Understanding the effects of Intra-Group Conflict: A Test of Moderation and Mediation

GAYE GREENWOOD* and JARROD M. HAAR**

Abstract

Intra-group conflict represents the dysfunction that can exist within a team and is likely to lead to poor outcomes including functioning and performance. The present study explores the links between intra-group conflict and job satisfaction, where we expect individual team members to be less satisfied when they perceive greater intra-group conflict. We extend understanding by testing negative affect (mood) as a mediator, suggesting the fighting within teams leads to bad moods that subsequently, lower job satisfaction. We also test supervisor support, suggesting it might moderate the influence of intra-group conflict, reducing detrimental influences. Using a sample of 130 New Zealand employees working in teams, we find that intra-group conflict is significantly related to negative affect and job satisfaction (positively and negatively), with negative affect partially mediating the influence of intra-group conflict on job satisfaction. Similarly, we find supervisor support is significantly related to negative affect (negatively) and job satisfaction (positively), as well as moderating the influence of intra-group conflict on negative affect. Ultimately, the interaction shows that high supervisor support buffers the influence of intra-group conflict on negative affect. We discuss the implications of intra-group conflict and the role of supervisors in aiding work and wellbeing outcomes.

Keywords: Intra-group conflict, job satisfaction, negative affect, supervisor support, mediation, moderation.

Introduction

Workplace conflict is dynamic, relational and interpretive. Thomas (1976) said conflict was "the process which begins when one party perceives that another has frustrated, or is about to frustrate, some concern of his/hers" (p. 891). Literature consistently defined conflict as a 'process' involving a dynamic sequence of events, with cognitive, behavioural, emotional and interpersonal responses between individuals and groups (Jehn, 1997; Rahim, 2002). Conflict emerges from interpretation of differences "about interests and resources, beliefs, values or practices that matter to individuals and teams" (De Dreu & Gelfand, 2008, p. 6). However, conflict about what 'matters' is not always a negative phenomenon – thus the dichotomy of conflict is complex. For example, conflict might lead to new solutions and thus improve performance, while at other times conflict might be strictly detrimental (Spell, Bezrukova, Haar, & Spell, 2011). Authors have conceived conflict as both a destructive problem (Pondy, 1967) and an opportunity (Walton 1969; Deutsch, 1973), the influence of workplace conflict on individual wellbeing functioning and performance is an important field of research.

* Mediator and Senior Lecturer in the Management Department in the Faculty of Business Economics and Law at Auckland University of Technology
** Professor of Human Resource Management, Department of Management, AUT University, Auckland, New Zealand

Pondy (1967) asserted organisational conflict was a negative experience on a continuum from passive resistance, to aggression involving emotions, perceptions and behaviours in response to conditions (e.g. a lack of resources) and/or the affective state of individuals (e.g. stress, tension, hostility). Others identified conflict as an opportunity for creativity and learning about different perspectives (Levine, Resnick, & Higgins, 1993; Nemeth, 1986). Debate about conflict as a breach of expectations, behaviour or procedure (March & Simon, 1958) was aligned with competitive negotiation behaviour as a threat to collaboration (Carnevale & Probost, 1998).

Early conflict research focussed on factors that contributed to escalation of conflict and how to manage conflict within organisations. Walton and Dutton (1969) were concerned with the events or stages of conflict, types of antecedents and interdependency of factors during organisational conflict. Thomas (1976) focused on the role of cognition in shaping negotiation and conflict behaviour. Carnevale and Probost (1998) found when people were engaged in hostile negotiation, cognitive flexibility and creative thinking were disrupted. However, the traditional focus on workplace conflict as a negative phenomenon was critiqued by Jehn (1995, 1997) who found aspects of conflict in teams positively correlated with idea creation and prevention of *group think* (Janis, 1982). In flat-structured organisations, task and interpersonal conflict enabled positive interdependence (Janssen, Van de Vliert & Veenstra, 1999). Research about the role of the devil's advocate suggested individuals made better decisions when their ideas were challenged (Schwenk, 1990).

The present paper argues that the managerial challenge is how to engage in constructive conflict behaviours and prevent or transform dysfunctional conflict. We explore, using a sample of New Zealand employees who conduct their work in teams, the role of intragroup conflict and its influence on the job satisfaction of workers. Meta-analysis by Judge, Thoresen, Bono, and Patton (2001) support a significant and moderate positive relationship between job satisfaction and job performance. Hence, exploring job satisfaction is important because it represents a positive outcome for both employees and employers. The present study contributes to the conflict literature by exploring antecedent and consequences of conflict, and the potential role of support as a buffer. It enhances our understanding of the detrimental links of conflict in the New Zealand workplace, but also provides useful directions for organisations on how to better manage such relationships.

Conflict Management

Behavioural, process and structural models have influenced conflict management literature. The 1970s and 1980s focus was on conflict-handling modes or styles of dealing with conflict (Rahim, 1983); such as the conflict management taxonomy/grid (Blake, Mouton, Barnes, & Greiner, 1964) and the dual concern theory (Pruitt & Rubin, 1986; Thomas & Kilmann, 1977). Common dimensions of conflict handling 'styles' were collaborating, yielding, forcing or avoiding. Deutsch (1973) investigated the conditions under which colleagues developed a cooperative or competitive relationship, by experimentally studying individual communication behaviour. The typology of conflict that emerged was a style-based set of characteristics focusing on roles and strategies that influenced outcomes. He proposed trust emerged from ongoing interaction and noted interdependence between context and process on outcomes. Deutsch's (1973) focus on relationships was influential but critiqued because interactions were simulated in the laboratory and not observed in the context of organisations.

Research concerning negotiation as a process for conflict management covers a broad range of approaches. From behavioural decision-making (Lax & Sebinius, 1986; Raiffia, 1982) and multi-party decision-making (Neale, & Bazerman, 1992), to the psychology of decision, making in dyadic bargaining (Neale & Northcraft, 1989), the common aim was to ascertain strategies and tactics for substantive and relational gains. The study of individual personality differences (Gilkey & Greenhalgh, 1986), the structural approach (Pruitt, 1981) and the communications approach (Putnam, 2004) focussed on how to conduct effective negotiation across human and contextual differences. Experimental methods continue to apply behavioural game theory to organisational conflict, social dilemmas, intra-group conflict, strategic decision-making, workplace aggression and attitude change during negotiation (Lewicki, Saunders, & Barry, 2016).

However, Jehn (1997) questioned studies that framed conflict as negative phenomena without addressing the positive effects of conflict on performance and teamwork. Rahim (2002) asserted there were dual aims of conflict management "to enhance learning and group outcomes, including effectiveness or performance…limiting the negative aspects of conflict while increasing the positive aspects" (p. 208). Thus, conflict management was viewed as a set of dynamic learning processes. Costantino and Merchant (1996) proposed a learning approach, to negotiating workplace conflict where leaders modelled collaborative values and behaviours in their everyday lives. The idea was to move away from hierarchical, authoritarian decision making to consensus building and joint problem solving in teams, thereby building the capacity for early conflict resolution through organisational practices.

The Present Study

The present study focuses now upon intra-group conflict, which is the disruptions that occur *within* a team. We explore a process model whereby the detrimental influence of intra-group conflict might be better understood as working through negative affect, and also posit the role of supervisor support – given the importance noted above – as interaction and buffering the detrimental effects of intra-group conflict. This builds on New Zealand research, where Greenwood (2016) found conflict contagion (Jehn et al., 2013) in teams had detrimental impacts, including resignation and dismissal. Our theoretical model is shown below in Figure 1. We detail the specific literature and hypotheses below.

Figure 1. Theoretical Model

16
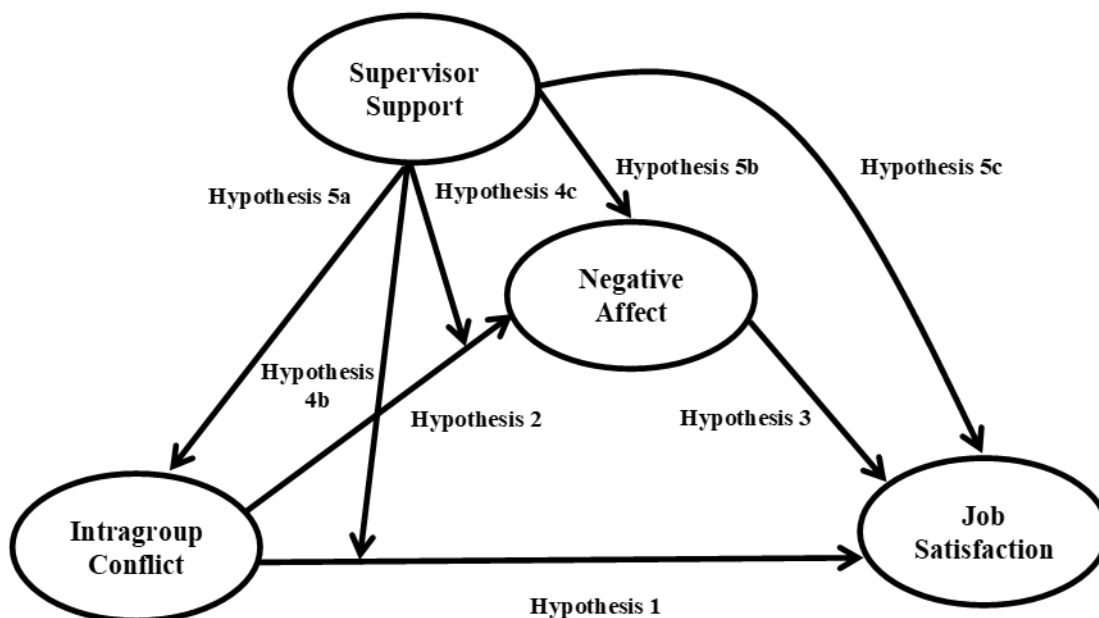
Intra-Group Conflict

Jenn (1995) defined intragroup conflict as disagreements or incompatibilities over work or non-work-related issues within a team. For example, team members arguing over workload and effort would signal intra-group conflict. Intra-group conflict influences individual satisfaction and team performance. There is evidence of a negative relationship between conflict, team productivity and satisfaction when conflict produces tension, antagonism and task distraction (Gladstein, 1984; Saavedra, Earley, & Van Dyne, 1993; Wall & Nolan, 1986). In effect, it is hard to be focused on the work and be satisfied with one's job, if the team one works in are arguing and creating friction and hostility. The literature on intragroup conflict initially categorised this as relationship and task conflict (Guetzkow & Gyr, 1954; Amason, 1996; Jehn, 1994). *Relationship conflict* referred to affective elements based on feelings of tension and friction, annoyance, frustration and irritation, while *task conflict* involved differences and viewpoints about tasks without interpersonal negative emotions of relational conflict.

Jehn (1994; 1995; 1997) identified the dynamic nature of team conflict finding relationships between different stages and types of teamwork. Relationship conflict was associated with decreased satisfaction and interfered with task performance but task conflict during complex non-routine tasks was beneficial for creativity, innovation, learning and development. Others concurred with Jehn (1994, 1995), finding task conflict could have positive effects on team performance (Amason & Schweiger, 1997; Simons & Peterson, 2000; Van de Vliert & De Dreu, 1994). Jehn (1997) identified *process conflict* as a third dimension to team conflict. Jehn, Northcraft and Neale (1999) defined process conflict as awareness of controversy about how tasks would be accomplished.

Following the investigation of antecedents of productive and destructive conflict in university MBA teams, Jehn and Mannix (2001) proposed managerial encouragement of open discussion norms, high levels of respect among members and asserted a cohesive supportive team environment would have a positive effect on team performance. They advised, managers and leaders should conduct conflict training at the early stages of group formation. However, an oversimplification of task conflict as functional and relational conflict as dysfunctional has been questioned.

Meta-analysis of the task-relationship conflict–team performance-satisfaction literature led De Dreu and Weingart (2003a, 2003b) to find both task and relational conflict to be equally disruptive suggesting the intensity of conflict matters. While conflict is less likely to disrupt routine tasks - a little conflict may be beneficial in complex tasks - these positive effects quickly breakdown as conflict becomes more intense. This is because the cognitive load increases, information processing is impeded, and consequently, team performance suffers (De Dreu & Weingart, 2003b). De Dreu and Weingart (2003b) meta-analysis found that team conflict was related negatively to both team performance and satisfaction, confirming a negatively link with satisfaction – the focus of the present study.

A subsequent meta-analysis of intra group conflict conducted by De Wit, Greer and Jehn (2012) found that intragroup conflict was significantly and negatively related to satisfaction. While this is typically satisfaction with group members, other studies have supported positive links between intra-group conflict and job satisfaction (Acuna, Gomez, & Juristo, 2009) and work

satisfaction (Cox, 2003). For example, Medina, Munduate, Dorado, Martínez, and Guerra (2005) found a significant relationship between intragroup conflict and job satisfaction (r= -.27, p< .01).

Locke (1969) defined job satisfaction as "a pleasurable emotional state resulting from employees' favorable appraisal of their job, achievements, and job-related value" (p. 309). Hence, it is a positive emotional state occurring when an employee appraises their job experiences (Locke, 1976). With regard to intragroup conflict and job satisfaction, McLaney and Hurrell (1988) tested both intergroup and intragroup conflict towards job satisfaction, and found both significant, with intragroup being the slightly more powerful predictor. Thus, employees whose work experience with their team is one where members fight about their work, have disagreements about the work processes and the work that each member should do, are likely to be left with a feeling of disappoint and reduced satisfaction about their job. In this regard, the intragroup conflict diminishes the emotional state with regard to their job. Thus, we posit the following.

Hypothesis 1: Intragroup conflict will be negatively related to job satisfaction.

The Mediation Effect of Negative Affect

Watson (2000) defined mood as "transient episodes of feeling or affect" (p. 4), with the two types of affect - positive and negative being theoretically and empirically proven (Watson, Clark, & Tellegen, 1988; Stoeva, Chiu & Greenhaus, 2002). We seek to extend the linkages between intragroup conflict and job satisfaction by exploring negative affect (mood) as a mediator. De Witt et al. (2012) suggested that, amongst other factors, affect may play a role in understanding the influence of intragroup conflict on outcomes. Jehn, Greer, Levine, and Szulanski (2008) found intragroup conflict and negative emotions were highly related and we suggest that negative affectivity might be a useful mediator for exploring the intragroup conflict-job satisfaction relationship, given the pleasurable emotional state (Locke, 1969) aligned with job satisfaction.

An explanation as to how mood may operate as a mediator was proposed by Friede and Ryan (2005), who proposed that individuals with different general dispositions – such as high negative affect - may interpret the same situation more detrimentally. Cropanzano, James and Konovsky (1993) noted that employees who report high levels of negative affect are likely to be anxious, afraid, and angry. Thus, we suggest that the relationship between intragroup conflict and job satisfaction might be better understood by considering what effect mood – specifically negative affect – plays in this relationship. In effect, the detrimental influence of intragroup conflict on job satisfaction is likely to be exacerbated by higher negative affect. Given the direct effect of negative affect to job satisfaction is well established with meta-analytic support from Connolly and Viswesvaran (2000) at -.33, we expect negative affect to be linked to job satisfaction and to mediate the influence of intragroup conflict on job satisfaction. Such relationships have been confirmed, for example Kafetsios and Zampetakis (2008) found affect mediated the influence of emotional intelligence on job satisfaction. Similarly, we expect intragroup conflict to be positively related to negative affect – as the infighting within a group increases, so too will the bad mood of the individual. Furthermore, as negative affect increases then satisfaction with one's job will reduce, and through this mechanism, negative affect will mediate the influence of intragroup conflict on job satisfaction. This leads to the following.

Hypothesis 2: Intragroup conflict will be positively related to negative affect.

Hypothesis 3: Negative affect will mediate the relationship between intragroup conflict and job satisfaction.

The Role of Supervisor Support

Perceptions of supervisor support during relationship conflict were investigated on 562 employees by Way, Jimmieson and Bordia (2016). Supervisor style had far reaching effects on employees exposed to relationship conflict and mental health issues (anxiety/depression). The authors suggested the efficacy of supervisor support is more influential when there is strong intragroup conflict, otherwise support may come across - in low conflict situations – as unwelcomed and unwanted. In their meta-analysis, De Church, Doty and Mesmer-Magnus (2013) identified two important factors around team conflict. Importantly, neither factor included the role of the supervisor, and we suggest that supervisor support may play a role in influencing the detrimental effect of intragroup conflict on job satisfaction. In a meta-analysis of over 32,000 employees, Ng and Sorensen (2008) and found the relationship between supervisor support and job satisfaction was significant and strong (r= .52). In effect, employees who have supportive supervisors are more likely to be satisfied in their jobs. As such, we argue that supervisor support will play a role in the relationships between intragroup conflict and job satisfaction.

While support can include supervisors, managers, and co-workers, Lee and Ashforth (1996) argued that supervisor support is the most common form of support tested, and there is evidence of it having direct effects towards conflict (Way et al., 2016) and buffering effects on relationships (Cohen & Willis, 1985). Within New Zealand, Haar and Roche (2008) found supervisor support was positively related to job satisfaction directly and moderated the influence of organisational support for work-family factors towards job satisfaction. Thus, there is potential for both direct and moderating effects from supervisor support towards job satisfaction. Similarly, towards negative affect, Wong, Cheuk, and Rosen (2000) found that supervisor support buffered the detrimental effects of job stress to negative affect, while Kammeyer-Mueller, Wanberg, Rubenstein, and Song (2013) founds links between affect and supervisor support. Similarly, Nifadkar, Tsui, and Ashforth (2012) found supervisor support was negatively related to negative affect.

Overall, we expect supervisor support to be negatively related to intragroup conflict, similar to Way et al. (2016). In addition, we expect supervisor support to buffer the relationships between intragroup conflict and both job satisfaction and negative affect. Furthermore, given the significant direct effects between supervisor support and job satisfaction and negative affect, we also predict those here. Thus, we posit the final set of hypotheses.

Hypotheses 4: Supervisor support will moderate the relationship between intragroup conflict and (a) job satisfaction and (b) negative affect.

Hypotheses 5: Supervisor support will be related (a) negatively to intragroup conflict, (b) negatively to negative affect, and (c) positively to job satisfaction.

Method

Sample and Participants

New Zealand employees were recruited to participate in the study after a series of telephone calls from one of the authors. We used a data collection procedure that has been widely employed in other research and is similar to that of Liao (2007) and Bezrukova and colleagues (2010). We had one entry criteria and that was that they were currently working in a team with a minimum two other workers. Those that were interested had the study outlined and requirements established (e.g., over 18 years of age, employed at least 20 hours a week, and working in a team). In total, 130 employees completed the survey over the phone. Our sample worked in a variety of industries (e.g., police department, manufacturing, construction, medical, insurance etc.).

Age of respondents ranged from 19 to 65 years, with an average age of 34.9 years (SD=13.2 years). Average tenure in their organisations was 6.2 years (SD=7.2 years) and tenure in their team was on average 4.9 years (SD=8.0 years). By gender, the sample was fairly evenly split with 55% female. On average respondents worked 34.3 hours a week (SD=13.2 hours) and there was strong diversity, with only 53% of New Zealand European descent, with the remainder Asian (19%), Maori (8%), Indian (9%), Pacific peoples (7%) and others (4%). By education, the majority had either high school education only (49%) or a university degree (44%).

Measures

Intragroup Conflict was measured with four items by Jehn (1995), coded 1=strongly disagree, 5=strongly agree The items were 1) Members within different subgroups fight about how to do the work. 2) Members within different subgroups disagree about the process to get the work done. 3) There is disagreement about task responsibilities within different subgroups. 4) There are frequent disagreements about who should do what within different subgroups
The measure had excellent reliability (α= .92).

Supervisor Support was measured using three items by Yoon and Lim (1999), coded 1=strongly disagree, 5=strongly agree. The items were: 1). My immediate supervisor can be relied upon when things get tough on my job. 2) . My supervisor is willing to listen to my job-related problems. 3). My supervisor really does not care about my well-being (this one is reverse coded. The measure had adequate reliability (α= .78).

Negative Affect was measured using five items of the Negative Affect Schedule by Watson, Clark, and Tellegen (1988), coded 1=very slightly, 5=extremely. The five items were from a shorter version used by Song, Foo, and Uy (2008) with sample items being "upset" and "irritable". The measure had good reliability (α= .83).

Job Satisfaction was measured using three items by Judge, Bono, Erez, and Locke (2005), coded 1=strongly disagree, 5=strongly agree. A sample question was "Most days I am enthusiastic about my work". The measure had good reliability (α= .87).

We control for the following variables: *Education* (1=high school, 2=technical college, 3=university degree, 4=postgraduate) and *Team Tenure* (in years). We suggest more educated employees are likely to have greater job challenges and thus be more satisfied in their job, and those with longer team tenure to have greater job satisfaction.

Measurement Models

We confirm the nature of the various study constructs using confirmatory factor analysis in SEM with AMOS 24. For SEM studies, Williams, Vandenberg, and Edwards (2009) offer the following goodness-of-fit indexes and their thresholds: (1) the comparative fit index (CFI ≥.95), (2) the root-mean-square error of approximation (RMSEA ≤.08), and (3) the standardized root mean residual (SRMR ≤.10). The hypothesized measurement model and an alternative model are shown in Table 1. Overall, the hypothesised measurement model was the best fit for the data. Models 2 and 3 tested alternative measurement constructs and these resulted in a poorer fit (Hair, Black, Babin, & Anderson, 2010). Thus, we confirm the distinct nature of our study constructs.

Analysis

Hypotheses 1 to 5 were tested using SEM in AMOS including mediation effects. We follow Haar, Russo, Sune, and Ollier-Malaterre (2014), and run the final model with the interaction effects based on the findings of the mediation effects.

Table 1. Results of Confirmatory Factor Analysis

Model	Model Fit Indices					Model Differences			
	χ^2	df	CFI	RMSEA	SRMR	χ^2	Δdf	p	Details
Model 1	141.9	98	.96	.06	.07				
Model 2	397.1	101	.74	.15	.17	255.2	3	.001	Model 1 to 2
Model 3	299.7	101	.82	.12	.12	157.8	3	.001	Model 1 to 3

Model 1=Hypothesised 4-factor model: supervisor support, intragroup conflict, negative affect and job satisfaction.
Model 2=Alternative 4-factor model: supervisor support, intragroup conflict and negative affect <u>combined</u> and job satisfaction.
Model 3=Alternative 3-factor model: supervisor support and intragroup conflict <u>combined</u>, negative affect and job satisfaction.

Results

Descriptive statistics for the study variables are shown in Table 2. Table 2 shows that supervisor support is significantly correlated with intragroup conflict (r= -.35, p<.01), negative affect (r= -.39, p<.01), job satisfaction (r= .30, p< .01) and intragroup conflict is significantly correlated with negative affect (r= .28, p<.01) and job satisfaction (r= -.25, p< .01). Finally, negative affect is significantly correlated with job satisfaction (r= -.36, p< .01).

Structural Models

A number of alternative structural models were tested, to determine the most optimal model based on the data, and results are shown in Table 3. Overall, the direct effects model (model 1) and the full mediation model (model 2) are significantly worse fits to the data compared to the partial mediation model (Hair et al., 2010). Overall, with the control variables included, the structural model is still robust and meets the minimum goodness-of-fit indexes noted above (Williams et al., 2009): χ^2 (df) = 150.8 (107), CFI=.96, RMSEA=.06, and SRMR=.07.

Aligned with the recommendations of Grace and Bollen (2005), unstandardised regression coefficients are presented in Table 4. Table 4 shows that in model 1 (direct effects model), there are consistent effects from supervisor support, being significantly related to intragroup conflict (path coefficient = -.35, p<.001), negative affect (path coefficient = -.37, p<.001), and job satisfaction (path coefficient = .35, p<.001). This supports Hypotheses 5a, 5b and 5c. Model 3 was found to be the best fitting model and this confirmed that when negative affect is included as a mediator, it partially mediates the effects of intragroup conflict on job satisfaction. In model 2, intragroup conflict was negatively related to job satisfaction (path coefficient = -.27, p<.001) and this reduced to path coefficient = -.15 (p<.05), when negative affect is included as a mediator. Furthermore, intragroup conflict was related to negative affect (path coefficient = .25, p<.001), and these effects support Hypotheses 1, 2 and 3. Finally, Hypothesis 4 related to the moderating effects of supervisor support on intragroup conflict were tested, and this was supported towards job satisfaction only (path coefficient = .06, p<.05) – supporting Hypothesis 4b. We graphed the interaction effects (Figure 2) to allow understanding of the significant interaction.

The interaction shows that at low levels of intragroup conflict respondents score high levels of job satisfaction, although respondents with low levels of supervisor support report higher levels than respondents with high supervisor support. However, at high levels of intragroup conflict respondents report a drop in job satisfaction with those with low supervisor support reporting a much more significant drop and ultimately the lowest levels of job satisfaction. The decrease in job satisfaction is much more modest for respondents with high supervisor support. supporting our hypothesis that supervisor support would buffer the detrimental effects of intragroup conflict on job satisfaction.

Overall, the models account for modest amounts of variance towards intragroup conflict (r^2 = .17), slightly higher levels of negative affect (r^2 = .24), and larger amounts of variance for job satisfaction (r^2 = .33).

Table 2. Correlations and Descriptive Statistics of Study Variables

Variables	M	SD	1	2	3	4	5	6
1. Education	6.1	8.2	--					
2. Team Tenure	3.4	.90	-.00	--				
3. Supervisor Support	3.5	.96	-.09	-.04	--			
4. Intragroup Conflict	3.9	.87	-.10	-.34**	-.35**	--		
5. Negative Affect	4.1	.80	.04	.12	-.39**	.28**	--	
6. Job Satisfaction	3.9	.79	-.27**	.18	.30**	-.25**	-.36**	--

N=130, *p<.05, **p<.01

Table 3. Model Comparisons for Structural Models

Model	Model Fit Indices					Model Differences			Details
	χ^2	df	CFI	RMSEA	SRMR	χ^2	Δdf	p	
Model 1	163.8	109	.95	.06	.09				
Model 2	161.9	109	.95	.06	.10	1.9	0	nil	Model 2 to 1
Model 3	150.8	107	.96	.06	.07	13.0	2	.01	Model 3 to 1
						11.2	2	.05	Model 3 to 2

All models include control variables: Education and Team Tenure covary with the other variables.

Model 1 = A direct effects model where supervisor support predicts intragroup conflict, negative affect and job satisfaction.
Model 2 = A full mediation model where supervisor support predicts intragroup conflict, and intragroup conflict predicts negative affect, and negative affect predicts job satisfaction.
Model 3 = A partial mediation model where supervisor support predicts, intragroup conflict and both predict negative affect and job satisfaction, and finally negative affects predicts job satisfaction.

Table 4. Final Structural Model Path Results

Variables	Unstandardised path coefficient	
	Direct Effects Only (Model 1 + 2)	Partial Mediation (Model 3)
Controls:		
Education → Job Satisfaction	-.17**	-.19**
Team Tenure → Job Satisfaction	.02**	.02*
Model 1		
Supervisor Support → Intragroup Conflict	-.35***	-.33***
Supervisor Support → Negative Affect	-.37***	-.25**
Supervisor Support → Job Satisfaction	.35***	.25**
Model 2		
Intragroup Conflict → Job Satisfaction	-.27***	-.15*
Model 3		
Intragroup Conflict → Negative Affect		.25***
Negative Affect → Job Satisfaction		-.32***
Interaction Effect		
Intragroup Conflict x Supervisor Support → Job Satisfaction		.06*
r^2 Values:		
Intragroup Conflict		.17
Negative Affect		.24
Job Satisfaction		.33

*p< .05, **p< .01, ***p< .001.

Note: we include Model 1 (direct effects model) to indicate the mediation effect of negative affect on relationships.

Figure 2. Interaction between Intragroup Conflict and Supervisor Support with Job Satisfaction as the Dependent Variable
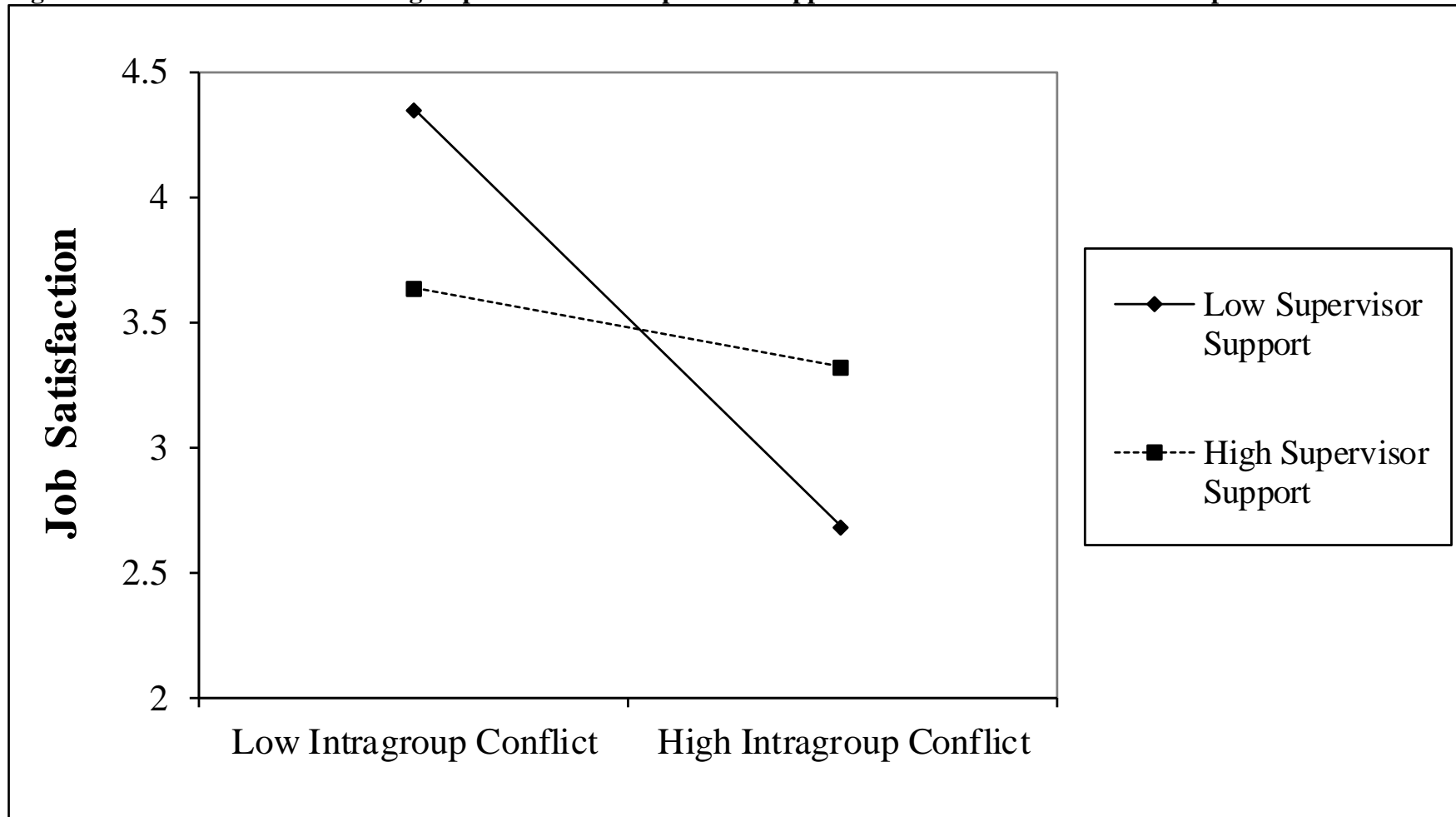
Discussion

The present study contributes to the literature in several ways. It adds strength to the importance of intragroup conflict, providing useful insights into the effects, and finding it is a strong predictor of job satisfaction, although better understood as working through negative affect. In addition, we find that supervisor support is a significant antecedent of intragroup conflict, and by including negative affect as a mediator, and finding partial mediation effects towards job satisfaction, we better understand the process of intragroup conflict. In the present study, this suggests a supervisor who provides support to workers provides useful benefits (Way et al., 2016; Haar & Roche, 2008), such as reducing the conflict that occurs within a team, and in turn, this intragroup conflict leads individuals to negative moods, which in turn leads less satisfaction with the job. In addition, supervisor support is still directly related to job satisfaction, highlighting its important influence. The sophisticated structural equation modelling allows us to explore different models and determine that our final model – with partial mediating effects from negative affect – and supervisor support moderating, was a superior fit to the data.

The finding of mediation effects from negative affect provides us with greater knowledge and insight around the process by which employees who have conflict around their team, are likely to experience worse moods and then be less satisfied in their jobs. It also confirms the outcomes – particularly job satisfaction – from a New Zealand sample, and supports similar findings internationally (Jehn, 1995, 1997). It confirms Jehn et al. (2008) suggestion that negative affectivity might be a useful mediator for exploring the influence of intragroup conflict on job satisfaction. This also reinforces the emotional state aligned with job satisfaction as suggested by Locke (1969). Importantly, it builds our understanding of antecedents of intragroup conflict, and highlights the important role that supervisors may play – when being supportive – in the way that teams work and maintain stability (and create less conflict) within themselves. That said, the present study focused only upon supervisor support and other forms of support might also be relevant for future researchers, such as organisational support (Eisenberger, Huntington, Hutchison, & Sowa, 1986).

In addition, the benefits of supervisor support were found to extend beyond direct effects and also included moderating effects, which replicates buffering effects found in other studies (Cohen & Willis, 1985; Haar & Roche, 2008). Our interaction effects showed that when intragroup conflict was high, respondents with low supervisor support reported the lowest levels of job satisfaction, and these levels were, on average, significantly lower than reported by employees with high supervisor support. Thus, we find supervisor support not only has direct effects – towards reducing intragroup conflict and negative affect, and enhancing job satisfaction – but also by interacting with intragroup conflict. Thus, the present study makes a number of contributions regarding supervisor support, intragroup conflict, and the process by which intragroup conflict influences job satisfaction.

Implications

Job Satisfaction is a fundamental area of focus for organisations and researchers, and has been found to be an important predictor of job performance (Judge & Bono, 2001; Judge et al., 2001). The present study emphasises the importance of intragroup conflict and highlights the detrimental effects that fighting within a team can play, including team performance (Jehn, 1995, 1997). Given conflict is interpretive and dynamic, one implication of these findings is the important role that supervisors play. Supervisor support had direct effects – towards

reducing intragroup conflict and negative affect, and enhancing job satisfaction – but also by interacting with intragroup conflict; suggesting the supervisor might play a pivotal role in interpreting, managing, and preventing conflict contagion (Jehn, et. al 2013). The nature of supervisor support (Yoon & Lim, 1999) suggests that showing interest in difficulties, listening to problems and demonstrating care about well-being, and indicates that interpersonal communication skills such as attentive listening are important attributes for supervisors. This would suggest that training and development for supervisors around managing the intragroup conflict of their teams might provide valuable results towards a number of outcomes including satisfaction and performance.

Given supervisor support buffered negative affect associated with intragroup conflict - such as members fighting about tasks, how work is done, disagreements about processes, responsibilities and roles (Jehn, 1995) - infers conflict management skills may be important dimensions of the supervisor toolkit. De Dreu and Weingart (2003b) suggested the way to manage intra-group conflict was characterized by collaboration rather than contention to "minimize if not reverse the negative effects of task conflict" (p. 747), and Greenwood (2016) claimed reflexive conversations between leaders and team members protected against conflict contagion (Jehn, et al., 2013) associated with negative emotional responses to conflict. Overall, we suggest a key to managing intragroup conflict may lie with supervisors and providing them with enhanced tools to manage better.

Future Research

Future studies might want to explore additional mediators. For example, while the present study focused on negative affect, Watson et al. (1985) also addresses the positive side of affectivity, and future studies might include that. Furthermore, other forms of support might be explored including organisational and co-worker support. For example, supervisor support might influence organisational support – which has meta-analytic support (Kossek, Pichler, Bodner, & Hammer, 2011) – and in turn these might influence intragroup conflict, affectivity and job satisfaction, which similarly has meta-analytic support (Rhoades & Eisenberger, 2002). Future studies might also explore these relationships at the team level, including intragroup conflict and support perceptions and thus a multi-level data approach would add to the understanding of these relationships. Finally, future studies might also seek to explore other antecedents of intragroup conflict including leadership styles and moderators including other team factors, such as group conflict norms (Jehn, 1995), as well as conducting longitudinal research, perhaps testing the effects of supervisor support pre- and post-training in conflict management.

Limitations

Like most studies, the present study does have some limitations particularly around the cross-sectional nature of data collection. Haar et al. (2014) notes that issues around common method variance (CMV) can be alleviated by using higher order statistical analyses, specifically using CFA to confirm the measures, and then SEM to analyse the data. This is because the CFA calculations could identify issues of CMV where constructs would begin to overlap and be indistinct. In addition, the present study tested moderation effects, which Evans (1985) asserts reduces the chances for CMV when significant interaction effects are found. Overall, our sample size is modest (n=130) although this is similar in the size of other New Zealand studies (e.g., Haar & Spell, 2001). Furthermore, our sample does have a good range in respondent occupations, education, ethnicity and sector, making the sample more generalizable to the New Zealand setting.

Conclusion

In conclusion, the present study sought to explore the role of intragroup conflict in influencing the job satisfaction of New Zealand employees, including a process model with an antecedent and mediator. While strong support was found for links between intragroup conflict and job satisfaction, analysis showed that supervisor support plays a key role in reducing intragroup conflict and negative affect, and building job satisfaction, with negative affect also having a mediating role. Furthermore, the moderating effects of supervisor support on intragroup conflict towards job satisfaction, builds on the direct effects of supervisor support, highlighting the key importance that supervisor support appears to play. The implications is that team and any accompanying conflict can be detrimental, although the role of supervisors appears to provide clear evidence of minimizing these negative links.

References

Acuna, S.T., Gomez, M., & Juristo, N. (2009). How do personality, team processes and task characteristics relate to job satisfaction and software quality? *Information and Software Technology, 51*: 627-639.

Amason, A.C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of management journal*, *39*(1): 123-148.

Amason, A.C., & Schweiger, D.M. (1997). The effects of conflict on strategic decision making effectiveness and organizational effectiveness. In C. De Dreu & E. Van De Vliert, E. (Eds.), *Using Conflict in Organizations* (pp.101-150). London, UK: Sage Publications Inc.

Blake, R.R., Mouton, J. ., Barnes, L.B., & Greiner, L.E. (1964). Breakthrough in organization development. *Harvard Business Review, 42(*6): 133-155.

Carnevale, P.J., & Probst, T. M. (1998). Social values and social conflict in creative problem solving and categorization. *Journal of Personality and Social Psychology*, *74*(5): 1300-1309.

Cohen, S. & Willis, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*: 310-357.

Connolly, J.J., & Viswesvaran, C. (2000). The role of affectivity in job satisfaction: A meta-analysis. *Personality and Individual Differences, 29*(2): 265-281.

Costantino, C. A. & Merchant, C. S. (1996). *Designing Conflict Management Systems*. San Francisco, CA: Jossey-Bass

Cox, K.B. (2003). The effects of intrapersonal, intragroup, and intergroup conflict on team performance effectiveness and work satisfaction. *Nursing Administration Quarterly, 27*(2): 153-163.

Cropanzano, R., James, K., & Konovsky, M.A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior, 14*(6): 595-606.

De Church, L.A., Mesmer-Magnus, J.R. & Doty, D. (2013). Moving beyond relationship and task conflict: toward a process-state perspective. *Journal of Applied Psychology*, *98*(4): 559-578.

De Dreu, C. K. W., & Van de Vliert, E. (1997). *Using Conflict in Organizations*, London, UK: Sage Publications Inc.

De Dreu, C.K.W., & Van Vianen, A.E.M. (2001). Managing relationship conflict and the effectiveness of organizational teams. *Journal of Organizational Behavior*, *22*(3): 309-328.

De Dreu, C.K.W., Evers, A., Beersma, B., Kluwer, E. & Nuate, A. (2001). A theory-based measure of conflict management strategies in the workplace. *Journal of Organizational Behavior*, 22(6): 645-668.

De Dreu, C.K.W., Van Dierendonck, D. & Dijkstra, M.T.M. (2004). Conflict at work and individual well-being. *International Journal of Conflict Management*, 15(1): 6-26.

De Dreu, C. K., & Gelfand, M. J. (2008). *The Psychology of Conflict and Conflict Management in Organizations*. New York, NY: Lawrence Erlbaum Associates.

De Dreu, C.K. (2008). The virtue and vice of workplace conflict: Food for (pessimistic) thought. *Journal of Organizational Behavior, 29*(1): 5-18.

De Dreu, C.K., & Weingart, L.R. (2003a). A contingency theory of task conflict and performance in groups and organizational teams. In M.A. West, D. Tjosvold, & K.G. Smith, (Eds.), *International Handbook of Organizational Teamwork and Cooperative Working* (pp. 151-166). West Sussex, UK: John Wiley & Sons Ltd.

De Dreu, C.K., & Weingart, L.R. (2003b). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology, 88*(4): 741-749.

De Wit, F.R.C., Greer, L.L. & Jehn, K.A. (2012). The paradox of intragroup conflict: A meta-analysis. *Journal of Applied Psychology*, *97*(2): 360-390.

Deutsch, M. (1973). *The Resolution of Conflict: Constructive and Destructive Processes*. New Haven. CT: Yale University Press.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3): 500-507.

Evans, M. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes, 36*(3): 305–323.

Fjermestad, J., & Hiltz, S.R. (1999). An assessment of group support systems experiment research: Methodology and results. *Journal of Management Information Systems,* 15(3): 7-149.

Friede, A., & Ryan, A.M. (2005). The importance of the individual: How self-evaluations influence the work-family interface. In E. E. Kossek & S. J. Lambert (Eds.), *Work and Life Integration: Organizational, Cultural, and Individual Perspectives* (pp. 185–200). New Jersey: Lawrence Erlbaum Associates Ltd.

Gilkey, R.W., & Greenhalgh, L. (1986). The role of personality in successful negotiating. *Negotiation Journal, 2*(3): 245-256.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, *29*(4): 499-517.

Grace, J.B. & Bollen, K.A. (2005). Interpreting the results from multiple regression and structural equation models. *Bulletin of the Ecological Society of America*, *86*(4): 283-295.

Greenwood, G.A. (2016). *Transforming Employment Relationships? Making sense of conlict management in the workplace*. Unpublished PhD Thesis. Auckland University of Technology. Auckland: New Zealand.

Guetzkow, H., & Gyr, J. (1954). An analysis of conflict in decision-making groups. *Human Relations, 7*(3): 367-382.

Haar, J.M. & Roche, M. (2008). Employee perceptions of organisational support for work-family issues and outcomes: The moderating effects of supervisor support. *New Zealand Journal of Human Resources Management, 8*: 1-27.

Haar, J.M., Russo, M., Sune, A., & Ollier-Malaterre, A. (2014). Outcomes of work-life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal of Vocational Behavior*, *85*: 361–373.

Haar, J. & Spell, C. (2001). Examining work-family conflict within a New Zealand local government organization. *The New Zealand Journal of Human Resources Management*, *1*: 1-21.

Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010). *Multivariate Analyses* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Janis, I.L. (1982). *Groupthink: Psychological Studies of Policy Decisions and Fiascoes* (2nd ed.). Boston, MA: Houghton Mitflin.

Janssen, O., Van De Vliert, E., & Veenstra, C. (1999). How task and person conflict shape the role of positive interdependence in management teams. *Journal of Management*, *25*(2): 117-141.

Jehn, K. (1994). Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, *5:* 223-238.

Jehn, K. (1995). A multimethod examination of the bene fits and detriments of intragroup conflict. *Administrative Science Quarterly*, *40*: 256-282.

Jehn, K., Northcraft, G., & Neale, M. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, *44*: 741-763

Jehn, K.A. (1997). A qualitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly*, *42*(3): 30–557.

Jehn, K.A., & Mannix, E.A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal, 44*(2): 238-251.

Jehn, K., Rispens, S., Jonsen, K. & Greer, L. (2013). Conflict contagion: A temporal perspective on the development of conflict within teams. *International Journal of Conflict Management*, *24*(4): 352-373.
Jehn, K.A., Greer, L.L., Levine, S., & Szulanski, G. (2008). The effects of conflict types, dimensions, and emergent states on group outcomes. *Group Decision and Negotiation,   17*: 465-495.

Judge, T.A., & Bono, J.E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1): 80-92.

Judge, T.A., Bono, J.E., Erez, A., & Locke, E.A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology, 90*(2): 257-268.

Judge, T.A., Thoresen, C.J., Bono, J.E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3): 376-407.

Kafetsios, K., & Zampetakis, L.A. (2008). Emotional intelligence and job satisfaction: Testing the mediatory role of positive and negative affect at work. *Personality and Individual Differences, 44*(3): 712-722.

Kammeyer-Mueller, J., Wanberg, C., Rubenstein, A., & Song, Z. (2013). Support, undermining, and newcomer socialization: Fitting in during the first 90 days. *Academy   of Management Journal, 56*(4): 1104-1124.

Kossek, E.E., Pichler, S., Bodner, T., & Hammer, L.B. (2011). Workplace social support and work–family conflict: A meta-analysis clarifying the influence of general and work–family-specific supervisor and organizational support. *Personnel Psychology, 64*(2): 289-313.

Lax, D., A., & Sebinus, J., K. (1986). Interests: the measure of negotiation, *Negotiation Journal*, *2*(1): 73-92.

Lee, R.T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of thethree dimensions of job burnout. *Journal of Applied Psychology, 81*(2): 123-133.

Levine, J.M., Resnick, L.B., & Higgins, E.T. (1993). Social foundations of cognition. *Annual Review of Psychology, 44*(1): 585-612.

Lewicki, R.J., Saunders, D.M. & Barry, B. (2016). *Negotiation* (7th ed.). Boston, MA: McGraw-Hill.

Locke, E.A. (1976). The nature and causes of job satisfaction. In, M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology* (pp. 1,297–1,349). Chicago, IL: Rand McNally.

Locke, E.A. (1969). What is job satisfaction? *Organization Behavior Human Performance*, *4*, 309-336.

McLaney, M.A., & Hurrell Jr, J. J. (1988). Control, stress, and job satisfaction in Canadian nurses. *Work & Stress, 2*(3): 217-224.

March, J.G. & Simon, H.A. (1958). *Organizations*. New York, NY: John Wiley & Sons

Medina, F. J., Munduate, L., Dorado, M. A., Martínez, I., & Guerra, J. M. (2005). Types of intragroup conflict and affective reactions. *Journal of Managerial Psychology, 20*(3/4): 219-230.

Ng, T.W., & Sorensen, K.L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. *Group & Organization Management, 33*(3): 243-268.

Neale, M.A., & Bazerman, M.H. (1992). Negotiator cognition and rationality: A behavioral decision theory perspective. *Organizational Behavior and Human Decision Processes*, *51*(2): 157-175.

Neale, M.A., & Northcraft, G.B. (1991). Behavioural negotiation theory-a framework for conceptualizing dyadic bargaining. *Research in Organizational Behavior*, *13*: 147-190.

Nemeth, C.J. (1986). Differential contributions of majority and minority influence. *Psychological Review, 93*(1): 23-32.

Nifadkar, S., Tsui, A.S., & Ashforth, B.E. (2012). The way you make me feel and behave: Supervisor-triggered newcomer affect and approach-avoidance behavior. *Academy of Management Journal, 55*(5): 1146-1168.

Pondy, L.R. (1967). Organizational conflict: Concepts and models. *Administrative Science Quarterly*, *12*(2): 296–320.

Pruitt, D.G., & Rubin, J.Z. (1986). *Social Conflict: Escalation, Stalemate, and Settlement.* New York, NY: Random House.

Putnam, L. (2004). Transformations and critical moments in negotiations. *Negotiation Journal*. *20*(2): 275-295.

Rahim, M.A. (1983). A measure of styles of handling interpersonal conflict. *The Academy of Management Journal*, *26*(2): 368-375.

Rahim, M.A. (2002). Toward a theory of managing organizational conflict. *International Journal of Conflict Management, 13*(3): 206-235.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4): 698-714.

Saavedra, R., Earley, P.C., & Van Dyne, L. (1993). Complex interdependence in task-performing groups. *Journal of Applied Psychology, 78*(1): 61-72.

Schwenk, C.R. (1990). Conflict in organizational decision making: An exploratory study of its effects in for-profit and not-for-profit organizations. *Management Science, 36*(4): 436-448.

Simons, T.L., & Peterson, R.S. (2000). Task conflict and relationship conflict in top management teams: the pivotal role of intragroup trust. *Journal of Applied Psychology, 85*(1): 102-111.

Song, Z., Foo, M. & Uy, M.A. (2008). Mood spillover and crossover among dual-earner couples: A cell phone event sampling study. *Journal of Applied Psychology, 93*(2): 443-452.

Spell, C., Bezrukova, K., Haar, J. & Spell, C. (2011). Faultlines, fairness, and fighting: A justice perspective on conflict in diverse groups. *Small Group Research, 42*(3): 309-340.

Stoeva, A.Z., Chiu, R.K., & Greenhaus, J.H. (2002). Negative affectivity, role stress, and work-family conflict. *Journal of Vocational Behavior, 60*(1): 1-16.

Thomas, K. (1976). Conflict and conflict management. In M. D. Dunnett (ed.), *Handbook of Industrial and Organizational Psychology* (pp.889-935). Chicago, IL: Rand-McNally.

Thomas, K.W. & Kilmann, R.H. (1977). Developing a forced-choice measure of conflict behavior: The "Mode" instrument. *Educational and Psychological Measurement, 37*(2), 309-325.

Wall Jr, V.D., & Nolan, L.L. (1986). Perceptions of inequity, satisfaction, and conflict in task-oriented groups. *Human Relations, 39*(11): 1033-1051.

Walton, R.E., & Dutton, J.M. (1969). The management of interdepartmental conflict: A model and review. *Administrative Science Quarterly*, *14*(1): 73-84.

Watson, D. (2000). *Mood and Temperament*. New York: Guilford Press.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6): 1063-1070.

Way, K.A., Jimmieson, N.L., & Bordia, P. (2016). Shared perceptions of supervisor conflict management style: A cross-level moderator of relationship conflict and employee outcomes. *International Journal of Conflict Management*, *27*(1): 25-49

Williams, L.J., Vandenberg, R.J. & Edwards, J.R. (2009). Structural equation modelling in Work and Family Researchers Network, 2010–2012 management research: A guide for improved analyses. *The Academy of Management Annals*, *3*(1): 543-604.

Wong, K.S., Cheuk, W.H., & Rosen, S. (2000). The influences of job stress and supervisor support on negative affects and job satisfaction in kindergarten principals. *Journal of Social Behavior and Personality, 15*(1): 85-98.

Yoon, J., & Lim, J. C. (1999). Organizational support in the workplace: The case of Korean hospital employees. *Human Relations, 52*(7): 923-945.