Received: 31 October 2016 | Revised: 18 July 2017 | Accepted: 21 July 2017 | Published on: 26 October 2017

DOI: 10.1002/smj.2710

WILEY STRATEGIC MANAGEMENT JOURNAL

RESEARCH ARTICLE

The impact of strategic dissent on organizational outcomes: A meta-analytic integration

Codou Samba[1] | Daan Van Knippenberg[2] | C. Chet Miller[3]

[1]Haslam College of Business, The University of Tennessee, Knoxville, Tennessee

[2]LeBow College of Business, Drexel University, Philadelphia, Pennsylvania

[3]Bauer College of Business, University of Houston, Houston, Texas

Correspondence
Codou Samba, Haslam College of Business, The University of Tennessee, Knoxville, TN 37996.
Email: csamba@utk.edu

***Research summary*:** Strategic dissent represents divergence in ideas, preferences, and beliefs related to ideal and/or future strategic emphasis. Conventional wisdom in strategic management holds that such differences in managerial cognitions lead to higher-quality strategic decisions, and thus to enhanced firm performance. However, 4 decades of empirical research have not provided consistent findings or clear insights into the effects of strategic dissent. Hence, we analyze the relative validity of predictions about these effects from both social psychological theories of group behavior and information processing perspectives on decision-making. Then, we conduct a meta-analytic path analysis (MASEM) based on current empirical evidence. Synthesizing data from 78 articles, we put to rest the notion that strategic dissent leads to positive outcomes for organizations and estimate how negative its effects actually are.

***Managerial summary*:** Top management teams (TMTs) set the tone and direction for their firms in important ways. Top managers, however, often disagree over fundamental issues related to strategy. Such strategic dissent affects how important decisions are made, and thus how the firm performs. In more specific terms and contrary to popular belief, strategic dissent creates not only dysfunctional relationships among top managers, but also disrupts the process by which these managers exchange, discuss, and integrate information and ideas in making strategic decisions. In short, firms have not yet generated value through numerous perspectives, ideas, and opinions among their top managers. We discuss interventions that could prove helpful in efforts to benefit from having diverse cognitions in a TMT.

KEYWORDS
cognitive conflict, cognitive diversity, meta-analysis, strategic decision-making, top management teams

1 | INTRODUCTION

In many firms, the top management team (TMT) is the center of decision-making (Hambrick, 2007; Hambrick, Humphrey, & Gupta, 2015; Hambrick & Mason, 1984). As such, this important team has been linked to various organizational outcomes, such as growth (e.g., Channon, 1979), strategic dynamism (e.g., Chatterjee & Hambrick, 2007), and financial performance (e.g., Hambrick & Cannella, 2004). Important for our purposes, top managers are essentially information workers (McCall & Kaplan, 1985), who bring together expertise from different domains in order to support organizational performance. However, their varying information sources and perspectives often cause substantial disagreements regarding the firm's strategic positioning. Indeed, each manager might favor goals and strategies based solely on his or her values and preferences (Finkelstein & Hambrick, 1996). To complicate matters, TMTs typically exhibit greater reciprocal interdependence and longevity in comparison to other work teams (Boerner, Linkohr, & Kiefer, 2011; Carpenter, 2002). Such dynamics likely cause disagreements among top managers to be more impactful, which makes the TMT particularly interesting as a focal point for a study on the firm outcomes of dissent.

In formal terms, strategic dissent is conceptualized as divergence in ideas, preferences and beliefs related to ideal and/or future strategic emphases (Amason, 1996; Miller, Burke, & Glick, 1998). In essence, strategic dissent refers to differences concerning what the strategy *should be*, rather than what it *is* (cf. Dess, 1987; Miller et al., 1998).[1] For strategy process research, important theoretical arguments have connected strategic dissent to organizational outcomes, with the most popular and dominant perspective suggesting that strategic dissent is a positive force for strategic decision-making and, thus indirectly, for firm performance (Appendix S1 in File S1).

Theoretically, dissent sets the stage for surfacing and combining unique pieces of information and insights (Hoever, van Knippenberg, van Ginkel, & Barkema, 2012; van Knippenberg, De Dreu, & Homan, 2004; van Knippenberg & Schippers, 2007). It promotes careful consideration of a diverse array of possible courses of action in the context of strategic decision-making (Bantel & Jackson, 1989; Glick, Miller, & Huber, 1993; Miller et al., 1998). These processes, in turn, yield higher-quality strategic decisions and better firm performance. At the same time however, strategic dissent creates troublesome violations of the basic assumptions of classical decision theory

[1]Strategic dissent is not the opposite of strategic consensus. Consensus, which is also concerned with managerial differences in cognition, is a vibrant area of research for both strategy and organizational theorists (e.g., Dess, 1987; Ensley & Pearson, 2005; see Kellermanns, Walter, Floyd, Lechner, & Shaw, 2011 for a recent meta-analysis establishing the performance outcomes of strategic consensus). Consensus represents the degree to which TMT members agree on what the goals, strategies, and strengths of the firm *are*. It is focused on strategy implementation (e.g., Amason, 1996; Kellermanns, Walter, Lechner, & Floyd, 2005) and is believed to "improve coordination and cooperation after a decision is made, which leads to a more efficient strategy implementation and, hence, enhanced organizational performance" (Kellermanns et al., 2011, p. 127). Strategic dissent, on the other hand, represents the degree to which TMT members disagree on what the goals, strategies, and strengths of the firm *should be*. Dissent constitutes one of the microfoundations of strategic problem formulation (Baer, Dirks, & Nickerson, 2013), in the sense that variety in how top managers organize stimuli and filter information influences what is noticed, and thus responded to (Bogner & Barr, 2000).

(e.g., Cabantous & Gond, 2011; March, 1997, 2006), such as the lack of coherent preference ordering in the strategic decision-making unit. Furthermore, strategic dissent may be a source of dysfunctional conflict because top managers likely do not readily compromise their strongly held ideas, preferences, and beliefs. Strained relations and communication failures can emerge, with poor quality strategic decisions and weak firm performance as the ultimate outcomes of this dissent (Amason, 1996; Eisenhardt & Zbaracki, 1992; Glick et al., 1993; Miller et al., 1998).

In strategy research, these positive- and negative-effect arguments have typically been used in isolation, with one or the other being emphasized in a given theoretical and empirical analysis. As a result, both positive argumentation (with its emphasis on useful information elaboration) and negative argumentation (with its emphasis on dysfunctional interpersonal relations) are well-developed in their separate worlds. The lack of theoretical integration across studies on strategic dissent is a limitation of existing work. Indeed, while previous research has provided important insights and advancements, it has fallen short by not integrating across the two key intervening process variables associated with the competing perspectives outlined above. Moreover, empirical investigations have generally not included measures of either intervening variable, but instead have treated them as unmeasured mediators while focusing empirical attention directly on decision quality (e.g., Amason, 1996; Dooley & Fryxell, 1999; Olson, Parayitam, & Bao, 2007) or firm performance (e.g., Ensley, Pearson, & Amason, 2002; West & Schwenk, 1996). Furthermore, strategic dissent has been found to have positive effects (e.g., Amason, 1996; Barsade, Ward, Turner, & Sonnenfeld, 2000; Doyle-Corner and Kinicki, 2004); negative effects (e.g., Amason & Mooney, 1999; Simsek, Veiga, Lubatkin, & Dino, 2005); negligible effects (e.g., Grinyer & Norburn, 1975; West & Schwenk, 1996); and contingent effects on organizational outcomes based upon the operationalization of dissent used in the focal study (e.g., Miller et al., 1998). In sum, research has so far failed to produce strong insights for either competing position; and the resultant dissent about strategic dissent is a key motivating force behind the current investigation.

To better understand the organizational impact of strategic dissent, we first theoretically specify mediating effects for both fundamental process variables: interpersonal relations and information elaboration. We also take into account the likely effects of interpersonal relations on information elaboration. In our empirical examination of the integrative model, we draw on existing research by using meta-analytic techniques for multiple-mediator models (i.e., MASEM) in order to (a) settle what we know about the organizational performance implications of strategic dissent and (b) examine the multivariate structure of the complex webs of relationships involved in explaining the effects of strategic dissent on firm performance (cf. Bergh et al., 2014). We thus bring to the conversation an integrative model and the most definitive data available. Contrary to popular belief, which assumes positive outcomes for strategic dissent, we find negative consequences overall. We put to rest the notion that strategic dissent leads to positive outcomes for organizations and estimate how negative its effects actually are.

2 | THEORETICAL BACKGROUND

Top managers represent different subunits and/or functions of the organization, and the TMT is often a conflation of multiple and conflicting ideas, preferences, and beliefs (Cyert & March, 1963). This variation in cognitions is associated with disagreement over strategic foci, which could cause dysfunctional interpersonal relationships within the TMT. Indeed, strategic dissent is believed to have negative effects because it disrupts managers' interpersonal relations. This theoretical position is grounded in robust and reliable findings from social psychology research, which is focused on the

psychology of small group behavior (e.g., Shaw, 1981). On the other hand, strategic dissent could have positive or negative effects on decision quality and firm performance through information elaboration (Glick et al., 1993; Miller et al., 1998). Arguments suggesting positive effects of strategic dissent are primarily based on the information processing perspectives of diversity (e.g., Harrison & Klein, 2007; van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998), which suggest that benefits accrue to teams that have diverse sources of information and insights compared to those that do not. As mentioned earlier, the positive-effect perspective of strategic dissent is the dominant view in the strategy literature (e.g., Barkema & Shvyrkov, 2007; Bogner & Barr, 2000; Elsbach, Barr, & Hargadon, 2005; Forbes & Milliken, 1999; Lant, Milliken, & Batra, 1992; Marcel, Barr, & Duhaime, 2011; etc.). Dissent, however, could harm information elaboration if top managers do not make joint efforts to bring together various points of view and diverse pockets of information (e.g., Hoever et al., 2012; van Knippenberg et al., 2004).

In an important deviation from the state of the science, we outline below how simultaneous consideration of the positive- and negative-effect perspectives suggests that negative effects of strategic dissent are more likely. To build our arguments, we describe step-by-step the effects of strategic dissent on our key mediating processes: interpersonal relations and information elaboration. We also include in building theory, the likely influence of interpersonal relations on information elaboration. Capturing these mediating paths is important both to build our integrative model and to substantiate it empirically through formal hypothesis testing. Thus, even though the ultimate outcomes of interest are strategic decision quality and firm performance, we build our argumentation stepwise around mediating processes in order to present a stronger case for our predictions. This process focus also somewhat deviates from primary research practices in strategic dissent: Although TMT studies exist for each of the two key mechanisms, studies have seldom included both process variables at the same time or simultaneously contained them alongside outcome variables. As a result, strong evidence concerning the relative validity of each competing position or the importance of the different causal paths does not exist. Our work highlights the relative contribution of each mechanism and brings together key aspects of the overall causal flow.

Our investigation rests on two key strategies for integrating the two isolated theoretical development efforts on strategic dissent (i.e., effects through interpersonal relations versus effects through information elaboration) and their opposite positions on the organizational outcomes of strategic dissent (i.e., negative versus positive effects). First, we argue that the negative effects of strategic dissent on interpersonal relations suppress any positive effects that might be generated through information elaboration. Specifically, we argue that strategic dissent has (a) negative effects on outcomes through both interpersonal relations and information elaboration and (b) a negative effect on information elaboration through interpersonal relations. Our arguments result in a prediction for overall negative effects on decision quality and firm performance. Second, we examine whether variation in how dissent is operationalized helps to sort out differences in arguments and findings on the effects of strategic dissent on information elaboration. Researchers have typically measured strategic dissent in one of two ways: diversity of opinions concerning strategic foci (often labeled cognitive diversity; e.g., Miller et al., 1998) versus judgmental differences regarding what strategies best achieve the organization's objectives (sometimes labeled task or cognitive conflict; e.g., Amason, 1996; Jehn, 1995). At the same time, one important purpose of meta-analysis is to establish the degree to which different measures form a broader construct that has consistent relationships with other variables (Stewart, 2006). Thus, we investigate whether cognitive diversity and cognitive conflict constitute distinct ways of measuring strategic dissent; and if the latter, whether this helps reconcile positive and negative findings related to information elaboration. Interestingly, we found

indication that the construct label used in a particular theoretical development does not always align with the construct operationalization used in empirical testing. Indeed, some studies have implicitly or explicitly referenced cognitive diversity in theory building but then used reports of team conflict around strategy issues. This practice adds to an often-noted problem in the strategy literature: mismatches between the conceptual definitions of phenomena and their measurement in empirical efforts (cf. Miller, Washburn, & Glick, 2013).

2.1 | Strategic dissent, interpersonal relations, and organizational outcomes

Interpersonal relations represent the extent to which top managers have warm feelings towards one another, feel connected to each other, and generally co-exist in a respectful fashion (Knight et al., 1999). In its various instantiations, the notion of interpersonal relations among teammates is one of the most popular constructs in research on work teams. In strategic dissent research, interpersonal relations have been captured by such variables as TMT cohesion (e.g., Glick et al., 1993; Wei & Wu, 2013; etc.), smoothness of relations (e.g., Ensley et al., 2002; Janssen, Van de Vliert, & Veenstra, 1999; etc.), and absence of relationship conflict (e.g., Barsade et al., 2000; Olson et al., 2007; Simons & Peterson, 2000; etc.).

As discussed above, dissent has been connected to interpersonal relations in a number of theoretical and empirical investigations. One line of reasoning suggests that people who have differing ideas and views are prone to having dysfunctional relationships based on inferred evaluations (Condon & Crano, 1988). Such evaluations involve individuals believing that those who disagree with them also dislike them, while those who agree with them also like them. The inference of being disliked based on divergent ideas leads to weaker interpersonal relations within a team because people tend to like those who like them (Aronson & Worchel, 1966). This is a fundamental prediction of the similarity-attraction paradigm (Harrison & Klein, 2007; van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). A closely related line of reasoning is grounded in social categorization theory, which predicts that stereotypic perceptions of dissimilar others, intergroup biases and subgroup formation arise within a diverse team, upset team functioning, and reduce affective and evaluative warmth (Harrison & Klein, 2007; van Knippenberg & Schippers, 2007). A third supporting argument for negative effects of dissent on interpersonal relations is found in self-verification theory (Swann, Polzer, Seyle, & Ko, 2004). This social psychological theory predicts that challenges to one's viewpoints by fellow teammates are interpreted as negative assessments of one's own abilities and competencies. As a result, cognitive differences cause team members to experience stress and dissatisfaction with the team (Dijkstra, van Dierendonck, & Evers, 2005; Yang & Mossholder, 2004). Empirically, the negative association between dissent and interpersonal relations is one of the most robust and reliable findings in social psychology research. Importantly, the direction of the relationship holds whether dissent is conceptualized as diversity of opinions (e.g., Martins, Schilpzand, Kirkman, Ivanaj, & Ivanaj, 2013; Mello & Delise, 2015; Mohammed & Ringseis, 2001) or as cognitive conflict (de Wit, Greer, & Jehn, 2012)—although intuitively, the magnitude of the relationship should somewhat be stronger for the conflict conceptualization.

While this negative linkage has been widely supported in organizational contexts (see DeChurch, Mesmer-Magnus, & Doty, 2013 for a meta-analysis), it has not been clearly established for TMTs. Indeed, top managers are believed to be better at handling complex interpersonal dynamics and to be more politically savvy (e.g., Amason & Sapienza, 1997; Carpenter, 2002; Eisenhardt, 1989) compared with members of lower-level teams. Also, Jehn (1995) found that dissent has a less negative effect on interpersonal relations when team members are involved in non-routine, creative work (for instance, TMTs). Finally, de Wit et al. (2012) found that the studies conducted among TMTs

showed, in the aggregate, a non-significant correlation between conflict (not limited to conflict about strategy) and team performance, suggesting that top managers may experience less dissatisfaction with dissent. Overall, we expect strategic dissent to be negatively related to interpersonal relations, albeit less so than suggested by social psychological findings.

Hypothesis 1 (H1): *Strategic dissent is negatively related to interpersonal relations in the TMT.*

As a possible mediating variable, interpersonal relations may have important downstream effects on the quality of strategic decisions and firm performance. Existing theories maintain that when team members have interpersonal problems and negative reactions to one another, working together is less effective and produces suboptimal results (Argyris, 1962; Jehn, 1995). Much of the team's efforts are spent resolving or trying to ignore these emotional issues (Baron, 1984). The time and energy necessary to address the task at hand are used up by unproductive social conflict (Shaw & Shaw, 1962). Research on work groups shows that interpersonal conflict is problematic for team outcomes (see de Wit et al., 2012 for a meta-analysis). Similarly, emotional conflicts among top managers likely promote negative and uncomfortable feelings, as well as hinder interactions and camaraderie within the TMT (Jehn, 1995). Furthermore, when these conflicts become chronic, top managers will likely disagree with each other just so that they can vent their highly emotional displeasure (Ensley & Hmieleski, 2005). This situation, in turn, contributes to more infighting within the TMT and focuses valuable managerial attention away from the organizational and environmental factors that are important for strategic decision-making.

In contrast, when interpersonal relations are positive, top managers are more likely to help one another (Glick et al., 1993; Miller et al., 1998). Smooth interpersonal relations are associated with positive communication, coordination and collaboration, which are positive for decision-making (see Mullen & Copper, 1994 for a meta-analysis). Stated formally:

Hypothesis 2 (H2): *Interpersonal relations are positively related to decision quality.*

In concert, the reasoning supporting Hypotheses 1 and 2 suggests a mediated path from strategic dissent to decision quality through interpersonal relations. Overall, this path indicates that strategic dissent is detrimental for organizations because dissent harms TMT relationships, and poor TMT relationships are problematic for decision quality. Our formal hypothesis is:

Hypothesis 3 (H3): *Interpersonal relations mediate the negative effect of strategic dissent on decision quality.*

2.2 | Strategic dissent, information elaboration, and organizational outcomes

Information elaboration captures the degree to which top managers utilize an extensive decision process when dealing with opportunities and threats (Miller et al., 1998). Key elements include exchanging, discussing, and integrating information, insights, and perspectives (van Knippenberg et al., 2004). Relevant labels used in past work include procedural rationality (e.g., Dean & Sharfman, 1996), comprehensiveness (e.g. Miller et al., 1998), and analysis (e.g., Priem, Rasheed, & Kotulic, 1995). While social psychology research has provided strong theoretical arguments and conclusive evidence for the negative effects of dissent on interpersonal relations within a team, information processing research has not generated such definitive outcomes for the effects of dissent on information elaboration. Indeed, arguments suggesting positive effects of dissent on information

elaboration and those suggesting negative effects each have been advanced, making the development of predictions about the causal path involving information elaboration a less straightforward affair. Furthermore, the positive-effect perspective is the dominant view in strategic dissent theorizing (Appendix S1 in File S1); but this does not mean that it has been supported empirically (indeed, this is for our review to determine) or imply that its conceptual arguments are more compelling in consideration with the wider literature in management and social psychology. We explain below why we expect the overall effect of strategic dissent on information elaboration to be negative, rather than positive.

The positive-effect perspective on information elaboration seems to be grounded in an interpretation of strategic dissent as simple diversity of opinions, ideas, and perspectives within the TMT. Cold, rather than hot, cognition seems to be the emphasis (e.g., Hodgkinson & Healey, 2011; Madrigal, 2008; Simon, Stenstrom, & Read, 2015). Key arguments for the positive-effect position hold that differing views provide the cognitive resources needed for deep analysis (e.g., Lant et al., 1992; March, 1991). Absent differing viewpoints related to which organizational goals should be emphasized or which strategic orientations might be the most beneficial, there is a limited foundation for rich search and discussions. With diversity of opinions however, there is the potential, and presumably the motivation (cf. Miller et al., 1998), to reach superior decisions through the exchange, investigation, and integration of the different viewpoints. In other words, managerial differences in ideas, preferences and opinions are essential in addressing the "extraordinary demands on the breadth and depth of information and knowledge required" (Baer et al., 2013, p. 201) to formulate organizational strategy. Therefore, strategic dissent likely leads to higher-quality strategic decisions. Moreover, and importantly, based on the "portrayal of strategic management as a series of rational and dispassionate activities" (Hodgkinson & Healey, 2011, p. 1501) above, the positive-effect argumentation should hold better when strategic dissent is operationalized using cognitive diversity measures compared to using cognitive conflict measures.

Differing points of view, however, might not actually create a strong motivation for rich search, discussion, or integration of ideas. In some cases, different viewpoints might be complementary, rather than competing, such as when one top manager favors innovation and another favors growth over the long term. In these cases, a single strategic option could satisfy two or more positions, with little need for substantial generation of creative choices. In essence, some goals and ideas simply do not compete with one another in a major way (see Ethiraj & Levinthal, 2009). Furthermore, firms with slack resources may be able to accommodate somewhat competing goals and ideas, with little need to bridge across them (see Cyert & March, 1963). Finally, different opinions may simply imply differing patterns of attention that are easily resolved, and not strong positions that top managers feel compelled to defend in formulating strategy (see Ocasio, 1997). Overall, strategic dissent may not necessarily be associated with contested choices that would seed high-energy decision processes. Thus, the value of diverse ideas, preferences, and beliefs does not seem self-evident, or at least does not seem to apply in a straightforward way.

Furthermore, and in sharp contrast to the positive-effect view, the negative-effect perspective is grounded in an interpretation of strategic dissent as perceived discrepancy or incompatibility of opinions, ideas and/or perspectives (e.g., Simons & Peterson, 2000). The underlying premise of this theoretical position is that conflicting ideas, preferences, and beliefs among top managers negatively impact strategic decision-making in organizations (Eisenhardt & Zbaracki, 1992). From this perspective, strategic dissent does not so much capture diversity of information and insights that can be fruitfully integrated, but instead represents conflicting goals and preferences that members have a vested interest in defending. Strategic dissent, thus, disrupts information elaboration because

managers are motivated to defend their positions rather than engage in an open-minded search and analysis (cf. De Dreu & van Knippenberg, 2005; Wittenbaum, Hollingshead, & Botero, 2004). In addition, the potential for a chaotic process may lead one or a few managers to "quietly address strategic issues behind the scenes while not opening up the process to others" (Miller et al., 1998: 42). Due to the hierarchical structure of TMTs, the CEO could respond to strategic dissent by excluding opposing voices from the decision-making process. The potential for greater information elaboration would thus not be realized.

Hypothesis 4 (H4): *Strategic dissent is negatively related to information elaboration.*

As implied in earlier parts of this discussion, information elaboration likely has positive effects on strategic decision quality (see Bourgeois & Eisenhardt, 1988; Papadakis, 1998; van Knippenberg et al., 2004). Information elaboration revolves around the surfacing and integration of information in decision processes (van Ginkel & van Knippenberg, 2008), as well as creativity in problem-solving and generation of decision alternatives (Ancona & Caldwell, 1992; De Dreu & West, 2001; Hoever et al., 2012). This is not to say that information elaboration is always necessary or desirable. Indeed, when there is no need to integrate diverse information and perspectives, or when time-urgency would prioritize a satisfactory decision sooner over an optimal decision later, the value-added of information elaboration may be limited. Nonetheless, in the context of decision-making by TMTs, which are teams that face substantial complexity and novelty, information elaboration should be a positive influence on decision quality on average.

Hypothesis 5 (H5): *Information elaboration is positively related to decision quality.*

In concert, the reasoning supporting Hypotheses 4 and 5 suggests a mediated path from strategic dissent to decision quality through information elaboration. Overall, this path indicates that strategic dissent is detrimental to organizations, as it likely limits useful information elaboration and, in turn, poor information regimes harm strategic decisions. Our formal hypothesis is:

Hypothesis 6 (H6): *Information elaboration mediates the negative effect of strategic dissent on decision quality.*

2.3 | Indirect effect of strategic dissent on information elaboration

Strategic dissent may have an indirect effect on information elaboration, in addition to its direct effect on this process variable. As discussed above, strategic dissent is expected to have a negative effect on interpersonal relations. In turn, interpersonal relations may affect information elaboration (Ancona & Caldwell, 1992; Chowdhury, 2005), creating a second path through which dissent could negatively affect the elaboration of decision-relevant information. The notion that interpersonal relations play a role in the dissent-elaboration linkage is not new (e.g., Miller et al., 1998; van Knippenberg et al., 2004). In fact, past research has suggested that interpersonal relations partially mediate the relationship between strategic dissent and information elaboration (e.g., Glick et al., 1993; Miller et al., 1998). This idea is consistent with anecdotal evidence suggesting that top managers' egos can be just as important as economic arguments in strategic decision-making (Hutzschenreuter & Kleindienst, 2006). It also aligns with research outside of the strategy domain suggesting that negative interpersonal relations disrupt information elaboration (van Knippenberg et al., 2004; van Knippenberg & Schippers, 2007). Furthermore, dysfunctional interpersonal relationships are likely to be characterized by low psychological safety (i.e., the perception that one cannot freely share ideas and

opinions without negative social consequences) (Edmondson, 1999). Yet, psychological safety is an important pre-condition for the open discussion and integration of different perspectives (Edmondson, 1999; van Ginkel & van Knippenberg, 2008). The sense that one can freely discuss his or her views may encourage top managers to engage in an open discussion of one another's perspectives, which in turn likely creates higher-quality decisions.

Overall, good relationships seem necessary for rich information elaboration. Thus, lower levels of strategic dissent are likely better for decision processes and outcomes, given their connection to better interpersonal relations. It is noteworthy that this potentially important and more complex mechanism has not been a point of emphasis in past TMT research.

Hypothesis 7a (H7a): *Interpersonal relations are positively related to information elaboration.*

Hypothesis 7b (H7b): *Interpersonal relations mediate the negative effect of strategic dissent on information elaboration.*

2.4 | Overall effects of strategic dissent on organizational outcomes

Although the idea that strategic dissent is beneficial remains popular in the strategy field, our theoretical analysis suggests overall negative effects for decision quality and firm performance. First, strategic dissent is expected to have a negative effect on interpersonal relations, as well as on information elaboration (directly and indirectly via interpersonal relations), and interpersonal relations and information elaboration are expected to have positive effects on the quality of strategic decisions. Thus, strategic dissent indirectly has negative implications for decision quality.

Second, The TMT is charged with making strategic decisions, the quality of which is expected to influence firm performance (e.g., Amason, 1996; Elbanna & Child, 2007; Finkelstein, Hambrick, & Cannella, 2009). In fact, TMT dynamics affect firm performance first and foremost through strategic decision-making. Extending our conceptual analysis with this insight, we predict that strategic dissent is negatively related to firm performance through its effect on decision quality, the effect of which is mediated by interpersonal relations and information elaboration.

Hypothesis 8a (H8a): *Decision quality is positively related to firm performance.*

Hypothesis 8b (H8b): *Decision quality mediates the effects of interpersonal relations and information elaboration on firm performance, and thus through sequential mediation, the negative influence of strategic dissent on firm performance.*

3 | METHODS

To test our hypotheses, a quantitative synthesis of previously published findings was undertaken. First, relevant correlations were collected from studies in order to calculate the aggregate effect sizes for the bivariate relationships in our integrative model; we call these effect sizes, "seed mean correlations" from here on. Next, the seed mean correlations were used as input for our meta-analytic path analysis (MASEM). The specific empirical methods are discussed below.

3.1 | Identification of studies

For our empirical work, studies including one or more of the bivariate relationships in the model were needed. To ensure the representativeness and completeness of the data, our study identification process included several steps. First, a study database was created for each bivariate link in our model; all the databases together constitute our study databank. To meet basic requirements for inclusion in a database, a study had to (a) focus on top managers as the target population; (b) be quantitative in nature and give sufficient statistical information to collect or compute correlations; and (c) have a sample that had not been used in another study already included in that particular database (e.g., the database for the bivariate relationship between strategic dissent and information elaboration). This third qualifying criterion ensured that non-independence across the observations in each of our databases was kept to a minimum.[2] For databases of correlations with strategic dissent, a study also had to include a variable tapping into managerial differences in ideas, preferences and/or beliefs related to ideal and/or future strategic emphases.

Keywords that authors could have used in their work were identified to conduct literature searches (see Appendix S2 in File S1 for a list of all the keywords). Example keywords for dissent included "cognitive conflict," "task conflict," and "cognitive diversity." Additional related terms such as "dispersion" and "disagreement" (as well as their antonyms, including "consensus") were used in order to engineer a thorough search. Terms representing information elaboration included "procedural rationality," "comprehensiveness," and "rational analysis." Terms representing interpersonal relations included "cohesion," "affect-based trust," and "loyalty." In addition, terms conveying the opposite of smooth relations in a team, such as "relationship conflict," "affective conflict," and "emotional conflict" were used also identified. The keywords were used in searches of the Social Sciences Citation Index, ABI/Inform, Business Source Complete, and Emerald Fulltext. In addition to searches of journal databases, the reference lists of review papers were consulted for candidate studies (e.g., Amason & Loughry, 2014; Castaño, Watts, & Tekleab, 2013; de Wit et al., 2012; Eisenhardt & Zbaracki, 1992; Miller, 2008; Nielsen, 2010; Rajagopalan, Rasheed, & Datta, 1993; Shepherd & Rudd, 2014). Furthermore, the tables of contents of several journals, including *Academy of Management Journal, Administrative Science Quarterly, Journal of Applied Psychology, Journal of Management, Journal of Management Studies, Organization Science, and Strategic Management Journal*, were examined.

Finally to be as inclusive and representative as possible and to help mitigate the possibility of a "file drawer" problem we sought unpublished studies working papers and conference papers. Rosenthal and Rosnow explained that "researchers and statisticians have long suspected that studies published in behavioral and social science journals are a biased sample of the studies that are actually carried out" (2008: 686). Thus we used the ProQuest Dissertations and Theses and the Social Science Research Network databases. We also reached out to authors who had published work on our relationships of interest in searching for unpublished studies that could be included in our databases (see Karna, Richter, & Riesenkampff, 2016).[3] The study identification process resulted in a meta-analytic databank of 78 articles yielding 192 relevant effect sizes (Appendix S3 in File S1).

[2]Including a sample a second time in a database would have created unnecessary non-independence in the data. If, however, a sample contained information for two of our bivariate relationships, then the sample was used in two of our databases (e.g., the database for strategic dissent and interpersonal relations, and the database for strategic dissent and information elaboration) (for additional discussion of pertinent procedures, see de Wit et al., 2012 and Kirca et al., 2011; also see Bergh et al., 2014).

[3]The impact of unpublished studies on the robustness of findings was assessed. Specifically, all the meta-analyses of bivariate linkages, as well as the MASEM, were run with only the published studies. We found that the publication status of the primary studies did not affect our core findings. Thus, we have retained the results of our analyses with all available studies included; this also helps increase the generalizability of our findings.

3.2 | Coding

A database was created for each of 10 bivariate relationships of interest. From each of the eligible studies, we collected or calculated product moment correlations describing the bivariate relationships (e.g., strategic dissent-interpersonal relations; information elaboration-decision quality) that are embedded in our multiple-mediator model. Sample sizes were also collected for use in weighting the correlations, as per standard meta-analytic procedures. Furthermore, internal consistency coefficients for the underlying variables were collected when reported.

Several studies provided correlations for two or more of the key bivariate relationships. The correlations were collected and put into their respective databases. Also, several studies yielded two or more correlations for a particular bivariate relationship. For example, Olson et al. (2007) provided two correlations for strategic dissent-interpersonal relations; one for each of the two operationalizations of dissent identified. For such cases, we averaged the correlations provided. Finally, a few references had more than one sample; in such cases, different samples represented different studies. For example, Miller et al. (1998) had three distinct samples, and each was considered a separate study (i.e., correlations from different samples were not combined).

For the bivariate links that involve strategic dissent, we also recorded information on the operationalization used for strategic dissent (i.e., cognitive diversity vs. cognitive conflict). We noted earlier that the positive- and negative-effect perspectives on the relationship between strategic dissent and information elaboration may be implicitly rooted in different interpretations of what dissent is. Indeed, the negative-effect perspective focuses on the notion of hot cognition and its associations with vested interests and ego implications of seeing one's position prevail, while the positive-effect view emphasizes variety of cognitions and its associations with the informational benefits of diverging viewpoints. In addition, evaluations of interpersonal relations within the TMT could be, on average, more pessimistic as a result of greater negative feelings elicited by the wording of the cognitive conflict scale items (cf. de Wit et al., 2012). To illustrate: "How many differences of opinion were there within the group over this decision?" was an item included in the cognitive conflict scale used in Amason (1996), while an item for the cognitive diversity scale used in Miller et al. (1998) was: "How strongly do members of the TMT agree or disagree with each other about which organizational objectives should be considered most important?"

Four independent raters, including two co-authors, coded studies in the databank. As part of this effort, each coder collected correlations relevant for the bivariate relationships under scrutiny. The initial two-rater interrater agreement (Perreault & Leigh, 1989) was 94%, and any discrepancy that arose in the coding process was resolved through discussion.

3.3 | Meta-analytic procedures

First, sample-size weighted mean correlations were estimated for each bivariate relationship in our model. To be thorough, we used both approaches to meta-analysis: the random-effects and the fixed-effect models (see Appendix S4 in File S1 for a description of the two models). Although the two methods yield the same conclusions in our work, we emphasize the random-effects approach. This method is based on the assumption that the sample of studies has been drawn from the universe of all possible studies that theoretically could have been conducted over time (Borenstein, Hedges, Higgins, & Rothstein, 2009). The random-effects approach has become increasingly accepted as the better representation of reality (e.g., Field, 2003).

Next, within the random-effects model, we corrected for measurement error in both the independent and dependent variables, using the approach developed by Hunter and Schmidt (1990, 2004).

This approach is also known as psychometric meta-analysis. We divided each correlation by the product of the square roots of the reliabilities of the measures assessing the two focal variables. The objective of this procedure is to correct for the imperfections of research methods used in the primary studies.[4] We used internal consistency coefficients when they were reported in a study. For studies that did not provide reliability information, the average of the reliability coefficients collected for a given variable was used in the correction of the focal correlations. In cases where archival sources had been used to assess a variable (typically firm performance), a reliability estimate of 0.80 was used,[5] in line with Dalton and Dalton's (2005) recommendation (see also Bergh et al., 2014).

Second, we conducted subgroup analyses on the bivariate links involving strategic dissent in order to explore the possibility that choice of measures may explain, at least in part, inconsistencies in existing findings and, as a result, help resolve the positive- versus negative-effect debate. We divided the studies into two categories, cognitive diversity vs. cognitive conflict, and assessed the extent to which the mean correlations associated with the two categories differ.

Third, MASEM (Viswesvaran & Ones, 1995) was used to evaluate our integrative model. The corrected, sample-size weighted, mean population correlations of the bivariate relationships (i.e., the seed mean correlations) were used as input for the meta-analytic correlation matrix. That correlation matrix, in turn, constitutes the primary input for the path analysis. To account for different sample sizes in the bivariate links representing the paths, we followed standard practice and used the harmonic mean of the sample sizes as the overall sample size for our path analysis (Viswesvaran & Ones, 1995). The harmonic mean gives less weight to large sample sizes and more weight to smaller ones and thus results in more conservative parameter estimates compared to the arithmetic mean. Five established model fit statistics were used to examine the viability of the model (Geyskens, Steenkamp, & Kumar, 2006; Jiang, Lepak, Hu, & Baer, 2012; Kirca et al., 2011; Kline, 2011): chi-square (χ^2), root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), comparative fit index (CFI), and adjusted goodness-of-fit index (AGFI). Strong model fit is associated with chi-square values that have p-values greater than .05, an RMSEA less than or equal to 0.08, an SRMR less than 0.10, a CFI greater than 0.90 (see Jiang et al., 2012), and an AGFI greater than 0.90 (see Kirca et al., 2011).

4 | RESULTS

4.1 | Bivariate meta-analytic effects

In Table 1, mean correlations are shown for each of the 10 bivariate relationships needed to complete the meta-analytic correlation matrix that provides the basis for our MASEM. In general, the meta-analytic effects are moderate to moderately strong; and only one summary effect size, the

[4]In social science research, measures are, undeniably, inexact reflections of their constructs. The Hunter-Schmidt approach assumes that if the measures were reliable, the researcher(s) would have detected a stronger association between the two constructs under investigation. Thus, this correction for unreliability in the measures results in a stronger correlation between the two constructs. However, we "don't get something for nothing in making…psychometric corrections" (Oswald, Ercan, McAbee, Ock, & Shaw, 2015, p. e1). Indeed, studies with lower measurement reliabilities (and thus a higher correction factor) contribute less to the estimated population correlation and more to the associated error. We provide both mean estimates of observed (i.e., uncorrected) and of corrected correlations, with an emphasis on the mean estimate of corrected correlations (cf. Oswald et al., 2015).

[5]We ran sensitivity analyses on all four bivariate correlations involving firm performance in order to determine whether changing our correction for measurement error on archival performance measures makes a difference in our findings. Specifically, we reran the analyses with reliability estimates of 1, 0.9 and 0.7 for the objective performance measures. Based on the results of this robustness check, we conclude that using 0.80 for the reliability correction of objective performance data is reasonable.

TABLE 1 Overview of key relationships[a]

Bivariate relationships	k	N	$\hat{\rho}$	SE$\hat{\rho}$	80% CR[b]	$\bar{r}$	SE$\bar{r}$	95% CI	Fail-safe N[c]
Strategic dissent–interpersonal relations[d]	36	3,881	−0.446	0.087	−1.112 to 0.220	−0.438	0.098	−0.464 to −0.412	6,341
Cognitive diversity–interpersonal relations	7	772	−0.360	0.074	−0.610 to −0.109	−0.315	0.031	−0.378 to −0.249	110
Cognitive conflict–interpersonal relations	32	3,496	−0.497	0.094	−1.176 to 0.182	−0.482	0.111	−0.508 to −0.456	6,422
Interpersonal relations–decision quality	15	1,387	0.353	0.066	0.026 to 0.679	0.311	0.028	0.262 to 0.359	401
Interpersonal relations–firm performance	32	3,691	0.205	0.026	0.198 to 0.390	0.175	0.007	0.143 to 0.207	759
Strategic dissent–information elaboration	13	1,295	−0.311	0.082	−0.690 to 0.068	−0.268	0.050	−0.319 to −0.216	222
Cognitive diversity–information elaboration	6	804	−0.345	0.108	−0.683 to −0.008	−0.299	0.066	−0.362 to −0.235	55
Cognitive conflict–information elaboration	7	491	−0.252	0.126	−0.679 to −0.176	−0.215	0.092	−0.300 to −0.128	25
Information elaboration–decision quality	8	958	0.468	0.077	0.190 to 0.746	0.411	0.029	0.356 to 0.463	313
Information elaboration–firm performance	34	3,752	0.180	0.040	−0.121 to 0.481	0.152	0.018	0.121 to 0.184	521
Interpersonal relations–information elaboration	13	1,200	0.253	0.080	−0.101 to 0.608	0.224	0.034	0.169 to 0.278	162
Strategic dissent–decision quality[d]	9	771	−0.019	0.168	−0.663 to 0.625	−0.009	0.161	−0.080 to 0.063	-
Cognitive diversity–decision quality	2	337	−0.078	0.319	−0.656 to 0.500	−0.052	0.638	−0.159 to 0.055	-
Cognitive conflict–decision quality	9	771	−0.060	0.180	−0.750 to 0.630	−0.051	0.186	−0.122 to 0.021	-
Decision quality–firm performance	6	824	0.439	0.049	0.285 to 0.594	0.388	0.017	0.327 to 0.445	204
Strategic dissent–firm performance[d]	26	3,177	−0.074	0.040	−0.332 to 0.185	−0.064	0.014	−0.099 to −0.029	18
Cognitive diversity–firm performance	9	969	−0.118	0.078	−0.419 to 0.183	−0.104	0.041	−0.167 to −0.041	5
Cognitive conflict–firm performance	18	2,262	−0.058	0.042	−0.288 to 0.171	−0.050	0.013	−0.092 to −0.009	0

[a] k = number of effect sizes; N = total sample size; $\hat{\rho}$ = mean estimate of the corrected population correlation (calculated using psychometric meta-analysis); SE$\hat{\rho}$ = estimated standard error of $\hat{\rho}$; $\bar{r}$ = mean estimate of observed correlations (calculated using the fixed-effect model); SE$\bar{r}$ = estimated standard error of $\bar{r}$; 95% CI = 95% confidence interval around $\bar{r}$.

[b] In lieu of significance testing, Hunter and Schmidt (2004) propose that substantial heterogeneity exists in the correlations when the 80% credibility interval around the estimated population correlation $\hat{\rho}$ is large enough or includes zero.

[c] Fail-safe N refers to the number of unpublished studies reporting null results needed to reduce the cumulative effect across studies to the point that the 95% confidence interval includes zero (see Lipsey & Wilson, 2001).

[d] Several studies reported both correlations with the Cognitive Diversity and Cognitive Conflict variables. In these cases, we averaged the correlations for the summary effect sizes. For example, the sum of k's for Diversity- and Conflict-Relations exceeds the k for Dissent-Relations (39 vs. 36 effect sizes).

mean correlation between strategic dissent and decision quality, shows a 95% confidence interval that includes zero. Furthermore, homogeneity test statistics indicate variation in the correlations of each of the bivariate relationships of interest. This heterogeneity is explored in bivariate links with strategic dissent, via analyses of subgroups based on the operationalization of dissent. The subgroup analyses suggest that the measure of strategic dissent used in a particular study could influence the strength of the relationships investigated (as discussed below). We also tested our mean correlations

for the possibility of publication bias.[6] We calculated the fail-safe *N*, which estimates the number of studies with null results needed to reduce each mean correlation across our studies to the point of non-significance. This set of results suggests that none of the 10 seed mean correlations suffer from an upward bias "due to sampling bias or the systematic omission of difficult-to-find studies" (Lipsey & Wilson, 2001, p. 165).

As expected, strategic dissent has a negative bivariate correlation with interpersonal relations ($\hat{\rho} = -0.47$) and information elaboration ($\hat{\rho} = -0.31$). Hypotheses 1 and 4 were supported in our data. Furthermore, distinguishing between the two operationalizations of dissent (i.e., cognitive conflict vs. cognitive diversity) produces a stronger negative correlation with interpersonal relations for cognitive conflict ($\hat{\rho} = -0.50$ vs. -0.36), as expected. However, and counter to our expectations, distinguishing between the two operationalizations of dissent produces a stronger negative correlation with information elaboration for cognitive diversity ($\hat{\rho} = -0.35$ vs. -0.25). Interpersonal relations and information elaboration are positively related to decision quality ($\hat{\rho} = 0.35$ and $\hat{\rho} = 0.47$, respectively); hypotheses 2 and 5 were supported in our data. Finally, and importantly for our integrating arguments, our initial findings suggest that interpersonal relations are positively related to information elaboration during strategic decision-making ($\hat{\rho} = 0.26$), supporting hypothesis 7a.

To explore the intriguing possibility that using the cognitive diversity operationalization might actually produce a stronger negative estimate for the effects of strategic dissent on information elaboration, we also conducted subgroup analyses based on the two operational definitions of dissent for the remaining dissent-outcome linkages: strategic dissent-decision quality and strategic dissent-firm performance. Distinguishing between the two operationalizations of dissent produces stronger negative effects for cognitive diversity on decision quality ($\hat{\rho} = -0.08$ vs. -0.06) and firm performance ($\hat{\rho} = -0.12$ vs. -0.06). Although it does not provide conclusive evidence of methodological moderation, this pattern of results suggests that cognitive diversity measures could be associated with stronger negative effects in some contexts. This set of findings is contrary to what we would conclude based on our current state of knowledge on strategic dissent. Notably, these preliminary findings also hold an additional indication that, as predicted, strategic dissent is a negative force for organizational processes and outcomes (see Table 1).

Considered together, the results of the meta-analyses defy conventional wisdom in suggesting that: (a) strategic dissent results in negative (not positive) organizational processes and outcomes, and (b) these negative effects may be stronger when the cognitive diversity (not the cognitive conflict) operationalization is used. The results address, in part, our research question by establishing the direction and significance of the bivariate relationships that underlie our integrative model. We discuss next the multivariate structure of the relationships involved in explaining the effects of strategic dissent on firm performance.

4.2 | Path-analytic meta-analysis (MASEM)

Our model predicts that strategic dissent has indirect, negative effects on decision quality through interpersonal relations and information elaboration. To test our proposed model, we created a correlation matrix from the mean estimates of corrected population correlations of relevant bivariate

[6]We also used the trim-and-fill method to assess potential publication as recommended by Aguinis, Pierce, Bosco, Dalton, and Dalton (2011), which seemed to suggest a moderate pro-dissent publication bias. Given that the homogeneity tests indicate variation in our mean correlations and that the trim-and-fill method can confuse true heterogeneity with bias (Aguinis et al., 2011; McDaniel, Rothstein, & Whetzel, 2006), these analyses are likely not appropriate tools for addressing the publication bias question, using our data.

TABLE 2 Meta-analytic correlation matrix for the hypothesized model

	Variable	1	2	3	4	5
1	Performance	1	6 (824)	26 (3,177)	32 (3,691)	34 (3,752)
2	Decision quality	0.440	1	9 (771)	15 (1,387)	8 (958)
3	Strategic dissent	−0.074	−0.019	1	36 (3,881)	13 (1,295)
4	Interpersonal relations	0.205	0.353	−0.446	1	13 (1,200)
5	Information elaboration	0.180	0.468	−0.311	0.263	1

Off-diagonal entries on the lower left contain the population estimates $\hat{\rho}$. Off-diagonal entries in the upper right show the number of samples (i.e., k's) and the total sample sizes (i.e., N's, in parentheses) from which the mean correlations were derived. Harmonic Mean $N = 1430$.

relationships[7] and then inputted the matrix in AMOS 23 (Arbuckle, 2014). Table 2 shows the correlation matrix and the associated sample sizes and number of studies.

The standardized path estimates for our hypothesized model are shown in Figure 1. Our results indicate that strategic dissent has a negative effect on interpersonal relations ($\beta = -0.45$, $p = .000$); they also show that interpersonal relations are positively related to decision quality ($\beta = 0.24$, $p = .000$). These findings are consistent with popular reasoning in collectively suggesting that the effect of strategic dissent through interpersonal relations is negative for decision quality and firm performance (−0.11 and −0.05 respectively, derived by multiplying path coefficients as one walks through the path diagram). Furthermore, our findings indicate that strategic dissent has a negative effect on information elaboration ($\beta = -0.24$, $p = .000$); this runs counter to popular reasoning found in discussions of top managers and their decision-making. Our results also show, as expected, that information elaboration has a positive relationship with decision quality ($\beta = 0.40$, $p = .000$). Thus, the effect of strategic dissent through information elaboration is negative for decision quality and firm performance (−0.10 and −0.04, respectively, derived as above). Sobel (1982) tests indicate that the indirect effects of strategic dissent on decision quality through only interpersonal relations and only information elaboration are significant ($z = -9.21$ and $z = -7.75$, respectively; p-values are .000). Hypotheses 3 and 6 were thus supported in our data.

In addition, our analysis suggests that interpersonal relations have a positive effect on information elaboration ($\beta = 0.16$, $p = .000$). Thus, when strategic dissent drives down interpersonal relations among top managers, it also indirectly drives down information elaboration. The effect of strategic dissent through this more complex path on decision quality and firm performance are −0.03 and −0.01, respectively (derived as above). MacKinnon et al.'*s* (2002) product-of-coefficients test indicates that the effect of strategic dissent on decision quality through both interpersonal relations and information elaboration (in a serial fashion) is significant ($z = -5.08$; $p = .000$). Hypothesis 7b was thus supported. Finally, the total cumulative effects of strategic dissent on decision quality and on firm performance through all the paths are −0.24 and −0.10 respectively (derived by summing the effects across all the paths). Hypothesis 8b was supported.

To summarize, strategic dissent has three negative paths to decision quality: (a) through interpersonal relations, (b) through information elaboration, and (c) through a longer path involving both interpersonal relations and information elaboration. The fit for our model was acceptable: $\chi^2 = 138$ ($p = .000$); RMSEA = 0.15; SRMR = 0.06; CFI = 0.90; AGFI = 0.86 (see Geyskens et al., 2006;

[7]As an additional robustness check, we ran the MASEM using the mean estimates of uncorrected correlations. The regression coefficients were attenuated, as expected, and the model fit improved slightly (see Appendix S5 in File S1). These differences, however, are immaterial in interpreting the patterns of latent relationships of concerns. Overall, we found that correcting for measurement error in the primary studies did not affect our core findings. Thus, we emphasize "imperfect corrections rather than correct imperfections" (Oswald et al., 2015, p. e4).

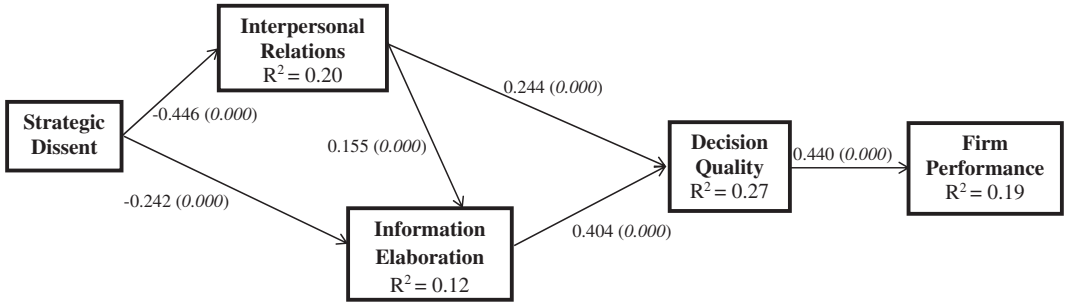

FIGURE 1 Integrative model of strategic dissent[a]. [a]Standardized coefficients are presented; *p*-values are in the parentheses. $N = 1430$ (Harmonic Mean). Fit statistics: $\chi 2\ (df) = 138\ (4)$; RMSEA = 0.15; SRMR = 0.06; CFI = 0.90; AGFI = 0.86

Hong, Liao, Hu, & Jiang, 2013; Jiang et al., 2012). Our results collectively indicate that, as theorized, strategic dissent has substantial negative effects on downstream organizational outcomes. This is not consistent with the way in which past strategic dissent research has been typically interpreted.

5 | DISCUSSION

Despite considerable theoretical and empirical efforts, fundamental disagreements exist among researchers seeking to understand the value of divergent points of view within TMTs. Hunter and Schmidt (2004) explained that meta-analysis can be a useful tool in theory development when research utilizes aggregated study effects to test causal models. In our study, we investigated the core mediating mechanisms through which strategic dissent is believed to influence firm performance. Specifically, we drew from upper-echelons theory, social psychological theories of group behavior, and information processing perspectives on decision-making to propose and test an integrative model of strategic dissent. In this model, interpersonal relations and information elaboration in the TMT simultaneously explain the association between strategic dissent and decision quality, and thus firm performance. In addition, our model evaluates the relationship between the two intervening processes; we establish that interpersonal relations also influence information elaboration.

We find that strategic dissent has a clear negative effect through interpersonal relations. Importantly and contrary to popular theorizing, it also has a negative effect through information elaboration. Because these two intervening variables have positive effects on the average quality of strategic decisions and the performance of firms, strategic dissent has an indirect negative influence on these downstream outcomes, overall. This finding runs counter to conventional wisdom in strategy process research, which suggests that strategic dissent works through increased use of distinct and unique information by the TMT to positively influence organizational outcomes.

We also find that whereas the relationship between strategic dissent and interpersonal relations has received significant empirical attention, the linkage between strategic dissent and information elaboration has been studied to a much lesser degree. This is surprising, given the widespread aforementioned belief in strategy process research. Overall, our meta-analytic integration shows that strategic dissent is important because it negatively affects the quality of strategic decisions and firm performance. We address below the research and practical implications of our work.

5.1 | Research implications

Our analysis has important implications for future research in strategic management. A first important consideration from our work is that the currently dominant perspective on strategic dissent is not empirically supported. Our arguments in favor of negative effects are based on the idea that whereas strategic dissent is more likely to capture positions around vested interests, positive-effect arguments hold that such dissent enables comprehensive assessments of opportunities and threats.

We emphasize that we do not suggest that decision quality does not benefit from informational diversity (also known as deep-level, task-oriented or job-related diversity; e.g., diversity in tenure, education and functional background; Joshi & Roh, 2009; Keller, 2001; Knight et al., 1999). Research has established that, under the right conditions, informational diversity can stimulate creativity, innovation, and decision quality in teams (e.g., van Dijk, van Engen, & van Knippenberg, 2012). Because the scope of our work excludes this aspect of managerial differences (see Kilduff, Angelmar, & Mehra, 2000; Nielsen, 2010; Priem, Lyon, & Dess, 1999), we cannot discuss whether these findings would hold for TMTs as well. The most appropriate conclusion from our findings, we believe, is that analyses of the effects of informational diversity should not be pursued from a strategic dissent approach, and vice-versa. The critical issue likely is that informational diversity research must focus on decision-relevant variables that directly and richly capture important variations in complementary information within the TMT, without also capturing hot cognitions fueled by a diversity of self-interested motives. Interestingly, organizational behavior research suggests that the relationship between informational diversity and team performance is not a straightforward main effect (e.g., van Knippenberg & Schippers, 2007). Developing this perspective further is a challenge in its own right (cf. van Dijk et al., 2012).

A second important takeaway is that both interpersonal relations and information elaboration operate as intervening processes for the negative effects of strategic dissent on TMT decision-making and firm performance. This dual negative mediation has not been an important focus of past research; this status-quo has likely limited our ability to fully understand TMT dynamics and to take the next steps to further this important research area. Notably, interpersonal relations have been described by some as a moderator of the relationship between dissent and outcomes, rather than as a mediator; this runs counter to our findings. We found interpersonal relations to have direct effects on information elaboration; but again, this has not been a significant part of previous TMT research. Supporting our results and providing a strong foundation for future TMT work, social psychology research has identified negative interpersonal relations as a key disruptive force in efforts to communicate, exchange and integrate divergent opinions (e.g., De Dreu & Weingart, 2003; de Wit et al., 2012; Hoever et al., 2012; Homan, van Knippenberg, Van Kleef, & De Dreu, 2007; van Knippenberg et al., 2004). Pursuing this line of research in the context of upper-echelon theory would be fruitful opportunities for future research.

A third important takeaway is that contrasting cognitive diversity with cognitive conflict variables did not help to reconcile positive- and negative-effect perspectives on strategic dissent; instead they likely are operationalizations of the broader construct of strategic dissent. In other words, cognitive conflict and cognitive diversity measures are, by and large, functionally equivalent. Both are associated with negative effects on interpersonal relations, information elaboration, decision quality, and firm performance. The functional equivalence of cognitive diversity and cognitive conflict measures further corroborates our conclusion that the effects of strategic dissent are better understood in terms of the negative-effect perspective's emphasis on dissent as reflecting vested interests and disrupting interpersonal relations, as opposed to in terms of the positive-effect perspective's focus on dissent as a resource for complementary information. Even though the subgroup analyses suggest

that cognitive diversity measures could yield stronger negative effects—this result is also very surprising—we urge caution in drawing any conclusions yet about differences between cognitive diversity and cognitive conflict. Indeed, subgroup analysis is very limited in addressing variability in research findings (Aguinis et al., 2011; Geyskens, Krishnan, Steenkamp, & Cunha, 2009). In addition, one possible explanation for our subgroup analyses' set of findings is methodological rather than conceptual: cognitive diversity measures tend to more explicitly reference company strategy. They may thus be more focused, "purer" measures of strategic dissent as compared to cognitive conflict measures, which may be contaminated by conflict about non-strategic issues. As a result, the more precise operationalization would better capture the role of dissent in TMT decision-making. Overall, the results from the subgroup analyses are more appropriately interpreted as emphasizing the two measures' communality in capturing the negative effects of strategic dissent.

A fourth important takeaway is that the effects of strategic dissent are heterogeneous. The obvious implication is a call to arms to develop and test theory about moderating influences on the effects of strategic dissent. In our work, the exploration of one methodological moderator suggests that the operationalization of strategic dissent might explain some variance in findings. However, the study of boundary conditions on the effects of strategic dissent remains incomplete; and until important moderators are identified, key relationships are not well understood and theoretical advances are limited (Van de Ven, 2007). As we explained earlier, our subgroup analyses are simple, one moderator tests that cannot shed light on the simultaneous influence of multiple moderator effects on the bivariate relationships. The indication of heterogeneity in our mean correlations provides a clear anchor for future research to systematically investigate potential moderators of these relationships. While these may or may not turn out to be moderators that point to positive effects, they would be important in determining under what conditions strategic dissent is less negative.

5.2 | Practical implications

The most important implication of our work is straightforward: contrary to common belief, strategic dissent is a negative force for strategic decision-making and firm performance. Indeed, a variety of cognitive input within the top management team (TMT) does not translate into greater quality of strategic decisions; in much the same way that, although an important ingredient, love does not naturally lead to a happy marriage. In our quantitative synthesis of strategic dissent research, we find that on average, firms do not generate value through different cognitions and numerous perspectives, ideas and opinions within their TMTs. In short, benefits assumed by many to arise from strategic dissent are not present in our research aggregation.

In an interesting lab study, Hoever et al. (2012) conclude that dissent is very difficult to manage because people quickly develop ownership of arguments and make these part of their self-concept. Our results seem to align with this theory, and the question that remains for managers is: where do we go from here? Past research in the area of Organizational Behavior indicates that deliberate interventions may unlock the potential benefits of having a variety of cognitive input within a team. For example, De Dreu and van Knippenberg (2005) point to the roles of societal guidance and moral rules in managing the process of dissent. Hoever et al. (2012) find that the extent to which teammates engage in perspective taking (i.e., a cognitive process that involves trying to understand or consider another's viewpoint) positively influences the process of information exchange and integration in diverse teams. In sum, training interventions to reduce the negative influences of ego-threats may hold the key to benefiting from diverse viewpoints in the TMT.

5.3 | Limitations and future research

Our review provides important and novel insights into the effects of strategic dissent. However, several limitations, which also provide new directions for theoretical and empirical research, need to be addressed. First, our analyses are conducted at the study level and not at the firm level. Therefore, interpretations of the results at the firm level should be made with caution (Robinson, 1950). Second, a small number of correlations were available for some bivariate relationships. For instance, there were only six decision quality-firm performance correlations available, and the power of our analyses was reduced as a result. This obviously is a limiting factor for any meta-analytic study because meta-analyses are constrained by the available evidence.

Relatedly, although our analyses indicate that the effects of strategic dissent are heterogeneous, the available evidence does not allow meaningful testing of possible moderating effects that use more powerful tools such as meta-regression analyses (MARA) (Aguinis et al., 2011; Geyskens et al., 2009). The obvious implication is a call to develop and test theory about moderating influences on the effects of strategic dissent. The key consideration, we believe, is the need to address those questions left unanswered and that would be most valuable to pursue in primary research. In this respect, we note that our results are consistent with our conceptual analysis, which gives us considerable confidence in our conclusions. The central tendencies seem clear.

6 | CONCLUSION

The top management team of an organization has important influences on organizational processes and outcomes. However, top managers often have different ideas, preferences and beliefs on issues related to strategy. Despite considerable theoretical and empirical efforts, fundamental disagreements exist among researchers interested in understanding the value of having a variety in cognitions within TMTs. With the help of meta-analytic techniques, we bring to the conversation the most definitive data currently available. Our integration of the existing evidence base is in favor of the negative-effect perspective on strategic dissent. Furthermore, our path analytic approach allows us to not only conclude that the overall effect of strategic dissent on firm performance is negative, but also to establish that this overall effect is mediated by negative influences on both interpersonal relations, and information elaboration (simply and serially through interpersonal relations). Future research establishing moderating influences on these key relationships will help increase our understanding of how organizations can effectively manage strategic dissent.

ACKNOWLEDGEMENTS

We acknowledge the very helpful input of *SMJ* Associate Editor Pamela S. Barr and two anonymous reviewers, as well as the useful comments and suggestions given by reviewers of, and participants in, SMS annual conference sessions. We also recognize with deep gratitude Russell Crook and Tim Munyon for their generous and extensive assistance in developing this paper. Finally, we thank Rhonda Reger for her valuable insights on the original version of the manuscript, as well as Pooya Tabesh and Daniel White for their assistance in study coding efforts.

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SUPPORTING INFORMATION

Additional Supporting Information may be found online in the supporting information tab for this article.

How to cite this article: Samba C, Van Knippenberg D, Miller CC. The impact of strategic dissent on organizational outcomes: A meta-analytic integration. *Strat Mgmt J*. 2018;39:379–402. https://doi.org/10.1002/smj.2710