

# **Functional and dysfunctional conflict in the context of marketing and sales**

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## Abstract

Focusing on the working relationship between marketing managers and sales managers, our study examines two dimensions of interpersonal conflict: dysfunctional conflict and functional conflict. Accordingly, this research contrasts with the vast majority of previous studies of conflict in marketing's cross-functional relationships which have only examined dysfunctional conflict, a negative psychosocial outcome. Drawing on the relevant theory, we include three communication variables (communication frequency, bidirectionality, and communication quality) and two organisational structure variables (centralisation and formalisation) as antecedents in our model. And, using the same set of independent variables to predict the two conflict dimensions, we find support for eight of the ten hypotheses. Though both regression models had high explanatory power, we explained functional conflict better than dysfunctional conflict. As predicted, all three communication variables were significant in both models. However, of the two organisational structure variables, only formalisation was significant. An important, but somewhat surprising finding is that the overall level of dysfunctional conflict between these two functional managers is relatively low.

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# Functional and dysfunctional interpersonal conflict in the context of marketing and sales

## Introduction

Cross-functional integration requires employees from different departments to interact, and exchange work, resources, and assistance (Ruekert & Walker, 1987a). These repeated interactions are known as 'cross-functional relationships' (CFRs) and are important aspects of internal marketing (e.g. Ballantyne, 1997), and market orientation (e.g. Kohli & Jaworski, 1990). Also, because Marketing is a key function responsible for NPD, and customer satisfaction, CFRs are of great academic and managerial importance (Houston, Walker, Hutt, & Reingen, 2001). Moreover, there is evidence that the performance of individual units, and the firm itself improves when CFRs are 'effective' (e.g. Souder, 1981).

Though our paper does not focus specifically on how to promote effective CFRs, we examine conflict which is generally regarded as being detrimental to team performance. However, there is a growing body of literature suggesting that not all conflict is bad (De Dreu & Weingart, 2003; Jehn, 1995). In fact, it is argued that under some circumstances, it is beneficial (Amason, 1996). Clearly, conflict and its resolution is a complex topic. Also, there is no doubt that there is a widespread acceptance of its importance in understanding team effectiveness in many disciplines (for a synthesis of current models of conflict, see Jehn, 1997).

The purpose of our research is to test a model of the antecedents of two types of conflict in the context of the Marketing and Sales. And in order to develop our model, we draw on two theoretical perspectives - the interaction approach (e.g. Morgan & Hunt, 1994) and Weber's (1947) theory of bureaucracy. The interaction approach seeks to explain the nature and patterns of interactions between personnel in different units (e.g. Moenaert, Souder, DeMeyer, & Deschoolmeester, 1994). On the other hand, Weber's (1947) theory of bureaucracy examines optimal structures and administrative systems for organisations with differentiated functions.

Our study differs from previous research on intraorganisational conflict in several ways. First, though conflict has been studied at a number of levels depending on the actors involved (e.g. SBUs or departments), we focus on interpersonal conflict. This contrasts with the key marketing CFR studies in the area (Barclay, 1991; Menon, Bharadwaj, & Howell, 1996; Maltz & Kohli, 2000; Morgan & Piercy, 1998) which have examined interdepartmental conflict. This distinction seems important because the antecedents and consequences for these two levels may differ.

Second, recent organizational studies suggest that interpersonal conflict has multiple dimensions (Reid, Pullins, Plank, & Buehrer, 2004). Here, we focus on one example of these multiple dimensions, namely functional and dysfunctional interpersonal conflict (Amason, 1996). By studying these two dimensions, we differ from the vast majority of traditional research which has focused solely on dysfunctional conflict. Though Menon *et al.* (1996) examined some of the antecedents of interdepartmental functional conflict, we could not locate any studies that have done this at the individual level.

Third, while there is a significant body of theory relating to communication and conflict, very few studies in the management or marketing literature have empirically tested the relationship between these two constructs for peer managers. So by linking three communication variables (communication frequency, bidirectionality, and communication quality) to both dysfunctional and functional conflict, we add to the sparse literature.

Fourth, by focusing on the marketing/sales CFR, we provide empirical evidence in an area where the literature is mostly anecdotal, conceptual, or normative. As noted by Dewsnap and Jobber (2000),

this important CFR for marketing is the least researched. So, by quantifying the amounts of dysfunctional and functional conflict, and by identifying which antecedents have the most explanatory power, we begin to fill this gap in the literature.

## Conceptual framework

Our model uses two sets of independent variables to explain functional and dysfunctional conflict: *communication* and *structural*. From the interaction approach, we include three communication variables - communication frequency, bidirectionality, and communication quality - because the current state of a CFR is the result of an ongoing series of interactions linking functional managers (Fisher, Maltz, & Jaworski, 1997; Johlke, Duhan, Howell, & Wilkes, 2000). Further support for the inclusion of this category of variables is provided by Johnson (1993) who argued that communication is a primary means by which personnel process information, reduce ambiguity, and coordinate their actions. In addition, and drawing on Weber's (1947) theory of bureaucracy, we include two structural/bureaucratic constructs - formalisation and centralization - because a large body of work suggests that they are indispensable in organisation research (e.g. Rajagopalan, Rasheed, & Datta, 1993).

### Dependent variables: dysfunctional and functional conflict

A contemporary view amongst various streams of literature examining conflict is that it has two underlying dimensions, one dysfunctional and the other functional. The original conceptualisation of conflict is its dysfunctional form (e.g. Pondy, 1967), where conflict is unhealthy and associated with negative outcomes, e.g. distortion and withholding of information to the detriment of others within the organisation, hostility, and distrust during interactions (Thomas, 1990; Zillman, 1988). Others argue that dysfunctional conflict is associated with opportunistic behaviour (Barclay, 1991), information gatekeeping (Jaworski & Kohli, 1993), and the creation of obstacles to decision-making (Ruekert & Walker, 1987b).

In addition, dysfunctional conflict is believed to reduce team performance and member satisfaction, because it produces tension and antagonism, and distracts people from their task performance (De Dreu & Weingart, 2003). Accordingly, we define dysfunctional conflict in the conventional sense: it is unhealthy, and associated with dysfunctional behaviours, dissatisfaction, and poor individual and/or group performance.

In contrast, functional conflict is believed to have beneficial effects which flow from the consultative interactions that occur when functional conflict is present (e.g. Cosier, 1978; Schwenk, 1989; Tjosvold, 1985). Where functional conflict is present, people feel free to express their opinions, and to challenge others' ideas, beliefs, and assumptions (e.g. Baron, 1991; Cosier, 1978; Tjosvold, 1985). Functional conflict can therefore be viewed as an antidote to 'groupthink' where feelings of solidarity and loyalty to a decision-making group may override the imperative to logically and realistically evaluate all possible options (e.g. Filley, 1970). Accordingly, we define functional conflict as a constructive challenging of ideas, beliefs, and assumptions, respect for others' viewpoints even when parties disagree, and consultative interactions involving useful give and take.

### Independent variables: communication

To provide a multidimensional view of cross-functional communication, we examine communication frequency, bidirectionality, and quality. Communication frequency is widely regarded as a key dimension of communication, and relates to the intensity of information flow through media such as e-mail, memos, and face-to-face meetings (Morgan & Piercy, 1998). Two recent studies of CFRs however have shown that bidirectionality is at least as important as communication frequency in generating positive cross-functional outcomes (Fisher *et al.*, 1997; Johlke *et al.*, 2000). Hence, we also investigate this form of communication and define it as the degree to which communication between the marketing manager (MM) and the sales manager (SM) is a two-way process (Fisher *et*

*al.*, 1997). Finally, we define communication quality, as the extent to which information provided is useful, credible, and relevant to a peer manager (Moenaert *et al.*, 1992).

#### Independent variables: organisational structure

Organisational structure is often defined in terms of two Weberian dimensions - centralisation and formalisation. Views however, on the most appropriate level at which to measure these two dimensions have changed over the years. Initially, researchers considered organisational structure at the firm level (e.g. Pugh *et al.*, 1968) while more recent research (e.g. John & Martin, 1984) suggests that it is better to examine it at the task-related, subunit level. Accordingly, we define centralisation and formalisation in terms of the activities that were carried out during the focal project in which the MMs and SMs were actively involved. We define centralisation in terms of how much the project-related contact between the Marketing and Sales sub-units was concentrated at higher levels in the firm's hierarchy. In contrast, formalisation is defined as the extent to which MMs and SMs followed specific rules, procedures, and plans when carrying out project-related activities.

## Hypothesis development

### Effects of communication behaviours

#### Communication frequency

Interaction theory suggests that frequent communication can have both dysfunctional and functional outcomes, therefore no clear predictions can be made from this theory alone. Some scholars argue that frequent cross-functional communication allows personnel to become conversant with, and better understand the language and jargon of their counterparts (e.g. Maltz, 1997). Similarly, others argue that frequent communication reduces the uncertainty associated with an activity, and facilitates performance (e.g. Daft & Lengel, 1984; Galbraith, 1977). On this basis, frequent communication should therefore be associated with low dysfunctional conflict.

Some empirical evidence supports these claims. In CFR studies, frequent communication has been linked to project success (Dougherty, 1992) and cross-functional integration, improved coordination, understanding of others' information requirements, and relationship effectiveness (e.g. Ruekert & Walker, 1987a; Souder, 1981). In addition, others argue that frequent communication between strategy team members can lead to mutual understanding and better rapport (Menon *et al.*, 1999). Overall, these studies suggest that communication frequency should be associated with lower dysfunctional conflict.

Conversely, other studies link frequent communication with negative outcomes. Maltz and Kohli (1996) for example found that beyond a certain threshold, frequent communications between peer managers are perceived to be low quality and dysfunctional. Similarly, Ruekert and Walker (1987a) found that higher 'interaction flows' between marketing and R&D, and marketing and accounting were associated with increased conflict.

Despite the mixed predictions from theory and the inconsistent empirical evidence, we posit that more frequent communication between MMs and SMs will lead to greater conflict. We argue this because the more frequent the interactions, the greater the opportunity for conflict to arise. Consistent with this, we also argue that high communication frequency will be associated with low functional conflict. In our study we conceptualise communication frequency as one-way, frequent interaction, rather than two-way, collaborative interaction. Consistent with our arguments above, we therefore expect that if communication frequency is dysfunctional rather than functional, it should also stifle functional conflict in the CFR. We therefore hypothesise:

H<sub>1a</sub>: Higher communication frequency will lead to higher dysfunctional interpersonal conflict.

H<sub>1b</sub>: Higher communication frequency will lead to lower functional interpersonal conflict.

## Bidirectionality

Recent research suggests that bidirectionality reduces ambiguity, facilitates dialogue, helps clarify and improve the quality of dyadic communications, and increases relationship effectiveness (Fisher *et al.*, 1997; Johlke *et al.*, 2000). Further, Jablin (1979) found that bidirectionality leads to more effective supervisor-subordinate relationships.

Other work by Mohr *et al.* (1996) on interfirm communications treats bidirectionality as an underlying dimension of a second-order factor - 'collaborative communication.' Their results show that collaborative communication has a strong positive effect on relationship satisfaction, a low conflict state. Similarly, others argue that where there are barriers to communication (e.g. there is low bidirectional communication), this can create confusion, misunderstanding, and reduce the opportunity for healthy constructive discussion (Barclay, 1991; Menon *et al.*, 1996; Menon & Varadarajan, 1992). In sum, these studies suggest that collaborative forms of communication, such as bidirectionality, are likely to be associated with lower dysfunctional conflict, and higher functional conflict. We therefore hypothesise:

H<sub>2a</sub>: Higher bidirectional communication will lead to lower dysfunctional interpersonal conflict.

H<sub>2b</sub>: Higher bidirectional communication will lead to higher functional interpersonal conflict.

## Communication quality

Consistent with Moenaert *et al.* (1992), we conceptualise communication quality as the perceived relevance and utility of information provided for the task at hand. Here, this relates to information provided to the MM by the SM on a joint project. Whilst Moenaert *et al.* (1992) did not investigate the effects of communication quality on conflict, they did note that this construct correlates positively with innovation success (cf. Cooper, 1979; Zirger & Madique, 1990).

Other work has found a positive association between communication quality and cross-functional integration, and the creative development of marketing strategy by intrafirm teams (Menon *et al.*, 1999). We would therefore expect communication quality to be associated negatively with dysfunctional conflict, and positively with functional conflict.

Further support for our hypotheses exists in the management and psychology literature. Some management theorists conceive of firms as information processing systems (e.g. Daft & Weick, 1984), and managers as boundary spanners who act as nodes of uncertainty absorption (March & Simon, 1958). Consistent with this, in the psychology literature the 'information processing perspective' on conflict suggests that as a person's cognitive load increases, their cognitive system shuts down, information processing is impeded, and team performance is likely to suffer (Carnevale & Probst, 1998). Hence poor quality information is likely to adversely affect a manager's ability to absorb uncertainty, their ability to process information, and should therefore be associated with higher conflict with managers who provide this poor quality information. Maltz and Kohli (1996) provide empirical support for this proposition, finding that poor quality cross-functional communications are dysfunctional. We therefore hypothesise:

H<sub>3a</sub>: Higher communication quality will lead to lower dysfunctional interpersonal conflict.

H<sub>3b</sub>: Higher communication quality will lead to higher functional interpersonal conflict.

## Effects of organisational structure

### Centralisation

Research in the management literature has found higher centralisation is associated with a range of negative outcomes. These include decreased flexibility, less autonomy, lower job satisfaction, and increased isolation, each of which can increase interdepartmental conflict (e.g. Hage & Aiken, 1967; Pfeffer, 1981). More recently, findings on marketing strategy development (Menon *et al.*, 1996) and organisational buying (Barclay, 1991) indicate that increased centralisation leads to a higher level of dysfunctional interdepartmental conflict. Barclay (1991) argues that the loss of local control associated with higher centralisation will lead to lower satisfaction with the task and the organisation.

The frustration that this causes may then lead to aggression directed at other departments. Accordingly, if we extrapolate these findings to the level of two managers viz., a MM and a SM, we would expect increased centralisation to be associated with greater dysfunctional conflict.

With respect to the effect of centralisation on functional interpersonal conflict, the literature is sparse. We could locate only one study testing this relationship (Menon *et al.*, 1996) but it found no support for the hypothesis that higher levels of centralisation would be related to lower functional interdepartmental conflict. However, research in marketing planning by John and Martin (1984) can offer some insight into this issue. Their findings suggest that greater centralisation not only increases alienation and inhibits participation in decision making, but that it also reduces the healthy exchange of ideas, and lessens constructive criticism, both of which are indicative of functional conflict. On this basis, and consistent with our previous hypotheses development, we propose that centralisation will have opposite effects on dysfunctional and functional conflict. Accordingly, we propose that higher centralisation reduces functional conflict.

H<sub>4a</sub>: As centralisation increases, dysfunctional interpersonal conflict will increase.

H<sub>4b</sub>: As centralisation increases, functional interpersonal conflict will decrease.

### Formalisation

Though competing arguments can be made about the effects of formalisation, the generally accepted view is that it decreases dysfunctional conflict because it clarifies the expectations and responsibilities of organizational members. In addition, by encouraging managers to adhere to established operating procedures, differences in language, jargon, and vocabulary can be reduced. As argued by Griffin and Hauser (1996), these differences can lead to conflict.

Strong empirical support for formalisation reducing dysfunctional conflict is provided by three key CFR studies in marketing which have examined this relationship at the departmental level (Barclay, 1991; Menon *et al.*, 1996; Morgan & Piercy, 1998). However, in another study by Maltz and Kohli (2000), the effects of formalisation in reducing interfunctional conflict were weaker. In short, they found a significant negative effect in just one of marketing's three interfaces (i.e. Marketing - R&D). Importantly, evidence at the interpersonal level suggests that increased formalisation leads to lower role conflict, less role stress, and reduced role ambiguity among marketing (Jaworski & MacInnis, 1989) and sales personnel (Michaels *et al.*, 1988). Together, the evidence at these two levels suggests that formalisation is negatively associated with dysfunctional interpersonal conflict.

Although the effects of formalisation on dysfunctional interpersonal (and interdepartmental) conflict seem unequivocal, its effect on functional interpersonal conflict is less clear. This is because no studies have examined this relationship at this level. However, at the interdepartmental level, Menon *et al.* (1996) found that formalisation and functional conflict were not significant in the context of marketing strategy development. Nevertheless, we speculate that at the interpersonal level, formalisation is likely to increase the amount of functional conflict between MMs and SMs. We argue this because if higher formalisation is associated with lower role conflict, role stress, and ambiguity, this is likely to provide an environment in which MMs and SMs feel comfortable to engage in consultative interaction, and useful give and take. Accordingly, we present our final hypothesis:

H<sub>5a</sub>: As formalisation increases, dysfunctional interpersonal conflict will decrease.

H<sub>5b</sub>: As formalisation increases, functional interpersonal conflict will increase.

### Method

Data was collected using a pretested, mailed, self-administered questionnaire. In total, 103 usable questionnaires were returned (response rate = 23%), and tests of nonresponse bias indicated no significant differences between early and late respondents in terms of 3 individual level variables (managerial seniority of respondents; their relative levels of education; and the extent of the MMs' vocational sales experience), and 2 organisational variables (proportion of goods versus service firms;

and markets served). The MMs had worked with the SM for an average of 3.5 years, which suggests that they were knowledgeable about the issues covered in this research. The final sample of firms revealed good diversity, goods-producers accounted for 44.7% of the responding organisations; service-providers 11.7%; and 43.6% sold both goods and services. In terms of market type, 41.7% were in business markets, 27.2% were in consumer markets, and 31.1% sold to both types of market. The average firm size was 557 employees.

## Measurement

One formative measure was used (communication frequency), and six reflective multi-item measures (bidirectional communication, communication quality, formalisation, centralisation, dysfunctional conflict, and functional conflict). Exploratory factor analysis revealed that the reflective multi-item constructs were unidimensional. We then conducted confirmatory factor analysis (CFA) using AMOS Version 4 (Arbuckle & Wothke, 1999) to evaluate the internal and external consistency of our measures. To maintain an acceptable ratio of observations to variables (Bentler & Chou, 1987), the CFAs were conducted in three stages. The criterion we used to choose the constructs tested in each stage was that they be maximally similar, in order to apply a strong test of discriminant validity. Stage one included the two reflective communication dimensions (bidirectional communication and communication frequency). Stage two included the two structural/bureaucratic dimensions (centralisation and formalisation), whilst stage three included the two conflict dimensions (dysfunctional and functional conflict).

In stage one, we analyzed a 9-item, two-factor model containing communication quality (five items) and bidirectional communication (four items). In order to detect possible model misspecification, AMOS provides information such as standardised residual covariances, modification indices, and standardised regression weights (Byrne, 2001). Inspection of these diagnostics suggested removal of one item from communication quality, and one from bidirectional communication in order to improve construct validity. The resulting 7-item model produced a chi-square of 19.299 ( $df = 12, p = .082$ ). A range of diagnostics recommended by Bagozzi and Yi (1988) for measurement model fit were examined, e.g. the GFI = .948, and CFI = .988 which both exceed the recommended .9. In addition, the relative chi-square ( $\chi^2/df$ ) = 1.608, and a rule of thumb for this statistic is that ratios in the range of 3 to 1 indicate acceptable model fit (Carmines & McIver, 1981). Finally, the RMSEA = .078, which is lower than the .08 recommended to indicate good model fit. Overall, these fit statistics were considered acceptable enough to establish the validity of this measurement model.

In stage two, we analyzed a 12-item, two-factor model containing centralisation (six items) and formalisation (six items). Inspection of the model diagnostics suggested the removal of 3 centralisation items and 3 formalisation items. The resulting 6-item model produced a chi-square of 10.783 ( $df = 8, p = .214$ ). Good model fit is demonstrated by the key fit statistics: GFI = .967, CFI = .979,  $\chi^2/df = 1.348$ , RMSEA = .059, all within acceptable ranges.

In stage three, we analyzed a 10-item, two-factor model containing functional conflict (six items) and dysfunctional conflict (four items). The model diagnostics suggested the removal of 3 functional conflict items and 1 dysfunctional conflict item. The final 6-item model produced a chi-square of 13.565 ( $df = 8, p = .094$ ), GFI = .958, CFI = .975,  $\chi^2/df = 1.696$ . However, whilst the RMSEA = .083, and falls slightly above the benchmark of .08, the other overall fit statistics demonstrate good model fit.

Convergent validity was established in two ways. First, the AMOS 'critical ratios' (LISREL t-values) were examined for each item in the CFAs, and all were statistically significant (Anderson & Gerbing, 1988). Second, the average variance extracted (AVE) for each construct was calculated, and all exceeded .50 except centralisation, AVE = .46, which fell marginally below the suggested benchmark. The AVE for bidirectional communication for example was .71, while that of communication quality was .78.

It was particularly important that we establish discriminant validity between three key pairs of constructs - the two communication dimensions (bidirectional communication and communication quality), the two structural variables (centralisation and formalisation), and the two conflict constructs (functional and dysfunctional conflict). These paired constructs were tested using Fornell and Larcker's (1981) procedure, and discriminant validity was established between all three pairs. The AVEs for bidirectional communication and communication quality for example were .71 and .78 respectively, whilst the squared correlation was .58.

Reliability analysis revealed that the composite reliability and alpha coefficients for all of the scales are .71 or more. For example the composite reliability of functional conflict = .76, and  $\alpha = .75$ , whilst the composite reliability of dysfunctional conflict = .79, and  $\alpha = .73$ . A full description of the final measures and their associated statistics are shown in the Appendix.

## Results

### Descriptive findings

As shown in Table 1, the descriptive statistics reveal that, on average, our responding MMs enjoy a good relationship with their counterpart SMs. Specifically, the level of dysfunctional conflict is low, mean = 1.67 out of 7, where low numbers indicate low dysfunctional conflict. The standard deviation however, reveals that there is some variation in the level of conflict (s.d. = 1.09). The low level of dysfunctional conflict we observe therefore contrasts with the moderately high levels of conflict observed by Maltz and Kohli (2000). They report levels of dysfunctional conflict on a 5-point scale, where low numbers indicate low conflict, specifically, mean = 2.76 between Marketing and R&D, mean = 2.72 Marketing and Manufacturing, and mean = 2.57 for Marketing and Finance.

In addition, we find a moderate amount of functional conflict in our observed CFRs (mean = 3.79, s.d. = 0.83), where low numbers indicate low functional conflict. Overall, these results show that dysfunctional conflict between MMs and SMs during the focal projects is fairly low, and that functional conflict is reasonably prevalent. Our findings therefore suggest that the conventional wisdom of the 1980s/90s, as indicated in Dewnap and Jobber's (2000) literature review, may no longer accurately reflect the current situation.

**Table 1.** Descriptive statistics and intercorrelations

Variable	Scale Mean	S D	1	2	3	4	5	6	7
1. Communication frequency	1.98	.80	-						
2. Bidirectionality	4.25	1.26	.30**	-					
3. Communication quality	4.39	1.26	.27**	.77**	-				
4. Centralisation	1.81	.90	-.35**	-.31**	-.33**	-			
5. Formalisation	3.14	1.14	.26**	.05	.13	-.05	-		
6. Dysfunctional conflict	1.67	1.09	-.05	-.53**	-.53**	.32**	-.20*	-	
7. Functional conflict	3.79	.83	.14	.73**	.76**	-.20*	.20*	-.61**	-

Notes: \*\* significant at 0.01 level (two-tailed); \* significant at 0.05 level (two-tailed). The means and standard deviations reported for each scale were formed by dividing the aggregate scores by the number of items in the scale.

### Model testing

OLS regression was used to estimate our model and an examination of the residuals showed no obvious violations for the key assumptions of linearity, normality, and independence. Turning first to the results for dysfunctional conflict, we find 4 of our 5 hypotheses are supported. As shown in Table 2, all of the communication behaviours have a significant effect on dysfunctional conflict, with bidirectional communication having the strongest negative effect ( $\beta = -.38$ ,  $p \leq .01$ ), followed by communication quality ( $\beta = -.29$ ,  $p \leq .05$ ), whilst communication frequency has a positive effect ( $\beta = .21$ ,  $p \leq .05$ ). In addition, we found that of the structural variables, only formalisation decreases

dysfunctional conflict ( $\beta = -.25, p \leq .01$ ). The beta for centralisation was positive as predicted, but non-significant.

**Table 2.** Regression model for explaining 'dysfunctional' interpersonal conflict

Hypothesis number & direction	Independent variables	Standardized coefficients	T-values
Communication			
H <sub>1a</sub> (+)	Communication frequency	.21	2.43*
H <sub>2a</sub> (-)	Bidirectionality	-.38	-3.13**
H <sub>3a</sub> (-)	Communication quality	-.29	-2.40*
Structural			
H <sub>4a</sub> (+)	Centralisation	.12	1.41
H <sub>5a</sub> (-)	Formalisation	-.25	-3.10**
R <sup>2</sup> = .467	Adjusted R <sup>2</sup> = .438	F-Value = 16.297	Sig. Level = 0.000

\* $p < 0.05$  \*\* $p < 0.01$  One-tailed tests.

As depicted in Table 3, all but one of our hypotheses regarding functional conflict are supported. Specifically, we find communication quality has the highest positive effect ( $\beta = .51, p \leq .01$ ), followed by bidirectionality ( $\beta = .41, p \leq .01$ ), whilst communication frequency had a negative effect ( $\beta = -.13, p \leq .05$ ). Again, of the two structural variables, only formalisation was significantly related to functional conflict ( $\beta = .18, p \leq .01$ ), whilst centralisation was non-significant.

**Table 3.** Regression model for explaining 'functional' interpersonal conflict

Hypothesis number & direction	Independent variables	Standardized coefficients	T-values
Communication			
H <sub>1b</sub> (-)	Communication frequency	-.13	-2.06*
H <sub>2b</sub> (+)	Bidirectionality	.41	4.61**
H <sub>3b</sub> (+)	Communication quality	.51	5.72**
Structural			
H <sub>4b</sub> (-)	Centralisation	.08	1.25
H <sub>5b</sub> (+)	Formalisation	.18	2.98**
R <sup>2</sup> = .707	Adjusted R <sup>2</sup> = .691	F-Value = 44.856	Sig. Level = 0.000

\* $p < 0.05$  \*\* $p < 0.01$  One-tailed tests.

## Discussion

### Theoretical implications

The purpose of our research was to test a CFR model which sought to explain the variation in the levels of both interpersonal dysfunctional conflict and functional conflict. The data used for model testing was obtained from MMs, who were asked to focus on their working relationships with SMs. Importantly, our model contains two categories of explanatory variables which relate to communication and organisational structure. The three variables from the first category were drawn from interaction theory, while Weber's (1947) theory of bureaucracy was the source of the two variables in the second category.

In model testing, we used the same five independent variables to explain the two types of conflict and, overall, both regression models had high explanatory power. However, we explained functional conflict better than dysfunctional conflict. This is evidenced by a  $r^2 = .71$  for the former, as compared to a  $r^2 = .44$  for the latter. Overall, the communication variables had the most explanatory power because all three were significant in both regression equations. This contrasts with the two organisational structure variables, where only formalisation was significant.

Consistent with one of the predictions of interaction theory, we find that high frequency communication may be dysfunctional. Our results therefore corroborate Maltz and Kohli (1996), who argue that low frequency communication may be functional, but at high frequencies it may become

dysfunctional. We see this reflected in the results of both regressions, as communication frequency is positively associated with dysfunctional conflict, but negatively associated with functional conflict. While there is little empirical or theoretical work to guide our interpretation of this result, one explanation might be the reduction in the perceived value of information observed by Maltz and Kohli (1996) when that information was disseminated frequently across functional boundaries. Frequent manager-to-manager communication may therefore be perceived as low in value, frustrating the receiver. Such communication behaviour may also be considered 'badgering' which again may lead to dysfunctional conflict between peer managers.

Furthermore, because functional conflict relies on a careful consideration of alternatives, and assumptions underlying decisions (Cosier & Schwenk, 1990), the provision of frequent low value information may also stifle functional conflict between managers. Managers receiving low value information on a frequent basis are unlikely to be able to use that information effectively in decision making, and such information may eventually be ignored by the receiver. Consequently, high frequency communication is likely to be associated with lower functional conflict.

This finding is also reflected in our results for communication quality, which had the single strongest positive effect on functional conflict, and the second strongest negative effect on dysfunctional conflict. High quality information is the basis for effective decision-making, and under conditions of uncertainty, high quality information helps managers evaluate all options, and challenge ideas and assumptions, i.e., engage in behaviours indicative of functional conflict. Conversely, where communication is poor in quality, this is likely to frustrate peer managers, and lead to conflict with those managers providing poor quality information (Robbins, 1990).

Our results for bidirectional communication also support this line of reasoning. Bidirectional communication is a consultative, collaborative form of communication, involving reciprocity, and consistent with this, our results show that it has the second strongest positive effect on functional conflict, and the strongest negative effect on dysfunctional conflict. The two-way give and take of bidirectional communication therefore seems an ideal vehicle to promote constructive debate and functional conflict. Similarly, because two-way communication helps clarify misunderstandings, and increase managers' knowledge of others' issues and priorities, it should help reduce dysfunctional conflict. Our results support this argument, and are therefore consistent with Fisher *et al.* (1997), who found that bidirectional communication was associated with higher levels of perceived relationship effectiveness, a state of low dysfunctional conflict.

Turning to the results for the two structural variables, we found that while formalisation had strong effects in the hypothesized direction for both dysfunctional and functional conflict, centralisation had no impact on either forms of conflict. Therefore, our finding regarding the effect of centralisation on interpersonal dysfunctional conflict differs from those of Barclay (1991) and Menon *et al.* (1996), who found that centralisation increased dysfunctional interdepartmental conflict. Our null results for this hypothesis may be due to the level of analysis (interpersonal vs interdepartmental) and/or the context of our research. As noted by John and Martin (1984), researchers have found that the control of behaviour via bureaucratic centralisation is less effective when tasks cannot be monitored and/or evaluated easily. Because the cross-functional projects in which the MM and SM were involved fit these conditions, it seems as though centralisation is rendered ineffective. Our context however, contrasts with Barclay (1991) who focused on the organisational buying of raw materials and components, which is likely to be a more structured decision-making process.

With respect to our second hypothesis for centralisation (H4b), we found no support for the view that as centralisation increases, functional conflict is also likely to decrease. Similarly, but at the interdepartmental level, Menon *et al.* (1996) found that centralisation and functional conflict were not related.

Consistent with prior research on formalisation and its effect on interdepartmental conflict (e.g. Morgan & Piercy, 1998), we found that this structural variable reduced interpersonal dysfunctional conflict. This finding seems important because it shows that by means of formalisation, senior managers can reduce dysfunctional conflict both at the departmental and interpersonal level. Importantly, we also found that formalisation had a strong positive effect on functional conflict. This is a new finding and seems to be noteworthy even though it contrasts with that of Menon *et al.* (1996), who found formalisation was not statistically related to functional interdepartmental conflict.

Our final theoretical implication relates to the wider applicability of our theoretical model. Whilst our model was tested in the context of the Marketing/Sales CFR, we believe that the model may apply equally to other Marketing CFRs, e.g. Marketing/R&D, and to CFRs not involving marketing personnel, such as the Purchasing/Manufacturing CFR. We believe that the conceptual framework we employed, using communication and structural variables, examine issues that are fundamental to all CFRs.

### Managerial implications

Our results have implications for senior managers of firms who wish to improve CFRs between MMs and SMs. A key issue for managers to consider is that not all forms of cross-functional communication are effective. Contrary to the interactionist perspective, and conventional wisdom, mere frequency of communication is an inadequate mechanism to reduce dysfunctional conflict between functional managers. More communication does not necessarily mean better communication. Very frequent communication actually increases dysfunctional conflict, rather than reducing it, and in addition, it stifles functional conflict in the CFR.

In addition, our results show that more collaborative forms of communication such as bidirectionality, and high quality communication both have powerful effects in reducing dysfunctional conflict, and increasing functional conflict. Senior managers should therefore seek mechanisms which increase the two-way communication between MMs and SMs, and also ensure that the quality of information flowing between the functions is high. Finally, our results demonstrate the benefits to management of formalising contact between MMs and SMs to decrease dysfunctional conflict and increase functional conflict. Our results show however that centralising decision-making on cross-functional projects does not affect the level of cross-functional conflict between MMs and SMs.

### Limitations and directions for future research

A major limitation of our research is that we rely on cross-sectional data to draw inferences regarding relationships which develop and are enacted over time. Future research could utilize longitudinal data to investigate these important phenomena. Another key limitation relates to the data being restricted to MMs' perceptions. Future research should therefore examine this relationship by using data obtained from both SMs and MMs. Another limitation relates to the measurement properties of centralisation. Future research could be improved by incorporating better measures of this construct.

Another avenue for future research would be to simultaneously examine the antecedents and consequences of dysfunctional and functional conflict. An important consequence is relationship effectiveness and so we need to know how these two dimensions of conflict impact on it. Ideally, a structural-model testing procedure should be used to provide the strongest test because it would involve examining all relationships in a single model.

Lastly, whilst we adopt a multidimensional view of communication between these peer managers, future research could look at other factors which may be relevant, e.g. the content of their communications.

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## Appendix A

### Final measures

<u>Construct</u>	<u>Items</u>	<u>Adapted from</u>
Communication frequency <sup>A</sup> (10 items)	Seven-point scale anchored by 0 'Never' and 6 'Very Frequently'. SMs were asked to rate how frequently they communicated with the MM: by (1) written memos; (2) by written reports; (3) fax machine; (4) in scheduled one-to-one meetings; (5) in impromptu face-to-face meetings; (6) in	Morgan & Piercy (1998)

	scheduled one-to-one phone conversations; (7) in impromptu phone conversations; (8) by voice mail; (9) by teleconferencing; and (10) by e-mail.	
Bidirectionality (3 items, alpha=.87) (composite reliability=.88) (AVE=.71)	Seven-point Likert scale: (1) whether the SM always responded to his/her communication; (2) whether the SM provided the MM with a lot of feedback; and (3) how much two-way communication there/was between the MM and the SM.	Fisher, Maltz & Jaworski (1997)
Communication quality (4 items, alpha=.92) (composite reliability=.93) (AVE=.78)	Seven-point Likert scale: (1) the information provided by the SM was very useful for my work project; (2) I was very satisfied with the content of the information provided by the SM on this project; (3) the information provided by the SM was highly relevant to my work on this project; and (4) the information provided by the SM was very credible.	Moenaert <i>et al</i> (1992)
Centralisation (3 items, alpha=.71) (composite reliability=.71) (AVE=.46)	Seven-point Likert scale: (1) there was a lot of informal, direct person-to-person contact between the Marketing and Sales personnel during this project <sup>R</sup> ; (2) during the project, Marketing and Sales communicated mainly through superiors; and (3) a lot of informal, face-to-face contact took place at all levels between Marketing and Sales during this project <sup>R</sup> .	Moenaert <i>et al</i> (1994)
Formalisation (3 items, alpha=.75) (composite reliability=.77) (AVE=.53)	Seven-point Likert scale: (1) to coordinate the Marketing and Sales activities during this project, standard operating procedures were established; (2) during this project, progress was monitored by means of formal procedures (e.g. milestones, budgets, actions undertaken); and (3) the project proceeded by means of a well-documented plan of action.	Moenaert <i>et al</i> (1994)
Dysfunctional conflict (3 items, alpha=.73) (composite reliability=.79) (AVE=.57)	Seven-point Likert scale: (1) when the two of us got together in group meetings, tensions between the two of us frequently ran high; (2) during this project, I generally disliked having to work with him/her; and (3) throughout the project, there was little interpersonal conflict between myself and the SM <sup>R</sup> .	Jaworski & Kohli (1993)
Functional conflict (3 items, alpha=.75) (composite reliability=.76) (AVE=.52)	Seven-point Likert scale: (1) during this project, there was consultative interaction and useful give-and-take; (2) there was constructive challenge of ideas, beliefs, and assumptions; and (3) even people who disagreed, respected each others' viewpoints.	Menon, Bharadwaj & Howell (1996)

<sup>a</sup> Denotes a formative measure

<sup>R</sup> Reverse-scaled