The Lack of Consensus About Strategic Consensus: Advancing Theory and Research

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The purpose of this article is to describe the theoretical and methodological reasons for the inconsistent findings on the value of strategic consensus. This analysis suggests the need for (a) definitions of consensus that align the locus and content of agreement with the study context and theoretical premises; (b) measures of consensus that take account of locus as well as differences in how the content of strategy is perceived by top-, middle-, and lower-level managers; (c) research designs wherein assumptions about the locus and content of consensus govern the choice of antecedents; and (d) more consistent use of moderators.

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A substantial body of empirical and theoretical research has accumulated on the subject of strategic consensus (e.g., Amason, 1996; Ambrosini & Bowman, 2003; Bourgeois, 1980, 1985; Dess, 1987; Dess & Priem, 1995; Homburg, Krohmer, & Workman, 1999; Hrebiniak & Snow, 1982; Knight et al., 1999; Markóczy, 2001; Stagner, 1969). The impetus for this research has been the premise that strategic consensus enhances organizational performance by improving coordination and cooperation within the organization. Empirical findings have been conflicting, however. For example, studies of the bivariate relationship between strategic consensus and financial performance have produced results that are supportive (e.g., Homburg et al., 1999; Iaquinto & Fredrickson, 1997; Rapert, Velliquette, & Garretson, 2002), partially supportive (e.g., Bourgeois, 1980; Knight et al., 1999), and not supportive (e.g., West & Schwenk, 1996; Wooldridge & Floyd, 1990). Multivariate research has also produced inconsistencies (e.g., Amason, 1996; Bourgeois, 1985; Bowman & Ambrosini, 1997; Homburg et al., 1999; Knight et al., 1999).

When one examines the research in detail, however, these inconsistencies may not be surprising. A review of the literature reveals that there is only limited agreement among researchers about the nature of the consensus construct and how it should be measured—even less about how to conceptualize the consensus-performance relationship. Despite this confusion, past research has frequently asserted that a better understanding of strategic consensus is critical to the development of theory (Bourgeois, 1985; Homburg et al., 1999; Priem, 1990; Rapert et al., 2002; West & Meyer, 1998), and recent studies continue to raise questions about whether and how it develops (e.g., Ketokivi & Castaner, 2004).

The purpose of this article is to describe the theoretical and methodological reasons for inconsistencies in strategic consensus research and to suggest ways that future research can advance on a more cumulative basis. Our synthesis of the literature begins by focusing on how scholars have conceptualized strategic consensus. Here, we offer a definition that reflects recent thinking and that provides a basis for synthesizing prior research. The review then turns to a discussion of research on the antecedents and outcomes of consensus. Then, we offer a series of observations about how differences in conceptualization and measurement may explain the inconsistent findings in the literature. On the basis of this critique, we develop a set of guidelines for the design of future research.

Synthesizing Strategic Consensus Research

The Evolving Definition of Strategic Consensus

Consensus has been a topic in the literature of strategic management since at least the late 1960s. In early work, terms like *agreement* (Hrebiniak & Snow, 1982; Shanley & Correa, 1992) or *cohesiveness* (Stagner, 1969; Whitney & Smith, 1983) were used instead of *consensus*. Despite some difference in early terminology, however, the underlying focus on agreement among top managers about strategy was relatively consistent for more than three decades. Indeed, until the late 1980s, much of the work adhered to a relatively narrow definition of strategic consensus as agreement among top managers on strategic ends and means (for an overview of definitions, see Table 1).

Table 1
Definitions of Strategic Consensus and Related Constructs

Author(s)	Definition
Grinyer & Norburn (1977-1978)	Consensus as "a statistically significant level of shared perception. It could therefore be used in calculating the extent of agreement between executives" (p. 103).
Bourgeois (1980)	Consensus as agreement within the dominant strategy-making coalition on means and ends.
Bourgeois & Singh (1983)	Strategic discord as the "extent that TMTs [top management teams] differ in their perception of what the environment holds, what organizational goals are important, and what strategies should be pursued" (p. 45).
Dess & Keats (1987)	Consensus as the "degree to which perceptions of the nature of the environment are shared by top management team (TMT) members" (p. 1987).
Dess & Origer (1987)	Consensus as "agreement of all parties to a group decision; it occurs only after deliberation and discussion of pros and cons of the issues, and when all (not the majority) of the managers are in agreement" (p. 313).
Priem (1990)	TMT consensus as "general agreement in the opinions held by all or most" (p. 469).
Wooldridge & Floyd (1990)	Consensus as the "product of middle management commitment to, and understanding of, strategy" (p. 235).
Dess & Priem (1995)	Consensus as the "level of agreement among the TMT or dominant coalition on factors such as goals, competitive methods, and perceptions of the environment" (p. 402).
Bowman & Ambrosini (1997)	Consensus as the "extent to which managers from a strategic business unit (SBU) share similar perceptions of strategic priorities. Consensus is understood here as shared understanding" (p. 244).
Homburg, Krohmer, & Workman (1999)	Strategic consensus as the "level of agreement among senior managers concerning the emphasis placed on a specific type of strategy" (p. 340).
Knight et al. (1999)	Strategic consensus as "shared cognitions among team members. This term mainly refers to agreement or overlap among individual team members' mental models of strategy" (pp. 446-447).
Menon, Bharadwaj, Adidam, & Edison (1999)	Consensus commitment as the "extent to which members of the strategy team agreed with and supported the chosen strategy" (p. 22).
Dooley, Fryxell, & Judge (2000)	Consensus as "agreement of all parties to a group decision that the best possible decision has been made" (p. 1238).

To accommodate recent uses of the term, in this article, we adopt a broader definition: *Strategic consensus is the shared understanding of strategic priorities among managers at the top, middle, and/or operating levels of the organization* (Dess & Origer, 1987; Floyd & Wooldridge, 1992; Wooldridge & Floyd, 1989, 1990). Specifying the scope of the definition to allow for managers at all levels of the hierarchy and to refer to strategic priorities (rather than other forms of strategy content) reflects the shifting focus of research since the 1980s. We provide a more detailed discussion of these developments below. We begin, however, by explaining why shared understanding is at the core of the consensus construct.

Although its origins can be traced to the early group decision-making literature (Fisher, 1980; Stagner, 1969), it is important to recognize that the term *strategic consensus* does not refer to group process (Fisher, 1980). Instead, the focus of this research is on the degree of agreement within a group of managers at a particular point in time. The central hypothesis is

that higher degrees of strategic consensus are associated positively with coordination and cooperation in the implementation of strategy, and hence, with organizational performance.

Underlying this hypothesis is the assumption that the coordination needed to implement strategy requires more than a simple action plan (Dess, 1987). It also requires a shared grasp of the logic behind the plan. Typically, strategic decisions are not articulated in great detail, and unforeseen issues arise as events unfold (Mason & Mitroff, 1981; Mintzberg, Raisinghani, & Theoret, 1976). Details must be settled and issues resolved in a way that is consistent with the intention behind the plan (Amason, 1996). A shared understanding of the rationale allows managers to act independently (Amason, 1996; Floyd & Wooldridge, 1992; Wooldridge & Floyd, 1989) "but in a way that is consistent with the actions of others and consistent with the spirit of the decision" (Amason, 1996: 125). The reference to shared understanding in the definition therefore denotes the need for a collective appreciation of the reasons behind a strategic decision as well as a common awareness of intended action.

In addition to shared understanding, the above definition refers to consensus among managers at multiple levels of the hierarchy. The use of "and/or" acknowledges the possibility that strategic consensus may be studied both within and across hierarchical levels. This view is a reflection of how assumptions about the *locus of consensus* have evolved within the broader literature on strategy making.

Specifically, early strategy process research focused exclusively on the top management team (TMT) as the center of strategic decision making. It is not surprising, therefore, that many theoretical as well as empirical studies concentrate on the TMT as the locus of strategic consensus (Amason, 1996; Bourgeois, 1985; Hrebiniak & Snow, 1982). Later models of strategy process took a more evolutionary view (Burgelman, 1991; Schwenk, 1995), wherein operating- and middle-level managers play a more substantive role in strategy making. Beyond taking direction from top management, in an evolutionary model, the autonomous behavior of operating-level managers provides an important source of variation, by generating new ideas, for example, and experimenting with new behaviors (Burgelman, 1983; Floyd & Lane, 2000). Middle managers, in turn, are central to the internal selection process, providing seed resources for new initiatives, championing some of these to top management (Burgelman, 1983), and potentially changing the official strategy (Burgelman, 1991). The conceptual definition of strategic consensus should therefore allow for the inclusion of managers at all levels of the hierarchy.

Another feature of our definition of consensus is the reference to strategic priorities. Like the reference to multiple levels of management, this part of the definition is intended to reflect how the conceptualization of the *content of consensus* has evolved over time. Initially, because strategy making was seen as the purview of top managers, research framed the content of consensus as agreement about the goals and means that would develop out of a decision-making process (e.g., Bourgeois, 1980; 1985; Dess, 1987; Dess & Origer, 1987; West & Schwenk, 1996). Later, as middle- and operating-level managers came to be seen as substantive actors, the content was framed in terms of strategic priorities (Bowman & Ambrosini, 1997; Hodgkinson & Johnson, 1994; Homburg et al., 1999; Rapert et al., 2002). This reflected the researchers' assumption that managers at lower levels were not as likely to be aware of specific

strategic ends and means as top managers (Hambrick, 1981) and that—based on the evolutionary model—they are more likely to view strategy content as the relative importance of specific initiatives, that is, strategic priorities (Smith, Mitchell, & Summer, 1985; Wooldridge & Floyd, 1989).

Initiatives are the unit of selection in evolutionary models (Burgelman, 1991), and lowerand middle-level managers are key actors in launching and developing such initiatives. This makes the relative priorities among initiatives particularly salient at these levels. Moreover, as key actors in the resource-allocation process (Bower, 1970; Burgelman, 1983), top managers are also likely to view strategy in terms of priorities across a pool of initiatives. Our use of the term *strategic priorities* reflects the premise that this way of characterizing strategic consensus is compatible with how strategy content is perceived at upper, middle, and lower levels of management.

Strategic ends and means and strategic priorities, however, have not been the only way that researchers have conceptualized the content of strategic consensus. The literature includes research on consensus about environmental conditions (Bourgeois, 1985; Bourgeois & Singh, 1983; Dess & Keats, 1987; Priem, 1990), competitive strengths and weaknesses (Hrebiniak & Snow, 1982; St. John & Rue, 1991), support for strategy (Menon, Bharadwaj, Adidam, & Edison, 1999), overlapping mental models (Knight et al., 1999), strategic groups (Spencer, Peyrefitte, & Churchman, 2003), and causes of strategic change (Markóczy, 2001).

Although we believe that our definition addresses recent developments in the strategic consensus literature, it is important to note that shared strategic commitment has been suggested as a second dimension of strategic consensus (Wooldridge & Floyd, 1989). Dess (1987) was the first to argue that the positive effects of shared understanding may be contingent on whether managers also share some level of strategic commitment. Wooldridge and Floyd (1989) reasoned that the need for strategic commitment arises because efficient implementation demands not just compliance but also active cooperation from managers—requiring them to go beyond day-to-day work to stimulate organizational change. To gain a high level of cooperation and support, managers must not only understand a strategy; they must also believe in it (Wooldridge & Floyd, 1989). Indeed, unless individuals are committed, they may continue to doubt whether the strategy is feasible, whether it serves the interests of their subunit (Floyd & Wooldridge, 1992). This kind of skepticism or self-interest is likely to deter active cooperation and support (Guth & MacMillan, 1986), and shared strategic commitment reduces the likelihood of both (Amason, 1996).

Notwithstanding these theoretical arguments, hypotheses using both shared understanding and commitment as dimensions of consensus have received only mixed support (e.g., Amason, 1996; Menon et al., 1999; Wooldridge & Floyd, 1990), and one study found strategic commitment to be an *outcome* of strategic consensus (Dooley, Fryxell, & Judge, 2000). Because empirical evidence leaves the importance of strategic commitment open to question, we have not incorporated the concept in our definition, nor are we proposing it as a necessary component of strategic consensus.

Antecedents of Consensus

Research on strategic consensus has examined a variety of antecedent variables. One set is based on upper echelon theory (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984) and includes the *TMT's demographic characteristics*, such as age, experience, or functional background (Finkelstein & Hambrick, 1996). In several studies, TMT homogeneity on these "social cohesion" variables (Michel & Hambrick, 1988) has been found to be correlated positively with strategic consensus (Dess & Priem, 1995; Iaquinto & Fredrickson, 1997; Knight et al., 1999; Priem, 1990). Theoretical support for these relationships is drawn from the social psychology literature (e.g., Shaw, 1981), where it is argued that similarities among group members lead to higher levels of cohesiveness, conformity, and consensus. In contrast to this argument, Iaquinto and Fredrickson (1997) found no significant relationship between consensus and TMT tenure, thereby questioning the assertion of Kiesler and Sproull (1982) that managers' understanding of their firms' strategic decision processes becomes more similar with increasing tenure. Although their study provided some support for the social cohesion argument, Knight and colleagues (1999) found a significant positive relationship between employment tenure *diversity* and strategic consensus.

A second set of antecedents relates to the *nature of the decision-making process*. Attributes of decision making that have been argued theoretically to influence consensus include decision comprehensiveness (Wooldridge & Floyd, 1989), the use of decisions aids (Dess & Priem, 1995; Priem, 1990; Wooldridge & Floyd, 1989), and goal congruency (Vroom & Jago, 1988). Within decision-making teams, empirical studies have supported a positive influence on consensus from the use of planning processes (St. John & Rue, 1991), agreement-seeking behaviors (Knight et al., 1999), increased communication (Rapert et al., 2002), and cognitive conflict (Amason, 1996). Among middle managers, increased involvement in strategy has been shown to enhance consensus (Wooldridge & Floyd, 1990).

A third set of antecedents centers on *organizational structure*, including variables such as centralization (Bourgeois & Eisenhardt, 1988; Dess & Priem, 1995; Eisenhardt & Bourgeois, 1988; Welsh & Slusher, 1986), formalization (Menon et al., 1999; Priem, 1990), hierarchical differentiation (Priem, 1990), and task specialization (Welsh & Slusher, 1986). In general, highly centralized and formalized organizations constrain individual autonomy, and in so doing, enforce agreement on strategic priorities. Such agreement may not, however, represent the kind of shared understanding that has come to be associated with strategic consensus.

Relationships Between Consensus and Outcome Variables

Theoretically, at least two distinct levels of outcomes can be conceptualized for strategic consensus. At the level of a decision-making group, higher degrees of strategic consensus may have a number of different outcomes, including cooperativeness within the group, group cohesiveness, and the ability of the group to reach consensus in subsequent contexts. Although such group-level variables have been a major focus of consensus research in task teams (e.g., Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000), in the strategy literature, research has emphasized organizational-level effects. More efficient strategy implementation

is widely identified as the outcome of the coordination and cooperation produced by consensus, and thus, for the most part, empirical work has focused on organizational performance as the key outcome variable (for exceptions, see Welsh & Slusher, 1986; Wooldridge & Floyd, 1990).

Although most studies agree on the relevant outcome (organizational performance), there is very little consistency in how organizational performance is conceptualized and measured in the literature (e.g., Bourgeois, 1980, 1985; Iaquinto & Fredrickson, 1997; Knight et al., 1999; West & Schwenk, 1996; Wooldridge & Floyd, 1990, 1997). Some studies have used objective measures, others have used subjective measures, and still others have used combinations of the two. Objective measures include indicators of financial performance, such as return on assets, return on sales, and growth (e.g., sales growth, growth in capital, growth in net earnings), as well as customer-centered evaluations of performance (e.g., Bourgeois, 1980; St. John & Rue, 1991). Subjective measures generally ask respondents to compare their organization to competitors on a variety of performance dimensions (e.g., Bowman & Ambrosini, 1997; Dess, 1987) or to compare the performance actually achieved against an ideal level of performance (West & Meyer, 1998). One exception to the emphasis on overall performance is a study by Dooley and colleagues (2000) who measured successful implementation of strategy as an outcome. As suggested earlier, in aggregate, the findings on the relationship between consensus and organization performance have been equivocal.

Explanations for Inconsistent Findings

As suggested by the above review, researchers have approached the topic of strategic consensus in many different ways. One way to categorize these differences is to distinguish between those related to construct definition and model specification (i.e., theoretical differences) and those related to research methodology. In the next section, we explain how these theoretical and methodological differences have led to inconsistent findings on the relationship between consensus and performance. This sets the stage for discussing how future research can be designed to produce more consistent and cumulative findings.

Differences in Construct Definition

First, research that focuses exclusively on the TMT as the locus of consensus ignores the fact that implementation requires shared strategic understanding at lower levels in the hierarchy. Without such understanding, managers will not be in a position to fill in details or respond to unforeseen events in a coherent way. Although the need for such responsiveness is likely to vary, in most organizations, top managers' ability to govern the implementation process and influence organizational performance is limited (Hambrick & Finkelstein, 1987). As a result, the potential positive performance impact of consensus among top managers would be diminished unless the locus of the agreement was widened to include a broader group. Thus, the failure to include middle and lower managers may explain why some studies of consensus within the TMT have failed to support the predicted positive effects on performance (Bourgeois, 1980; Grinyer & Norburn, 1977-1978; West & Schwenk, 1996; West & Meyer, 1998).

The differences in findings that result from differences in how the *content* of consensus is defined are more difficult to anticipate. In some respects, the different ways to describe consensus content are reminiscent of the story of blindfolded people describing different parts of an elephant. Each description is valid in its own right, but it fails to capture the totality of what it means to be an elephant. Similarly, any one of the definitions of consensus content captures only part of the construct, and it seems likely that these different parts differ in the strength and form of their relationship to organizational performance. Bourgeois's (1980) results provide an illustration. He found a positive relationship with financial performance for TMT consensus on goals, no relationship for TMT consensus on strategic means, and a negative relationship for TMT consensus on environmental conditions.

Differences in Model Specification

Antecedents. In addition to how consensus is defined, how consensus forms, as represented by the antecedents in the literature, has an important bearing on whether it leads to improved performance. Research suggests, for example, that greater diversity within a TMT produces superior information-processing capability (e.g., Hambrick, Cho, & Chen, 1996; Hambrick & Mason, 1984; Kilduff, Angelmar, & Mehra, 2000). Thus, consensus reached within a diverse TMT would be more likely to produce an adaptive strategy. This is consistent with Amason's (1996) argument that cognitive conflict in a TMT enhances both decision quality and strategic consensus. The use of decision aids may also be associated with higher decision quality and consensus (Dess & Priem, 1995; Priem, 1990; Wooldridge & Floyd, 1989).

The point of these examples is that antecedent conditions play an important role in determining whether consensus improves performance. The fact that some researchers included no antecedents and others included different antecedents means that the results of the studies vary for reasons other than those in the hypotheses. If this is true, inconsistent treatment of antecedents provides another explanation for the inconsistent performance results.

Outcome relationships. Research models also differ in how outcomes are conceptualized, and this has relatively obvious effects on results. Even within a particular class of outcome variables, such as financial performance, the magnitude of the relationship to consensus may differ based on the underlying theoretical lens. An efficiency logic for the role of consensus, for example, suggests that it may be more closely related to profitability than to growth. Moreover, it seems reasonable to expect higher effect sizes for consensus' relationship to more proximate outcomes, such as the success of particular strategies (Dooley et al., 2000), in comparison to more distal outcomes, such as overall organizational performance.

The plethora of approaches to measuring both strategic consensus and organizational performance compounds differences in conceptual definitions. West and Schwenk (1996), for example, argued that the nonsignificance of their results was a consequence of inadequate measurement of the dependent variable, that is, performance. Along the same line, Dess (1987) attributed his conflicting findings to the fact that he used subjective and self-reported objective measures in his sample of private firms, whereas other studies used objective measures in publicly held firms. In short, there seems to be little doubt that the variety of

approaches to measuring performance is likely to be a part of the explanation for the inconsistency in the findings on this variable's relationship to consensus.

In addition, whereas the vast majority of studies assumed a linear relationship (Bourgeois, 1980; De Woot, Heyvaert, & Martou, 1977-1978; Grinyer & Norburn, 1977-1978; Hrebiniak & Snow, 1982), Priem (1990) argued for the existence of a curvilinear relationship between consensus and performance. On one hand, extremely low levels of consensus lead to poor coordination among managers and decreased organizational performance. On the other hand, however, extremely high levels of consensus shut down open dialogue and impede effective decision making. This line of reasoning asserts that an optimum level of consensus falls somewhere between complete agreement and complete disagreement.

The inflection point is likely to vary from organization to organization and, within a particular organization, over time (Priem, 1990). While consensus may be desirable during the implementation of strategy, for example, the process of formulation—which comes earlier in the decision-making process—may be served better by a low level of consensus. This is because lower consensus early in the decision process prevents premature closure and encourages the expression of diverse opinions (Ginsberg, 1990; Wooldridge & Floyd, 1989), which in turn increases decision quality and improves organizational performance. As a result, the achievability and desirability of consensus is likely to vary over time (Markóczy, 2001). Thus, part of the reason for the inconsistent findings may be differences in how performance is conceptualized. Another element may be the fact that researchers have failed to look for potential curvilinear effects.

Moderators. The failure to account for variables that influence the strength or sign of the relationship between consensus and performance provides one further explanation for the equivocal findings. The results of studies where moderators have been included differ sharply compared to those that employed no moderators (Dess, 1987; Dess & Origer, 1987; Dess & Priem, 1995). So far, however, the discussion of moderators in the literature has been rather limited, with external environmental conditions representing the primary focus. Environmental dimensions that have been identified theoretically include munificence, complexity, and dynamism (Dess & Beard, 1984).

Environmental munificence refers to an environment's ability to support sustained growth (Baum & Wally, 2003). Dess and his colleagues (Dess, 1987; Dess & Origer, 1987; Dess & Priem, 1995) argued that munificence is associated with organizational slack, which in turn enables an organization to experiment and pursue multiple organizational goals, thereby reducing the importance of consensus. Organizations in environments characterized by low munificence would benefit more from the focus, cooperation, and implementation efficiency provided by strategic consensus.

Environmental complexity refers to the number of elements in a firm's operating environment and their interconnectedness (Rajagopalan, Rasheed, & Datta, 1993). Although no study has tested this relationship, theory suggests that organizations in more complex environments need higher levels of strategic consensus to create the integrative structures required to support the implementation of complex strategies (Dess & Origer, 1987).

Environmental dynamism (or terms used interchangeably, such as *uncertainty*, *volatility*, and *turbulence*) refers to variance in the rate of market and industry change and in the level of

uncertainty about forces that are beyond the control of individual firms (Aldrich, 1979; Baum & Wally, 2003). In a highly dynamic context, high levels of strategic consensus are likely to undermine organizational performance. Too much agreement on a course of action impedes the ability of decision makers to consider new alternatives and respond quickly to unforeseen events (Priem, 1990). High levels of consensus appear to be more desirable in stable environments, where agreement to a particular decision is more likely to pay expected dividends in terms of efficient implementation without the costs of slowed decision making (Priem, 1990). However, empirical support on this proposition has been mixed. Homburg and colleagues' (1999) results support the theoretical argument, but other studies have failed to find a significant effect (e.g., Bourgeois, 1985; Iaquinto & Fredrickson, 1997; West & Schwenk, 1996).

Organizational-level variables, like the organizational life-cycle stage or organizational structure, may also have an impact on the consensus-performance relationship (Bourgeois & Singh, 1983; West & Meyer, 1998). West and Meyer's (1998) study provides a dramatic example of the difference such moderators can make. They hypothesized organizational life-cycle stage as a moderator and examined the consensus-performance relationship in new ventures. Although their hypothesis was that consensus would be positively related to performance in new ventures, they found the opposite: Disagreement, not consensus, was more important in early stages.

Combinations. In addition to the inconsistencies caused by differences in the individual theoretical elements (construct definitions, antecedents, outcome relationships, and moderators), research models also differ in how they *combine* these variables to explain the consensus-performance relationship. Different combinations, therefore, represent another potential source of inconsistent findings. Markóczy's (2001) study, for example, shows how the locus of consensus interacts with the timing and size of its effect on performance. In her study, consensus on a new strategy formed first within a coalition of middle and operating managers and then developed more broadly in the organization over time. Consensus did not increase, however, within either the initial coalition or the TMT. On this basis, Markóczy (2001) argued that at certain times in the life of an organization, the locus and scope of consensus may be more closely related to performance than the degree of consensus.

Differences in Methodology

A closer look at the research designs employed by previous researchers reveals four distinct approaches to the construction of surveys. One employs multiple scenarios and asks respondents up to 43 questions for each scenario (e.g., Iaquinto & Fredrickson, 1997). Another measures consensus as a product of commitment to, and understanding of, a specific organizational strategy, such as reducing cost (Amason, 1996; Bourgeois, 1980; Wooldridge & Floyd, 1990). Understanding is measured as a forced-choice distribution by the respondents against a set of strategic priorities (Smith et al., 1985), and data on strategic commitment are gathered in a survey instrument adapted from Porter, Steers, and Mowday (1974). A third approach measures consensus as agreement on the importance of organizational activities characteristic of various business-level strategies (Homburg et al., 1999). The fourth and most

recent approach captures consensus data through the comparison of managers' mental models or causal maps, which represent perceptions about the relationships among organizational success factors (Markóczy, 2001).

Beyond these measurement issues, there is also significant heterogeneity in data analysis. In general, the basic approach is to calculate the standard deviations across individual respondents within firms for each of the questions asked. The mean of these standard deviations represents a group-level (e.g., TMT-level) or firm-level consensus score. Another common approach uses difference scores between an influential person, often the CEO, and other managers (e.g., of the TMT). A mean of the absolute-value differences (average-squared Euclidian space) between organizational members is created with lower average scores indicating lower consensus (Dess, 1987; West & Schwenk, 1996).

Questions have been raised about whether the above methods result in an unrealistically stable construct—reflecting a level of agreement at only one point in time during the ongoing process of strategic decision making (Priem, 1990). Furthermore, these scores do not adequately differentiate between agreement on a substantive strategy versus agreement on a *lack* of strategy—that is, for example, whether the expressed priority is high (substantively important) or low (substantively unimportant). When all that managers can agree to are the priorities that are unimportant, Bowman and Ambrosini (1997) described the agreement as "impoverished." Such measures also fail to show the quality of agreement—that is, whether the agreed-upon priorities are adaptive in light of environmental circumstances. Thus, the degree of consensus measured in standard deviation terms, or as a difference score, might be equal in two organizations, but in one case, managers agree on priorities that are adaptive, and in another, managers agree on priorities that are not adaptive. The relationship between the measure of consensus and organizational performance would likely differ in these two settings unless the researchers were able to control for the substantive quality of the agreement.

An alternative way to calculate strategic consensus draws on the approach used for assessing cognitive consensus in task teams (e.g., Smith-Jentsch, Mathieu, & Kraiger, 2005). In this and related research, consensus is measured by an index of consistency. Average correlations between the organizational members' responses are calculated, and higher averages indicate higher consensus. In the strategic consensus literature, this approach has been used by Bowman (1991), but to date, only two studies have compared consensus-performance associations in the same sample using the consistency measure and another approach (Kellermanns, 2003; Smith-Jentsch et al., 2005). Their findings suggest that choosing between Euclidian-based and correlation-based measures of consensus is likely to affect results with respect to performance and that these two measures may, in fact, be indicators of somewhat different phenomena. In particular, distance scores provide indirect indicators of the centralization of opinion among managers, and as such, they are likely to reflect intended or deliberate strategy. Correlation-based measures, on the other hand, quantify the degree of *overlap* within the group, without reference to a center, and if the measure is broadly administered, may be said to reflect emergent strategy.

In sum, similar to the theoretical situation, each approach to measuring consensus has its advantages, but as a set, they contribute to the confusing array of findings. Rather than advocating one particular measure, it may be that different measures are appropriate under different conditions. In the next section, we discuss this and other guidelines for future research.

Guidelines for Future Research

Definitions of Consensus: Theory and Measurement

Researchers should define the locus and content of consensus in their study to be consistent with the study context and theoretical premises. The content of consensus should be conceptualized in order to line up with the groups of managers involved, that is, the locus. Consistent with the function of the TMT, consensus among top managers may be assessed meaningfully as strategic ends and means (e.g., Bourgeois, 1980; Dess & Keats, 1987; West & Schwenk, 1996). Among middle managers, however, consensus content should center on strategic priorities. If consensus among managers at both these levels is the focus, the language of priorities provides a likely bridge. Moreover, if organizational-level outcomes are expected as a part of the hypotheses, it is likely that the locus of consensus should include middle- and lower-level managers.

Assumptions about the locus of consensus should also influence operational definitions. In particular, theory and research suggests that top management's intentions represent the organization's deliberate strategy (Mintzberg & Waters, 1985) and that the CEO is the most influential actor within the top management group (Hambrick, 1995). Consensus within the TMT should be measured by comparing each team member's views against those of the CEO, thereby reflecting the degree to which members agree with the CEO (Wooldridge & Floyd, 1990). Measures of consensus within the TMT should employ Euclidian-distance scores between the CEO and other TMT members (e.g., Iaquinto & Fredrickson, 1997; West & Schwenk, 1996). Consistent with this, Smith-Jentsch and colleagues (2005) argued that distance scores should be used when the construct of interest is the alignment of opinion around a specific view.

In contrast, a correlation index or standard deviation score should be used when similarity of views is the focus, as in a group's rank ordering of strategic priorities. A correlational approach reflects the degree of variance in team members' views and in doing so treats the specific views held by different individuals on an equal basis. Middle- and operating-level managers are much less likely than members of the TMT to be aware of the CEO's views (Hambrick, 1981), and the use of distance scores is, therefore, unlikely to be appropriate. Moreover, given the variety of subunit perspectives among middle- and lower-level managers (Guth & MacMillan, 1986; Walsh, Henderson, & Deighton, 1988), the interchangeability of views captured by distance scores is neither practical nor desirable. Instead, the nature of agreement among middle- and lower-level managers or among groups composed of managers at multiple levels is more likely to be represented by measures that reflect the extent to which views overlap (e.g., Mathieu et al., 2000; Smith-Jentsch et al., 2005; Stout, Cannon-Bowers, Salas, & Milanovich, 1999). Thus, correlation measures appear to be a more appropriate way to measure strategic consensus within groups of middle-level managers or within groups composed of managers from multiple levels (Wooldridge & Floyd, 1989).

In addition to the choice of distance versus correlation, we would expect that in some cases, consensus at the operating level will develop in the form of shared mental models (Markóczy, 2001). Shared belief systems or mental models within task groups have been identified as the

basis for more tangible agreements on action (Mohammed & Dumville, 2001). When measured as shared mental models, consensus therefore links actions to outcomes (i.e., causes to effects) and may become the basis for coherent behavior. In strategic contexts, shared mental models provide operating managers with a common framework to interpret and respond to environmental challenges (Marks, Mathieu, & Zaccaro, 2000), so that an agreed-upon strategy may be executed efficiently. On the other hand, operating-level managers' beliefs are subject to the same subunit influences as those of middle managers (Guth & MacMillan, 1986; Walsh et al., 1988). Therefore, we suggest that the use of shared mental models as measures of consensus may be subject to the qualification that such use be limited to operating-level groups where there is significant interunit interaction, such as on cross-functional teams or task forces responsible for change (Markóczy, 2001). Otherwise, it is difficult to see how similar mental models would develop across operating levels of management. When operating-level managers are part of a study of consensus that includes middle- and/or top-level managers, the correlation-based approach to measuring consensus across these groups appears preferable (e.g., Smith-Jentsch et al., 2005).

Antecedents and Moderators

Antecedents should be identified based on assumptions about the locus and content of consensus in the study. If consensus is examined within a decision-making group such as the TMT, demographic characteristics and the use of decision aids are appropriate variables to provide insight into how consensus develops. On the other hand, if consensus is conceptualized as agreement on strategic priorities at middle and lower levels of management, the degree of middle-management involvement in the decision process and the structure of the organization (e.g., the level of decentralization) are likely to offer better explanations of how and whether consensus develops.

Future studies should incorporate the use of contextual moderators. Because theory posits a fit between evolutionary strategy making and dynamic external environments (Burgelman, 1991), and between more deliberate strategy making and stable environments (Hart, 1992), research should consider the interaction of environment and process in making predictions about consensus and performance. In more dynamic contexts, for example, operating-level managers are usually the first to experience the need for change. Middle managers may, therefore, come to see their priorities on the basis of signals from lower levels about such matters as customers' changing needs, rather than as direction from top management (Floyd & Lane, 2000). Moreover, if middle management's priorities change, this is likely to affect top managers' perceptions of what can be accomplished in the organization (Hambrick & Finkelstein, 1987). Under these circumstances, middle managers' consensus on priorities is more likely to be associated with performance than top managers' consensus on ends and means. In stable contexts, however, where a more directive approach may be effective (Floyd & Lane, 2000; Hart, 1992), consensus among top managers is more likely to be related to organizational performance. In addition to the external environment, future research should continue to explore the relevance of organizational-level moderators, including, for example, the extent to which the strategic consensus represents an adaptive strategy. In short, to produce consistent results, future research should consider both the external and internal contexts of the organization as potential moderators.

Discussion

In addition to the guidelines discussed above, consensus research is likely to benefit from broadening its theoretical base. In the following paragraphs, we consider the possibilities for cross-pollinating consensus research with ideas from related areas of inquiry.

First, although process-related variables have been examined as antecedents in prior research, much of this work focuses on variables associated with strategic planning or decision-making processes, such as the use of decision aids (Dess & Priem, 1995), the degree of involvement (Wooldridge & Floyd, 1990), or the extent of cognitive conflict (Amason, 1996). In evolutionary models of strategy making, however, the process of allocating resources across initiatives becomes the central focus (Bower, 1970; Burgelman, 1983). This may suggest a different set of process-related antecedents.

In the context of evolutionary strategy making, for example, middle management's attention is focused on acquiring and managing resources (Bower, 1970; Burgelman, 1983). Perceptions of fairness, therefore, form around the administrative procedures that govern resource allocation (Kim & Mauborgne, 1991). When the process is seen to be arbitrary or manipulative, perceptions of fairness decline. This likely undermines managers' level of active cooperation with the broader priorities of the organization (Kim & Mauborgne, 1998). To the extent managers perceive the process to be fair, however, one can speculate that they are more likely to develop shared understandings and to display higher levels of voluntary cooperation and commitment. Thus, among middle- and lower-level managers, we would expect that justice perceptions play a significant role in the formation of strategic consensus.

With respect to the TMT, Hambrick (1994) observed that not all cohorts of managers are really groups, much less teams. Instead, groups of managers differ in the extent to which they interact and form a group. Hambrick (1994) referred to this variable as the degree of behavioral integration—defined as the amount of information exchange, collaborative behavior, and joint decision making with a group (Hambrick, 1994; Simsek, Veiga, Lubatkin, & Dino, 2005). In the absence of behavioral integration, consensus within the TMT may still form on the basis of independently developed, yet common, interpretations. Even without much communication on a particular issue, individuals who share a common background and set of experiences may come to see things in similar ways (Hambrick & Mason, 1984). More homogeneous groups, therefore, may start with a base level of strategic consensus, even at low levels of behavioral integration. As behavioral integration increases, however, one would expect increases in strategic consensus even among heterogeneous groups, and perhaps, a further increase within homogeneous groups. Thus, behavioral integration may be an important process-related antecedent variable, and it may interact with other antecedents (e.g., group diversity) to influence the development of consensus.

Second, the conditions under which consensus forms are closely related to the question of *when* consensus forms. As Priem observed, temporal issues have been neglected in strategic consensus research as the "cross-sectional, correlation-based nature of consensus-

performance studies performed to date does not allow causal inferences to be drawn or lag effects to be examined" (1990: 475). Thus, a research design that accounts for temporal effects would be in a better position to examine the effects of antecedents on consensus. Perhaps more significant, designs that lag outcome variables (e.g., decision quality, implementation success, organizational performance) would reduce concerns about reverse causality that have plagued existing work (e.g., Bourgeois, 1985; Dess, 1987).

Beyond the methodological issues, however, the question of time raises theoretical questions: How does strategic consensus change over time? Where does it emerge first, and how does the scope of consensus evolve? Institutional theory logic may provide part of the answer. O'Neill, Pouder, and Buchholtz (1998) reasoned that a new strategy begins when a firm or firms recognize the potential for improved performance. As a strategy gains a critical mass of acceptance within the organizational field, however, it spreads to organizations who adopt the strategy with little regard for its performance impact. A number of forces account for this effect, including regulation, industry norms, and isomorphic (imitative) behavior. A similar effect may occur within organizations. A strategy may begin to develop within a coalition based on the strategy's potential performance effects. If it proves successful, it may gain acceptance and spread within the organization on the basis of its legitimacy rather than its performance-enhancing effects. Depending on the strength of legitimacy norms, however, the degree of consensus that emerges outside the initial coalition may not be very high. This also would be consistent with Markóczy's (2001) findings.

This reasoning raises a number of additional questions: Are there distinctive patterns of diffusion for strategic consensus (top-down, bottom-up, middle-up-down) that vary systematically with antecedents and outcomes? What degree of strategic consensus is associated with widespread acceptance of a new strategy? How is this degree associated with the organization's norms of legitimacy?

Third, the question of diffusion also reinforces the need to conceptualize the dynamics of strategic consensus at multiple levels of the hierarchy. In addition to hierarchical groupings, however, the action units associated with the evolutionary model are likely to be both crossfunctional and multilevel (Markóczy, 2001; McGrath, 2001). Typically, such project groups come together for a limited period of time, membership ebbs and flows depending on the needs of the project, and the project ends once an outcome has been achieved or the initiative fails. Despite their ad hoc character, research suggests that such groups are still likely to develop a "common mind" (Weick & Roberts, 1993). Active cooperation in the face of unforeseen developments is important in most projects, and the need for a common set of strategic priorities would therefore seem especially pertinent. It would be interesting to know, for example, how the level of consensus within these groups interacts with the level of consensus in the TMT to influence the outcomes associated with the project.

Fourth, in addition to consensus at a micro level, studies of strategic consensus within interorganizational alliances and networks also seem relevant. Research should investigate, for example, the relationship between strategic consensus and performance within an alliance or across an alliance network. Studies may also consider the role of strategic consensus in interorganizational knowledge transfer. Perhaps, for example, organizations whose TMT members share common priorities are more likely to exert the extra effort involved in learning and knowledge transfer across organizational boundaries (cf. Inkpen & Tsang, 2005).

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