants are systematically ignored and the decision is viewed as emerging from a single person. A significant opportunity would seem to exist in replicating earlier studies using the buying center in lieu of the individual as the unit of analysis.

Part of the problem identified in the previous paragraph seems to lie in the delineation of buying center boundaries. A typical question (and as of yet not adequately answered) faced by buying center researchers is, "Who should be included in the buying center?" Guidelines in this area would be useful and important.

A somewhat-related issue is the frequent confusion between involvement (a structural concept) and influence (a dynamics concept) in a buying center. Involvement

is a necessary condition for influence but is, by no means, a sufficient condition. The literature reveals that these terms are often used interchangeably.

A final area in need of understanding is the relationship between purchasing outcomes and subsequent buying center structure and dynamics. It is quite likely that organizational learning occurs over both time and transactions. This review failed to identify any work that has examined this particular relationship.

Buying Process

A significant amount of research has focused on buying process steps, search processes, and the evaluation of alternatives. Very little, on the other hand, has been done to develop an understanding of post-purchase phenomena. Of specific interest would be the impact of purchasing outcomes on subsequent buying processes. This review has failed to uncover any research that has been conducted in this vein. Again, organizational learning would be the construct of central interest.

Although there are numerous statements in the literature that would lead one to believe that the buying process structure changes across situational and contextual dimensions, very little empirical research validates these statements. A question in this context seems to be whether there is such a thing as a "general" buying process structure. Another question is whether situational and contextual dimensions actually alter the buying process structure or simply impact the speed at which progression is made through the structure.

A final question deals with the interaction of technology and buying processes. The impact of changing buying technology on buying process structure and behaviors warrants a critical examination.

Buying Center/Buying Process Interaction

The interaction of the buying center and the buying process yields a number of interesting questions. Surprisingly, though, relatively little has been done in investigating this relationship.

Part of this lack of research may stem from the fact that the two concepts are typically examined at different levels of analysis. Buying centers are generally studied using the small group as the unit of interest, while buying processes are typically explored at the individual level. The merging of the two creates unique problems and issues.

A possibility exists that the size of the buying center affects the speed at which a purchasing decision is made (progression through the buying steps). One would expect larger buying centers to be associated with more divergent views, opinions, criteria, and this divergence to slow-buying decisions. Somewhat related would be the issue of how coalition formation impacts buying-process progress.

On the other side of the coin, no work seems to have been done on how the buying center size or composition changes across different buying-process stages. Granted, significant work has looked at how influence changes across buying-process stages, but none has looked at size or composition.

Integration of the Buyer

Up to this point, the vast majority of organizational purchasing research could be classified as intraorganizational. That is, the impact of the relationships that may have developed between buying and selling organizations over a period of time and transactions

has been systematically overlooked (notable exceptions to this include the recent work of Hallen, Johanson, and Seyed-Mohamed, 1991; Ford, 1980; Dwyer, Schurr, and Oh, 1987; Frazier, Spekman, and O'Neal, 1988; and Noordewier, John, and Nevin, 1990). This represents a critical omission.

It is crucial that the "bigger picture" be brought into play through the consideration of the interorganizational context in which the purchase is made. The interorganizational relationship must be considered an important element in the purchasing firm's environment. An analysis that includes both the interorganizational relationship and the buying situation simultaneously takes into consideration both relational and episodic phenomena. It would ultimately allow research to be conducted in a fashion deemed appropriate by Ford (1980). He maintained that in organizational purchasing research "it is important to analyze both individual episodes and the overall relationships as well as to understand the interaction between the two" (Ford, 1980, p. 341).

CONCLUSIONS

The multidimensional nature of organizational purchasing becomes apparent in this type of analysis. The buying center, buying process, situational factors, and contextual factors are all dimensions that interact and impact each other. The fact that anything over two interacting dimensions causes problems for researchers helps to explain why research findings are often conflicting and why integration of research has been so difficult. A large percentage of the research in the area has looked at either only one or possibly two of the dimensions at a time. A failure to hold the other dimensions constant or compensate for their impact has made consistent findings difficult.

Even though a significant amount of research has been conducted in the organizational purchasing domain, there are clearly unanswered questions remaining that represent significant research opportunities. Foremost among these opportunities are:

1. Replication of earlier studies using the buying center as the unit of analysis instead of the individual.
2. Continued investigation of the delineation of buying center "boundaries."
3. Investigation of the impact of previous purchasing outcomes on subsequent buying center structure and dynamics.
4. Investigation of the impact of previous purchasing outcomes on subsequent buying processes.
5. Investigation of the impact of changing purchasing technologies on buying processes.
6. Investigation of how buying center size and structure impacts progression through the buying process.
7. Investigation of how buying center size and structure changes as progress is made through the buying process.
8. Continued investigation of the impact of the buyer-seller relationship on purchasing.

This paper has attempted to identify some of the major issues and knowledge gaps that exist in the area of organizational purchasing. Hopefully, it will provide impetus and direction to those interested in this complex, yet intriguing, area of organizational behavior.

REFERENCES

- Bellizzi, J. A. and C. K. Walter. "Purchasing Agents' Influence in the Buying Process," **Industrial Marketing Management** 9 (1980): 137-141.
- Bishop, W. S., J. L. Graham, and M. H. Jones. "Volatility of Derived Demand in Industrial Marketing and Its Management Implications," **Journal of Marketing** 48 (1984): 95-103.
- Bonoma, T. V. "Major Sales: Who Really Does the Buying?" **Harvard Business Review** (May-June 1982): 111-119.
- Cardozo, R. N. "Situational Segmentation of Industrial Markets," **European Journal of Marketing** 14 (1980): 264-276.
- _____. "Modeling Organizational Buying as a Sequence of Decisions," **Industrial Marketing Management** 12 (1983): 75-81.
- Clopton, S. W. "Seller and Buying Firm Factors Affecting Industrial Buyers' Negotiation Behavior and Outcomes," **Journal of Marketing Research** 21 (1984): 39-53.
- Cooley, J. R., E. W. Jackson, and L. L. Ostrom. "Analyzing the Relative Power of Participants in Industrial Buying Decisions." In **Contemporary Marketing Thought**. Eds. B. A. Greenberg and D. Bellinger. Chicago: American Marketing Association, 1977.
- Crittenden, V. L., C. A. Scott, and R. T. Moriarty. "The Role of Prior Product Experience in Organizational Buying Behavior." In **Advances in Consumer Research, Vol. 14**. Eds. Melanie Wallendorf and Paul Anderson. Association for Consumer Research, 1986.
- Crow, L. E., R. W. Olshavsky, and J. O. Summers. "Industrial Buyers' Choice Strategies: A Protocol Analysis," **Journal of Marketing Research** 17 (1980): 34-44.
- Cyert, R. M., H. A. Simon, and D. B. Trow. "Observation of a Business Decision," **Journal of Business** 29 (1956): 237-248.
- Dwyer, F. R., P. H. Schurr, and S. Oh. "Developing Buyer-Seller Relationships," **Journal of Marketing** 51 (1987): 11-27.
- Ford, D. "The Development of Buyer-Seller Relationships in Industrial Markets," **European Journal of Marketing** 14 (1980): 339-353.
- Frazier, G. L., R. E. Spekman, and C. R. O'Neal. "Just-In-Time Exchange Relationships in Industrial Markets," **Journal of Marketing** 52 (1988): 52-67.
- Hallen, L., J. Johanson, and N. Seyed-Mohamed. "Interfirm Adaptation in Business Relationships," **Journal of Marketing** 55 (1991): 29-37.
- Jackson, D. W., J. E. Keith, and R. K. Burdick. "Purchasing Agents' Perceptions of Industrial Buying Center Influence: A Situational Approach," **Journal of Marketing** 48 (1984): 75-83.

- Johnston, W. J. and T. V. Bonoma. "The Buying Center: Structure and Interaction Patterns," **Journal of Marketing** 45 (1981): 143-156.
- Kohli, A. "Determinants of Influence in Organizational Buying: A Contingency Approach," **Journal of Marketing** 53 (1989): 50-65.
- Krapfel, R. E. "An Advocacy Behavior Model of Organizational Buyers' Vendor Choice," **Journal of Marketing** 49 (1985): 51-59.
- LeBlanc, R. P. "Organizational Buyers' Use of Information Processing Strategies: Buying Tasks Influence in Evoked Set Selection." In **Educators' Proceeding, Series #47**. Ed. K. Bernhardt. Chicago: American Marketing Association, 1981.
- Lilien, G. L. and M. A. Wong. "An Exploratory Investigation of the Structure of the Buying Center in the Metalworking Industry," **Journal of Marketing Research** 21 (1984): 1-11.
- McCabe, D. L. "Buying Group Structure: Constriction," **Journal of Marketing** 51 (1987): 89-98.
- McDaniel, C., Jr. and W. R. Darden. **Marketing**. Newton, MA: Allyn and Bacon, Inc., 1987.
- McQuiston, D. H. "Novelty, Complexity, and Importance as Causal Determinants of Industrial Buyer Behavior," **Journal of Marketing** 53 (1989): 66-79.
- Michaels, R. E., R. L. Day, and E. A. Joachimsthaler. "Role Stress among Industrial Buyers: An Integrative Model," **Journal of Marketing** 51 (1987): 28-45.
- Moriarty, R. W. and R. E. Spekman. "An Empirical Investigation of the Information Sources Used during the Industrial Buying Process," **Journal of Marketing Research** 21 (1984): 137-147.
- Morris, M. H. and S. M. Freedman. "Coalitions in Organizational Buying," **Industrial Marketing Management** 13 (1984): 123-132.
- Naumann, E. "The Impact of Purchase Situation and Purchase Phase on Amount and Bases of Influence in Organizational Purchasing: An Empirical Investigation." Dissertation. Arizona State University, 1981.
- Noordewier, T. G., G. John, and J. R. Nevin. "Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships," **Journal of Marketing** 54 (1990): 80-93.
- Parasuraman, A. "Role Clarity and Job Satisfaction in Purchasing," **Journal of Purchasing and Materials Management** 17 (1981): 2-7.
- Robinson, P. J., C. W. Faris, and Y. Wind. **Industrial Buying and Creative Marketing**. Boston: Allyn and Bacon, 1967.
- Ronchetto, J. R., M. D. Hutt, and P. H. Reingen. "Embedded Influence Patterns in Organizational Buying Systems," **Journal of Marketing** 53 (1989): 51-62.

- Sheth, J. "A Model of Industrial Buyer Behavior," **Journal of Marketing** 37 (1973): 50-56.
- Silk, A. J. and M. U. Kalwani. "Measuring Influence in Organizational Purchase Decisions," **Journal of Marketing Research** 19 (1982): 165-181.
- Thomas, R. J. "Bases of Power in Organizational Buying Decisions," **Industrial Marketing Management** 13 (1984): 209-217.
- Vyas, N. and A. G. Woodside. "An Inductive Model of Industrial Supplier Choice Processes," **Journal of Marketing** 48 (1984): 30-45.
- Webster, F. E., Jr. and J. Wind. **Organizational Buying Behavior**. Englewood Cliffs, NJ: Prentice Hall, 1972.
- Webster, F. E., Jr. and Y. Wind. "A General Model for Understanding Organizational Buying Behavior," **Journal of Marketing** 36 (1972): 12-19.
- Wind, Y. and R. J. Thomas. "Conceptual and Methodological Issues in Organizational Buying Behavior," **European Journal of Marketing** 14 (1980): 239-263.
- Wynn, G. W. "The Purchasing Professional: Characteristics and Implications." In **1986 Proceedings Southwestern Marketing Association Conference**. Ed. Thomas Jensen. Fayetteville, AR: Southwestern Marketing Association, 1986.
-

Mark C. Hall is an Associate Professor in the Department of Marketing at Mankato State University. C. P. Rao is University Professor in the Department of Marketing at the University of Arkansas. Kevin M. Elliott is an Associate Professor in the Department of Marketing at Mankato State University.