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A STUDY OF CONFLICT IN TOP MANAGEMENT DECISION MAKING: THE IMPACT OF CONTRIBUTION MOTIVE

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ABSTRACT

Decisions made by top management teams and the setting of goals for the organization are of critical importance. It seems likely the process is one that could be subject to conflict. This paper looks at conflict's impact on firm behavior and a new approach for understanding conflict. The paper examines a study done by Amason and Sapienza, which tests a model that looks at the effects of two types of conflict and how the moderating variables they propose can impact the quality of decision-making. The article proposes a model that identifies an additional construct that, when added to their model, more fully specifies the impact of conflict on decision-making.

The issue of conflict on top management team (TMT) decision-making has been the subject of numerous academic studies (Amason & Mooney, 1999; Jehn & Chatman, 2000; Long, Zhong-Ming, & Wei, 2011; Simons & Peterson, 2000). This literature posits that a measure of conflict is inherent in every decision-making process. Competing opinions, perspectives, views, needs, and agendas are involved whenever a team comes together to make a choice. The manner in which conflict manifests itself, actors conduct themselves, and conflict is managed, and the resultant impact on the decision outcome and ultimate implementation, are of interest from both a theoretical and practitioner's perspective.

The TMT consists of an organization's executives who "form the inner cadre or circle of people who collectively formulate, articulate, and execute the strategic and tactical moves of the organization" (Eisenhardt, Kahwajy, & Bourgeois, 1997, p. 42). The qualities of this team "are the essential foundation for a successful strategic process within the firm" (Hambrick, 1987, p. 89). Its decisions, and the acceptance of the decisions by members of the organization, arguably influence firm performance (Amason, 1996). More directly, Cheng, Wang, & Zhang note that "top management teams make strategic decisions that are critical for organizational performance" (2011, p. 189).

Of decisions made by top management teams, the setting of goals for the organization is of critical importance. Management literature suggests that the setting of a compelling vision and resultant goals for the enterprise is one, if not the, primary function of leadership (Bennis & Nanus, 1985; Boyatzis, 1982; Locke & Latham, 2002). How these goals are communicated to and subsequently acted upon affects goal setting. Given the apparent importance of goal setting, it seems likely that the process is one that could be subject to conflict.

This paper first looks to Cyert and March's second edition of *A Behavioral Theory of the Firm* (1992), where they provide both the classical theories of conflict's impact on firm behavior and outline a new approach to framing an understanding of this issue. Next, a general review of goal setting literature will establish a proposed linkage of decision-making based conflict and the goal setting process. Having established a plausible theoretical basis to expect that conflict can arise in this process, the paper revisits a study done by Amason and Sapienza, "The Effects of Top Management Team Size and Interaction Norms on Cognitive and Affective Conflict" (1997). In this study, Amason and Sapienza test a model that looks at the effects of two types of conflict and how the moderating variables they propose can impact the quality of decision-making.

Since the results of the test conducted by Amason and Sapienza were disappointing, we wonder if something is missing. Thus, we propose a model that identifies an additional construct that, when added to the model, more fully specifies the impact of conflict on decision-making. Stated in the form of a research question: Is there an additional construct that specifies the impact of conflict on decision making? Finally, this paper will report the results of a pilot scale development study that shows support for this revised model.

CLASSICAL THEORIES OF CONFLICT'S IMPACT ON FIRM BEHAVIOR

A simplification of the Cyert and March (1992) review of the classic economic theory of firm behavior suggests that it can be "reduced to two propositions: (1) firms seek to maximize profits; (2) firms operate with perfect knowledge" (p. 8). They discount these as being insufficient and suggest that a firm has objectives beyond profit and profit maximization, and that perfect or complete knowledge be replaced with a process that describes a firm's search and interpretation of information. The authors finally suggest that the existing organizational theory inadequately describes the actual characteristics of business organizations as a single individual entity with single purpose and goals. They propose in its place to focus their theory on the decision-making of the firm as the unit of analysis and as the basis for predicting firm behavior in reference to the process of decision-making. If they are correct, a working definition of goals and a general review of the goal setting literature are needed.

GENERAL REVIEW OF GOAL SETTING LITERATURE

Significant numbers of articles, books, tapes and videos are available on the topic of goals; how to set them, how to measure them, what they do and what they do not do. Individual, team, short-term, and strategic goals are all a part of both the academic and general literature.

Though this article focuses on the executive team, or TMT, much of the literature discusses goal setting relative to both teams and groups. Teams are interdependent, "committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable" (Katzenbach & Smith, 1993, p. 112). Teams produce "collective work

products,” such as strategic direction and decision-making. Groups, however, produce “individual work products,” and members of groups are individually accountable (Katzenbach & Smith, 1993, p. 113) and can view their work and contribution to group effort as having ended once a given task is complete. Thus, teams and groups differ with respect to purpose, accountability, and performance expectations. We believe much of the important goal setting literature applies well to either team or group contexts.

We look to Locke and Latham (1990), who define a goal as a “specific standard of proficiency on a given task, usually within a time limit” (p.26). Taking from the works of Locke, Shaw, Saari, and Latham (1981) and Hollensbe and Guthrie (2000), it is posited that goals affect performance by directing attention and action, mobilizing effort, and motivating individuals to develop goal-attainment strategies.

Two important elements of goal setting theory revolve around “goal difficulty” and “goal-commitment” (Locke & Latham, 1990; O’Leary-Kelly, Martocchio, & Frink, 1994). Goal difficulty directs performance expectations to be measured against a desired outcome or standard. Goal setting theory proposes a linear relationship between goal difficulty and performance in cases in which subjects reach the limits of their ability with difficult goals; however, this relationship levels off. Goal setting theorists identify goal commitment as an antecedent to performance (Locke & Latham, 1990; Locke, Latham & Erez, 1988). Intuitively, it would seem logical that in teams, goals would cause members to react similarly and to work faster and better in cooperative pursuit of their goals. As with individuals, a team’s goal commitment is its “attachment to or determination to reach a goal” (Locke & Latham, 1990, p. 125).

Additional influences are the factors of collective efficacy, team size, interdependence, performance norms, feedback (Hollensbe & Guthrie, 2000) and past performance history (Amason & Mooney, 1999). Collective efficacy is defined as a group’s perception of its ability to perform successfully in a particular situation (Durham, Knight, & Locke, 1997; Prussia & Kinicki, 1996). Individual efficacy is important in achieving performance goals, as are the effects of performance on subsequent efficacy (Silver, Mitchell, & Gist, 1995). It is reasonable to expect collective efficacy to influence goal commitment in the same manner as individual efficacy. If goal-setting levels in individuals is influenced by self efficacy (Locke & Latham, 1990) then groups efficacy should also influence goals set by teams. This supports the conclusion that efficacy levels affect goal choice or goal level and should influence the propensity to set goals.

Team goal setting may be affected by resistance that emerges among team members. Some of the factors that may lead to conflict and resistance include issues of trust, differential perceptions of cultural values and low tolerance for change (Kirkman, Jones, & Shipiro, 2000). Trust emerges as salient factor in team relationships (Sheng, Tian & Chen, 2010; Rau, 2005; Tidd, McIntyre, & Friedman, 2004). The absence of trust can lead to team dysfunction outcomes (Lincioni, 2002). Trust is associated with conflict in that the perception of trust or lack of trust may enable conflict. Simply stated the lesser the trust the higher the potential for conflict and the greater the trust the lower the potential for conflict (Shrum, Chompalov & Genuth, 2007). Top

management teams may potentially enable trust by engaging in formal and informal team development activities (Woodfield & Kennie, 2008). According to the findings of Salas, DiazGrandos, Cameron, et. al. (2008) team development activities are effective in improving team performance.

Team size directly affects goal setting from a variety of perspectives. Communications and coordination are key elements of team performance, and these activities are more likely and easier in smaller teams. Larger teams limit the time available for team maintenance work because of time spent on additional coordination. Members of small teams might have a clearer understanding of the organization's mission and see a link between performance and rewards (Vroom, 1964). Social loafing also increases as the size of the team increases (Jackson & Harkins, 1985; Karau & Williams, 1993); members of larger teams generally will be less committed to team goals. The ability to monitor behavior in smaller teams can also strengthen the commitment to team goals, and small teams may find it easier to cooperate and share information and workload. This discussion suggests that smaller teams might engage in goal setting more often than larger teams and may set goals that are more challenging.

Interdependence is a defining characteristic of teams. Factors such as technology and the flattening of hierarchies have contributed to greater task interdependence within teams and between teams. Interdependence is functional to the extent it relies on clear coordination of tasks and optimal integration of the work among differentiated units (Thompson, 1967). Functional interdependence might increase the motivational properties of the work and the efficiency with which work is performed (Campion, Medsker, & Higgs, 1993).

Interdependence can also be dysfunctional when it hampers team and organizational effectiveness. This might be particularly true when between-group task interdependence and within-group reward interdependence exists, which might lead to competition between teams (Dematteo, Eby, & Sundstrom, 1998; Mohrman, Mohrman, & Lawler, 1992). Interdependence also might affect a team's propensity to engage in goal setting, as well as the level of goals set. A functionally interdependent team is more likely to seek the optimal coordination and integration required to set goals. Tjosvold and Field (1989) found that collective interdependence results in positive expectations, exchange of information and resources, productivity, cohesion, and morale. These effects would likely prompt teams to set challenging goals, based on the availability of expanding group resources.

From a behavioral standpoint, the importance of team norms on goal setting cannot be overestimated. To a large measure, they set the limits of what a team believes it can and cannot achieve and serve as the standards that guide members' behaviors (Jehn, 1994; Johnson & Johnson, 1991). The team member behaviors may be influenced by cultural values (Kirkman, Jones, & Shipiro, 2000). Additionally, the norms establish what level of performance is appropriate and possible (Locke & Latham, 1990). The relative strength of group norms can set the upper limits of group performance to goal attainment (Locke & Latham, 1990), and the lower limits, including the deliberate restriction of group effort (Roethlisberger, 1982).

Teams are more likely to set challenging goals and remain committed to them if they receive feedback on their performance. Basic reinforcement theory indicates that feedback is most likely to influence behavior when it is provided frequently and in temporal proximity to performance. Receiving frequent and timely performance feedback affects goal setting within the team, with performance feedback acting as a catalyst for continued revision of goals oriented toward the possibility of future rewards. Frequent, timely knowledge of results gives team members a standard to exceed that could increase the valance of high or improved performance (Locke & Latham, 1990).

Team decision-making, past performance and history are also variables that can affect future decision-making processes and outcomes (Amason & Mooney, 1999). The manner in which teams have conducted themselves in the past during goal setting and how they have handled conflict can reasonably be expected to affect how they act in the future. The results or outcomes of past decisions would also logically be expected to influence future decision-making activities both positively and negatively. If past goals have been effective in directing organization efforts and goals have been attained, top management teams should be more and more comfortable with the process going forward (Cyert & March, 1992; Nelson & Winter, 1982).

In their comprehensive review of the goal-setting issues outlined above, Locke & Latham (2002) conclude that “goal-setting theory is among the most valid and practical theories of employee motivation” (2002, p. 714). They note in summary that the literature reflects “100 different tasks involving more than 40,000 participants in at least eight countries working in laboratory, simulation, and field settings” (p. 714).

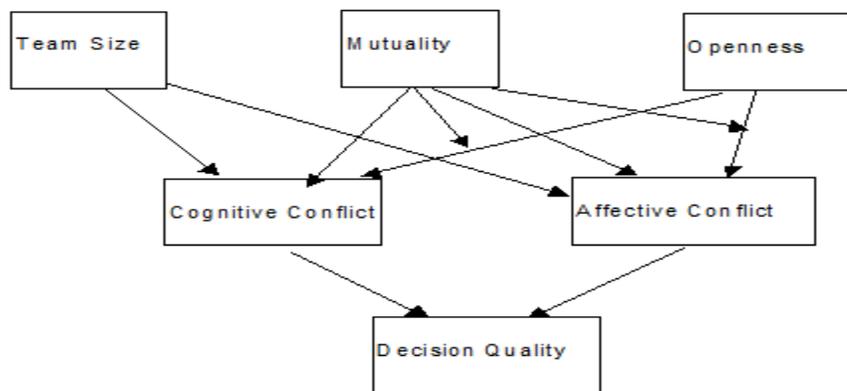
THEORETICAL BASIS FOR GOAL-SETTING CONFLICT

Looking again to Cyert and March’s (1992) discussion of organizational goals helps establish a solid theoretical explanation as to why conflict exists in organizational decision-making. Individuals - not organizations - have goals, and for an organizational level goal to be articulated, a coalition or consensus must be structured. The building of the coalition inherently involves conflicting individual goals. The authors discount a prior theory that organizational goals are defined exclusively by the firm’s founder or dominate coalition, or that they represent a consensus goal that is shared by everyone in the organization. Instead, they propose a model that is economic in nature and involves bargaining, control, and learning and allows for conflicting goals accommodated by what they term “slack.” Slack permits conflicting goals to coexist within the coalition. Accepting Cyert and March’s explanation that conflict arises as a result of unresolved internal individual goals, we can take the next step.

Decision making theory can be presented as the following formula: Decision Making = $f(\text{goals, expectations, choices, control} + e)$. These variables will be useful in examining the impact of conflict on team decision-making, as they align nicely with the elements of the research question proposed here, and are referred to as they pertain to the elements of the

research design. Amason and Sapienza (1997) identify five constructs to frame their study: team size; cognitive conflict; affective conflict; openness; and mutuality. They hypothesize that strategic decision-making by top management teams are impacted by team size, openness, mutuality, and interactions between them. Their initial model, which ultimately fails to be fully supported by their test results, as depicted below:

Figure One – Amason and Sapienza Model (1997)



Based upon significant prior literature, Amason and Sapienza posit that “when conflict remains task-focused, not only decision quality improves but so does member commitment and satisfaction. When conflict becomes individual-oriented, however, decision quality, commitment, and team member satisfaction decline” (1997, p. 497). For the purpose of this paper, task-focused conflict is defined as cognitive, and individual-focused is defined as affective. Amason and Sapienza use the same definitions relative to their study, and these definitions are also supported by Pinkley (1990) and Jehn (1994). We can link Cyert and March’s “explanation variable” to cognitive conflict, in that it addresses elements of search and information processing that should occur when a team is functioning properly. Cyert and March’s discussion of bias, bias discount, and counter bias as organizational processes may tend to load on affective conflict.

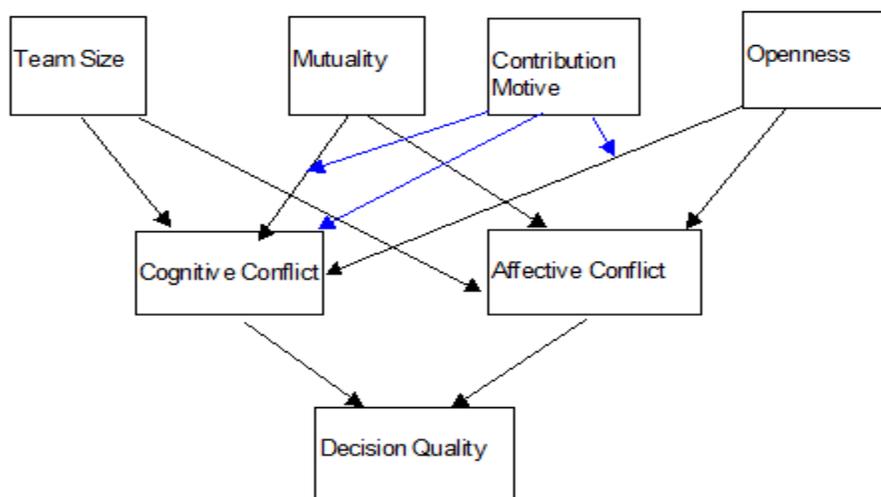
Amason and Sapienza’s (1997) constructs of mutuality and openness are the focus for this research project. They define mutuality as “the extent to which TMT members believe that they are mutually accountable and responsible and will share in the consequences of their strategic decisions” (p. 499). They contend that this construct is manifested by team members suppressing full participation and input in the decision-making process. They suggest TMT members may do so because of concern that other team members will interpret their contribution as being self-serving or self-dealing. Cyert and March’s discussion of team theory is consistent in part with the construct of mutuality wherein they describe the team (and by extension the firm) as an organization in which all organizational participants share a common interest.

Amason and Sapienza further hypothesize that mutuality interacts with a second factor, openness, such that the greater the level of mutuality, the stronger the effect openness will have on cognitive conflict. They define openness as “the TMT’s propensity to tolerate, encourage, and engage in open, frank expression of views” (p. 499). Intuitively, it would seem reasonable that if a team believes it will be judged collectively on the outcome of a decision, and if the team environment is open, frank, and conducive to participation, team members should be willing to contribute and argue aggressively for the “good of the cause.” However, the mixed results of their study failed to support the hypothesis that mutuality, directly or in interaction with openness, had a positive impact on cognitive conflict.

It is proposed that this finding is due to an additional construct that plays a role, which is labeled as “contribution motive.” Contribution motive is defined as the degree to which a team member believes that his or her motives for contributing in the decision-making process will not be questioned by the members of the team. This is not to say that they must assume that the team will deem their input as correct or even necessarily useful, but that the team will accept it without suspicion of it being self-serving or self-dealing. Contribution motive is similar in definition to terms like trust and self-confidence, but is proposed that it is qualitatively different and an independent term. Cyert and March speak to this construct in part when they indicate that due to political and strategic issues being infused at almost every point of the decision process, trust and loyalty are often emphasized. The desire to be trusted and not have one’s motives questioned in team decision-making appears to be supported in theory and is a concept that needs to be tested.

The model that proposed for this test is as follows:

Figure Two – Revised Model



Developing a scale allows testing whether contribution motive by itself, or in interaction with mutuality and/or openness, influences TMT decision-making. It is posited that contribution motive will increase cognitive conflict directly, and further, that contribution motive will strengthen the effects of openness and mutuality on cognitive conflict

METHODS

Sample and Procedures

The study was modeled after the approach used by Amason and Sapienza (1997), which was a modified version of Flanigan's (1954) Critical Incident Technique. It measures the openness, mutuality, and contribution motive of 13 senior level management teams as they reflected on a recent strategic decision each team had made, and then measured the amount of affective and cognitive conflict they experienced during the consideration of the team's decisions. By asking the teams to focus on a specific decision, the hope was to limit the impact of recollection bias (Podsakoff & Organ, 1986).

The first step was to gain approval to conduct the study from the Chairman and CEO of the subject company. The company was a U.S. based, US\$3.2 billion, Fortune 500, global auto parts manufacturing concern with approximately 17,000 employees and operating in 26 countries. It is important to note that all of the teams included in the study were senior level managers responsible for the operations of divisions of the company ranging in size from US\$300 million to US\$1.2 billion. The level of decisions ranged from closing facilities to significant product-, market-, and consumer-focused activities. The CEO agreed to provide a cover letter outlining his personal support of the study and his interest in the results for the company, as well as to have all surveys emailed from his office to encourage participation.

The study was operationalized by starting with a recent decision selected by the CEO; a decision he and staff had made to pursue the merger of the company with a larger peer organization. A cover letter with the survey and instructions was emailed to the members of his staff that participated in the decision. To keep the responses confidential, participants were instructed to return the survey in an unmarked, company confidential envelop through interplant mail to the researcher. They were also instructed to identify the most recent strategic decisions they and their staffs had made and to email it to the researcher with a list of who participated in the decision. This process was then cascaded down two levels of the corporation resulting in 63 surveys being distributed over a three-week period. A total of 50 of the 63 surveys were returned, which resulted in a response rate of 79 percent. It is also important to note that many of the teams were partly comprised of non-U.S. based employees including English, Dutch, Italian, German, Spanish, Canadian, Mexican, South African, and French. The company conducts its business in English and all participants are fluent in English, so no translations were considered necessary.

Each of the 13 senior level managers referenced above was asked to identify the most recent decision that his or her team had made and implemented. This was to limit them from selecting a decision based upon a decision outcome, or perception of decision process as either positive or negative. In order for their team decision to be included, at least two responses from

those participating in the team's decision had to be provided. Of the 13 team decisions distributed, 12 of the 13 teams had a usable response. The average team consisted of 4.85 members, with the largest having 12 and the smallest having 2 members. On average, 3.85 members per team responded.

Measures

Four of the five scales used in this study were established scales taken from published articles. Cognitive and affective conflict was measured with items from the Interpersonal Conflict Scale developed by Jehn (1994). Three items measured cognitive conflict and four measured affective conflict. The responses were recorded on scales ranging from one (1) "none" to (5) "a great deal." Using factor analysis with a Varimax rotation, the three cognitive conflict items loaded on a single factor and produced a subscale reliability measure of .794, and the four affective conflict items loaded on a single factor and produced a subscale reliability measure of .906.

Openness was measured with four items from scales published by Eisenhardt (1989) and Folger (1977) asking for measures of agreement. The responses were recorded on a seven-factor scale in which all four loaded on a single factor, but item OP3 loading negatively at -.262. Removing item three resulted in a coefficient alpha of .575. Mutuality was measured with four items taken from Tjosvold and Deemer (1980), Tjosvold and Field (1989), and Deutsch (1949). The team members were asked for their level of agreement. These items loaded on a single factor with a coefficient alpha of .827.

The fifth construct, contribution motive, was a new scale that is developed. It consists of five items that addressed the perception of team member confidence that their participation in team decision-making would not be viewed as individually self-serving or self-dealing. The final five items loaded on a single factor with a reliability coefficient alpha of .909. Table 2, outlines the correlation matrix of the five constructs of interest. The first step in the development of the new scale involved individually drafting five items reviewed with two doctoral students who critiqued the items and offered valuable editing assistance. Subsequently, the researchers and reviewers collaboratively crafted an additional eight items. The next step involved two series of Question Sorts, with three outside readers and five doctoral students sorting the 13 proposed items of the contribution motive plus the items from the other scales. These were printed on 3X5 index cards; five cards containing a definition of the constructs involved in the study, as well as one card labeled "other." The scale items that were properly matched with contribution motive by more than eight sorters were selected for use in the final draft of the multiple item scale. The last step was to review the wording of the items with a senior marketing professor from a major U.S. tier one research school for clarity and format. The 20 items from the survey are listed in Table One.

Table One – Measures

Contribution Motive (Clerkin, 2000)

I am confident that the motives behind my comments about the decision were not viewed by the group as individually self-serving or self-dealing.

I had no concern that the group questioned my motives for the positions I took.

I felt comfortable that even if the group rejected my input into the decision they were not questioning my motives.

The group trusted my motives for my comments to group discussions.

I was perceived as someone who was primarily interested in furthering the goals of the group.

Openness (Eisenhardt, 1989; Folger, 1977)

We thoroughly and sincerely evaluate different alternatives.

Quality improves when all the group's members participate.

Dissenting opinions should be encouraged.

The group enjoys debating different ideas.

Mutuality (Tjosvold & Deemer, 1980; Tjosvold & Field, 1989; Deutsch 1949)

This group tends to cooperate for the overall benefit of the company.

Rewards are shared equally regardless of whose ideas are used.

When we make a decision, we are all focused on achieving the same goal.

We all benefit equally, when we make a good decision.

Affective Conflict (Jehn, 1994)

How much anger was there among the group over this decision?

How much personal friction was there in the group during this decision?

How much personality clashed between group members evident during this decision?

How much tension was there in the group during this decision?

Cognitive Conflict (Jehn, 1994)

How many disagreements over different ideas about this decision were there?

How many differences about the content of this decision did the group have to work through?

How many differences of opinion in the group were there within this decision?

RESULTS

To assess the validity of the scale, an initial exploratory factor analysis was conducted on each of the five constructs separately to determine if the items would load on a single construct of interest. Every item loaded positively on a single factor at a level greater than .3, except for item OP3, which, as noted earlier, was correlated negatively and thus removed. To confirm that the five constructs measured with the survey were indeed separate, a full factor analysis of the data was conducted. The correlations among the other factors from the established scales are not as high.

Table Two - Correlation Matrix

	CM1	CM2	CM3	CM4	CM5	OP1	OP2	OP3	OP4	MU1	MU2	MU3	MU4	AC1	AC2	AC3	AC4	CC1	CC2	CC3	
CorrelationCM1	1.000																				
CM2	.699	1.000																			
CM3	.660	.720	1.000																		
CM4	.701	.645	.817	1.000																	
CM5	.645	.560	.719	.703	1.000																
OP1	.165	-.021	.396	.376	.497	1.000															
OP2	.250	.377	.347	.435	.480	.293	1.000														
OP3	.004	-.024	-.063	-.026	.024	-.089	-.069	1.000													
OP4	.216	.459	.505	.429	.422	.183	.458	-.293	1.000												
MU1	.250	.515	.413	.343	.535	.274	.606	-.088	.637	1.000											
MU2	.391	.594	.449	.419	.547	.162	.393	.025	.452	.567	1.000										
MU3	.315	.341	.486	.288	.512	.382	.274	-.184	.585	.493	.514	1.000									
MU4	.299	.403	.418	.351	.561	.416	.218	.018	.343	.388	.740	.653	1.000								
AC1	-.352	-.562	-.331	-.208	-.353	.011	-.116	-.028	-.276	-.564	-.395	-.156	-.115	1.000							
AC2	-.131	-.362	-.305	-.113	-.303	-.155	.026	.035	-.268	-.513	-.241	-.276	-.258	.737	1.000						
AC3	-.113	-.350	-.244	-.095	-.165	-.100	.098	-.275	-.526	-.207	-.190	-.088	.723	.826	.669	1.000					
AC4	-.046	-.304	-.148	.019	-.183	.066	.063	.195	-.344	-.441	-.188	-.246	-.092	.682	.709	.669	1.000				
CC1	-.234	-.303	-.219	-.204	-.180	-.013	.156	-.083	-.075	-.301	-.095	.023	-.056	.659	.707	.720	.516	1.000			
CC2	-.101	-.113	-.007	-.012	-.067	-.022	.337	.076	.110	.182	-.013	-.079	-.153	.232	.344	.233	.279	.474	1.000		
CC3	-.198	-.252	-.043	.000	-.070	-.048	.181	.056	-.068	-.190	-.159	-.147	-.115	.565	.507	.556	.393	.652	.600	1.000	

Varimax rotation was used to assess the ability of the items to discriminate between the items to discriminate between the constructs and set the criteria for factor retention at eigenvalue >1. Six factors emerged with eigenvalues greater than one, explaining 72.61 percent of the total variance.

Table Three - Rotated Factor Matrix

	Factors					
	1	2	3	4	5	6
AC3	.877	-5.625E-02	-3.132E-02	-5.763E-02	-.109	-7.202E-02
AC2	.871	-7.575E-02	-.161	4.517E-02	-7.273E-02	-.126
CC1	.811	-.183	6.645E-02	.242	.105	-4.580E-02
AC1	.808	-.280	-.101	-8.973E-02	2.864E-02	.152
AC4	.743	2.439E-02	-.121	-1.970E-02	-.304	.116
CC3	.631	-9.207E-02	-7.761E-02	.413	-.150	-5.596E-04
CM4	-1.457E-02	.885	8.078E-02	.109	6.758E-02	.221
CM1	-.106	.812	.138	-7.754E-02	2.841E-03	-3.235E-02
CM3	-.159	.778	.217	.124	.167	.192
CM2	-.322	.763	.306	.130	7.664E-02	-.329
CM5	-.166	.675	.353	.133	3.591E-02	.311
MU4	-4.435E-02	.233	.915	-7.546E-02	-3.003E-02	.225
MU2	-.146	.344	.686	.226	-5.835E-02	-6.810E-02
MU3	-.119	.210	.630	8.971E-02	.404	.197
CC2	.370	-7.597E-02	-8.583E-02	.711	-.175	-3.890E-02
MU1	-.516	.240	.374	.601	.186	.115
OP2	5.432E-02	.344	.201	.581	.132	.140
OP3	9.839E-02	-3.924E-02	2.537E-02	6.882E-02	-.623	-7.723E-02
OP4	-.205	.270	.353	.405	.538	1.203E-02
OP1	-3.095E-03	.206	.215	7.687E-02	.129	.743

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization

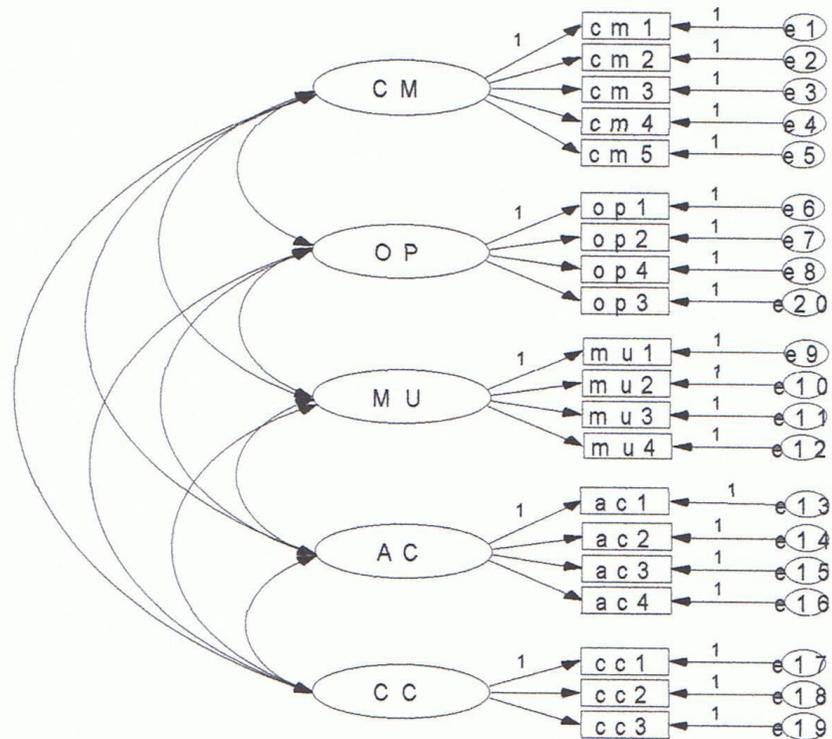
a. Rotation converged in 7 iterations.

As indicated in Table Three, cognitive and affective conflict primarily loaded on a single factor. Given the original propositions that they were highly correlated, this finding is not surprising. The new construct, contribution motive, loaded completely on Factor 2 without any off loading. The construct mutuality loaded heavily on Factor 3, while openness had mixed loadings on Factors 4, 5, and 6.

Confirmatory Factor Analysis

The final stage of the scale development process involved the use of the software package AMOS. It was at this stage of the process that a problem with the size of the sample became an issue. With a total sample size of only 50, the fully specified model indicates the data violate the assumption of multinormality (kurtosis = 50.865 and critical ratio 6.062). This will inflate the fit index that includes chi-square. Using a congeneric measure in which there are no constraints on any of the parameters I wanted to estimate, the resultant chi-square, p-values, and degrees of freedom are 306.270, .000, and 160 respectively, indicating a bad fit. Additional indicators of bad fit are GFI= .649, RMSEA = .137, RMR=.155, and CFI = .777. Figure Three shows the model used for this version of the confirmatory factory analysis.

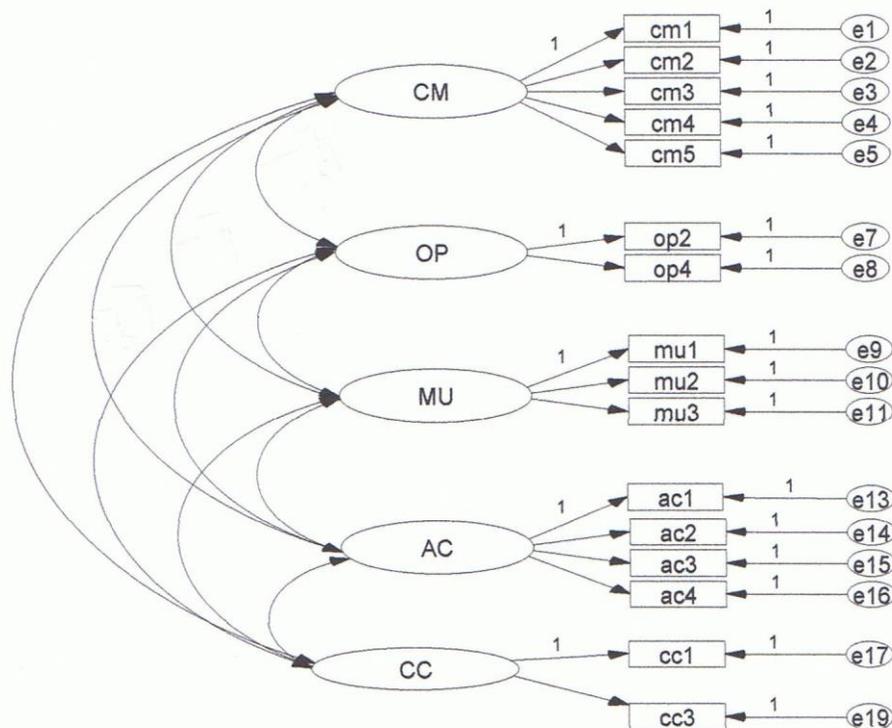
Figure Three - Confirmatory Factor Analysis



A second model was developed that removed the items that had squared correlations below .4 to determine if a better fit could be obtained. These items were CC2, MU4, OP1, and OP3. This new model, shown in Figure 4, resulted in a chi-square = 150.38, p-value= .000, degrees of freedom = 94, GFI = .76, RMSEA = .111, RMR = .134, and CFI = .894.

This revised model had improved the fit to a more acceptable level. It is important to note that none of the items on the new scale for contribution motive needed to be removed. The items with poor loadings were all from previously established scales. While the confirmatory factor was not robust, it did not disagree with the results of the exploratory factor analysis.

Figure Four - Confirmatory Factor Analysis



FUTURE RESEARCH

This research establishes the construct of contribution motive enabling subsequent tests of the validity of the construct in TMT decision-making and goal setting. Another area for potential investigation is to understand how contribution motive works in different industries and comparing the data to determine construct validity. A third area of future research could be to investigate whether contribution motive functions similarly or differently depending on gender or racial/cultural team composition. Finally, a potential area of research could be to investigate how contribution motive functions in differing team levels beyond the TMT context.

We believe there are many additional areas of research may enhance the concept of conflict motive and should be the direction of future research.

CONCLUSION AND IMPLICATIONS

Of decisions made by top management teams, the setting of goals for the organizations is of critical importance. As has been discussed in this article, management literature would suggest that the setting of a compelling vision and resultant goals for the enterprise is one of, if not the, primary function of leadership. Given the apparent importance of goal setting, it seems likely that the process is one that could be subject to conflict.

Given these results, it is encouraging that the newly developed scale has good validity and the construct “contribution motive” should be tested further with a much larger sample to determine its real value. If contribution motive proves to be the missing link in explaining how cognitive and affective conflict influence the effectiveness of TMT decision-making, then this body of theory can be advanced. It could also be important for practitioners in their efforts to manage conflict in a constructive manner to enhance strategic decision-making and organizational performance.

We believe we have identified an additional construct that can be added to the Amason and Sapienza model to further specify the impact of conflict on decision-making. The importance of this research is that it gives new insight on how top management teams interact and subsequently set goals. This research initiates a way of looking at the process that may inform TMTs on ways to improve their decision-making. We also believe that contribution motive may become an important variable when assessing the performance of top management teams and should initiate a stream of new research to understand the operation of the variable.

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