FOCAL WORK CONFLICT

Work Conflict: Meaning, Measurement, and Management

by
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Many people have asked me why I undertook a PhD so late in my career. The simple answer is that my family believed in me. This meant supporting me even when the journey seemed unending and unbearable, and sacrificing their own interests so that I could realize this crazy dream. I was moved by the strength of my mother and late father, Shirley and Babe. I was supported by my friends and extended family, especially Dawn and Kate, who listened, reassured, and advised me along the way. I could not have completed this work without the love and support of my adult children and their life partners, Brennan, Holly, Erin, Antoni, Conor, and Nina. Finally, and most importantly, Sean Dempsey, this is because of you.

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Abstract

Scholars have explored conflict work conflict for more than 70 years and yet the basis for this research—a definition and severity scale—are not available. The absence of such a measure limits research linking the psychological experience of work conflict—how individuals think, feel, and behave—to employee functioning and health. To address this gap, the present research reviewed prior theory as a foundation for four studies. Study I was a scale development study with 19 cross-industry workers who recalled critical incidents. Thematic analysis supported the proposed definition and scale development. Study II was a scale validation study conducted with 1029 healthcare and university workers. Quantitative results suggested that a two-factor solution fit the data better than the proposed 3-factor solution. In addition, qualitative analysis of conflict descriptions suggested that the scale was incomplete. Study III was a second scale validation study with 268 workers who were contemporarily experiencing a conflict. Exploratory structured equation modeling supported a 3-factor model. Results indicated that focal work conflicts predict strain even after accounting for other job stressors and intragroup conflict. Rumination, emotion regulation, and psychological distancing each partially mediated the relationship between focal work conflict and strain. The quality of social interactions and one's power relative to one's conflict partner moderated the focal work conflict-strain relationship. Finally, Study IV was a diary study with 24 workers who were contemporarily in conflict and participating in conflict coaching. Results provide evidence that conflict coaching is beneficial. Taken together, the four studies suggest that work conflict is a state of *social discord* (i.e., norm violation or interpersonal friction) characterized by *relational negativity* (i.e., negative emotions and relational dissonance) that poses a *threat* to some core human need or state (i.e., one's interests, identity, security, or sense of inclusion).

December 6, 2018

Work Conflict: Meaning, Measurement, and Management

Managing work conflict is key to organizational health. Handled skillfully, work conflict can lead to positive outcomes such as high-quality decisions (deWit, Jehn, & Scheepers, 2013). However, most research indicates that work conflict is a potent job stressor (De Dreu & Weingart, 2003; deWit, Greer, & Jehn, 2012). Work conflict has been the focus of an extensive field of research (Gupta, Boyd, & Kuzmits, 2011). Despite copious investigations, however, the most fundamental questions about work conflict remain unanswered. What is work conflict? Does work conflict lead to strain (i.e., psychological and physical health symptoms, reduced functioning at work and home) or vice versa? How can organizations develop the capacity to effectively manage conflict? The purpose of this research is to add to the body of literature that addresses these questions by defining work conflict as a psychological state, exploring relationships between work conflict and strain, and investigating the efficacy of an in-house conflict coaching service.

Work conflict is prevalent in organizations around the world. A study of nine countries in North America, South America, and Europe found that employees spend from 0.9 to 3.3 days per month dealing with unproductive conflict (CPP, 2008). In addition, approximately 20% of managers' time is spent dealing with conflicts (Thomas & Schmidt, 1976). The loss of productive time represents only a fraction of the impact because a significant proportion of absenteeism and at least one-half of voluntary turnover have been attributed to work conflict (CPP, 2008; Dana, 1984). These negative effects are not limited to organizational members. In the health care sector, for example, work conflict has been found to hinder patient care (e.g., minor delays in treatment and

medication delivery; CDHA, 2010). In addition to these organizational and patient impacts, work conflict is a prevalent source of employee stress across industries and around the world (Spector & Bruk-Lee, 2008). Work conflict is associated with job frustration, generalized anxiety, psychosomatic complaints, reduced job satisfaction (Spector, Dwyer & Jex, 1988), and strain (Sonnentag, Unger, & Nägel, 2013). Tragically, work conflict also contributes to suicide (Leymann, 1990), violence, and homicide (Axelrod & Johnson, 2005). Thus, a vibrant field of research is devoted to understanding and managing work conflict.

In preparation for a recent meta-analysis, de Wit et al. (2012) located approximately 300 peer-reviewed work conflict articles published from 1990 to 2010. Work conflict is the focus of research at the individual, group, and organizational level in virtually every industry and in many countries around the world (see de Wit et al., 2012). Several organizations, such as the Alternative Dispute Resolution Institute of Canada, offer conflict management services to individuals and organizations (ADR, 2018). Many popular publications, such as *Difficult Conversations* (Stone, Patton, & Heen, 2000) and *Turning Conflict into Profit* (Axelrod & Johnson, 2005), offer conflict management advice. Yet despite the substantial focus on this field, questions about the meaning, measurement, and management of work conflict persist.

Meaning

Over the past 70 years, research exploring work conflict has focused on the interpersonal temporal process rather than examining the psychological state of being "in conflict" (for an exception see Deutsch, 1949). In his influential discourse, Pondy (1967) defined work conflict as a sequence of encounters between individuals that gradually

escalate to a state of disorder. A decade later, Thomas (1976) reviewed the literature and described work conflict as "the process which [sic] begins when one party perceives that another has frustrated, or is about to frustrate some concern of his" (p. 891). Similarly, in their literature review, Wall & Callister (1995) described work conflict as "a process in which one party perceives that its interests are being opposed or negatively affected by another party" (p. 515). De Dreu (2008) noted that work conflict "emerges when one party—be it an individual or group of individuals—perceives its goals, values, or opinions being thwarted by an interdependent counterpart" (p. 6). Two recent meta-analyses summarized work conflict as "the process resulting from the tension between team members because of real or perceived differences" (De Dreu & Weingart, 2003, p. 741), and "the process emerging from perceived incompatibilities or differences among group members" (de Wit et al., 2012, p. 360). These historic and contemporary definitions are similar in that they describe the interpersonal transactions that *trigger* work conflict, but they fail to describe the cognitions, emotions, and behaviours that one experiences as work conflict. This leaves one to question: What does it mean to be in a *state* of conflict?

Measurement

To conduct the present research, I considered using two scales that are prominent in scholarly literature: Spector and Jex's (1998) Interpersonal Conflict at Work Scale (ICAWS) and Jehn's (1997) Intragroup Conflict Scale (ICS). The ICAWS is a 4-item individual-level scale designed to measure the frequency of interpersonal conflict at work (Spector & Jex, 1998). ICAWS was not suitable for the present research for two reasons. First, ICAWS confounds work conflict with workplace mistreatment (Spector & Bruk-

Lee, 2008). That is, only one ICAWS item is specific to the theoretic domain of work conflict (i.e., *How often do you get into arguments with others at work?*). Second, ICAWS assesses interpersonal conflict aggregated across conflict incidents whereas the present research aims to isolate the effects of a single *focal work conflict* (FWC).

The second prominent scale, the ICS, was designed to measure disagreements about task, process, and relational issues within teams and across one or more conflict incidents (Jehn, 1997; Jehn & Mannix, 2001). Researchers commonly use the ICS subscales to specify how different types of work conflict relate to team performance (Jehn, 2014). The ICS has four characteristics that make it unsuitable for the present research. First, the ICS subscales focus on conflicts among teammates who share some goal (Jehn, 2014) whereas the present research is not restricted to conflicts that occur within teams. Second, the ICS is a group-level measure (Jehn, 1997, Jehn & Mannix, 2001) whereas the present research is focused on individuals. Third, the ICS assesses intragroup conflict behaviours aggregated across multiple events whereas the present research focused on fluctuations in the severity of singular events. Fourth, researchers have identified several other conflict types beyond the three measured with the ICS scales (i.e., task, process, and relational), such as financial, political (Conlon & Jehn, 2009), and generational conflicts (Hochwarter, 2009. The present research aims to assess the severity of focal work conflicts irrespective of what the conflict is about (i.e., conflict type). Therefore, the ICS typographical subscales are not a good fit for the present research.

In summary, the ICAWS aggregates interpersonal conflict and workplace mistreatment at the individual level whereas the ICS aggregates three types of intra-team

conflicts at the group level. In contrast, the present research requires an individual-level measure of focal work conflicts and neither the ICS nor the ICAWS meet these specifications. I was unable to find such an instrument in the extant literature. Therefore, I developed a new scale to meet the needs of the present research, which ultimately examined an organizational conflict management intervention.

Management

A number of theorists suggest that because conflict is prevalent and burdensome to organizations and workers it is important to manage conflict such that its negative effects are minimized and its possible positive effects are realized (Axelrod & Johnson, 2005; Gupta, Boyd, & Kuzmits, 2011). However, work conflict is not easily resolved by individuals in dispute: approximately 30% of workers seek help managing work conflict (Warren Sheppel, 2002). As a result, organizations are increasingly establishing in-house conflict management programs that offer informal assistance to employees (Lipsky, Seeber, & Fincher, 2003). These programs employ specialists who use a wide range of techniques to support the resolution of disputes and build conflict competencies (Lipsky et al., 2003).

A basic assumption for establishing in-house conflict management programs is that work conflict *causes* strain and deterioration in job performance. The direction of these relationships has not been established, however (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011; Spector & Bruk-Lee, 2008), and some evidence suggests that strain causes work conflict (e.g., Smith et al., 2002). Although theorists point out that a cyclical pattern (i.e., work conflict causes strain, which in turn causes more work conflict, etc.) is a more realistic depiction of the work conflict/strain relationship (Andersson & Pearson,

1999; Bush, 2001), research exploring directionality is needed to estimate the relative strengths of work conflict and strain (Nixon et al., 2011). In addition, evidence of directionality would aid organizations in justifying in-house conflict management programs as worthy investments in organizational health. That is, if work conflict leads to strain, then funding in-house conflict management programs is warranted. However, if strain leads to work conflict, then interventions intended to reduce work stressors are also likely to reduce work conflict, and leaders ought to invest in stress interventions. Thus, understanding the direction of the relationships among work conflict and strain has the potential to make a significant contribution to research and practice.

Summary

Conflict is a prevalent and impactful aspect of work life that engenders a rich field of research and practice, yet gaps remain. Few studies have linked fluctuations in conflict severity to strain and the field lacks a scale to measure focal work conflicts. Although conflict management programs are becoming more popular, empirical evidence investigating program effectiveness is lacking (Hicks, 2011; Lipsky et al., 2003). Directionality of the conflict/strain relationship remains undetermined and there is little exploration of how conflict management practitioners assist workers to reduce negative experiences, achieve positive outcomes, and develop skills. The present research addresses these gaps.

The Present Research

The present research consists of four studies that build on prior knowledge to define the work conflict state, develop a new FWC scale, and examine the efficacy of conflict coaching. Study I was a scale development study that used classical test theory to

define the psychological state of work conflict and to develop a preliminary scale. Study

II was a validation study that examined a preliminary scale and indicated a need for

additional items to augment the scale. Study III was a validation study for the final scale

and examined variables that influence the relationship between work conflict and strain.

Finally, Study IV was a diary study that examined an in-house conflict coaching service.

Taken together, findings from these four studies contribute to the field of research by

providing a theoretic model of work conflict, a psychometrically sound measure of focal

work conflict severity, evidence of how conflict coaching helps individuals reduce

conflict severity, and by exploring the causal direction in the relationship between

conflict and strain.

Study I

The goals of Study I were to explore the conceptual meaning of work conflict and

to develop a focal work conflict scale. To meet this goal I built upon prior research to

propose four necessary and jointly sufficient conditions of work conflict.[1] Then I

gathered critical incidents of work conflict and analyzed qualitative data to evaluate this

new definition. Finally, I generated preliminary survey items for scale validation.

A review of the theoretic and empirical research on work conflict can be

summarized as consisting of four conditions: social discord; negative affect; relational

dissonance; and threat. These conditions are not distinct categories: they reflect shared

[1] In this work, a condition is necessary if it *must* be present for one to perceive that he or she is experiencing a work conflict. Jointly sufficient means that if all of the conditions are present, then work conflict will also be present.

attributes of prominent work conflict definitions. A discussion of each of these four

conditions follows.

Social Discord

Social relations theory posits that interpersonal attitudes form the foundation for

social interactions (Deutsch, 1949). For example, a sense of cooperation among

coworkers forms the foundation for cooperative interactions (Deutsch, 1994). During

work conflicts, conflictual parties develop negative attitudes (e.g., suspicion and hostility)

toward one another (Bush, 2001). Thus, the social interactions of employees should be

marked with dysfunction such as unproductive arguing, disrespect, and poor

communication. Research supports this theory: work conflict is associated with reduced

cooperation (Hessel, 1981), poor quality work relationships (Meier et al., 2013),

interpersonal tension, and rejection (Baumeister & Leary, 1995; De Dreu & Gelfand,

2008). Thus, the first proposed condition of work conflict is social discord.

The term *social discord* describes the entire set of conflictual behaviours

manifested by individuals in dispute. Some of these social discord behaviours are easily

observed or overt (e.g., arguing), while other social discord behaviours are covert and

may be less obvious to an observer (e.g., ignoring). The social discordant behaviours

most commonly included in work conflict definitions are interpersonal disagreement,

interference, and interpersonal differences (Barki & Hartwick, 2004). Notably, Jehn and

her colleagues' intragroup conflict model depict work conflict as three types of

interpersonal disagreement and disharmony: task conflict (disagreements about how to do

work); process conflict (disagreements about who should do work); and relational conflict

(interpersonal tension or personality clashes; Jehn, 1994; Jehn, 1995). Interference is

opposition or obstruction that reduces one's effectiveness or blocks one's ability to

achieve a goal (Barki & Hartwick, 2004). Personal differences are conflictual behaviours

associated with diverse beliefs, values, or practices (De Dreu & Gelfand, 2008) expressed

during personal conflicts (Jehn, 1994), generational conflicts (Jackson, 2012), cultural

conflicts (Katz & Flynn, 2013), and ideological conflicts (Goldman, 2008). This prior

research leads to the following research questions:

> 1a: Is social discord a necessary condition of work conflict?

> 1b: How is social discord expressed during work conflict?

The theoretical basis for the remaining proposed conditions of work conflict is

found in the conservation of resources theory. The basic tenet of conservation of resource

theory is that individuals strive to secure and preserve things that they value (Hobfoll,

2001). Hobfoll (2001) uses evolutionary theory to explain that the distress individuals

experience as a result of lost or reduced access to resources has been instrumental to

survival because it drives individuals to restore the resources needed to sustain basic

human needs. This drive persists even in situations when equivalent resources are

abundant, an adaptation that developed to increase the likelihood of surviving and

thriving in a competitive and complex environment (Hobfoll, 2001). Applying this theory

to work conflict provides theoretical grounding for three additional conditions of work

conflict. Specifically, the second condition is distress, or *negative affect,* arising from the

perceived loss of resources, the third condition is the unease related to the impairment of

the conflicted work relationship, or *relational dissonance*, and the fourth condition is a

sense of *threat* that one experiences as a result of the perceived or actual loss of

resources. Empirical evidence supporting each of these conditions follows.

Negative Affect

The second proposed attribute of work conflict definitions is *negative affect.*
Negative affect has been observed as an attribute of work conflict since scientific interest
in the field began (Lewin, 1944; Pondy, 1967). Work conflict definitions characterize
emotions such as anger, frustration, tension, and hostility as central to the concept of
work conflict (Barki & Hartwick, 2004; Bruk-Lee & Spector, 2012; Jehn, 1997, Jones,
2000). This prior research leads to the following questions:

2a: Is negative affect a necessary condition of work conflict?

2b: What negative emotions do individuals experience during work conflict?

Relational Dissonance

The third proposed attribute of work conflict is *relational dissonance.* Empirical
evidence indicates that during work conflicts, disputants become aware and concerned
about their ability to work with one another (Jameson, 1999). As work conflicts escalate,
communication between disputants becomes unreliable and relationships are marked by
interpersonal tension and hostility (Deutsch, 1994). Indeed, Bush and Pope (2002) noted
that "conflict precipitates a crisis in human interaction that *parties find profoundly
disturbing*" (italics added; p. 72). Unlike social discord, which describes the (mostly)
observable conflictual behaviours expressed by disputants, relational dissonance is
introspective and describes one's going-over of the dysfunction and need for restoration
of one's relationship with a disputant. This prior research leads to the following
questions:

3a: Is relational dissonance a necessary condition of work conflict?

3b: In what ways do individuals experience relational dissonance during work

conflict?

Threat

The fourth proposed attribute of work conflict definitions is threat. Conflicts

intensify with tangible threats to one's basic needs (e.g., job loss; Maslow, 1943),

retaliation (Gilin, Maddux, Carpenter, & Galinsky, 2013), and violence (De Dreu, van

Dierendonck, & de Best-Waldhober, 2003). In addition, threats to one's ego (Baumeister

& Leary, 1995), identity (Brinkert, 2011), self-esteem (Volmer, Binnewies, Sonnentag, &

Niessen, 2012), and sense of belonging (Meier, Semmer, Elfering, & Jacobshagen, 2008)

relate to the severity of work conflict. This prior research leads to the following

questions:

4a: Is threat a necessary condition of work conflict?

4b: What do individuals perceive to be threatened during work conflict?

Proposed Definition of Work Conflict

The present review of prior scholarly and empirical work led to the proposition

that work conflict consists of four necessary and jointly sufficient conditions: (1) social

discord; (2) negative affect; (3) relational dissonance; and (4) threat. I propose the

following definition: *Work conflict is a state of social discord (e.g., adverse interaction,*

unwanted disagreement) characterized by negative affect (e.g., frustration, anger,

anxiety), the experience of relational dissonance (e.g., distress regarding the conflicted

relationship), and threat to a core human state (e.g., one's interests, identity, security,

social inclusion). This definition implies that social discord, negative affect, relational

dissonance, and threat are jointly sufficient conditions of work conflict. This definition leads to the fifth and final question:

> 5: Are any other conditions beyond social discord, threat, negative affect, and relational dissonance necessary for work conflict to exist?

Study I Method

Procedure

Classical test procedures described by Crocker and Algina (1986) and Hinkin (1995, 1998) were used to develop a focal work conflict scale. Study I was a qualitative study undertaken to complete the first stage of scale development, namely, item generation (Crocker & Algina, 1986; Hinkin, 1998). The item generation stage consisted of the six steps depicted in Table 1.

Step 1 consisted of semi-structured interviews with three conflict resolution practitioners who provide mediation and coaching services in healthcare, post-secondary education, and military organizations (see Appendix G for the practitioner interview guide). The purpose of these interviews was to determine whether the research-based definition was consistent with practice. Therefore, the interview questions were general and not based on the research literature. During Step 2, 19 participants provided their informed consent before responding to interview questions. Participants recalled 35 descriptions of work conflicts (see Appendix B for the interview guide) using critical incident technique procedures described by Flanagan (1954). That is, during face-to-face interviews, each of the 19 participants responded to prompts to recount one positive and one negative work conflict. The interview questions were not limited by the literature, rather, the prompts allowed participants to fully relay their thoughts, feelings, and

behaviours. At the end of each interview, participants critiqued the preliminary definition of work conflict. Braun and Clarke's (2006) six-phase inductive process (familiarization, generation of initial codes, searching for themes, reviewing of themes, definition and naming of themes, and reporting of findings) guided the qualitative analysis of critical incident data and assessment of the research questions.

During Step 3, organizational psychology scholars and I wrote survey items to represent the themes produced in the qualitative analyses (see Appendix C for item generation instructions). During Step 4, graduate students reviewed and revised the items for readability and grammar (see Appendix D for item review instructions). During Step 5, graduate students conducted a Q-Sort to group items and label the groupings (see Appendix E for sorting instructions). Finally, during Step 6, graduate students not previously involved in the scale development activities matched randomly ordered items with themes in a bottom-up analysis (see Appendix F for item matching instructions). Items that were sorted similarly or were needed to adequately represent the work conflict domain were retained. This final step resulted in 15 survey items for validation.

Participants

Critical incident interview participants were recruited using the snowball technique on Facebook and were not compensated for taking part in this research. Nineteen Caucasian workers (female = 12; ages 30 to 62 years; mean age = 47) representing several industries (e.g., healthcare, post-secondary education, insurance, government agencies, non-profit, telecommunications) with 2.5 to 34 years organizational tenure ($M = 13.13$, $SD = 10.20$), and working in various occupations (e.g., physician, administrative assistant, professor, sales associate) participated in this study.

Table 1.

Study I item generation and trial process steps.

#	Step	Sample Size	Participants	Appendix
1	*Gather Practitioner Knowledge* Interviewed conflict specialists for definitions of work conflict, observations of workers' perceptions and experiences, emotional, physical, learning, and relational outcomes, and relevant contextual factors.	3	Three in-house conflict management practitioners (female = 2) who provide training, coaching, and mediation services.	A
2	*Collect Critical Incidents* Interviewed participants for lead-up events, thoughts, feelings, behaviours, and consequences of work conflict. Conducted thematic analysis on interview transcriptions.	19	Nineteen (female = 12) employed adults who had experienced a work conflict.	B
3	*Item Writing* Wrote 3-5 items for each theme identified in Step 2, guided by the operational definition of work conflict and item writing specifications.	5	Three scholars (female = 2), one male practitioner with extensive knowledge of work conflict, and I.	C
4	*Item Review* Removed items that were inconsistent with work conflict themes and definition. Reviewed and rephrased items for clarity, readability, grammar, and to reduce potential bias.	3	Three female graduate students with specialized knowledge of work conflict and scale development.	D
5	*Item Sorting* Sorted items into groups and labeled the groupings.	5	Five graduate students (female = 3) with specialized knowledge of work conflict and scale development.	E
6	*Item Matching* Match randomly ordered items with themes identified during Step 2.	10	Ten graduate students (female = 7) not involved in prior scale development activities.	F

Study I Results

Audio files from the practitioner interviews were transcribed verbatim and imported into NVivo 10.0 for Mac (Beta). Thematic analysis resulted in three themes that were used to develop the critical incident interviews, namely: conflict emotions, work relationships, and threats. For example, because the practitioners indicated that their clients typically report negative emotions, I added a question about negative emotions to the critical incident interview guide.[2]

Critical Incidents

Each of the 19 participants was invited to recount one positive and one negative work conflict event. Three participants were unable to recall a work conflict that was a positive experience or yielded some positive outcome and relayed one or two negative critical incidents. Several characteristics of the 35 (16 positive and 19 negative) critical incidents were analyzed to assess the degree to which the critical incidents represented the work conflict domain. The critical incidents represented a variety of difficult behaviours from passive (e.g., interpersonal tension) to aggressive (e.g., yelling). The cases provided samples of short (a few hours) and long (several years) durations of work conflict and represented conflict within and across organizational levels. Participants reported 18 conflicts with peers, 5 conflicts with subordinates, 7 conflicts with supervisors, 1 conflict with a supervisors' boss, 2 conflicts with subordinate groups, and 2 conflicts with non-organizational members (1 client, 1 spouse of an organizational

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[2] Additional data from the practitioner interviews informed future studies.

member). The disputant dyads were the same sex (11 female-female, 4 male-male), mixed sexed (18 female-male). Dyad age differences ranged from 0 (same age) to 35 years. Participants reported that, in comparison with the disputant, they had more power (n = 11), less power (n = 13), or about the same amount of power (n = 11).

Before beginning the analyses, random sections of the transcript were compared with the audio files to ensure transcription accuracy. In Stage 1, transcripts were read and reread to become familiar with the data. In Stage 2, all sentences/phrases relevant to the definition of work conflict were parsed and ascribed a label to reflect their semantic meaning, yielding 110 codes (see Appendix H). In Stage 3, these codes were reviewed, revised, and combined, to reduce the number of codes to 78. In Stage 4, the 78 codes were categorized into 16 subthemes. In Stage 5, the subthemes were assessed to determine their fit with the proposed work conflict model. In Stage 6, a comprehensive report of the findings was written (see Appendix I) to synthesize the results in preparation to explore the research questions.

Social discord was evident in each of the 35 critical incidents, suggesting that social discord is a necessary condition of work conflict. The social discord condition/theme was comprised of 8 subthemes: bureaucratic; counter-productive work behaviours; illness; incivility; violation of norms; interpersonal relations; leadership/management; and team function. The bureaucratic subtheme consisted of social discord related to work activities (e.g., a participant reported interpersonal tension when her conflict partner removed the participant's web-page changes). The counter-productive work behaviour subtheme consisted of actions that caused harm to individuals or the organization (Marcus et al., 2016; e.g., a participant reported that she believed that

her organization's reputation would be harmed because her conflict partner served alcohol in the workplace in violation of policy). The illness subtheme consisted of mental and physical health problems that led to poor behaviour (e.g., a participant reported that her supervisor, who had been diagnosed with narcissistic personality disorder, continuously disregarded her needs). The incivility subtheme referred to rude behaviours with ambiguous intention for harm (Andersson & Pearson, 1999; e.g., participants reported that their conflict partners failed to respond to polite greetings). The violation of social norms subtheme consisted of behaviours that are unexpected within an organization's culture (e.g., a participant reported that her conflict partner wept in their workplace). The interpersonal relations subtheme referred to problematic social interactions (e.g., participants reported tensions related to email or verbal communication). The leadership and management subtheme consisted of poor or abusive supervision (e.g., participants reported that their supervisors/conflict partners withheld organizational resources). Finally, the team function subtheme referred to a lack of cohesiveness among team members (e.g., conflict related to team members taking opposing sides in a discussion). Taken together, these results suggest that social discord is expressed in a vast array of interactions.

In response to research question 2a, there was evidence of negative affect in all 35 cases, suggesting that negative affect is a necessary condition of work conflict. In response to research question 2b, the negative affect theme/condition comprised two subthemes: high-arousal negative emotions and low-arousal negative emotions. The high-arousal negative emotions subtheme refers to affective states of intense displeasure (Van Katwyk, Fox, Spector, and Kelloway, 2000; e.g., participants reported feeling

frustrated and angry). The low-arousal negative emotions subtheme refers to affective states of mild displeasure (Van Katwyk et al., 2000; e.g., participants reported feeling disappointed, confused, or inadequate).

In response to research question 3a, there was evidence of relational dissonance in each of the 35 cases. In response to research question 3b, the relational dissonance theme/condition comprised of three subthemes: aversion, distrust, and instability. The aversion subtheme referred to the perception of animosity toward a disputant (e.g., participants reported that they disliked or resented their conflict partner). The distrust subtheme referred to reduced trust (e.g., participants reported that they were unable to get over feeling betrayed). Finally, the instability subtheme referred to the perception of low psychological safety among disputants (e.g., participants relayed that they felt unsafe when interacting with the disputant).

In response to research question 4a, there was evidence of threat in 34 of 35 cases. Although the absence of threat in one case implies that threat may not be a necessary condition of work conflict, an explanation for this finding is provided in the Study I Discussion section below. In response to research question 4b, the threat theme/condition comprised of three subthemes: resources; others' strain; and quality of service. The resources subtheme referred to jeopardized personal and professional support/materials (as defined by Hobfoll, 2000; e.g., participants worried that they would lose their jobs. The other's well-being subtheme was a threat to the participants' self image as a caring individual (e.g., participants worried that their own conflictual behaviour was negatively affecting their conflict partner's psychological health). Finally, the quality of service

subtheme referred to perceived threats to the organization's continuing provision of quality service (e.g., participants worried that their clients might become dissatisfied).

To validate the above analysis, a research assistant trained on the proposed definition of work conflict used a deductive method, searching for evidence (sentences and phrases) of social discord, negative affect, relational dissonance, and threat within each critical incident transcript. This deductive analysis suggested that all four themes were present in every case. Taken together, the results of these analyses indicate that social discord, negative emotions, and relational dissonance, and threat are necessary conditions of work conflict.

To explore research question 5, all relevant critical incident interview data were parsed into 21 subthemes to determine whether any additional condition was necessary for work conflict to exist. The 16 subthemes reported above fit within the 4-condition model of work conflict (i.e., social discord, negative affect, relational dissonance, and threat), as shown in Figure 1. Analyses identified five additional subthemes (i.e., multiple provocation, leader responses, conflict management behaviours, external assistance, and outcomes) that pertain to the process or context of work conflict. The first subtheme was an antecedent to work conflict: in every case, multiple provocations preceded work conflict. That is, participants did not consider minor/major transgressions to be work conflicts until their initial attempts to resolve the issues were unsuccessful. The supervisor subtheme was contextual and referred to leaders' (largely ineffectual) attempts to help subordinates resolve work conflict. Two subthemes pertained to participants' attempts to resolve the work conflict. The conflict management behaviours subtheme consisted of participants' own conflict resolution actions, such as avoiding the disputant.

The external assistance subtheme referred to participants' efforts to obtain help from specialists or self-help books. Finally, organizational health and well-being are the positive (e.g., professional development) and negative (e.g., turnover, mental health symptoms) outcomes of work conflict.

All of the subthemes can be classified as either part of process/context (and therefore not pertinent to the present operational definition of work conflict) or as one of the four proposed conditions of work conflict. Thus, in response to research question 5: social discord, negative affect, relational dissonance, and threat are jointly sufficient conditions of work conflict-—there were no superfluous conditions found in these data. Taken together, the qualitative evidence affirms the operational definition that work conflict consists of four necessary and jointly sufficient conditions: social discord; negative affect; relational dissonance; and threat (with one exceptional case where threat was absent).

To assess whether participants agreed with the definition of work conflict as presented after the critical incidents were gathered, the relevant portions of the transcripts were reviewed. All participants indicated that the definition fit their perception of work conflict and several immediately applied the definition to their particular episode.
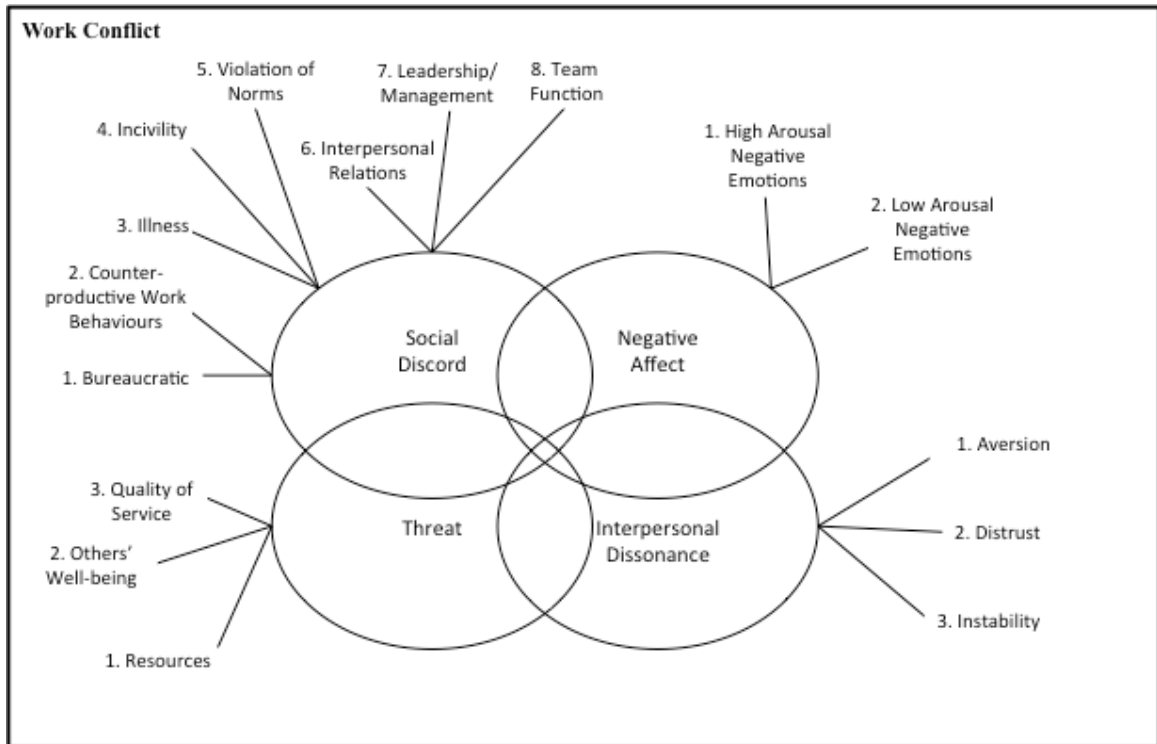
Figure 1. Diagram of the themes and subthemes derived from the CIT interview thematic analysis.

Item Generation

For item writing (see Table 1, Step 3), three researchers, one practitioner (female = 3), and I drafted 98 preliminary scale items to represent the conditions of social discord, negative affect, relational dissonance, and threat. In addition, one female researcher identified a potential additional theme, *confusion*, and wrote nine items to represent this theme (see Appendix J for the list of 107 preliminary survey items). Three female graduate students reviewed the preliminary items, removed duplicates, and improved items for grammar, reducing the list to 82 items. Five graduate students (female = 3) with no prior involvement in this research sorted the revised items into categories, and created labels to signify the topic of each item category (see Appendix K for item review and sorting results). The aim of this step is to assess the degree to which each item represented its intended condition without biasing the item sorters toward the theoretic conditions. The item categorical labels differed from the work conflict conditions and required further analysis. For example, one reviewer created a categorical label of "emotional response" to describe a group of items. Although this categorical label is not identical to any of the four theoretic conditions, I considered items in this category to belong with the "negative affect" condition, given that all of the emotional responses described negative emotions. I continued in this manner, assessing each of the reviewers' categorical labels and the respective items, and comparing results across reviewers, to select 42 items that were consistently sorted to categories that belonged to the conditions. Then, ten graduate students (female = 7) matched each of the 42 items to one or more of the theoretic conditions (social discord, negative affect, relational dissonance, threat, and confusion; see Appendix L for item matching results). I assessed all of the sorting and

matching results to select 15 items that adequately sample the conditions of work conflict

for Study II scale development.

Study I Discussion

The goals of Study I were to explore the work conflict model and to develop a

focal work conflict scale. A summary of prior literature suggested that work conflict

consists of four necessary and jointly sufficient conditions: social discord; negative affect;

relational dissonance; and threat. The results of two discrete qualitative analyses

indicated that in all but one incident the four conditions were necessary and jointly

sufficient.

The one exceptional incident was the second of two nearly indistinguishable

negative work conflicts recounted by one female participant. In each of these distinct

events, the participant reported that she yelled and swore at her "lazy" and "stunned"

coworkers. Reportedly, each of the participant's coworkers responded by becoming

extremely upset, immediately leaving the workplace, taking extended "stress leaves," and

finding new jobs (i.e., internal turnover). While retelling the first incident, the participant

stated that she worried that her own professional reputation might be tarnished because a

peer complained to their supervisor. This worry provided evidence of the threat

condition. Notably, the participant reported that the supervisor took no action in response

to this seemingly severe work conflict. For the second critical incident, the participant

reported that she was not worried about anything because both she and her supervisor

"knew" that the co-worker would "quit anyway." Because the second incident lacked the

necessary condition of threat, it does not qualify as work conflict as defined by the

proposed model. Indeed, the participant readily admitted that she intended to be

habitually rude and aggressive toward her peer and she justified her behaviour. This incident, therefore, is better categorized as workplace bullying (for a definition, see Hershcovis, 1999).

Taken together, this participant's critical incidents are intriguing, as they point to a possible escalation of work conflict into workplace bullying. Granted, this finding reflects only 2 of the 35 critical incidents. However, escalation from incivility to aggression is supported by Andersson and Pearson's (1999) theory that workplace conflicts can increase in severity. In addition, this finding is consistent with prior empirical findings that laissez-faire leadership is associated with conflict escalation (Skogstad, Einarsen, Torsheim, Aasland, & Helhard, 2016).

Limitations

Recruiting interview participants via the author's own Facebook page may have resulted in selection bias that limits the generalizability of Study 1 results in two ways. First, individuals who had unresolved work conflicts may have been more inclined than those with resolved conflicts to participate, as a way of venting their grievances. This selection bias would result in an over-sampling of intractable work conflicts. However, this bias seems unlikely given that several participants spontaneously related that they had not thought about their experiences for some time and that their conflicts were long since resolved. In addition, the incidents represented low and high conflict severity and varied in duration, suggesting the absence of a selection bias toward intractable conflicts. Second, because 13 of the 19 participants were family or friends of the author, it is possible that the sample does not represent the entire domain of workers. This bias seems

unlikely given that the sample represented a wide range of workers in terms of age, sex, occupation, and industry.

An additional limitation is that interviewees may have gleaned the researchers' interests and provided responses that serve the researchers' purpose, in a form of demand characteristics. I attempted to reduce demand characteristics by writing a-theoretic questions and allowing the interviewees to describe their conflicts without interruption. Indeed, many interviewees provided lengthy narratives before I asked the first interview question. However, this does not negate the possibility that interviewees responded to nonverbal and tonal communication nuances to interpret my theoretic leanings. One way to avoid such biases is for the researcher to be naïve to the expected outcomes. However, a naïve approach may lead one to repeat rather than build on past research. Finally, while conducting thematic analysis, my theoretic biases may have led me to misconstrue the data as supporting the model without factual basis. This misinterpretation of the data seems unlikely given that a research assistant's top-down analysis yielded similar results.

Conclusion

In conclusion, Study I affirmed the model of work conflict and met the goal of developing a focal work conflict scale. Data from the critical incidents suggested that work conflict consists of social discord, relational dissonance, negative affect, and threat. Despite efforts to reduce biases, there are limitations to the results and further research is needed to assess the work conflict model. The next logical step is to assess the structure and validity of the work conflict scale as a means of assessing the emerging model.

Study II

Although Study I provided evidence that work conflict consists of four conditions, a more parsimonious 3-factor model also seemed feasible. Specifically, one could argue that the intensity of relational dissonance (e.g., fears and insecurities related to the possible loss of that relationship) directly corresponds to disputants' social discord behaviours (e.g., arguing) such that measuring social discord was redundant. In addition, it is possible that social discord is a first step in the process of work conflict but not a condition of the conflict state. That is, social discordant behaviours may trigger negative affect, relational dissonance, and threat reactions and only these reactions are necessary conditions for the conflict state. This seems plausible given that social discord is comprised of external behaviours whereas the other three conditions are internal thoughts and emotions. Thus I dropped social discord from the model and eliminated preliminary social discord items from scale validation. Admittedly, forgoing the 4-factor model at this point was a research methods error—the scale development steps are designed to refine and select the best-fitting model provided that the items tap into the entire domain of a construct. Nonetheless, I retained Study II because the research provided preliminary evidence of the factor structure as well as qualitative data needed to develop new social discord items. Thus the goal of Study II was to validate the focal work conflict scale based on a 3-factor model (i.e., negative affect, relational dissonance, and threat).

FWC Factor Structure

Evidence of validity is demonstrated by the process of developing survey items and by assessing how well the internal structure of the scale matches the expected model

(AERA et al., 1999; Nunnally & Bernstein, 1994). The proposed operational definition of work conflict consisted of three interrelated factors. Therefore, I predicted:

> *Hypothesis #1*: The FWC scale items will cluster into three distinct and reliable factors (negative affect, relational dissonance, threat) with items loading on the expected factor in an exploratory structured equation model (ESEM).

FWC Predicting Strain

Prior research has linked intragroup and interpersonal conflict to employee strain. Intragroup conflict has been related to psychological health symptoms (Dijkstra, Beersma, & Evers, 2011), whereas interpersonal work conflict has been linked to physical health symptoms (Nixon et al., 2011). Both intragroup and interpersonal conflict have been associated with reduced job performance (Anwar, Maitlo, Soomro, & Shaikh, 2012; Barki & Hartwick, 2001; De Dreu & Weingart, 2003; deWit et al., 2012; Guetzkow & Gyr, 1954; Jones, 2007), absenteeism (Duddle & Boughton, 2007), and turnover intentions (Duddle & Boughton, 2007; Giebels & Janssen, 2005). Work conflict is an uncomfortable and unpleasant process (Duddle & Boughton, 2007) related to job-related negative affect (Bruk-Lee, 2006). Thus I predicted that:

> *Hypothesis #2a*: The FWC scale will be positively correlated with psychological and physical health symptoms, absenteeism, job-related negative affect, and turnover intentions.

> *Hypothesis #2b*: The FWC scale will be negatively related to job performance.

FWC Convergent with Intragroup and Interpersonal Conflict

As noted above, the focal work conflict scale measures the severity of a single conflict incident whereas both the ICS and ICAWS measure frequency of work conflict

behaviours across one or more conflict episodes during a specific period of time. In addition, FWC measures individual-level conflict whereas the ICS is a group-level measure. Furthermore, FWC is a more precise measure of work conflict than ICAWS; ICAWS taps into incivility as well as work conflict (Hershcovis, 2011). Despite these distinctions, FWC should be positively correlated with these existing measures of work conflict. Thus I predicted that:

> *Hypothesis #3a*: The FWC scale will be positively correlated to both ICS and ICAWS.

> *Hypothesis #3b*: The FWC scale will predict criterion variables after accounting for ICS and ICAWS.

Revisiting the Work Conflict Model

As a reminder, social discord items were not included in this study because the relational dissonance condition seemed to account for social discordant behaviours. However, Study II afforded an opportunity to further explore the model and more objectively assess this assumption with the following research question:

> *Research Question 1*: Do participants' textual descriptions of work conflict comport with a three-condition model (i.e., negative affect, relational dissonance, and threat) or a four-condition model (i.e., social discord, negative affect, relational dissonance, and threat) of work conflict?

Study II Method

Procedure

Study II procedure followed final steps for scale development of survey administration guided by Crocker and Algina (1986). The survey was administered in

association with the Partnership for Productive Organizational Conflict (PPOC). PPOC is

a collaboration of scholars, practitioners, and students who are funded by the Social

Studies and Humanities Research Council (SSHRC) to generate research, distill best

practices, and translate knowledge about work conflict (Gilin Oore, 2013). Participants

completed an informed consent form as per Tri-council Guidelines. The PPOC cross-

sectional survey was a self-report questionnaire designed to link participation with in-

house conflict resolution programs to employee strain.

Participants

Participants were recruited with invitational and reminder emails sent to all

employees in one healthcare institution and one university. Participants received a $10

gift card redeemable at a retailer of their choice for completing the survey. Participants

completed an online survey hosted by FluidSurveys© for both settings and in paper

format in the healthcare institution ($n = 16$). Although 1453 participants completed the

PPOC study, only 71% ($N = 1029$; 795 healthcare and 234 university) of the respondents

reported that they had experienced a work conflict and completed the FWC items. The

gender proportions were similar in both samples and were predominately female

(healthcare $n = 672$, 84.5%, university $n = 148$, 63.5%). A similar proportion of both

samples self-identified as members of diverse populations based on ethnicity, sexual

orientation, ability, or other characteristic (healthcare $n = 139$, 18%, university $n = 44$,

19%). The healthcare sample was 76% full-time; 14% part-time; and 10%

casual/temporary or "other" employees. Participants were occupied as nurses ($n = 189$,

24%); other health care professionals (e.g., social worker, dietician; $n = 259$, 33%);

office/clerical staff ($n = 140$, 18%); managers and researchers ($n = 114$, 14%); support

staff (e.g., janitorial; $n = 36$, 5%); physicians ($n = 12$, 1%); or "other" ($n = 44$, 5%). The

university sample was 44% full-time staff; 16% full-time faculty; 19% part-time staff; 3%

part-time faculty; 15% casual staff; and 3% "other." Participants' mean age for the

combined sample was 41 years ($SD = 11.4$) and the healthcare sample was marginally

older than the university sample (healthcare $M = 41.8$, $SD = 10.6$; university $M = 36.9$, SD

$= 13.3$). The mean tenure for the two groups combined was 6.8 years ($SD = 3.0$). The

healthcare sample had slightly more years of tenure than the university sample (healthcare

$M = 7.1$, $SD = 2.9$; university $M = 5.5$, $SD = 3.0$).

Measures

 Focal work conflict scale. Focal work conflict was measured with 15-

preliminary items reduced to 7-items (see bolded text in Table 2) to reflect two subscales:

negative affect and relational dissonance (4 items) and threat (3 items; see Table 4 for

final items). Respondents used 5-point Likert-type agreement scale (*strongly disagree* to

strongly agree). Higher scores indicate higher focal work conflict severity. Reliability

estimates are shown in Table 6.

 Psychological health symptoms. Psychological health symptoms were measured

with the 12-item General Health Questionnaire checklist of mental health experiences

(Goldberg et al., 1997). Respondents used a 5-point Likert-type scale (*never* to *always*)

to indicate how frequently they felt mentally healthy. Item scores were reversed such that

higher scores indicate increased frequency of psychological health symptoms (e.g., "Have

you recently felt you couldn't overcome your difficulties?"; see Table 6 for the reliability

estimate).

Physical health symptoms. Physical health symptoms were measured with the 6-item physical symptoms checklist of the Personal Risk Scale (Leiter, 1996). Respondents used a 5-point Likert-type scale (*never* to *daily*) to indicate how frequently they experienced symptoms. Higher scores indicate more frequent physical symptoms (e.g.; "Over the past month, how frequently have you experienced back strain?"; see Table 6 for the reliability estimate).

Job performance. Self-reported job performance is not strongly correlated with others' measures of the performance (Harris & Schaubroeck, 1988; Mabe & West, 1982), bringing the criterion validity of self-reported job performance measures into question. To increase validity, job performance was measured with three items that prompt respondents to judge how their supervisor would rate the respondents' performance (Gilin Oore et al., 2015). Respondents used a 5-point Likert-type scale (*poor* to *excellent*) to indicate how well they performed. Higher scores indicate better performance (i.e., "Considering all of your job duties and responsibilities, how would your supervisor or boss rate the following about your work: (1) The amount of work that you accomplished?, (2) The quality of your work?, and (3) Your overall performance?"; see Table 6 for the reliability estimate).

Absenteeism. Absenteeism was assessed with a single item developed for this study (Gilin Oore et al., 2015). Participants responded using an open-ended field: Higher scores indicate more missed time (i.e., "Over the past month, how many times have you been absent from a regularly scheduled workday [e.g., calling in sick, using a personal day]? Please include any instance where you were absent for half a day or longer.)"

Job-related negative affect. Job-related negative affect was measured with the 5-item low-pleasure, low-arousal (LPHA) and the 5-item low-pleasure, high-arousal (LPLA) subscales of the Job-affective Well-being Scale (JAWS; Van Katwyk et al., 2000). Respondents used a 5-point scale (*never* to *extremely often*) to indicate how frequently they felt each emotion. Higher scores indicate more frequent experiences of negative emotions (e.g., LPLA "My job made me feel bored"; LPHA "My job made me feel angry."; see Table 6 for reliability estimates).

Turnover intention. Turnover intention was assessed using a 3-item turnover intention scale (Kelloway, Gottlieb, & Barham, 1999). Respondents used a 5-point Likert scale to indicate their agreement (*strongly disagree* to *strongly agree*). Higher scores indicate stronger intention to leave the organization (e.g., "I am thinking about leaving this organization."; see Table 6 for reliability estimate).

Interpersonal conflict. Interpersonal conflict was assessed with the 4-item interpersonal conflict at work scale (ICAWS; Spector & Jex, 1998). Respondents used a 5-point Likert-type scale (*never* to *everyday*) to indicate how frequently they experience conflict interactions with others. Higher scores indicate increased frequency of interpersonal conflict (e.g., "How often are people rude to you at work?"; see Table 6 for the reliability estimate).

Intragroup conflict. Intragroup conflict was measured with the 3-item task and the 3-item relational conflict subscales of the intragroup conflict scale (ICS; Jehn, 1995). Respondents used a 5-point Likert-type scale (*none/not at all* to *a lot*) to indicate the frequency or amount of conflict behaviours in their workgroup. Higher scores indicate more frequent conflict (e.g., task conflict: "How many disagreements over different ideas

were there?"; relational conflict "How much tension is there in the group during decisions?"; see Table 6 for reliability estimates).

Focal work conflict descriptions. Respondents described their work conflicts with two open-ended items, as follow: (1) "*Conflict* can be described as tension, arguments, or difficulty with other people. Working with others often involves some conflict. Conflicts may result from a specific problem or struggle between people, or simply when people's personalities cause them to not 'get along' well. Think of your workplace over the past year, and reflect on the conflict you had that bothered or upset you the most. The conflict can have been about anything, and have been between multiple people, or just you and one other person. Please briefly describe the conflict, including what happened, (i.e., events/actions taken) the thoughts and feelings you experienced, and the impact the conflict had on you (such as effects to your work, well-being, social life, mental and emotional health, etc.). " (2) "Please provide any additional details about how the conflict progressed throughout its duration. For example, maybe the conflict was very intense with frequent arguments at first, and then changed to be less intense, but still with tension or avoiding each other."

Study II Results

Data were screened and assessed against assumptions of normality, linearity, outliers, multicollinearity, and orthogonality as recommended by Tabachnick and Fidell (2013). Incomplete cases were removed from the dataset and random missing data were replaced with a missing data value in SPSS. ESEM was used to develop a parsimonious and brief scale that represents the theoretical model. ESEM is a contemporary single-step approach that can be used instead of the more traditional two-step approach of EFA for

item reduction followed CFA for model assessment. I chose to use ESEM for two

reasons. First, empirically developed survey items often load on more than one factor as

a result of theory (Asparouhov & Muthén, 2009). Multiple factor item loading is relevant

to the FWC scale: all items are designed to measure the severity of a single work conflict

incident and, as a result, items are expected to load on more than one factor. When items

are theoretically expected to load on more than one factor, the CFA calculations that fix

item cross-loadings to zero artificially inflate the correlations among the factors

(Asparouhov & Muthén, 2009; Marsh et al., 2009). Second, CFA fixes all cross-loadings

to zero, a constraint that may distort the relationships between resultant factors and other

variables (Asparouhov & Muthén, 2009). Thus, using CFA when factors are expected to

correlate (as is the case with the FWC scale), presents a threat to construct and criterion

validity (Asparouhov & Muthén, 2009). ESEM and multi-level modeling were conducted

using MPlus Version 1.13 for Mac. All other analyses were conducted using SPSS

Version 24.

FWC Factor Structure

To test Hypothesis 1—that the focal work conflict scale consists of three factors

(negative affect, relational dissonance, threat) —I conducted a series of ESEM analyses.

Because no one test provides an absolute finding that the model fits the data (e.g.,

Kelloway, 2015), absolute (χ^2, RMSEA), comparative (CFI), and parsimonious (AIC)

indices were used to assess model fit. The χ^2 measure is sensitive to large sample sizes

such that significant tests rarely reach non-significance, which indicates that the model is

a good fit for these data (Kelloway, 2015). Lower RMSEA values indicate better fit.

RMSEA values < .10 (Steiger, 1990) or < .06 (Hu & Bentler, 1999) and a significance

test indicating whether the observed value is likely to differ from .05 (a non-significant *p*-value indicates that the obtained valued does not differ from .05, an indication of good fit; Kelloway, 2015), indicate that the model is a good fit for the data. Higher CFI values indicate better fit and values >.95 indicate a good model fit (Kelloway, 2015, Hu & Bentler, 1999). Lower AIC values indicate more parsimonious fit, and although there are no cut-off criteria for this test, AIC is valuable for comparing multiple models (Kelloway, 2015).

As a first step, I conducted ESEM with all items loading on three factors (see Table 2). I assessed the items in light of the work conflict model and item loadings using the healthcare sample (see Table 3). A 7-item, 2-factor model provided an overall good fit for these data: $\chi^2 = 60.21$ (8); CFI = .976; RMSEA = .09; AIC = 33932.68, although the RMSEA is not strong according to Hu and Bentley's criteria (1999). To further assess the model, I conducted ESEM fitting the 7-item 2-factor model using the university sample. The model fit for these data was similar to the healthcare subsample: $\chi^2 = 29.66$ (8); CFI = .97; RMSEA = .11; AIC = 4823.86. These findings do not support the hypothesized 3-factor model and suggest that the FWC scale has two factors: one with negative emotion and relational dissonance items (FWC-NARD subscale) and the second with threat items (FWC-T subscale). See Appendix M for item descriptive statistics and inter-item correlations, Table 4 for final item loadings, Table 5 for subscale descriptive statistics and factor correlations.

Table 2.

FWC standardized item loadings for all 15 items loading on 3 factors for all observations

(N = 1029).

#	Cond.	Item	1	2	3
1.	NA	I have spent a lot of time just trying to 'figure out' what was happening in the conflict.	.43^c	.24^c	−.03
2.	RD	**It has felt like something was very wrong between me and the other person.**	.73^c	.01	.06
3.	RD	**My communication with the other person has felt strained.**	.88^c	−.10	.01
4.	RD	It has been difficult for me to imagine our relationship getting back on track.	.87^c	−.15	.19^b
5.	NA	**I have felt angry toward the other person.**	.70^c	.02	−.11
6.	NA	**The conflict situation has been extremely frustrating for me.**	.65^c	.21^a	−.14^a
7.	NA	I have felt betrayed by the other person.	.42^c	.34^c	−.02
8.	NA	I have felt inadequate when dealing with the conflict.	.27^c	.47^c	−.00
9.	T	**I have felt afraid of losing things that were important to me.**	.11	.68^c	.07
10.	T	**I have worried that people were saying negative things behind my back, spreading bad gossip or rumors about me.**	.07	.39^a	.45^c
11.	T	I have worried that the conflict was affecting my clients/customers/patients.	−.06	.57^c	.13
12.	NA	I have dreaded running into the other person	.62^c	.04	.30^c
13.	T	I have worried that the conflict would affect my ability to work with the other person	.65^c	−.00	.35^c
14.	T	**I have felt isolated from my coworkers as a result of this conflict**	−.02	.47^b	.48^c
15.	T	It has been harder to achieve my goals because of this conflict	.02	.69^c	.18^b

Notes: Cond. = Condition: RD = Relational Dissonance; NA = Negative Affect; T = Threat. Bolded items were retained in the final 2-factor solution. $^a p \leq .05$; $^b p \leq .01$; $^c p \leq .001$.

Table 3.

ESEM fit indices and supporting analysis for item reduction for all observations (N = 1029)*.

Items	Factors	χ^2(df)	RMSEA		CFI	AIC	Analyses Notes
			Statistic	*p*			
15	3	401.5(63)	0.08	0.00	0.95	34018.07	
14	3	316.05(52)	0.08	0.00	0.95	31765.91	• Remove item 1, time spent contemplating doesn't necessarily indicate severity. • Cross-loading on factors 1 and 2
13	3	275.61(42)	0.08	0.00	0.96	29504.59	• Remove item 8, interview data suggests that inadequacy is not a typical work conflict emotion • Cross-loading on factors 1 and 2
12	3	198.13(33)	0.79	0.00	0.97	27212.91	• Remove item 7, interview data suggests that betrayal is uncommon. • Cross-loading on factors 1 and 2
11	3	157.90(25)	0.08	0.000	0.97	25252.25	• Remove item 4, contains multiple ideas of imagining and getting back on track. • Cross-loading factors 1 and 2
10	3	81.12(18)	0.07	0.03	0.98	22991.96	• Remove item 12, interview data suggests that dread is not a common work conflict emotion. • Cross-loading on factors 1 and 2
10	2	186.59(26)	0.09	0.00	0.92	23081.44	• Reduce to 2 factors because NA and RD load on one factor.

Items	Factors	χ^2(df)	RMSEA		CFI	AIC	Analyses Notes
			Statistic	*p*			
9	2	171.11(19)	0.1	0.00	0.95	20922.58	• Remove item 13, contains aspects of interpersonal dissonance *and* threat. • Cross-loading on both factors
8	2	85.63(13)	0.08	0.00	0.97	18630.85	• Remove item 15, interview data suggests that threat of trying to achieve goals is uncommon. • Cross-loading on both factors.
7	2	60.21(8)	0.09	0.00	0.98	16028.01	• Remove item 11, interview data suggests that worry related to customers/patients is an uncommon threat. • Cross-loading on both factors

Notes: χ^2(df) = chi-squared (degrees of freedom); RMSEA = root mean square error of approximation; CFI = comparative fit index; AIC = Akaike information criterion.

[*]These analyses were first conducted separately for the healthcare subsample ($n = 795$) and then the university subsample ($n = 234$). The same items were removed in the exact sequence using the same rationale in both sets of analyses. Therefore, the results shown here and in remainder of the analyses reflect all observations.

Table 4.

Study II final item loadings for 7-item 2-factor scale showing statistically significant loadings >.3 using all observations (N = 1023).

#	Cond.	Item	1	2
1.	RD	It has felt like something was very wrong between me and the other person.	**.67**[c]	.12[b]
2.	RD	My communication with the other person has felt strained.	**.82**[c]	-.01
3.	NA	I have felt angry toward the other person.	**.73**[c]	-.04
4.	NA	The conflict situation has been extremely frustrating for me.	**.78**[c]	.02
5.	T	I have felt afraid of losing things that were important to me.	.34[c]	**.43**[c]
6.	T	I have worried that people were saying negative things behind my back, spreading bad gossip or rumors about me.	.02	**.79**[c]
7.	T	I have felt isolated from my coworkers as a result of this conflict.	-.04	**.76**[c]

Notes: Cond. = Condition; RD = Relational Dissonance; NA = Negative Affect; T = Threat. [b]$p <.01$; [c]$p <.001$

Table 5.

Study II final exploratory structured equation model (ESEM), number of items,

descriptive statistics, correlations, and alpha coefficients (on the diagonal) for work

conflict factors using all observations (n=1008).

	# of Items	*M*	*SD*	Factor 1	Factor 2
Factor 1 FWC-NARD	4	3.62	1.00	(.85)	
Factor 2 FWC-T	3	2.63	1.14	.55[c]	(.76)

Notes: *M* = Mean; *SD* = Standard deviation; FWC-NARD = Focal work conflict negative affect and relational dissonance subscale; FWC-T = Focal work conflict, threat subscale.
[c] $p < .001$

Study II data represent individual participants nested within two organizations. With nested data, higher intraclass correlations result in reduced standard errors, leading to an increased likelihood of Type 1 error (Hox, 2002). To reduce this likelihood, I assessed the data using multi-level modelling following Kelloway's (2015) procedures; I calculated interclass correlation coefficients (ICC) for all study variables to estimate group-level variance. All ICC values were $\leq .02$, indicating that at least 98% of the variance was at the individual level. The model failed to converge and I was unable to calculate the null model. Given that the vast majority of variation existed at the individual level, I used SPSS with the combined healthcare and university observations in correlational analyses to test hypotheses 2 and 3. See Table 6 for study variable descriptive statistics and correlations.

Hypothesis 2a, which posited that work conflict predicts strain, was supported. The FWC negative affect/relational dissonance (FWC-NARD) and threat subscales (FWC-T) predicted psychological health symptoms: ($r = .36, p < .01; r = .48, p < .01$, respectively); physical symptoms: ($r = .31, p < .01; r = .31, p < .01$, respectively); absenteeism ($r = .17, p < .01; r = .10, p < .01$, respectively); low-pleasure low-arousal negative emotions: ($r = .37, p < .01; r = 37\ p < .01$, respectively); low-pleasure high-arousal negative emotions: ($r = .40, p < .01; r = .40, p < .01$, respectively); and turnover intentions: $r = .15, p < .01; r = .22, p < .01$, respectively). Hypothesis 2b was partially supported. FWC-NARD was not significantly related to job performance ($r = -.05, p =$ n.s.) whereas FWC-T predicted job performance in the expected direction: ($r = -.21, p < .01$).

Hypothesis 3a predicted that the FWC scale would be positively related to ICAWS (Spector & Jex, 1999) and ICS task and relational conflict (Jehn, 1997). This hypothesis was supported: FWC-NARD and FWC-T were associated respectively with interpersonal conflict: $r = .37, p < .01; r = .45$; task conflict: $r = .30, p < .01, r = .31; p < .01$, and relational conflict: $r = .37, p < .01, r = .35, p < .01$. Hypothesis 7b predicted that FWC relates to outcomes after controlling for other measures of conflict. To test this hypothesis I conducted a series of seven hierarchical multiple regression analyses, entering ICAWS and the two ICS subscales in the first step and the two FWC subscales in the second step of models predicting LPLA, LPHA, GHQ, physical symptoms, job performance, absenteeism, and turnover intentions. As shown in Table 7, this hypothesis was supported in six of the seven analyses, with the exception that the FWC subscales did not predict variation in absenteeism after controlling for ICAWS and ICS.

FWC Model Revisited

To explore the research question, which asked whether work conflict consists of four conditions (i.e., social discord, negative affect, relational dissonance, and threat) or three conditions (i.e., exclude social discord), two research assistants (RAs) coded each participant's written description of work conflict ($n = 891$) for the presence or absence of each condition. Before the RAs began this analysis, I provided definitions and demonstrated how to assess the explicit qualitative data without inferring meaning. For example, a text passage may seem to indicate frustration, but unless the participant explicitly stated that she felt frustration or some other negative emotion(s), the negative affect condition was coded as absent. The two RAs and I analyzed the first 20 cases

together and discussed coding decisions until the RAs demonstrated competency. Then, each of us independently coded an additional 10 cases and compared results, finding that all forty coding decisions (i.e., 10 cases $\times$ 4 conditions) were unanimous. The RAs continued coding and comparing results in blocks of 30 to 40 cases. Interrater reliability was high, with percentage agreements as follows: social discord = 98%; negative affect = 97%; relational dissonance = 98%; and threat, 98%. The RAs easily resolved coding differences.

Cross-tab calculations (see Table 8) indicated that 41.8% ($n = 372$) showed evidence for all four conditions, 25.5% ($n = 277$), had three conditions, 16.7% ($n = 149$) had two conditions, 10% ($n = 89$) had one condition, and 6.1% ($n = 54$) were absent of evidence for any condition. I conducted crosstab analyses to assess whether or not relational dissonance and social discord tap into the same latent construct. Analyses show overlap in coding in 83.4% ($n = 743$) of cases (i.e., 73.2%, $n = 652$ had both conditions present; 10.2%, $n = 91$ had both conditions absent). There were differences in coding for 16.6% ($n = 148$) of the cases (i.e., 7.6%, $n = 68$ with social discord present and relational dissonance absent; 9.0%, $n = 80$ with social discord absent and relational dissonance present).

Table 6.

Study II variable means, standard deviations, correlations, and reliability coefficients for all observations (n = 844 to 1029).

Variable	*M*	*SD*	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. Age	40.68	11.42																
2. Sex	1.81	.41	.08[a]															
3. Emp.	1.33	.64	-.15[b]	.08[a]														
4. Tenure	6.76	2.98	.67[b]	.07[a]	-.33[b]													
5. Minority	1.82	.38	.07[a]	.18[b]	-.06	.17[b]												
6. F-NARD	3.62	1.00	.14[b]	.17[b]	-.06	.20[b]	.05	(.85)										
7. F-T	2.63	1.14	.07[a]	.09[b]	.03	.05	-.07[a]	.55[b]	(.76)									
8. LPLA	2.41	.77	.00	.01	-.09[a]	.07[a]	-.06	.37[b]	.37[b]	(.76)								
9. LPHA	2.17	.80	.07[a]	.01	-.08[a]	.15[b]	-.05	.40[b]	.40[b]	.75[b]	(.82)							
10. GHQ (R)	2.30	.67	.01	.02	-.04	.03	-.12[b]	.36[b]	.48[b]	.74[b]	.65[b]	(.90)						
11. PhySym.	3.30	1.34	-.01	.16[b]	-.05	.01	-.03	.31[b]	.31[b]	.51[b]	.45[b]	.51[b]	(.77)					
12. Job Perf.	4.07	.78	-.02	.07[a]	-.05	.02	.09[b]	-.05	-.21[b]	-.27[b]	-.22[b]	.40[b]	.11[b]	(.95)				

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
13. Absent	1.05	2.40	.03	$-.09^a$	$-.08^a$	.03	-.04	$.12^b$	$.10^b$	$.12^b$	$.17^b$	$.21^b$	$.17^b$	$-.15^b$	--			
14. Turn.	2.34	1.19	$-.17^b$	-.01	.05	$-.12^b$	$-.08^b$	$.15^b$	$.22^b$	$.39^b$	$.35^b$	$.36^b$	$.28^b$	$-.12^b$	$.07^a$	(.85)		
15. ICAWS	2.01	.79	$.15^b$	.03	$-.08^a$	$.21^b$	$-.08^b$	$.37^b$	$.45^b$	$.48^b$	$.59^b$	$.47^b$	$.34^b$	$-.15^b$	$.18^b$	$.27^b$	(.82)	
16. TskCon	2.82	.89	$.14^b$	.03	-.07	$.16^b$	$-.10^b$	$.30^b$	$.31^b$	$.40^b$	$.47^b$	$.34^b$	$.27^b$	-.05	$.13^b$	$.20^b$	$.60^b$	(.80)
17. RltCon	2.99	1.08	$.19^b$	$.08^b$	$-.09^a$	$.22^b$	$-.07^a$	$.37^b$	$.35^b$	$.43^b$	$.53^b$	$.36^b$	$.30^b$	$-.07^a$	$.14^b$	$.23^b$	$.64^b$	$.74^b$

Notes: M = Mean; SD = Standard deviation; Emp. = employment status; Minority = whether or not participants identified as part of a minority group; F-NARD = Focal work conflict negative affect and relational dissonance subscale, F-T = Focal work conflict threat subscale; GHQ (R) = psychological health symptoms; LPLA = JAWS low pleasure low arousal subscale; LPHA = JAWS low pleasure high arousal subscale; Turn. = Turnover intentions; ICAWS = Interpersonal conflict at work scale; TskCon = Intragroup conflict task subscale; RelCon = Intragroup conflict relational subscale. $^a p < .05$; $^b p < .01$

Table 7.

Summary of hierarchical multiple regression analyses: Focal work conflict predicting outcomes controlling ICAWS and ICS.

Predictor	LPLA β	LPLA ΔR^2	LPHA β	LPHA ΔR^2	GHQ (R) β	GHQ (R) ΔR^2	Phys. Sym. β	Phys. Sym. ΔR^2	Job Perf. β	Job Perf. ΔR^2	Absenteeism β	Absenteeism ΔR^2	Turnover ΔR^2
Step 1		.27[c]		.39[c]		.23[c]		.13[c]		.02[c]		.03[c]	.07[c]
ICAWS	.33[c]		.41[c]		.39[c]		.24[c]		-.19[c]		.15[b]		.19[c]
ICS-Task	.07		.06		.05		.05		.05		.00		.00
ICS-Rel.	.18[c]		.23[c]		.09[a]		.12[a]		.01		.06		.11[a]
Step 2		.04[c]		.03[c]		.09[c]		.04[c]		.03[c]		.00	.01[b]
ICAWS	.26[c]		.34[c]		.26[c]		.16[c]		.01[b]		.14		.15[b]
TskCon	.07		.07		.04		.05				.00		.00
RelCon	.13[b]		.19[c]		.04		.07		.06		.04		.11[a]
FWC-NARD	.14[c]		.13[c]		.07[a]		.14[c]		-.12[b]		.06		-.02
FWC-T	.11[b]		.10[b]		.30[c]		.12[b]		.10[c]		-.01		.12[b]
Total R^2		.30[c]		.42[c]		.32[c]		.17[c]		.06[c]		.04[c]	.08[c]

Notes: (R) = reverse coding; n= 965 for JAWS; n = 972 for GHQ; n = 969 for physical symptoms; n = 936 for job performance and turnover intentions; n = 824 for absenteeism. LPLA = low pleasure low arousal; LPHA = low pleasure high arousal; GHQ = General Health Questionnaire ICAWS = Interpersonal conflict at work scale; TskCon = Intragroup task conflict scale, RelCon = Intragroup relational conflict scale. [a]$p < .05$; [b]$p < .01$; [c]$p < <.001$

Table 8.

Crosstab results of work conflict textual description coding (condition absent or present).

| | | RD Absent | | RD Present | | |
		T Absent	T Present	T Absent	T Present	Total
	NA Absent Count	54	4	20	8	86
SD	NA Absent Percent	6.1%	0.4%	2.2%	0.9%	9.7%
Absent	NA Present Count	25	8	28	24	85
	NA Present Percent	2.8%	0.9%	3.1%	2.7%	9.5%
	NA Absent Count	40	9	87	78	214
SD	NA Absent Percent	4.5%	1.0%	9.8%	8.8%	24.0%
Present	NA Present Percent	9	10	115	372	506
	NA Absent Count	1.0%	1.1%	12.9%	41.8%	56.8%
Total Count		128	31	250	482	891
Total Percent		14.4%	3.5%	28.1%	54.1%	100%

Notes: RD = Relational Dissonance; SD = Social Discord; NA = Negative Affect; T = Threat

Study II Discussion

The goal of Study II was to evaluate the internal structure of the FWC scale, as well as to assess its validity. I hypothesized that the FWC would consist of three factors: negative affect, relational dissonance, and threat. However, the evidence supported a 2-factor model, with negative affect and relational dissonance items loading on factor 1 and threat items loading on factor 2. The model fit indices for this solution were not uniformly confirming, with RMSEA values above the .05 goodness-of-fit criteria recommended by Hu and Bentler, 1999. Furthermore, one threat item cross-loaded on both factors, bringing the stability of the solution into question. Despite these measurement problems the scale is promising given that both the healthcare subsample and the university subsample yielded similar results for model fit.

The qualitative analyses provided some support for the original 4-factor solution of social discord, negative affect, relational dissonance, and threat (as a reminder, social discord items were not included in Study II). The finding that 17% percent of the coded conflict descriptions showed evidence for either social discord or relational dissonance (but not both) suggests that relational dissonance does not account for all of the variation in social discord and that further scale development was needed.

The findings provide evidence to support the validity of the FWC scale. The evidence suggests that FWC is a job stressor because it moderately predicted many strain outcomes. Notably, study participants ($n = 844$) reported missing 887 shifts over the month prior to survey completion, and FWC accounted for approximately 20% of the total missed time (177 missed shifts). Thus although the correlation between work conflict and absenteeism was weak, it may have practical significance for organizations

that are seeking to reduce absenteeism. In addition, only the FWC-T subscale predicted job performance. A possible explanation for this finding is that the threat component of work conflict interferes with job motivation, especially if workers perceive that their job or career aspirations are in jeopardy. As a reminder, job performance was self-assessed, and prior research has shown that employee performance ratings are only weakly correlated with objective measures of job performance (Murphy, Cleveland, & Mohler, 2001). Therefore, additional research using a more robust measure is needed to replicate or refute these findings.

The significant correlations between the FWC subscales and ICS scales suggest that the FWC overlaps with these conflict variables. The multiple regression analyses showing that the FWC predicts outcomes after accounting for interpersonal and intragroup conflict suggests that the FWC is tapping into a unique construct.

Limitations

Admittedly, Study II provides an incomplete scale (as discussed above). Although the criterion and convergent validity results are consistent with prior research and as expected by hypotheses, additional research was needed to further develop the survey instrument and assess its validity.

The results are based on single-source self-report data and are subject to common method variance. Common method variance can distort the relationships among variables (Campbell & Fiske, 1959) primarily as a result of social desirability bias and trait negative affect (Conway, 2002). Social desirability is a concern in the present research because work conflict is a negative experience and respondents may systematically bias their ratings to present a more positive image than would be reflected in a true assessment

of work conflict. Similarly, social desirability may account for variance in job performance and absenteeism ratings. Trait negative affect is a potential bias as well. It is possible, for example, that trait negative affect is a third (unmeasured) variable that accounts for common variance in the FWC scale and the JAWS negative affect scales. Therefore, common method variance may inflate the relationships among the study variables and the effect sizes should be interpreted with caution.

Finally, Study II was conducted with a specific subset of industry, namely healthcare and university institutions, which raises questions about generalization of the results (Crocker & Algina, 1986). However, the present sample included a wide variety of job categories (e.g., patient care, research, administrative, janitorial, etc.) making it reasonable to expect that the results could generalize to a larger population of workers. Additional research with a broader representation of industry is needed to strengthen the generalizability of the present research.

Conclusion

In conclusion, Study II prompted respondents to consider a past work conflict and retrospectively assess the severity of that conflict using the FWC scale. Retrospective assessment may lead to inaccuracies associated with deterioration in memory recall. This is a considerable threat to validity because the purpose of the FWC scale is to detect fluctuations in work conflict severity. A replication of this cross-sectional study with participants experiencing a work conflict at the time of survey completion is needed to affirm the relationships among study variables.

Study III

The goals of Study III were to assess the validity of a revised FWC scale with items representing all four conditions (i.e., social discord, negative affect, relational dissonance, and threat) and to examine several variables that influence the relationship between work conflict and strain.

FWC: New Social Discord Items

Six of the 107 items generated during Study I were intended to measure the social discord condition and an additional 7 items were assigned to the social discord category during item review. To augment this list and to ensure the entire domain of social discord was sampled, I analyzed excerpts of Study II participant conflict descriptions and generated an additional 13 items (see Appendix N for excerpts and items). I reviewed the resultant 26 items and selected candidate items that best represented the social discord condition. Working independently of me, two research assistants with advanced knowledge of the FWC model did the same. Then, working together, we discussed the candidate items and agreed to retain five items for scale validation. With the addition of these social discord items, the FWC model consisted of four conditions of work conflict, namely: social discord; negative affect; relational dissonance; and threat. However, Study II provided evidence that negative affect and relational dissonance load on a single factor. Therefore I predicted that the FWC items would load on three factors, specifically:

Hypothesis #4: The FWC items will cluster into three distinct and reliable

factors, with social discord items loading on factor 1, negative affect/relational

dissonance items loading on factor 2, and threat items loading on factor 3.

FWC: A Job Stressor

Study II results show that FWC predicts psychological and physical health

symptoms, reduced job performance, absenteeism, job-related negative affect and

turnover intentions. These same relationships were expected with the revised FWC scale.

In addition, Study III explored the relationship between FWC and job satisfaction. Meta-

analytic findings have shown that that interpersonal conflict (*mean r = −*.32; Spector &

Jex, 1998), as well as task and relational conflict (*mean r = −* .32; and *mean r = −*.56,

respectively; de Wit et al., 2012) predict lower job satisfaction. Thus, I predicted that:

Hypothesis #5: FWC subscales will be positively associated with psychological

and physical symptoms health symptoms, lost productive time, absenteeism, job-

related negative affect, and negatively associated with job satisfaction.

FWC Convergent with Interpersonal and Intragroup Conflict

Study II showed that FWC was correlated with interpersonal, task, and relational

conflict and predicted unique variance in strain after accounting for these related work

conflict variables. Study III aimed to replicate these findings and to extend this analysis

to process conflict. Thus, I predicted that:

Hypothesis #6a: The FWC subscales will be positively correlated with

interpersonal conflict and intragroup conflict (i.e., task, process, and relational

conflict).

Hypothesis #6b: The FWC subscales will predict strain after accounting for

interpersonal and intragroup conflict (i.e., task, process, and relational conflict).

FWC Convergent with other Job Stressors

Job stressors are correlated to the extent that they share an underlying mechanism

such as trait negative affect (Sonnentag & Frese, 2013). That is, individuals higher in

trait negative affect tend to perceive job stressors as more severe than their low trait

negative affect colleagues (Sonnentag & Frese, 2012). In addition, job stressors tend to

accumulate such that each job stressor uniquely predicts additional variance in strain

(Sonnentag & Frese, 2013). Thus, focal work conflict should be positively associated

with trait negative affect and job stressors. In addition, the FWS scale should

incrementally predict stain and function after accounting for trait negative affect and job

stressors (i.e., lack of significance, low recognition, over burdening workload, work-

family conflict, lack of skill use, and strained co-worker relations. Thus, I predicted that:

Hypothesis #7a: The FWC subscales will be positively correlated with trait

negative affect, lack of significance, low recognition, over burdening workload,

work-family conflict, lack of skill use, and strained co-worker relations.

Hypothesis #7b: The FWC subscales predict negative outcomes after accounting

for trait negative affect, lack of significance, low recognition, over-burdening

workload, work-family conflict, lack of skill use, and strained co-worker

relations.

FWC: Underlying Mechanisms Predicting Strain

Several mediators of the work conflict-strain relationship have been identified in

survey and experimental studies using intragroup task and relational conflict scales.

Work conflict severity fluctuates with rumination, regulation of negative emotions, psychologically distancing oneself from the conflict, and through other-focused tendencies of cognitive perspective-taking (PT) and empathic concern (EC).

Rumination. Rumination is a mental reappraisal of negative events that is conscious, unproductive, and detrimental (Martin & Tesser, 1996). Theoretically, work conflict stimulates rumination and, in turn, rumination is associated with strain and poor function (De Dreu & Beersma, 2005; Meier, Semmer, & Gross, 2014).

Emotion regulation. Regulating emotions consists of redirecting one's attention, focusing on positive emotions, and suppressing negative emotions (Garnefski & Kraaij, 2006). An experimental study found that emotion regulation was helpful for reducing the negative effects of intragroup relational conflict on team performance (Griffith, Connelly, & Thiel, 2014).

Psychological distancing. Psychological distancing is the reframing of one's thoughts by socially, temporally, or spatially zooming out from the situation or problem (Trope & Liberman, 2010). For example, one may take a third-person perspective (social psychological distancing), or consider how one's experience may differ a week in the future (temporal psychological distancing), or imagine how the situation would look if one were to see it from a further physical location (spatial psychological distancing; Trope & Liberman, 2010). In an experimental study, individuals primed to zoom out while reading and rewriting a romantic conflict situation effectively regulated their emotions (Wang, Lin, Huang, & Yeh, 2012).

Perspective-taking (PT) and empathic concern (EC). PT and EC are other-focused dispositional patterns of thinking and feeling, respectively. PT allows multiple

viewpoints to be imagined and considered, which is beneficial in negotiation (Galinsky, Maddux, Gilin Oore, & White, 2008), arbitration (Bazerman & Neale, 1982), problem-solving (Davis, 1983), and during task and relational conflict (LeBlanc, Gilin Oore, Calnan, & Solarz, 2012). EC is the dispositional tendency to experience sympathetic feelings toward others (Davis, 1983). Although EC is considered a pro-social attribute, it has been associated with increased task and relational conflict (LeBlanc et al., 2012) and retaliation (Gilin Oore, Maddux, Carpenter, & Galinsky, 2013). Conflict style theorists suggest that a balance of concern for self and concern for others facilitates collaboration and leads to win-win resolutions (Rubin, Pruitt, & Kim 1994). Thus, one explanation for these somewhat counter-intuitive findings is that highly empathic people over-emphasize others' needs in detriment to their own (LeBlanc et al., 2012). Although PT and EC were conceptualized as other-focused traits, Calnan (2010) demonstrated that priming participants to adopt other-focused states can reduce conflict severity. The present study aimed to explore how state-like PT and EC are associated with conflict severity.

In summary, Study III included five variables as possible mediators of the relationship between work conflict and strain. Thus, I predicted that:

> *Hypothesis #8*: Rumination, psychological distancing, emotion regulation, and PT, and EC will each partially mediate the relationship between FWC subscales and strain.

FWC, Relative Power, and Social Interaction Quality

Two contextual variables that may moderate the relationship between focal work conflict and strain were examined: relative power and the quality of social interactions. Individuals who have lower power relative to their conflict partner report more intense

levels of anger, confusion, and stress as compared to individuals with higher relative power (Coleman et al., 2013). The quality of social interactions with one's conflict partner, supervisor, coworkers, friends, or family may exacerbate or alleviate work conflict severity. Conflict severity is lessened when disputants are able to communicate effectively and resolve issues whereas problematic disputant interactions escalate conflicts (Hicks, 2011). Coworker support has attenuated the relationship between task conflict and reduced job satisfaction (Boz, Martinez, & Munduate, 2009; Martínez-corts, Boz, Medina, Benítez, & Munduate, 2011), however, Study I findings suggested that strained coworker relations intensify conflict. Supervisor support has attenuated the relationship between relational conflict and reduced job satisfaction (Boz, Martinez, & Munduate, 2009; Martínez-corts, Boz, Medina, Benítez, & Munduate, 2011). However, laissez-faire leadership style strengthened the relationship between interpersonal conflict and bullying assessed two years later (Ågotnes, Einarsen, Hetland, & Skogstad, 2018). Help from others can alleviate work conflict severity (Giebels & Janssen, 2005). However, one can imagine that unsupportive connections with friends and family (e.g., blaming or shaming) would increase conflict severity. In summary, the quality of social interactions with one's conflict partner, supervisor, coworkers, friends, or family may attenuate or accentuate relationships between work conflict and study outcomes. Thus, I predicted that:

> ***Hypothesis #9a***: Relative power exacerbates work conflicts such that FWC becomes a stronger predictor of strain when respondents perceive that they have lower power relative to their conflict partner.

Hypothesis #9b: Social interaction quality moderates the relationship between work conflict and strain such that helpful social interactions weaken the negative effects of work conflict.

Study III Method

Procedure

The correlational survey was administered online using Qualtrics. Potential respondents who indicated that they were currently experiencing a work conflict were screened into the study. Respondents provided their informed consent before completing the survey. Instructions prompted respondents to consider their experiences over the past week. Items measuring demographics were placed first, followed by trait variables, outcome variables, FWC items, moderator, and mediator variables (see Appendix O for the complete survey).

Participants

Participants were recruited by Qualtrics and received a nominal payment (0.75 USD) for completing the survey. Participants (N = 268) were workers aged 20 to 74 years (*Mdn* age = 42.6; male = 120, female = 147, other = 1) who were experiencing a work conflict at the time of data collection. Respondents were full-time ($n = 258$) and part-time ($n = 10$) employees working on average 40.4 hours per week ($SD = 7.97$) in scientific/technical ($n = 26$), healthcare ($n = 25$), education ($n = 25$), retail ($n = 25$), manufacturing ($n = 25$), finance/insurance ($n = 16$), construction ($n = 13$), information ($n = 12$), transportation ($n = 12$), and several other industries ($n = 46$). Participants held management ($n = 84$), sales ($n = 53$), service ($n = 51$), educator ($n = 21$), production ($n = 18$), construction ($n = 14$), healthcare provider ($n = 14$), government ($n = 10$), and farming

jobs ($n = 3$) from 1.5 months to 36.5 years ($M = 8.4$, $SD = 7.6$). Approximately 30% of the participants self-identified as part of a minority group based on social, ethnic, sexual orientation, ability, or other characteristic.

Measures

Demographics. Respondents reported age, gender, employment status, occupation, job tenure, industry, and minority group status.

Work stressors. Six work stressors: low job significance, low recognition, over-burdening workload, work-family conflict, low skill use, and strained co-worker relations, were measured using highly valid single-item scales (Gilbert & Kelloway, 2014). Single-item scales were selected for brevity. Respondents used a 5-point scale (*strongly disagree* to *strongly agree*) to rate the severity of each job stressor (i.e., significance: "My work is important to the organization" (R); recognition: "I feel I am recognized for the work I do" (R); workload: "It is hard for me to keep up with the workload"; work-family conflict: "It is difficult to balance my work and family demands"; skill use: "My job allows me to use my skills and abilities" [R)]; and co-worker relations: "My co-workers treat me with respect and courtesy" [R]).

Trait negative affect. Trait negative affect was measured with 10 items assessing chronic and persistent negative emotions or mood (Watson, Clark, & Tellegen, 1988). Respondents used a 5-point scale (*very slightly or not at all, a little, moderately, quite a bit, very much*) to indicate the extent that they experience negative emotions in general. Higher scores indicate higher trait negative affect (e.g., "Indicate to what extent you feel scared"; see Table 11 for internal consistency and item-total correlations).

Focal work conflict. Respondents indicated the severity of a current focal work conflict with 28 preliminary items that assessed social discord (5 items), negative emotions (7 items), relational dissonance (5 items) and threat (11 items). Respondents used a 5-point scale to indicate their agreement (*strongly disagree* to *strongly agree*). Preliminary items, means, standard deviations, and inter-item correlations are listed in Table 9. See Table 11 for internal consistency and item-total correlations of final scales.

Interpersonal conflict (ICAWS). See Study II Measures for a description of ICAWS and Table 11 for internal consistency and item-total correlations.

Intragroup conflict (ICS). See Study II Measures for a description of ICS and Table 11 for internal consistency and item-total correlations.

Job-related affect (JAWS). The four subscales of the Job Affective Well-being Scale were used to measure low pleasure low arousal (LPLA), low pleasure high arousal (LPHA), high pleasure low arousal (LPLA) and high pleasure high arousal (HPHA) job affective states (Van Katwyk et al., 2000). Respondents used a 5-point frequency scale (*never* to *extremely often*) with twenty items to indicate how their job made them feel over the past week. Higher scores indicate more extreme job affect (e.g., LPLA: "My job made me feel bored"; LPHA: "My job made me feel angry"; HPLA "My job made me feel content"; HPLA "My job made me feel excited"; see Table 11 for internal consistency and item-total correlations).

Psychological health symptoms. See Study II Measures for a description the GHQ and Table 11 for internal consistency and item-total correlations.

Physical health symptoms. See Study II Measures for a description physical symptoms checklist measure and Table 11 for internal consistency and item-total correlations.

Job performance. See Study II Measures for a description of the job performance measure and Table 11 for internal consistency and item-total correlations.

Life function. Life function was measured with five items developed for this study to assess the relative frequency of respondents' wellness and social habits. Respondents used a 5-point scale (*far less frequent* to *far more frequent*) to indicate how their past week's behaviours differed from typical patterns. Higher scores indicate improvement in over typical levels of functioning (e.g., "Compared to your typical behaviour, how would you rate the frequency of healthy eating*?";* see Table 10 for all items and inter-item correlations and see Table 11 for internal consistency and item-total correlations).

Turnover intention. See Study II Measures for a description of the turnover intention measure and Table 11 for internal consistency and item-total correlations.

Job satisfaction. Job satisfaction was assessed with a single item: "Overall, I am satisfied with my job" (Nagy, 2002). Respondents used a 5-point scale *(strongly disagree* to *strongly agree)* to indicate how satisfied they were with their job over the past week*.* Higher scores indicate greater job satisfaction.

Lost productive time. Lost productive time was measured with three items that prompted respondents to report time spent distracted, time spent dealing with the conflict, or time missed as a result of the focal work conflict (Gilin Oore et al., 2015). Because each item measured a discrete aspect of lost productive time and Cronbach's alpha (α =

.61) suggested that the three items do not represent a single underlying construct, analyses were conducted with single item measures. All items are listed in Table 10.

Rumination. Rumination was measured with a modified version of the four items that assess negative repetitive thoughts about work experiences from the 8-item Negative and Positive Work Rumination Scale (NAPWRS; Frone, 2015). The original items assess repetitive thoughts about work in general and with no specified time period. The items were reworded to assess rumination related to the focal work conflict over the past week. Respondents used a 4-point scale (*never, rarely, sometimes, often*) to indicate their negative rumination frequency. Higher scores indicate more frequent rumination about the focal work conflict (e.g., "Over the past week, how often have you replayed negative aspects of the work conflict in your mind even after you left work?"; see Table 11 for internal consistency and item-total correlations).

Emotion regulation. Emotion regulation was measured with a modified version of the 4-item regulation of emotion (ROE) subscale of an emotional intelligence scale (Wong & Law, 2002). The original items assess one's internal ability to manage negative emotions in general and with no specified time period (Wong & Law, 2002). For the present study, the lead-in was reworded to assess emotion regulation related to the focal work conflict over the past week. Respondents used a 5-point scale (*strongly disagree* to *strongly agree*) to indicate the extent that they were able to regulate emotions while dealing with the focal work conflict. Higher scores indicate stronger regulating of emotions related to a focal work conflict (e.g., "While dealing with the work conflict over the past week, I was able to control my temper and handle difficulties rationally"; see Table 11 for internal consistency and item-total correlations).

Psychological distancing. Psychological distancing is conceptually distancing oneself from some event along continuums of time, space, sociability, or hypotheticality (Trope & Liberman, 2010). Psychological distancing was measured with 11 items developed for this study to assess the tendency to zoom out from the focal work conflict. Respondents used a 5-point scale (*strongly disagree* to *strongly agree*) to rate their agreement. Higher scores indicate more habitual psychological distancing related to the focal work conflict over the past week (e.g., "To help myself manage the work conflict over the past week, I imagined how my choices will affect me a year from now"; see Table 10 for all items and inter-item correlations and Table 11 for internal consistency and item-total correlations).

Perspective-taking and empathic concern. In their original form, the 7-item perspective-taking scale and the 7-item empathic concern scale measure trait-like dispositions to consider others' viewpoints (Davis, 1980). For the present study, the lead-in was reworded to assess other-focused *state-like* tendencies by instructing respondents to consider how well the statements describe them *over the past week* rather than *in general*. Respondents used a 5-item scale with anchors at 1 (*does not describe me well*) and 5 (d*escribes me very well*). Higher scores indicate stronger other-focused state-like tendencies (e.g., perspective-taking "I believed that there were two sides to the story and tried to look at them both"; empathic concern: "I had tender, concerned feelings for people less fortunate than me"; see Table 11 for internal consistency and item-total correlations).

Relative power. Relative power assesses disputant power dynamics with a single item (Gilin Oore et al. 2015). Respondents indicated whether they have more, less or

equal power to their conflict partner. Higher scores indicate greater relative power

"Compared to the other person, I have (more, less, or equal) power in my workplace."

Social interaction quality. Social interaction quality is a 5-item scale that

measures the degree to which relations with one's conflict partner, supervisor, coworkers,

friends, or family are perceived to be helpful in reducing conflict severity. Respondents

either selected *no contact* or used a 5-point scale (*much worse, worse, neutral, better,*

much better) to indicate perceived support related to the focal work conflict. Higher

scores indicate more helpful interactions (e.g., "Please rate how connecting with your

supervisor affected the intensity of the conflict"; see Table 11 for internal consistency and

item-total correlations).

Table 9.

Study III FWC item means, standard deviations and inter-item correlations.

#	Subscale/Item	*M*	*SD*	Inter-Item Corr.[1]
Social Discord				
1.	**We argued with one another**	**3.17**	**1.17**	**.28 - .53**
2.	There were awkward or tense interactions between us	3.83	0.93	.26 - .30
3.	We had a power struggle	2.95	1.17	.30 - .41
4.	**We were rude or disrespectful toward one another**	**3.00**	**1.13**	**.28 - .50**
5.	**At least one of us raised our voice in frustration or anger**	**3.25**	**1.18**	**.26 - .53**
Negative Emotion				
11.	**I have felt angry toward the other person.**	**3.62**	**0.98**	**.19 - .50**
12.	**The conflict situation has been extremely frustrating for me.**	**3.78**	**0.95**	**.23 - .50**
13.	I have felt betrayed by the other person.	3.33	1.15	.28 - .49
14.	I have felt inadequate when dealing with the conflict.	2.91	1.17	.23 - .45
15.	I have dreaded running into the other person.	3.44	1.17	.18 - .44
16.	I felt shocked at what had happened.	3.24	1.15	.19 - .49
17.	I felt worried and anxious about the conflict situation at work[2].	3.44	1.07	.30 - .48
Relational Dissonance				
18.	**It has felt like something was very wrong between me and the other person.**	**3.54**	**1.01**	**.48 - .64**
19.	**My communication with the other person has felt strained.**	**3.88**	**0.93**	**.45 - .64**
20.	It has been difficult for me to imagine our relationship getting back on track.	3.38	1.10	.45 - .49
21.	Myself and the other person/people only spoke when absolutely necessary.	3.60	1.15	.49 - .57

#	Subscale/Item	*M*	*SD*	Inter-Item Corr.[1]
22.	My relationship with the other person/people was strained because of our disagreement.	3.61	1.03	.46 - .56
Threat				
23.	**I have felt afraid of losing things that were important to me.**	**2.79**	**1.22**	**.37 - .60**
24.	**I have worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.**	**3.14**	**1.28**	**.39 - .61**
25.	I have worried that the conflict was affecting my clients/customers/patients.	2.96	1.16	.33 - .51
26.	I have worried that the conflict would affect my ability to work with the other person.	3.53	1.15	.33 - .51
27.	**I have felt isolated from my co-workers as a result of this conflict.**	**2.79**	**1.20**	**.44 - .61**
28.	It has been harder to achieve my goals because of this conflict.	3.08	1.20	.37 - .55
29.	I worried about my professional reputation because of the conflict.	2.92	1.28	.42 - .71
30.	Friendships that I cared about were at stake during this conflict.	2.63	1.27	.33 - .54
31.	The conflict felt like an attack on my identity	3.13	1.20	.24 - .58
32.	Important working relationships were at risk as a result of the conflict	3.12	1.16	.39 - .58
33.	I worried that people would think less of me because of the conflict	2.89	1.26	.49 - .71

Note: Bolded items were retained in the final subscales.
[1] Inter-item correlations are subscale ranges. All correlations are significant at $p < .001$
[2] Item dropped for poor quality (double-barreled).

Table 10.

Survey items for Study III life function, job performance, and psychological distancing

scales[1].

#	Construct/Item	*M*	*SD*	*Inter-Item Corr.*
Life Function				
1.	Relations with Family	3.21	0.89	.34 - .55
2.	Connecting with Friends	3.00	0.88	.43 - .55
3.	Volunteering	2.72	0.90	.34 - .49
4.	Exercise and Activity	2.88	0.93	.43 - .62
5.	Healthy Eating	2.90	0.93	.37 - .62
Lost Productive Time				
1.	How much time did you spend dealing with the conflict (e.g., talking to others, going for a walk to calm down)?	4.86	7.40	.53 - .67
2.	How much time were you distracted, worried, or thinking about the conflict?	5.76	7.71	.43 - .67
3.	Please estimate how many days you missed either partly or entirely because of the conflict.	0.59	1.77	.43 - .53
Psychological Distancing				
1.	Imagined how my choices will effect me a year from now	3.21	1.17	.29 - .55
2.	Thought about how important this conflict will seem in a week	3.28	1.10	.28 - .55
3.	Think of myself in the present moment (R)[2]	2.46	0.92	--
4.	Looked at my options for resolving the conflict from every angle	3.69	0.87	.17 - .51

#	Construct/Item	*M*	*SD*	Inter-Item *Corr.*
5.	Considered how the conflict would be different in another workplace	3.11	1.22	.24 - .61
6.	Imagined myself in a different space or setting	3.19	1.23	.17 - .61
7.	Thought how someone I respect would handle this situation different from me	3.29	1.09	.31 - .68
8.	Imagined how a role model would behave during this conflict	3.17	1.16	.37 - .68
9.	Wondered how others would manage the conflict differently than me	3.22	1.12	.32 - .68
10.	Asked myself 'what if' questions about various options for dealing with the conflict	3.50	0.99	.31 - .51
11.	Wondered how I will act as the conflict situation changes	3.41	1.04	.32 - .52
12.	Thought creatively about ways to change the conflict situation	3.45	1.01	.21 - .51

Notes: *M* = Mean; *SD* = Standard deviation
[1] All item-item correlations are significant at $p < .001$
[2] Item dropped from scale due to low internal consistency and poor theoretic fit.
Correlations between Item 3 and all other items are not significant.

Study III Results

Data were screened and assessed against assumptions of normality, linearity, outliers, multicollinearity, and orthogonality as recommended by Tabachnick and Fidell, 2013. The three items measuring lost productive time were positively skewed. Log transformations provided normal distributions and these transformed variables were used for regression analyses. One outlier data point (one respondent reportedly worked 441 hours per week) was set to missing. Descriptive statistics are shown in Table 11 and correlations between study variables are shown in Table 12.

To test Hypothesis 4, which stated that FWC items would load on three factors (social discord, negative affect/relational dissonance, and threat), Principal Component Analysis (PCA) and Exploratory Structured Equation Modeling (ESEM) analyses were conducted using SPSS and MPlus, respectively. PCA results indicated that four factors with eigenvalues greater than 1 account for 57% of the variance (see Appendix P). However, Cattell's scree test (Cattell, 1966) suggested a 3-factor solution (see Appendix R). Thus 3-factor and 4-factor models were compared using ESEM with MPlus V1.31.

Using all 28 items, both a 4-factor model ($\chi^2(378) = 499.2$, $p < .001$; CFI = .94; RMSEA < .06, *ns*) and a 3-factor model ($\chi^2(297) = 603.81$, $p < .001$; CFI = .92; RMSEA < .06, *ns*) provided good fit for these data. A 4-factor model with only two items loading on the fourth factor was rejected in favor of the 3-factor model for parsimony. In the 3-factor solution, four of the seven negative emotion items loaded with all five of the relational dissonance items on Factor 2.

Working with the 3-factor solution, items were assessed using estimated loadings and informed by theory with an aim to reduce the scale to 3-4 items per factor. First, two

items that did not load on the predicted factor and three items with complex loadings were eliminated leaving a 3-factor 23-item model with good fit ($\chi^2(187) = 338.83$, $p <$ .001; CFI = .95; RMSEA < .06, *ns*). Then, three items with loadings < .5 and one item with complex loadings were eliminated leaving a 3-factor 19-item solution with very good fit ($\chi^2(117) = 193.78$, $p < .001$; CFI = .97; RMSEA < .05, *ns*). Finally, an additional nine items with moderate loadings and comparatively weaker representation of the theoretic model were eliminated leaving a 3-factor, 10-item scale with excellent fit ($\chi^2(18) = 19.36$, $p = .37$; CFI = .99; RMSEA = .02, *n.s.*). Final items and their loadings are shown in Table 13.

For the remaining hypotheses tests, I present findings using the FWC subscales. The internal structure analyses indicate that negative affect and relational dissonance items load on one factor, which is herein referred to as *relational negativity*. Thus, three subscales are examined—social discord (FWC-SD), relational negativity (FWC-RN), and threat (FWC-T) These fine-grained analyses allow for interpretation of the relative strengths each facet of focal work conflict.

To test Hypothesis 5, which stated that focal work conflict is a job stressor, I conducted a series of hierarchical regression analyses with age/gender in the first step and the FWC subscales in the second step of models predicting strain and function (see Table 14). FWC subscales did not predict absenteeism after controlling for age and gender but results were as expected for the other nine outcomes (R^2_{change} values from .07 to .29). FWC-SD was not a significant predictor in any of these models and although FWC-RN was significant in seven models, FWC-T facet was the strongest predictor with Beta values ranging from .18 to .49.

Hypothesis 6a, which stated that the FWC scale is positively correlated with the

ICAWS and the ICS subscales (i.e., task, process, and relational conflict), was supported

(see Table 12). To test hypotheses 6b, which predicted that FWC predicts strain after

accounting for ICAWS and ICS, I conducted a series of hierarchical regression analyses

with age/gender in the first step, ICAWS/ICS subscales in the second step, and the FWC

subscales in the third step of models predicting strain and function. Hypothesis 6b was

largely supported (see Table 15): Collectively, the FWC subscales accounted for

additional variance in 8 of 10 outcomes (R^2_{change} = .03 to .10); FWC was not significant in

models predicting *time spent dealing with conflict* and *absenteeism*. FWC-SD was

significant in only one model, predicting LPLA, and in the opposite direction as expected

(β = -.*16*). FWC-RN was significant in 5 strain models (β = .13 to .23) and job

satisfaction (β = -.19). FWC-T was significant in 6 strain models (β = .15 to .38) and in

job performance β = -.18).

Hypothesis 7a was partially supported. As shown in Table 12, trait negative affect

was positively associated with FWC. However, FWC was significant in predicting

overburdening workload, work-family conflict, and poor coworker relations, but not low

significance, low recognition, and low skill use. To test Hypothesis 7b, which stated that

FWC predicts strain after accounting for trait negative affect and job stressors, I

conducted a series of hierarchical regression analyses with age entered in the first step;

trait negative affect, low significance, low recognition, workload, work-family conflict,

low skill use, and strained coworker relations in the second step; and the FWC subscales

in the third step in models predicting strain and function. Hypothesis 7b was supported

but only the FWC-RN and FWC-T subscales were significant predictors: FWC-RN was

significant in all models (β = .12 to .26) while FWC-T as significant in three strain

models (β = .15 to .28.) Summary results are shown in Table 16.

To test Hypothesis 8, which stated that rumination, emotion regulation,

psychological distancing, perspective-taking and empathic concern each partially mediate

the relationship between FWC and strain, I used Hayes' SPSS PROCESS tool (2018) and

followed Hayes's (2013) mediation procedures with 5000 bootstrapping samples. With

this procedure a significant indirect effect (i.e., path from predictor to mediator to

outcome) provides evidence of partial mediation (Hayes, 2013). This contemporary

procedure contrasts with prior approaches that require the direct path between the

predictor and the outcome to be reduced to zero (Baron & Kenney, 1986), or reduced to

be statistically non-significant (Sobel, 1986) after accounting for the indirect effect. The

relationship between FWC and life function was not statistically significant after

controlling for age and gender and no additional results are reported for life function. As

shown in Table 17, rumination mediated both FWC-RN and FWC-T predicting LPLA,

LPHA, GHQ, physical symptoms and life function. Emotion regulation mediated FWC-

SD and FWC-T predicting GHQ, job performance, life function. In addition, emotion

regulation mediated FWC-SC predicting job satisfaction; PT mediated FWC-SD and

FWC-RN predicting GHQ; and EC mediated FWC-RN predicting job performance.

Psychological distancing mediated FWC-T predicting life function and an omnibus of all

FWC scales predicting turnover intentions. Thus Hypothesis 8 was partially supported.

To test Hypotheses 9a, and 9b, which stated that relative power and social

interaction quality moderate the relationship between FWC and strain, I used Baron and

Kenny's (1986) method and the SPSS PROCESS custom dialog for SPSS (Hayes, 2018)

to conduct 48 moderator analyses. Each of the potential moderators (i.e., relative power, social interaction quality) was assessed in models predicting strain after controlling for age and gender when these demographic variables were significantly correlated with the outcomes. Hypothesis 9a was not supported: relative power was a moderator in 6 of the 24 models but the significant results were not as predicted (see Tables 18 and 19). That is, the negative effects of FWC-SD and FWC-T were worse when participants reported higher power relative to their conflict partner (see Appendix Q). Results for Hypothesis 9b were mixed: *helpful* social interactions (i.e., interactions that that reportedly made the conflict less severe) were beneficial when the conflict severity was low but the reportedly helpful interactions exacerbated conflict's predictive effects on strain when conflict severity was high. However, the significant moderating effects of helpful contact on the relationships between FWC subscales and life function and job satisfaction were as expected (see Table 20, 21, and 22 for results and Appendix Q for graphs).

Table 11.

Descriptive statistics, reliability estimates, and item-total correlations for Study III variables.

Scale	*M*	*SD*	*Min – Max*	*# of Items*	*Cronbach's Alpha*	*Item-total Correlations*
Demographic Variables						
1. Age (years)	42.65	12.31	20 – 74	1	—	—
2. Gender (male, female, other)	—	—	1 – 3	1	—	—
3. Employment Status (full-time, part-time)	1.04	.19	1 – 2	1	—	—
4. Job Tenure (years)	8.39	7.58	.17 – 36.5	1	—	—
5. Diversity Status						
Convergent Variables						
6. Trait Negative Affect Scale (NAS)	1.93	.83	1 – 5	10	.93	.68 - .78
7. Significance (R)	1.81	.77	1 – 5	1	—	—
8. Recognition (R)	2.35	1.00	1 – 5	1	—	—
9. Workload	2.70	1.21	1 – 5	1	—	—
10. Work-family Conflict	2.76	1.23	1 – 5	1	—	—
11. Skill Use (R)	2.14	.98	1 – 5	1	—	—
12. Coworker Relations (R)	2.23	.85	1 – 5	1	—	—

Scale	M	SD	Min – Max	# of Items	Cronbach's Alpha	Item-total Correlations
Predictor Variables						
13. Social Discord (FWC-SD)	3.14	.94	1 – 5	3	.74	.53 - .61
14. Relational Negativity (FWC-RN)	3.70	.78	1 – 5	4	.82	.58 - .68
15. Threat (FWC-T)	2.91	1.05	1 – 5	3	.81	.64 - .68
16. Interpersonal Conflict (ICAWS)	2.34	.90	1 – 5	4	.88	.72 - .79
17. Task Conflict (ICS)	2.63	.84	1 – 5	3	.78	.57 - .68
18. Process Conflict (ICS)	2.61	.91	1 – 5	3	.83	.64 - .73
19. Relational Conflict (ICS)	2.61	.90	1 – 5	3	.82	.59 - .72
Outcome Variables						
20. Job Affect: High Pleasure High Arousal (JAWS)	2.75	.94	1 – 5	5	.90	.62 - .82
21. Job Affect: High Pleasure Low Arousal (JAWS)	3.04	.88	1 – 5	5	.90	.72 - .77
22. Job Affect: Low Pleasure High Arousal (JAWS)	2.45	.85	1 – 5	5	.85	.57 - .75
23. Job Affect: Low Pleasure High Arousal (JAWS)	2.61	.89	1 – 5	5	.83	.41 - .76
24. Mental Health Checklist (GHQ, R)	2.59	.68	1 – 4.33	12	.88	.10 - .75
25. Physical Symptoms	2.44	1.07	1 – 5	6	.87	.60 - .72
26. Job Performance	4.01	.82	1.33 – 5	3	.90	.78 - .81
27. Life Function	2.94	.68	1 – 5	5	.81	.55 - .65
28. Turnover Intention	2.67	1.07	1 – 5	3	.81	.55 - .75
29. Job Satisfaction	3.37	1.11	1 – 5	1	—	—

Scale	M	SD	Min – Max	# of Items	Cronbach's Alpha	Item-total Correlations
30. Dealing with Conflict (hours)	4.86	7.40	0 – 46	1	—	—
31. Distracted by Conflict (hours)	5.76	7.71	0 – 46	1	—	—
32. Absent as a Result of Conflict (days)	.59	1.77	0 – 20	1	—	—
Mediator Variables						
33. Rumination	2.75	.81	1 – 4	4	.92	.77 - .84
34. Emotion Regulation	3.84	.76	1.75 – 5	4	.87	.63 - .79
35. Psychological Distancing	3.32	.74	1 – 5	11	.88	.49 - .71
36. Cognitive Perspective-taking (IRI)	3.48	.74	1 – 5	7	.82	.25 - .70
37. Empathic Concern (IRI)	3.84	.76	1.75 – 5	7	.78	.44 - .61
Moderator Variables						
38. Relative Power	.97	.72	0 – 2	1	—	—
39. Social interaction quality	3.31	0.62	1– 5	6	.89	.22 - 78

(R) Indicates reverse coding

Table 12.

Study III variable correlations (N = 268).

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Age													
2. Gender	-.05												
3. Employment Status	.05	.06											
4. Tenure	.46[b]	-.05	-.15[a]										
5. Diverse Status	-.19[b]	.00	.07	-.11									
6. Trait NA	-.35[b]	.00	-.01	-.11	.20[b]								
7. Significance (R)	-.20[b]	-.07	-.05	-.16[b]	.05	.17[b]							
8. Recognition (R)	-.05	.06	-.05	-.08	.00	.12	.45[b]						
9. Workload	-.24[b]	-.10	-.11	-.11	.08	.32[b]	.16[b]	-.07					
10. Work-Family Balance	-.30[b]	-.09	-.06	-.13[a]	.08	.31[b]	.07	-.03	.64[b]				
11. Skill Use (R)	-.23[b]	.02	-.01	-.22[b]	-.02	.18[b]	.47[b]	.45[b]	.14[a]	.10			
12. Coworker Relations	-.13[a]	.12	.06	-.13[a]	.00	.26[b]	.33[b]	.42[b]	.12	.11	.49[b]		
13. FWC-SD	-.24[b]	-.10	.05	-.13[a]	.12[a]	.35[b]	.00	-.04	.16[b]	.17[b]	.03	.22[b]	
14. FWC-RN	-.10	.08	.03	.00	.06	.23[b]	-.11	.01	.02	.11	.01	.08	.47[b]

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
15. FWC-T	-.26[b]	-.05	-.03	-.12	.18[b]	.48[b]	.13[a]	.09	.30[b]	.35[b]	.11	.26[b]	.54[b]
16. ICAWS	-.35[b]	-.04	-.10	-.14[a]	.10	.55[b]	.14[a]	.02	.42[b]	.38[b]	.24[b]	.33[b]	.45[b]
17. ICS Relational Conflict	-.25[b]	.06	-.07	-.10	.08	.52[b]	.15[a]	.07	.39[b]	.33[b]	.25[b]	.32[b]	.37[b]
18. ICS Process Conflict	-.25[b]	-.06	-.08	-.05	.08	.47[b]	.10	.08	.33[b]	.34[b]	.18[b]	.20[b]	.31[b]
19. ICS Task Conflict	-.31[b]	-.07	-.06	-.12[a]	.07	.47[b]	.14[a]	.03	.38[b]	.32[b]	.20[b]	.23[b]	.35[b]
20. JAWS HPHA	.04	-.10	.06	.07	.09	.07	-.21[b]	-.45[b]	-.01	-.05	-.43[b]	-.33[b]	.05
21. JAWS HPLA	.11	-.07	.03	.15[a]	-.01	-.08	-.21[b]	-.44[b]	-.12	-.14[a]	-.37[b]	-.41[b]	-.12
22. JAWS LPHA	-.21[b]	.03	-.02	-.15[a]	.19[b]	.60[b]	.14[a]	.20[b]	.37[b]	.38[b]	.22[b]	.35[b]	.40[b]
23. JAWS LPLA	-.24[b]	.03	-.09	-.16[b]	.12	.57[b]	.25[b]	.33[b]	.36[b]	.38[b]	.30[b]	.31[b]	.26[b]
24. GHQ (R)	-.37[b]	.05	.01	-.21[b]	.07	.49[b]	.29[b]	.34[b]	.43[b]	.43[b]	.38[b]	.48[b]	.32[b]
25. Physical Symptoms	-.25[b]	.18[b]	.05	-.17[b]	.08	.49[b]	.06	.11	.24[b]	.33[b]	.14[a]	.28[b]	.25[b]
26. Job Performance	.23[b]	.12	.06	.16[a]	-.12	-.22[b]	-.43[b]	-.38[b]	-.20[b]	-.15[a]	-.37[b]	-.41[b]	-.07
27. Life Function	-.07	-.12[a]	-.03	-.05	.08	.12[a]	-.03	-.31[b]	.20[b]	.10	-.16[b]	-.21[b]	.07
28. Turnover Intentions	-.24[b]	-.03	-.06	-.24[b]	.14[a]	.23[b]	.19[b]	.24[b]	.19[b]	.23[b]	.33[b]	.28[b]	.22[b]
29. Job Satisfaction	.08	-.06	.06	.10	-.05	-.08	-.29[b]	-.43[b]	.04	-.05	-.39[b]	-.41[b]	-.08
30. Dealing with Conflict	-.24[b]	-.07	-.07	-.10	.12[a]	.41[b]	.08	-.05	.21[b]	.13[a]	.05	.13[a]	.20[b]

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
31. Distracted by Conflict	-.15[a]	-.01	-.02	-.06	.18[b]	.48[b]	.04	.15[a]	.20[b]	.21[b]	.14[a]	.30[b]	.24[b]
32. Absent	-.24[b]	-.13[a]	-.04	-.09	.19[b]	.45[b]	.02	-.16[a]	.29[b]	.24[b]	.00	-.03	.25[b]
33. Rumination	-.10	.10	.12	-.14[a]	.00	.34[b]	.00	.18[b]	.19[b]	.28[b]	.17[b]	.23[b]	.24[b]
34. Emotion Regulation	.16[b]	-.01	-.04	.17[b]	-.09	-.25[b]	-.27[b]	-.31[b]	-.19[b]	-.21[b]	-.32[b]	-.47[b]	-.29[b]
35. Psychological Distancing	-.18[b]	-.09	.00	-.07	.15[a]	.24[b]	-.02	-.12	.15[a]	.17[b]	.00	-.10	.26[b]
36. IRI Perspective-taking	.10	.05	.04	.13[a]	.06	-.07	-.13[a]	-.13[a]	-.19[b]	-.12[a]	-.17[b]	-.21[b]	-.16[a]
37. IRT Emotive Concern	.15[a]	.15[a]	.19[b]	.07	.06	-.08	-.17[b]	-.02	-.24[b]	-.20[b]	-.20[b]	-.13[a]	-.11
38. Relative Power	.05	.00	-.05	.11	.00	-.01	-.20[b]	-.28[b]	.07	.01	-.22[b]	-.12[a]	.08
39. Social Interaction Quality	-.16[b]	-.13[a]	.03	.03	.17[b]	.18[b]	-.05	-.23[b]	.03	-.02	-.11	-.18[b]	.05

Variables	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.
15. FWC-T	.43[b]													
16. ICAWS	.22[b]	.53[b]												
17. ICS Relational Conflict	.32[b]	.49[b]	.76[b]											
18. ICS Process Conflict	.28[b]	.42[b]	.71[b]	.77[b]										
19. ICS Task Conflict	.24[b]	.44[b]	.73[b]	.77[b]	.80[b]									
20. JAWS HPHA	-.11	-.04	-.03	-.03	.01	.01								
21. JAWS HPLA	-.23[b]	-.21[b]	-.08	-.14[a]	-.05	-.04	.76[b]							
22. JAWS LPHA	.39[b]	.54[b]	.59[b]	.59[b]	.51[b]	.53[b]	-.11	-.30[b]						
23. JAWS LPLA	.36[b]	.45[b]	.53[b]	.53[b]	.50[b]	.50[b]	-.25[b]	-.32[b]	.80[b]					
24. GHQ (R)	.30[b]	.57[b]	.52[b]	.49[b]	.45[b]	.45[b]	-.39[b]	-.52[b]	.63[b]	.67[b]				
25. Physical Symptoms	.32[b]	.43[b]	.45[b]	.50[b]	.47[b]	.50[b]	-.09	-.19[b]	.57[b]	.59[b]	.57[b]			
26. Job Performance	.04	-.21[b]	-.26[b]	-.16[b]	-.14[a]	-.22[b]	.29[b]	.34[b]	-.19[b]	-.23[b]	-.36[b]	-.07		
27. Life Function	-.11	.05	.21[b]	.14[a]	.13[a]	.11	.41[b]	.33[b]	.05	-.04	-.15[a]	-.11	.15[a]	
28. Turnover Intentions	.29[b]	.34[b]	.35[b]	.33[b]	.37[b]	.31[b]	-.18[b]	-.31[b]	.41[b]	.38[b]	.43[b]	.23[b]	-.24[b]	.07
29. Job Satisfaction	-.22[b]	-.12[a]	-.07	-.12[a]	-.14[a]	-.09	.44[b]	.50[b]	-.24[b]	-.30[b]	-.39[b]	-.11	.32[b]	.26[b]
30. Dealing with Conflict	.07	.22[b]	.52[b]	.41[b]	.41[b]	.44[b]	.14[a]	.08	.29[b]	.24[b]	.18[b]	.27[b]	-.09	.23[b]

Variables	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.
31. Distracted by Conflict	.21[b]	.32[b]	.47[b]	.47[b]	.39[b]	.36[b]	-.01	-.12	.46[b]	.40[b]	.33[b]	.36[b]	-.16[b]	.10
32. Absent	.13[a]	.30[b]	.42[b]	.34[b]	.33[b]	.39[b]	.22[b]	.17[b]	.37[b]	.37[b]	.20[b]	.32[b]	-.08	.30[b]
33. Rumination	.50[b]	.40[b]	.32[b]	.41[b]	.36[b]	.38[b]	-.21[b]	-.32[b]	.58[b]	.59[b]	.53[b]	.57[b]	-.11	-.18[b]
34. Emotion Regulation.	-.17[b]	-.31[b]	-.23[b]	-.22[b]	-.09	-.17[b]	.29[b]	.37[b]	-.32[b]	-.26[b]	-.48[b]	-.20[b]	.40[b]	.19[b]
35. Psychological Distancing	.26[b]	.36[b]	.35[b]	.32[b]	.38[b]	.29[b]	.14[a]	-.01	.28[b]	.24[b]	.22[b]	.24[b]	.01	.24[b]
36. IRI Perspective-taking	.03	-.11	-.12	-.04	.04	-.04	.22[b]	.18[b]	-.09	-.11	-.17[b]	.00	.16[b]	-.01
37. IRT Emotive Concern	.12	-.06	-.26[b]	-.19[b]	-.18[b]	-.21[b]	.07	.03	-.02	-.04	-.13[a]	-.02	.22[b]	-.13[a]
38. Relative Power	.04	-.04	.05	.06	.06	-.01	.27[b]	.25[b]	-.01	-.04	-.14[a]	-.06	.18[b]	.11
39. Social Interaction Quality	-.10[a]	.06	.19[b]	.06	.17[b]	.18[b]	.37[b]	.31[b]	.00	-.02	-.10	.01	.10	.41[b]

Variables	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.
29. Job Satisfaction	-.63[b]										
30. Hours Dealing	.21[b]	.08									
31. Hours Distracted	.23[b]	-.10	.67[b]								
32. Hours Absent	.17[b]	.15[a]	.53[b]	.43[b]							
33. Rumination	.23[b]	-.24[b]	.07	.29[b]	.15[a]						
34. Emotion Regulation	-.16[a]	.28[b]	-.03	-.19[b]	-.01	-.28[c]					
35. Psychological Distancing	.24[b]	.02	.21[b]	.15[a]	.23[b]	.21[b]	.12				
36. IRI Perspective-taking	-.09	.05	.03	.00	-.03	-.05	.39[b]	.29[b]			
37. IRT Empathic Concern	-.11	-.04	-.13[a]	-.05	-.17[b]	.08	.22[b]	.18[b]	.43[b]		
38. Relative Power	-.15[a]	.30[b]	.12	.05	.15[a]	-.11	.15[a]	.03	.03	-.10	
39. Social interaction quality	.02	.28[b]	.31[b]	.11	.29[b]	-.15[b]	.11	.23[b]	.04	-.03	.07

[a]$p < .05$; [b]$p < .01$

Table 13.

Study III: ESEM completely standardized solution (STDYX) factor loadings for the final

3-factor, 10-item FWC scale.

#	Item	FWC-SD	FWC-RN	FWC-T
1.	At least one of us raised our voice in frustration or anger.	**.72ᶜ**	-.02	.02
2.	We argued with one another.	**.71ᶜ**	.10	-.02
3.	We were rude or disrespectful toward one another.	**.49ᶜ**	.30ᵇ	.01
4.	My communication with the other person has felt strained.	.00	**.66ᶜ**	.06
5.	It has felt like something was very wrong between me and the other person.	.10	**.57ᶜ**	.13
6.	I have felt angry toward the other person.	-.05	**.88ᶜ**	-.01
7.	The conflict situation has been extremely frustrating for me.	.12	**.56ᶜ**	-.02
8.	I have felt isolated from my co-workers as a result of this conflict.	.01	-.16	**.89ᶜ**
9.	I have worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.	-.04	.07	**.75ᶜ**
10.	I have felt afraid of losing things that were important to me.	.03	.01	**.71ᶜ**

Notes: FWC-SD = Focal work conflict social discord subscale; FWC-RN = Focal work conflict relational negativity subscale; FWC-T = Focal work conflict threat subscale.
ᵇ $p < .01$; ᶜ $p < .001$

Table 14.

Study III: Summary of hierarchical regression analysis of FWC subscales predicting outcomes (N = 268).[*]

Predictor	LPLA		LPHA		GHQ (R)		Phy. Sym.		Turnover	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.06[c]		.04[b]		.13[c]		.09[c]		.06[c]
Age	-.24[c]		-.21[b]		-.37[c]		-.24[c]		-.24[c]	
Gender	--		--		--		.17[b]		--	
Step 2		.20[c]		.29[c]		.25[c]		.17[c]		.11[c]
Age	-.15[b]		-.07		-.24		-.15[b]		-.17[b]	
Gender	--		--		--		.17[b]		--	
F-SD	-.08		-.08		-.04		-.02		-.04	
F-RN	.23[c]		.17[b]		.08		.16[a]		.19[b]	
F-T	.35[c]		.40[c]		.49[c]		.34[c]		.23[b]	
Total R²		**.26[c]**		**.33[c]**		**.38[c]**		**.26[c]**		**.17[c]**

Notes: LPLA = Job-related negative affect, low-pleasure low arousal subscale; LPHA = Job-related negative affect, low-pleasure high arousal subscale; GHQ = General Health Questionnaire; Phy. Sym. = Physical health symptoms; FWC-SD = Focal work conflict social discord subscale; FWC-RN = Focal work conflict relational negativity subscale; FWC-T = Focal work conflict threat subscale.

[*]Age and gender were included as control variables when their pairwise correlations with outcome variables were significant (See Table 12 for pairwise correlations).
[a] $p < .05$; [b] $p < .01$ [c] $p < .001$

Predictor	Job Perf.		Job Sat.		Log Hrs. Deal.		Log Hrs. Dist.		Log Hrs. Absent	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.06^c		.04^b		.08^c		.03^b		.05
Age	-.24^c		-.21^b		-.28^c		-.18^b		-.11	
Gender	--		--		--		--		-.17	
Step 2		.20^c		.29^c		.07^c		.16^c		.02
Age	-.15^b		-.07		-.20^b		-.09		-.10	
Gender	--		--		--		--		-.14	
FWC-SD	-.08		-.08		.13		.03		.09	
FWC-RN	.23^c		.17^b		-.01		.16^c		.05	
FWC-T	.35^c		.40^c		.18^c		.29^c		.06	
Total R^2		**.26^c**		**.33^c**		**.14^c**		**.19^c**		**.07**

Notes: Job Perf. = Job performance; Job Sat. = Job satisfaction; Log Hrs. Deal = Log of hours spent dealing with conflict; Log. Hrs. Dist. = Log of hours spent distracted by conflict; Log Hrs. Absent = Log of hours absent due to conflict; FWC-SD = Focal work conflict social discord subscale; FWC-RN = Focal work conflict relational negativity subscale; FWC-T = Focal work conflict threat subscale.

*Age and gender were included as control variables when their pairwise correlations with outcome variables were significant (See Table 12 for pairwise correlations).
[a] $p < .05$; [b] $p < .01$ [c] $p < .001$

Table 15.

Study III: Summary of hierarchical regression analysis of FWC predicting outcomes after accounting for ICAWS and ICS (n = 268)*.

Predictor	LPLA		LPHA		GHQ		Phy. Sym.		Turnover	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.06[c]		.04[b]		.13[c]		.09[c]		.06[c]
Age	-.24[c]		-.21[b]		-.37[c]		.24[c]		-.24[c]	
Gender	--		--		--		.17[b]		--	
Step 2		.28[c]		.36[c]		.20[c]		.24[c]		.11[c]
Age	-.07		.00		-.22[c]		-.08		-.14[a]	
Gender	--		--		--		.19[c]		--	
ICAWS	.23[b]		.33[c]		.25[b]		.07		.13	
TskCon	.06		.05		-.01		.23[a]		-.09	
ProCon	.10		.02		.07		.12		.27[b]	
RelCon	.22[a]		.28[b]		.21[a]		.15		.06	
Step 3		.07[c]		.08[c]		.10[c]		.05[c]		.05[b]
Age	-.06		.02		-.19[c]		-.07		-.13[a]	
Gender	--		--		--		.19[c]		--	
ICAWS	.25[b]		.27[b]		.25[b]		.04		.12	
TskCon	.08		.06		.00		.24[a]		-.08	
ProCon	.06		.00		.06		.09		.24[a]	
RelCon	.13		.18[a]		.11		.08		-.03	
F-SD	-.16[a]		.00		-.09		-.07		-.07	
F-RN	.23[c]		.17[b]		.07		.13[a]		.17[b]	
FWC-T	.16[b]		.21[c]		.38[c]		.20[b]		.15[a]	
Total R^2		**.38[c]**		**.48[c]**		**.44[c]**		**.38[c]**		**.22[c]**

Predictor	Job Perf.		Job Sat.		Log Hrs. Deal.		Log Hrs. Dist.		Log Hrs. Absent	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.05^c				.08^c		.03^b		.05
Age	.23^c		--		-.28^c		-.18^b		-.11	
Gender	--		--		--		--		-.17	
Step 2		.05^a		.03		.23^c		.20^c		.20^a
Age	.15^a		--		-.10		-.06		.04	
Gender	--		--		--		--		-.11	
ICAWS	.09^a		.10		.35^c		.17		.04	
TskCon	-.24		.06		.14		-.15		.44^a	
ProCon	-.16		-.18		.12		.14		-.03	
RelCon	.08		-.10		-.06		.32^b		.04	
Step 3		.03^a		.03^a		.00		.05^b		.01
Age	.15^a		--		-.10		-.05		.03	
Gender	--		--		--		--		-.11	
ICAWS	-.20		.08		.33^c		.13		.05	
TskCon	-.16		.04		.14		-.13		.44^a	
ProCon	.11		-.15		.12		.12		-.03	
RelCon	.07		-.04		-.06		.25^a		.05	
F-SD	.09		.03		.04		-.01		-.02	
F-NAID	.12		-.19^a		.00		.15^a		.02	
F-T	-.18^a		-.04		.00		.15^a		-.02	
Total R^2		**.14^c**		**.06^a**		**.30^c**		**.28^c**		**.25**

Notes: LPLA = Job-related negative affect, low-pleasure low arousal subscale; LPHA = Job-related negative affect, low-pleasure high arousal subscale; GHQ = General Health Questionnaire; Phy. Sym. = Physical health symptoms; ICAWS = Interpersonal Conflict at Work Scale; TskCon = Intragroup task conflict; ProCon = Intragroup process conflict; RelCon = Intragroup relational conflict; FWC-SD = Focal work conflict social discord subscale; FWC-RN = Focal work conflict relational negativity subscale; FWC-T = Focal work conflict threat subscale.

*Age and gender were included as control variables when their pairwise correlations with outcome variables were significant (See Table 12 for pairwise correlations).

$^a p < 05$; $^b p < .01$ $^c p < .001$

Table 16: Study III: Summary of hierarchical regression analyses of FWC predicting strain after accounting for age, trait negative affect, and job stressors (N = 268)[*].

Predictor	LPLA		LPHA		GHQ		Phy. Sym.	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
Step 1		.06[c]		.04[b]		.13[c]		.06[c]
Age	-.24[c]		-.21[b]		-.37[c]		-.25[c]	
Step 2		.40[c]		.42[c]		.39[c]		.25[c]
Age	.02		.05		-.14[b]		-.06	
Trait NA	.44[c]		.49[c]		.24[c]		.38[c]	
Significance	.00		-.08		-.02		-.09	
Recognition	.25[c]		.12[a]		.20[c]		.04	
Workload	.12		.13[a]		.19[b]		-.03	
Work-Fam. Conf.	.17[b]		.15[a]		.17[b]		.21[b]	
Skill Use	.07		.02		.06		-.02	
Coworker Relations	.03		.17[b]		.25[c]		.18[b]	
Step 3		.07[c]		.08[c]		.08[c]		.05[c]
Age	.02		.08		-.12[b]		-.06	
Trait NA	.37[c]		.38[c]		.12[a]		.31[c]	
Significance	.05		-.04		-.01		-.06	
Recognition	.23[c]		.12[a]		.19[c]		.02	
Workload	.14[b]		.14[a]		.19[b]		-.02	
Work-Fam. Conf.	.14[b]		.10		.11[a]		.17[a]	
Skill Use	.06		.03		.08		-.02	
Coworker Relations	.01		.12[b]		.21[c]		.16[a]	
FWC-SD	-.07		.05		-.04		-.09	
FWC-RN	.26[c]		.20[c]		.12[a]		.19[b]	
FWC-T	.07		.15[b]		.28[c]		.15[b]	
Total R^2		**.53[c]**		**.55[c]**		**.58[c]**		**.36[c]**

Notes: LPLA = Job-related negative affect, low-pleasure low arousal subscale; LPHA = Job-related negative affect, low-pleasure high arousal subscale; GHQ = General Health Questionnaire; Phy. Sym. = Physical health symptoms; FWC-SD = Focal work conflict social discord subscale; FWC-RN = Focal work conflict relational negativity subscale; FWC-T = Focal work conflict threat subscale.
[a] $p < .05$; [b] $p < .01$ [c] $p < .001$

Table 17.

Study III: Statistically significant results of hierarchical regression analysis showing the mediation effects on the relationships between FWC and outcomes with 5000 bootstrap samples at 95% level of confidence for confidence intervals.

Outcome Mediator	Direct Effects Model*		Indirect Omnibus Effects				Indirect FWC-SD Effects				Indirect FWC-RN Effects				Indirect FWC-T Effects			
	R^2	F	Eff.	SE	LB	UB	Eff.	SE	LB	UB	Eff.	SE	LB	UB	Eff.	SE	LB	UB
LPLA	.26	22.72[c]																
Rum.	.30	27.65[c]	**.14**	**.03**	**.10**	**.20**	-.04	.03	-.11	.01	**.23**	**.04**	**.16**	**.33**	**.10**	**.03**	**.05**	**.17**
LPHA	.33	32.77[c]																
Rum.	.30	27.65[c]	**.12**	**.03**	**.08**	**.18**	-.04	.03	-.09	.01	**.20**	**.04**	**.12**	**.28**	**.09**	**.03**	**.04**	**.14**
GHQ	.22	18.84[c]																
Rum.	.30	27.65[c]	**-.05**	**.01**	**-.08**	**-.03**	.02	.01	-.00	.04	**-.09**	**.02**	**-.14**	**-.05**	**-.04**	**.01**	**-.07**	**-.02**
ER	.12	9.18[c]	-.01	.01	-.02	-.00	**.15**	**.01**	**.00**	**.04**	.00	.01	-.02	.01	**.02**	**.01**	**.00**	**.04**
PT	.05	3.15[a]	**.00**	**.00**	**-.01**	**.00**	**.01**	**.01**	**.00**	**.03**	**-.01**	**.01**	**-.03**	**.00**□	.00	.00	-.00	.02
Phy. Sym.	.26	18.28[c]																

Outcome Mediator	Direct Effects Model*		Indirect Omnibus Effects				Indirect FWC-SD Effects				Indirect FWC-RN Effects				Indirect FWC-T Effects			
	R^2	F	Eff.	SE	LB	UB	Eff.	SE	LB	UB	Eff.	SE	LB	UB	Eff.	SE	LB	UB
Rum.	.30	22.54[c]	**.17**	**.03**	**.11**	**.25**	-.05	.04	-.12	.02	**.27**	**.05**	**.17**	**.38**	**.13**	**.04**	**.07**	**.21**
Job Perf.	.11	6.50[c]																
ER	.12	7.38[c]	**.04**	**.01**	**.01**	**.07**	**-.06**	**.02**	**-.11**	**-.02**	.01	.03	-.04	.06	**-.06**	**.03**	**-.11**	**-.02**
EC	.08	4.43[b]	.00	.00	-.00	.01	-.02	.01	-.05	.001	**.03**	**.02**	**.00**	**.07**	.00	.01	-.03	.01
Life Function	.05	2.59[a]																
Rum.	.31	22.54[c]	**-.04**	**.02**	**-.08**	**-.00**	.01	.01	-.00	.04	**-.06**	**.03**	**-.12**	**-.01**	**-.03**	**.02**	**-.07**	**-.00**
ER	.21	7.38[c]	**.02**	**.01**	**.00**	**.04**	**-.03**	**.01**	**-.06**	**-.01**	-.02	.01	-.02	.03	**-.03**	**.01**	**-.06**	**-.01**
PD	.16	10.07[c]	**.03**	**.01**	**.01**	**.06**	.01	.02	-.03	.04	.03	.02	-.01	.08	**.05**	**.02**	**.01**	**.10**
Turn. Int.	.17	10.55[c]																
PD	.16	10.07[c]	**.03**	**.02**	**.03**	**.07**	.01	.02	-.03	.02	.03	.02	-.00	.09	.00	.01	.01	.11
Job Sat.	.05	2.96[a]																
ER	.12	7.38[c]	**.03**	**.02**	**.01**	**.07**	**-.05**	**.03**	**-.12**	**-.02**	.01	.03	-.04	.06	-.05	.03	-.12	-.01

Notes: LPLA = Low-pleasure low arousal; LPHA = Low-pleasure high arousal; GHQ = General Health Questionnaire; Phy. Sym. = Physical health symptoms; FWC-SD = Focal work conflict social discord subscale; Rum. = Rumination; PT = Perspective-taking; EC

= Empathic concern; PD = Psychological distancing; ER = Emotion regulation; [a] $p < .05$; [b] $p < .01$; [c] $p < .001$; *df = 5, 262.

Table 18.

Study III: Statistically significant results of regression analysis showing the moderating effects of power on the relationships between FWC-SD and job performance/turnover intentions.

Predictor	Job Performance		Overall Model		Turnover Intentions		Overall Model	
	b	$t_{(261)}$	R^2	$F_{(6,261)}$	b	$t_{(261)}$	R^2	$F_{(6,261)}$
			.10	4.87[c]			.16	8.34[c]
Constant	3.26	16.80[c]			3.61	14.78[c]		
FWC-SD	.13	1.39			-.14	-1.23		
Low vs. Equal Power	.16	1.41			-.41	-2.78[b]		
Low vs. High Power	.43[b]	3.14			-.48	-2.83[b]		
FWC-SD*Low-Equal Power	-.20	-1.65			.44	2.91[b]		
FWC-SD*Low-High power	-.29	-2.09[a]			.62	3.51[a]		
Age (covariate)	.01	3.23[b]			-.02	-2.95[b]		

Notes: FWC-SD = Focal work conflict social discord subscale; [a] $p < .05$; [b] $p < .01$; [c] $p < .001$

Table 19.

Study III: Statistically significant results of regression analysis showing the moderating effects of power on the relationships between FWC-T and LPLA, LPHA, turnover intentions, and job satisfaction.

Predictor	Low Pleasure Low Arousal		Overall Model		Low Pleasure High Arousal		Overall Model		Turnover Intentions		Overall Model		Job Satisfaction		Overall Model	
	b	$t_{(261)}$	R^2	$F_{(6,261)}$	b	$t_{(261)}$	R^2	$F_{(6,261)}$	b	$t_{(261)}$	R^2	$F_{(6,261)}$	b	$t_{(261)}$	R^2	$F_{(6,261)}$
Model			.25	14.79[c]			.35	23.20[c]			.19	10.37[c]			.12	7.17[c]
constant	3.18	16.40[c]			.2.83	16.38[c]			3.57	14.69[c]			2.88	23.28[c]		
Age	-.01	-2.55[a]			-.01	-1.58			-.01	-2.78[b]			--	--		
FWC-T	.12	1.36			.24	2.96[b]			-.01	-.08			.07	.57		
low vs. equal	-.21	-1.86			-.29	-2.82[b]			-.39	-2.72[b]			.51	3.30[b]		
low vs. high	-.08	-0.60			.01	.06			-.41	-2.50[a]			.94	5.25[c]		
FWC-T*low-equal power	.25	2.27[a]			.17	1.68			.39	2.80[b]			-.32	-2.13[b]		
FWC-T*low-high power	.38	3.31[b]			.35	3.11[b]			.44	2.80[b]			-.12	-.70		

Notes: FWC-T = Focal work conflict threat subscale; low = lower relative power; high = higher relative power
[a] $p < .05$; [b] $p < .01$; [c] $p < .001$

Table 20.

Study III: Statistically significant results of regression analysis showing the moderating effects of social interaction quality on the relationships between FWC-SD and LPLA, physical symptoms, and life function.

Predictor	Low Pleasure Low Arousal		Overall Model		Physical Symptoms		Overall Model		Life Function		Overall Model	
	b	$t_{(263)}$	R^2	$F_{(4,263)}$	b	$t_{(264)}$	R^2	$F_{(5,262)}$	b	$t_{(263)}$	R^2	$F_{(4,263)}$
Model			.11	8.49[c]			.16	9.58[c]			.22	18.33[c]
constant	3.24	16.74[c]			2.47	8.81[c]			3.04	24.84[c]		
Age	-.01	-3.39[c]			-.02	-3.31[b]			--	--		
Gender	--	--			.44	3.58[c]			-.07	-.92		
FWC-SD	.20	3.54[c]			.26	3.91[c]			.02	.47		
Cont. with others	-.05	-.49			-.01	-.09			.44	6.55[c]		
FWC-SD*Cont.	.21	2.03[a]			.28	2.36[a]			.18	2.54[a]		

Notes: FWC-SD = Focal work conflict social discord subscale
[a] $p < .05$; [b] $p < .01$; [c] $p < .001$

Table 21.

Study III: Statistically significant results of regression analysis showing the moderating effects of social interaction quality on the relationships between FWC-RN and life function/job satisfaction.

Predictor	Life Function		Overall Model		Turnover Intentions		Overall Model	
	b	$t_{(261)}$	R^2	$F_{(4,263)}$	b	$t_{(261)}$	R^2	$F_{(6,261)}$
Model			.22	18.41[c]			.13	12.73[c]
constant	3.06	25.26[c]			3.38	52.99[c]		
Age	--	--			--			
Gender	-.08	-1.01			--			
FWC-RN	-.08	-1.18			-.30	-3.66[c]		
SIQ	.47	7.30[c]			.44	4.02[c]		
FWC-RN*SIQ	.16	1.97[a]			.28	2.01[a]		

Notes: SIQ = Social Interaction Quality; FWC-RN = Focal work conflict relational negativity subscale
[a] $p < .05$; [b] $p < .01$; [c] $p < .001$

Table 22.

Study III: Statistically significant results of regression analysis showing the moderating effects of social interaction quality on the relationships between FWC-T and LPLA, physical symptoms, and life function.

	Low Pleasure Low Arousal				Physical Symptoms				Life Functioning			
	Predictors		Overall Model		Predictors		Overall Model		Predictors		Overall Model	
	b	$t_{(263)}$	R^2	$F_{(4,263)}$	b	$t_{(264)}$	R^2	$F_{(5,262)}$	b	$t_{(263)}$	R^2	$F_{(4,263)}$
			.24	21.27[c]			.26	18.55[c]			.22	18.80[c]
constant	3.05	17.05[c]			2.27	7.92[c]			3.04	25.03[c]		
Age	-.01	2.60[b]			-.01	-2.54[a]			--	--		
Gender	--	--			.43	3.78[c]			.07	-.93		
FWC-T	.36	7.57[c]			.42	7.78[c]			.01	.17		
SIQ	-.09	-1.04			-.04	-.34			.44	6.55[c]		
FWC-T*SIQ	.23	3.04[b]			.24	2.68[b]			.17	2.83[b]		

Notes: SIQ = Social Interaction Quality; FWC-T = Focal work conflict threat subscale
[a] $p < .05$; [b] $p < .01$; [c] $p < .001$

Study III Discussion

The first goal of Study III was to reassess the internal structure and validity of the FWC scale with a cross-industry sample of workers who were experiencing a work conflict at the time of the study. The 3-factor model of work conflict as social discord, relational negativity, and threat provided an excellent fit for these data. The combining of negative affect and relational dissonance makes intuitive sense when one considers that work conflict's negative emotions are *relational* (e.g., anger *toward* one's conflict partner). In light of these results, a refined version of the work conflict definition is provided in the General Discussion section below. Notably, the final scale developed in Study III mirrored the Study II scale: all three of the FWC-RN items and two of the three FWC-T items were retained in both studies.

Like intragroup conflict, focal work conflicts are job stressors. The finding that threat was the strongest facet in focal work conflict predicting strain supports the conservation of resources (COR) theory. Specifically, COR predicts that loss or threatened loss of resources is the *primary* source of stress (Hobfoll, 2001). In keeping with this theory, the present research suggests that a threat to a core human state (one's interests, identity, security, belongingness, or values) is the most pernicious aspect of work conflict.

As expected, FWC was correlated with ICAWS and accounted for additional variance in strain outcomes. As a reminder, the 4-item ICAWS scale includes only one item specific to interpersonal conflict (the remaining three items tap into workplace mistreatment; Hershcovis, 2011), whereas the FWC subscales tap into the full

psychological experience of work conflict. Similarly, FWC was correlated with ICS and accounted for additional variance in strain outcomes. This suggests that focal work conflict and intragroup conflict are distinct job stressors. Taken together, these results suggest that prior research using ICAWS/ICS may underestimate the total negative effects of work conflict for any worker who is directly involved in conflicts at work.

The results suggest that employees with high trait negative affect may perceive work conflict as more severe than employees with low trait negative affect. Caution is needed here: this finding does *not* indicate that high trait negative affect is associated with an increased risk of becoming involved in work conflicts as the FWC scale assesses severity, not incidence, of work conflict. Indeed, it is possible that workers high in trait negative affect learn to avoid work conflict as a means of safeguarding their mental health.

The results show that work conflict is correlated with a subset of job stressors, namely: workload; work-family conflict; and poor coworker relations. Logically, work conflict adds to workloads as the burden of resolving conflicts is added to workers' job duties. The relationship between work conflict and work-family conflict is consistent with prior research indicating that workers ruminate on the negative aspects of customer conflicts when they return home from work (Volmer et al., 2012). Conceptually, the negative interactions associated with work conflict are consistent with poor coworker relations. In addition, FWC accounts for 10% to 17% of the variation in strain outcomes after accounting for six other job stressors (i.e., lack of significance, lack of recognition, workload, work-family conflict, underutilization of skills, and strained coworker

relationships). Thus, future researchers attempting to examine job stressors and their

relative magnitude in predicting strain may wish to include the FWC scale.

Reduced negative rumination, enhanced emotion regulation, and the tendency to

zoom out (psychological distancing), were shown to be effective in helping participants

cope with work conflict. The lead-in/items for these three scales were reworded to

directly assess, respectively, respondents' negative ruminations related to the focal work

conflict; regulating of emotions related to the focal work conflict; and to zoom out from

the focal work conflict. Contrary to prediction, and in contrast with prior research,

neither perspective-taking (PT) nor empathic concern (EC) mediated the relationship

between FWC and strain. The PT and EC scales used in the present study prompted

respondents to consider their other-focused tendencies over the past week in an attempt to

capture state rather than trait PT and EC, but the items did not directly reference the focal

work conflict. Thus the present measure of PT and EC may have been too distal to assess

whether or not PT and EC mediate the relationship between FWC and study outcomes.

Interestingly, having high power relative to one's conflict partner was associated

with *increased* conflict severity in contrast to prior research (see Coleman et al., 2013).

Self-determination theory provides a basis for understanding this finding. Self-

determination theory posits that satisfying the basic needs of autonomy, competency, and

relatedness fosters well-being whereas frustrating these basic needs leads to mental and

physical strain (Ryan & Deci, 2000). During conflict, supervisors may experience need

frustration because conflict competency is a foundational supervisory skill (Fusch, 2013).

Future research should measure needs frustration as a potential mediator of relative

power's moderating effects while also assessing different types of power (e.g., coercive,

legitimate, expert, and referent). Specifically, one would expect that if the frustration of conflict competency needs were a source of increased strain then only legitimate power—and not coercive, expert, or referent power—would moderate the relationship between work conflict and strain. In addition, the present study used a single item to measure power and a more comprehensive assessment is recommended to examine relationships among variables (Hinkin & Schriesheim, 1989).

Finally, when participants who were experiencing severe work conflicts reported that their social interactions were helpful, the social interactions seemed to exacerbate some of focal work conflict's harmful effects. One explanation is that social interactions trigger negative rumination, which is positively associated with strain. Although the correlation between SIQ and rumination did not reach statistical significance, it was positive ($r = .11$). This post hoc observation is intriguing but additional research exploring the quality of social interactions, rumination, and work conflict in structured equation modeling is needed to clarify these relationships. Nonetheless, future research should control for social interaction quality when examining work conflict severity and related outcomes.

Limitations

The relationships among variables may be inflated because the data are taken from a single-source self-report survey (Sonnentag & Frese, 2013). In addition, Study III is a cross-sectional design and causality cannot be inferred. That is, although I have used work conflict as a predictor of strain, the opposite direction can also be inferred, that strain predicts work conflict.

The observed mean score of the social discord subscale was 3.14, indicating that, on average, participants neither agreed nor disagreed with the three items. In addition, the social discord subscale had weak or statistically insignificant relationships with outcome variables. It is possible that the retained items, which prompt participants to report arguments, raised voices, and rude/disrespectful behaviours, do not sufficiently tap into the entire range of social discordant behaviours. Admittedly, the process for developing social discord items strayed from the steps recommended by Crocker and Algina (1986). Specifically, a more complete set of social discord items should have been included in the preliminary list of items. However, a more robust social discord scale may not have been sufficient to capture the domain because the survey prompted participants to report behaviours that occurred within the past week whereas the social discord behaviours may have occurred prior to the study timeframe. Given these psychometric limitations, the null findings may not reflect the actual relationship between social discord and the study outcomes. Additional scale development and validation may be needed to more accurately assess the social discord domain.

Conclusion

In conclusion, Study III examined the validity of the revised FWC scale and provided evidence of several variables that influence the relationship between conflict and strain. However, longitudinal research is needed to explore the direction of the relationship between work conflict and strain.

Study IV

Work conflict is estimated to cost $359B US in lost work time in the United States[3] (CPP, 2008) and, when the effects of poor teamwork, low quality decisions, retaliation, rights-based interventions (e.g., grievance procedures and legal remedies) and employee turnover are included, the cost of an escalated conflict can reach $600K US (Dana, 2012). Unproductive responses, such as avoidance, retaliation, and escalation, are common (Axelrod & Johnson, 2005), and minor conflicts can rapidly escalate to aggression (Pearson, Andersson, & Porath, 2005). Given these negative outcomes, it seems reasonable for organizations to invest in conflict resolution systems.

Conflict Coaching

For the past three decades practitioners have designed conflict resolution systems to reduce conflict's negative effects (Bendersky, 1998). A conflict resolution system is a suite of integrated formal and informal services that aim to reduce unproductive conflict and build conflict competencies (Bendersky, 1998). Formal conflict services (e.g., grievance proceedings, documented complaints, and legal remedies) are typically used in collective disputes (i.e., judgements of right and wrong in relation to some contract or policy), whereas informal conflict services are designed to assist workers in managing personal disputes (Jameson, 2001).

Informal conflict services are becoming increasingly prevalent in industry (Lipsky, Seeber, & Fincher, 2003) and many organizations are employing in-house

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[3] The costs of conflict to Canadian industry are not available.

conflict specialists to prevent, resolve, and restore damaged relationships (Nicholson, 2014). These informal in-house programs provide voluntary, impartial, and confidential alternative dispute resolution services such as mediation and conciliation (Barkat, 2015), but the most popular service is conflict coaching (Brinkert, 2011).

Conflict coaching is a relatively new term but its fundamentals can be traced back several decades to advising and facilitating (Kolb, 1986). Modern conflict coaching is a dyadic approach that combines conflict advising and executive coaching (see Brinkert, 2016). During conflict coaching, workers meet with conflict specialists alone and without an expectation that other parties will participate in the resolution process (Jones & Brinkert, 2008). Despite its popularity, there is scant research exploring the effectiveness of conflict coaching (Brinkert, 2016). One study conducted with 22 nurse managers trained as conflict coaches and 17 of their clients provided preliminary evidence that conflict coaching is beneficial (Brinkert, 2011). That is, descriptive statistics indicated that conflict coaching improved disputants' understanding of the conflict situation and conflict-related communication (Brinkert, 2011). Based on this emerging theory and research, I predicted that:

Hypothesis #10: Conflict coaching reduces focal work conflict severity.

The majority of empirical evidence linking work conflict to strain is derived from cross-sectional studies with a theoretic supposition that work conflict is a job stressor that *causes* strain (De Dreu & Weingart, 2003; Spector & Jex, 1999). Study IV provided an opportunity to explore the direction of the relationship between work conflict and strain from one day to the next (diary entries). Thus, I predicted that:

*Hypothesis # 11***:** Pre-intervention daily measures of work conflict will predict next-day strain after accounting for same-day strain.

Conflict Competencies

Empirical evidence of the competencies or underlying mechanisms associated with effective conflict management would be helpful for researchers to better understand the variance between work conflict and its outcomes and for practitioners aiming to reduce harmful effects associated with work conflict. Six possible conflict competencies were included in Study IV.

Rumination. A diary study of intragroup conflict found that conflict-related negative emotions experienced one day were associated with reduced job performance and organizational citizenship behaviours on the following day (Rispens & Demerouti, 2016). In discussing these findings, the authors suggested that reducing rumination may effectively reduce conflict severity (Rispens & Demerouti, 2016).

Emotion regulation. Work conflict evokes intense negative emotions and regulating these emotions is a critical skill for reducing conflict severity (Spector & Bruk-Lee, 2008; LeBlanc et al., 2012). Conflict coaching offers disputants an opportunity to manage these emotions by providing a safe setting to explore and express emotions and by helping employees identify, label, and differentiate among various concurrent feelings (e.g., anger and frustration; Jameson et al., 2010).

Psychological distancing. Experimental research has related psychologically zooming-out to improved decision-making (Kross & Grossmann, 2012) and to integrative or win-win conflict resolution approaches (De Dreu, Giacomantonio, Shalvi, & Sligte, 2009; Giacomantonio, De Dreu, & Mannetti, 2010). Psychological distancing facilitates

emotion regulation for individuals who are habitually self-immersed during highly emotional events (Wang, Lin, Huang & Yeh, 2016) such as work conflicts.

Perspective-taking (PT) and empathic concern (EC). PT is an effective communication and relationship skill that can be developed with simple training tasks (Gockel & Brauner, 2013). Conflict coaches use PT to help expand disputants' views of themselves, others, and the situation (Brinkert, 2011). The definition of work conflict developed in Study I of the present research includes negative affect as a component of work conflict. Given this premise, EC is likely to intensify work conflict as one's experience of feeling the negative emotions of one's conflict partner increases the negative affect component of work conflict. Prior research has shown that EC intensifies negative emotions during conflict coaching (Solarz, 2013).

In summary, workplace conflict management programs aim to reduce the harmful effects of work conflict but there is little empirical evidence examining conflict competencies. Prior theory and research suggests six possible competencies may be useful in preventing and resolving conflict: reducing rumination, regulating emotions, zooming-out from the conflict situation, developing habitual perspective-taking, curtailing empathic concern, and adopting conflict styles to match the situation. Thus, I predicted that:

> *Hypothesis #12*: Rumination and EC decline whereas emotion regulation, psychological distancing, and PT, increase after conflict coaching.

Study IV Method

Procedure

Study IV was a PPOC study funded by SSHRC (Gilin Oore, 2013). The present study explored a healthcare institution's in-house conflict resolution program, which was designed and implemented by the author during her Master's internship placement under the supervision of Dr. Debra Gilin Oore. The conflict program employed a part-time (0.6 FTE) program coordinator who was the first point of contact of employee-clients who sought assistance from the full-time in-house conflict specialist. The program coordinator position was dual-purpose: to support the conflict specialist and to enable research.[4] The program coordinator recruited study participants by advising new clients of the opportunity to participate in this study. Potential research participants' contact information and the date of the first conflict coaching session were submitted to the author or a trained research assistant (RA). The author or RA conducted a face-to-face informed consent process (see Appendix S) in accordance with Tri-council guidelines. After completing the informed consent process, participants were invited to wear a fitness tracker for the duration of the study and those individuals who agreed to wear the device were trained on its use.

Participants received an email notification to prompt them to complete each diary entry and a single follow-up reminder if the diary entry was not completed as scheduled,

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[4] The program coordinator position was eliminated in March 2017 as a means of reducing program costs.

as recommended by Ohly et al. (2010). Four different survey instruments were administered using FluidSurveys©: (1) A pre-intervention survey of stable control variables (i.e., demographics and conflict style), outcomes (i.e., life function, job performance, job-related high-arousal negative emotions, mental, and physical symptoms), mediators (i.e., rumination, perspective-taking, empathic concern, psychological distancing, emotion regulation, and conflict adaptability), a process control variable (i.e., social interaction quality) and focal work conflict severity experienced the prior week; (2) a daily diary survey measuring the outcomes and work conflict severity experienced the prior day; (3) a weekly diary survey measuring outcomes, work conflict severity, and mediators over the prior week; and (4) a post-intervention survey measuring work conflict severity, outcomes, and mediators over the prior week as well as several contextual variables (i.e., the conflict partner's age, sex, job position, and relative power).

Data collection began one day after completing the informed consent process with the pre-intervention survey. Then participants completed daily diary surveys for seven consecutive days prior to their first meeting with the conflict specialist. This first meeting was an intake session in which clients described the work conflict and the conflict specialist listened and advised. Participants completed a combined daily and weekly diary entry one day after the intake session and then no other surveys were administered until after the intervention (i.e., conflict coaching). Scheduling for the intervention depended on the availability of the conflict specialist and her client and typically took place two weeks after the intake session. Participants resumed diary entries after their first conflict coaching session, beginning with a weekly diary survey on the first day following the conflict coaching session and then daily diary surveys for six consecutive

work and non-work days. Finally, after a seven-day lag, participants completed the post-intervention survey. In addition, the conflict specialist completed a survey related to coaching topics (e.g., the extent to which perspective-taking was discussed), and provided assessments of her clients' work conflict severity and conflict skills (i.e., mediator variables) approximately one day after the first conflict coaching session. All survey instruments are shown in Appendix U. After the participant completed all of the surveys, the author or research assistant met with the participant to retrieve the Fitbit® ChargeHR device, to provide the $30.00 gift certificate, and to discuss individualized results.

The Intervention

In keeping with best practices (Solarz, Brownlow, LeBlanc, & Gilin Oore, 2017), the investigated in-house program is a voluntary and confidential service that is physically distant from the human resources department and the conflict specialist reports at arm's length from human resources. Conflict coaching is one of several alternative dispute resolution services (others include mediation and training) offered to any organizational members (Solarz, 2012). The conflict coaching intervention is a series of meetings between the conflict specialist and a client experiencing work conflict (Solarz; 2012). During these sessions the client fully recounts their experiences while the conflict specialist listens and advises (Solarz, 2012).

Design

Study IV was a pre/post intervention and longitudinal diary study between- and within-person design. The design did not include a wait-list control group so as to avoid any possible delay in service provision. Diary studies increase the statistical power of small samples through frequent longitudinal measures (Scherbaum & Ferreter, 2009) and

was appropriate given that a relatively small proportion of the workforce utilize conflict

programs (Harlos, 2010). Pre- and post-intervention scales measured control, predictor,

and outcome variables to test between-person hypotheses. Figure 2 depicts the
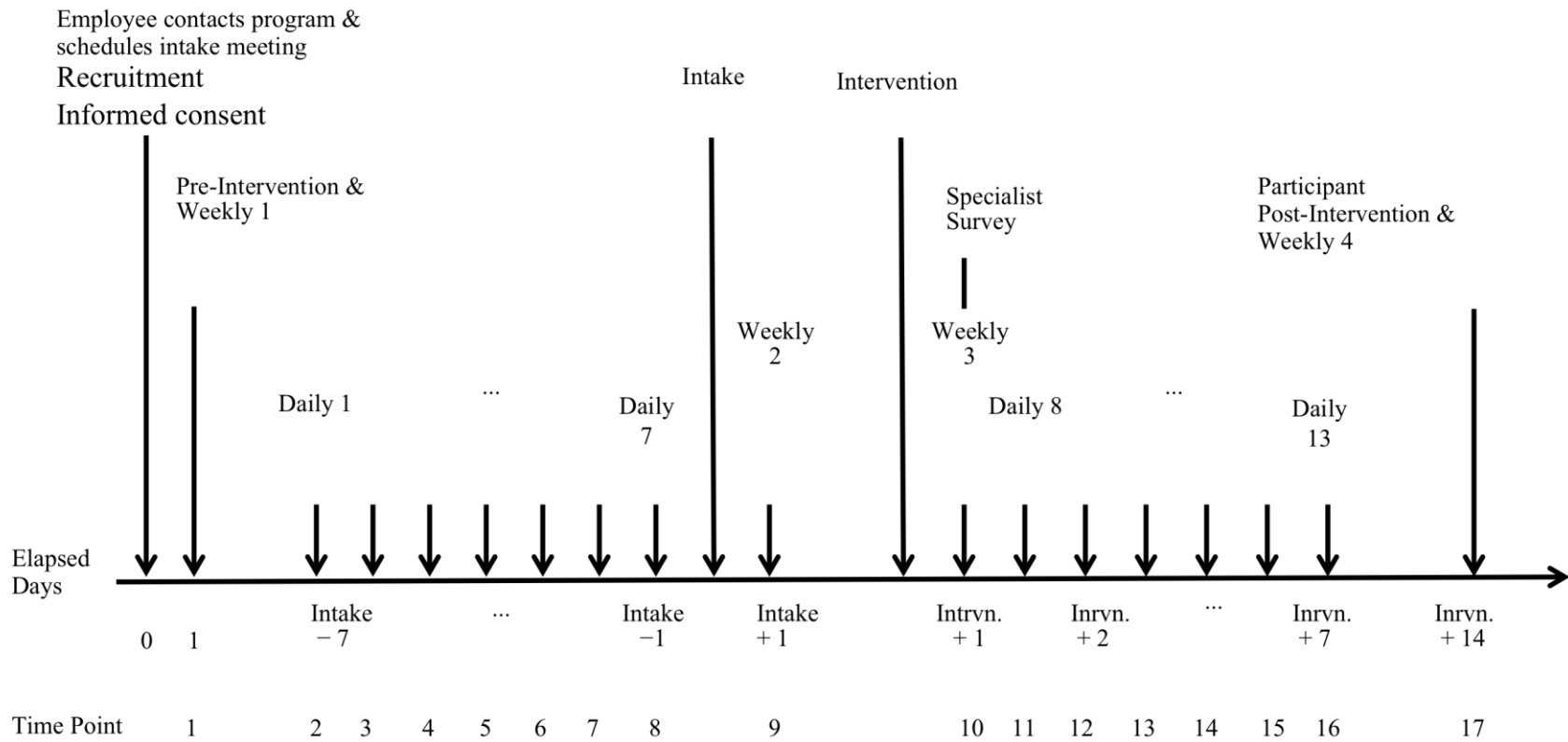
recruitment and data collection timeline.

Employee contacts program &
schedules intake meeting
Recruitment
Informed consent

Intake

Intervention

Pre-Intervention &
Weekly 1

Specialist
Survey

Participant
Post-Intervention &
Weekly 4

Weekly
2

Weekly
3

Daily 1

Daily
7

Daily 8

Daily
13

...

...

...

Elapsed
Days

Intake
− 7

...

Intake
−1

Intake
+ 1

Intrvn.
+ 1

Inrvn.
+ 2

...

Inrvn.
+ 7

Inrvn.
+ 14

0   1

Time Point   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17

Figure 2: Recruitment and data collection timeline.

Participants

During the 11-month data collection period, the organization's conflict management program provided services to 42 clients who were eligible to become research participants. Eighteen clients did not participate in the study: the program coordinator did not invite four highly distraught clients to participate; two clients declined because they did not have regular access to a computer; three declined because they were too busy; and the remaining nine did not provide a reason for their choice. The 24 clients who became research participants (female = 21, male = 3) were 27 to 59 years old ($M = 45$, $SD = 8.62$), held various occupations (nurse = 7, allied health-care = 5, support or clerical = 5, manager = 3, researcher = 1, unspecified = 1) and organizational tenure ranging from .5 to 29 years ($M = 11.25$, $SD = 7.71$). Only one participant identified as part of a minority group or other diverse population (based on social, ethnic, sexual orientation, ability, or other characteristic). Participants responded to 1 pre-intervention survey, 1 post-intervention survey, and up to 15 diary surveys for a total of 373 completed surveys. In addition, 19 participants wore Fitbit® ChargeHR data trackers during part or all of the study duration yielding 250 daily average heart rate and 211 sleep quality data points. The conflict specialist held intake sessions with all of the participants and 20 received conflict coaching while participating in the research (4 participants reported that the intake session was sufficient to resolve their conflicts and continued participating in the research).

Measures

Demographics: The participants' age, sex, diversity status, occupation, employment status, and tenure were measured in the pre-intervention survey.

Focal work conflict. Focal work conflict was measured with the 3-item FWC-SD subscale measuring conflictual interactions, the 4-item FWC-RN subscale measuring relational negativity toward one's conflict partner, and the 3-item FWC-T subscale measuring threat related to a focal work conflict. Respondents used a 5-point scale to indicate their agreement (*strongly disagree* to *strongly agree*) over the past day or week. Higher scores indicate more severe conflict (e.g., FWC-SD: "We argued with one another"; FWC-RN: "I felt angry toward the other person"; FWC-T: "I have felt afraid of losing things that are important to me"; see Table 23 and overall internal consistency).

Low pleasure low arousal (LPHA). See Study II Measures for a description of LPHA and Table 23 for item-total correlations and overall internal consistency.

Psychological health symptoms. Psychological health symptoms were measured with and an abbreviated 6-item scale for Goldberg et al.'s (1997) checklist of mental health symptoms. The items selected for the abbreviated scale demonstrated strong internal consistency ($\alpha = .91$) and inter-item correlations ranged from .50 to .75 in Study III. See Study II Measures for response scale and sample items; see Table 23 for item-total correlations and internal consistency.

Physical health symptoms. Physical symptoms were measured using an abbreviated 4-item checklist (Leiter, 1996). The items selected for the abbreviated scale demonstrated strong internal consistency ($\alpha = .84$) and inter-item correlations ranged from .46 to .67 in Study III. See Study II Measures for response scale and sample items; see Table 23 for item-total correlations and internal consistency

Life function. See Study III Measures for a description of the life function scale and Table 23 for item-total correlations and internal consistency.

Rumination. See Study III Measures for a description of the rumination scale and Table 23 for item-total correlations and overall internal consistency.

Emotion regulation. See Study III Measures for a description of the emotion regulation scale and Table 23 for item-total correlations and overall internal consistency.

Psychological distancing. See Study III Measures for a description of the psychological distancing scale and Table 23 for item-total correlations and overall internal consistency.

Perspective-taking and empathic concern. In their original form, the 7-item perspective-taking scale and the 7-item empathic concern scale measure trait-like dispositions to consider others' viewpoints (Davis, 1980). For the present study, the lead-in was reworded to assess other-focused states by instructing respondents to consider how well the statements describe their other-focused thoughts and feelings *in relation to the work conflict* rather than *in general*. See Study II Measures for response scale and sample items; see Table 23 for item-total correlations and internal consistency.

Relative power. See Study III Measures for a description of the relative power item.

Social interaction quality. See Study III Measures for a description of the social interaction quality scale and Table 23 for item-total correlations and internal consistency.

Heart rate and sleep patterns: Heart rate was tracked using Fitbit[®] Charge devices with PurePulse[®] photoplethysmography technology (Fitbit, 2018). The device emits a green light on the skin and uses an optical sensor to measure light absorption to calculate heart rate. Data depicting the average daily heart rate is transmitted to password

protected profile pages hosted on the Internet (Fitbit, 2017). Average daily heart rate data were downloaded from user profile pages.

Sleep patterns were tracked using the Fitbit® Charge built-in motion detectors. Fitbit® calculates four sleep variables: minutes asleep (from sleep onset to awake before arising); minutes awake (restless or awake periods from sleep onset to awake before rising); number of times awake; and time in bed (minutes from retiring to rising). The device transmits data to a password protected profile page on the Internet. Prior research has shown that within-device reliability is acceptable for sleep studies (reliability estimates of .96 to .99 when compared with the Actiwatch-64, a clinical sleep tracking device; Montgomery-Downs, Insana, & Bond, 2012). Sleep data were downloaded from user profile pages for participants who wore devices during this study.

Comments: An open-ended question to gather additional information.

Study IV Results

Study IV was a field diary design and the data reflect the contextual challenges of collecting data with worker participants. That is, each participant had their own unique work and intervention schedules and some of these schedules did not perfectly align with the expected methodological timeframe (see Figure 3). Data were cleaned by adjusting observations that occurred differently from expectations to fit the methodological timeframe (see Appendix U for further details). In addition, a control variable reflecting the days elapsed since informed consent ($M = 52.26$, $SD = 30.31$, *Min-Max* = 21 - 162) was computed. One or more surveys were missing for 12 of the 24 participants (57 of 648 or 9% of all surveys) and variable scores were missing for 469 of 3336 (14%) across all variables. Analysis regressing the number of missing surveys on time points indicated

that the missing data were unrelated to attrition ($F_{1, 15} = .479 \ p = .5$). To probe for other

missing data patterns, I followed Tabachnick & Fidell's (2007) approach and conducted t-

tests comparing variable means of the two groups (no missing surveys, n = 12; some

missing surveys, n = 12). There were significant mean differences between the groups for

15 of the 139 (11%) variable pairings, primarily for outcome scales (physical strain = 4;

life function = 5; GHQ = 3; perspective-taking = 1; psychological distancing = 1; FWC-

SD = 1). For all 12 significant between-group differences in strain, the missing surveys

group scores reflected poorer outcomes than the no-missing surveys group. There were

no univariate or multivariate outliers (z scores $> \pm 3.29$), histograms showed that the

variables approximate normal distributions, and multicollinearity statistics did not exceed

thresholds established by Tabachnick & Fidell (2007) for the survey variables.

Descriptive statistics are shown in Table 23 and correlations across daily and weekly time

periods are found in Tables 24 and 25, respectively. There was one outlier in the

biological data in which Fitbit® algorithm combined two nights sleep into one set of sleep

data. These sleep data points were set to missing. Biological data descriptive statistics

and correlations are shown in Table 26.

  The observations are repeated measures taken over time. Repeated measures

violate the assumption of independence because the observations are nested within

persons. With nested data, ordinary least square statistical methods typically

underestimate standard errors and may lead to Type 1 error (Kelloway, 2015). In

addition, statistical analyses that fail to account for the variations within- versus between-

person may yield specious results (Kelloway, 2015). Multi-level modeling is appropriate

for these data because it does not rely on the assumption of independence and it parses the

within- and between-person variances to more accurately estimate relationships among variables (Nezlek, 2011).

Before conducting hypotheses tests, I examined two possible covariates, social interaction quality (i.e., feeling better about the focal work conflict as a result of relating with one's conflict partner, supervisor, coworkers, friends, an family) and participants' work patterns concurrent with the survey measures (i.e., whether or not the participant worked, number of work hours, and shift worked). Social interaction quality was significantly correlated to life function ($r = .39$), LPHA ($r = -.33$), GHQ ($r = -.42$), and physical symptoms ($r = -.26$). However, none of the work pattern variables were significantly related to these outcomes. Therefore, I controlled for social interaction quality only while testing Hypothesis 10.

To test Hypothesis 10, which stated that conflict coaching reduces work conflict severity, I used HLM7.0 Student Version. The predictors were person-mean centred to examine participants' changes over time. Participants completed pre/post surveys at Time 1 (pre-intervention), Time 9 (post-intake), Time 10 (post-conflict coaching), and Time 17 (study completion). Because there were four measurement points, I probed the data to detect patterns of within-person change first with a linear model (T1=0; T9=1; T10=2; T17=3), second with Times 1 and 9 as pre-, and Times 10 and 17 as post-intervention (T1=0; T9=0; T10=1; T17=1); and finally with Time 1 as pre- and Times 9, 10 and 17 as post-intervention (T1=0; T9=1; T10=1; T17=1). The final pre/post coding

best reflected the pattern of change in these data[5] and I used this conceptualization to test the hypotheses. After controlling for elapsed days and social interaction quality, all measures of conflict severity and strain (Table 27, Model D) were significantly reduced in association with the intervention. Contrasting with these results, life function was not improved in association with the intervention. In addition, after controlling for elapsed days, social interaction quality, and pre/post, FWC-SD predicted LPHA and GHQ (Table 27, Model E), FWC-RN (Table 27, Model F) and FWC-T (Table 27, Model G) predicted LPHA, GHQ, and physical symptoms, all in the expected direction. Although the mean score for physical symptoms increased from Time 2 to Time 3, ANOVA between-subject LSD post hoc analyses indicated that the improvements in all three outcomes (i.e., negative affect, psychological, and physical health symptoms) were statistically significantly comparing Time 1 to Time 3 (LPHA: $t_{diff\,(16)} = .68$ $p < .01$; GHQ: $t_{diff\,(16)} = .69$ $p < .05$; Physical Symptoms: $t_{diff\,(16)} = .63$ $p = .05$).

To test whether or not conflict coaching was associated with a change in average heart rate or sleep patterns, I used HLM to compute multi-level models with data from the 19 participants who wore Fitbit® ChargeHR devices. The biological measures reflect the date that participant began wearing the Fitbit® tracker, usually one day after informed consent, to the date when the participant returned the device. Not all participants wore the devices continuously throughout the study period for various reasons (e.g., forgot to

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[5] According to B. Solarz (personal conversation, Feb. 8, 2016), participants are encouraged to fully describe their work conflict experiences and the conflict specialist outlines choices for resolution and often begins conflict coaching during this initial session.

put it on after showering) and the number of days that participants wore the devices

ranged from 9 to 90 days ($M = 13.76$; $SD = 6.78$). As shown in Table 28, elapsed days

significantly predicted an increase in minutes awake and minutes in bed (Table 28, Model

B), whereas pre/post significantly predicted an increase in the number of minutes in bed

and a decrease in average daily heart rate (Table 28 Model C), but neither of these

predictors were significantly related to the biological measures when both were included

(Table 28 Model D). Thus, Hypothesis 10 was supported with survey but not biological

measures of strain.

     To test Hypothesis 11, which stated that work conflict precedes strain, I conducted

a series of cross-lagged analysis using MPlus Version 7 and the procedures outlined by

Kelloway (2015). That is, for each combination of predictor (FWC-SD, FWD-RN, and

FWC-T) and outcome (life function, LPHA, GHW, and physical symptoms) I computed

four nested models: Model 1 was autoregressive (each variable regressed on its own prior

day scores); Model 2 was autoregressive with correlated time residuals (added parameters

to correlate within-time point residuals between FWC and strain); Model 3 was cross-

lagged with hypothesized relationships (added parameters to regress strain on prior day

FWC subscales); and Model 4 was cross-lagged with the opposite of hypothesized

relationships (added parameters to regress FWC subscale on prior day strain to Model 2;

see Figure 3 for sample model). I selected pre-intervention data (depicted as Time 2 to

Time 7 in Figure 3) because these data were least likely to be altered by the intervention.

To test the hypothesis that work conflict precedes strain, I conducted chi-squared

difference tests following Tabachnick and Fidell's (2007) procedures for nested models.

That is, I calculated the difference between Model 3 and Model 2 chi-squared values and

degrees of freedom, and compared results with Tabachnick and Fidell's (2007) chi-squared critical values. Only 1 of the 12 results was significant and only at one cross lag (FWC-T Day 7 regressed on physical symptoms Day 6). To test whether or not reverse direction models (i.e., strain precedes work conflict) were a better fit for these data, I conducted chi-squared difference tests using this same procedure and this time compared Model 4 with Model 2. Four of the 12 analyses provided significant results but again, each significant result reflected only one significant cross-lag (GHQ Day 3 predicted FWC-T Day 4; physical symptoms Day 6 predicted FWC-RN Day 7; physical symptoms Day 3 predicted FWC-T Day 4; and life function Day 3 predicted FWC-SD Day 4). In addition, none of the 48 models approached critical values indicating that the data were an acceptable fit (i.e., CFI > .95, Hu & Bentler, 1999; RMSEA <.10, Browne & Crudeck, 1993)[6]. Thus, Hypothesis 11 was not supported (see Table 29 for summary results).

To test Hypothesis 12, which stated that rumination and empathic concern (EC) decline whereas emotion regulation (ER), psychological distancing, perspective-taking, and conflict adaptation increase after conflict coaching, I computed a series of models using HLM Student Version 7.0 and the procedures outlined above. As shown in Table 30, only rumination significantly changed over time and this change was in the expected direction. The reduced rumination effects were statistically significant when comparing

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[6] Because the direction of the conflict – strain relationship may be influenced by social interaction quality/elapsed time, I repeated these analyses with these two covariates and the unreported results were similar.

Time 1 to Time 2 as well as when comparing Time 2 to Time 3. Thus, rumination was

reduced during conflict coaching and did not revert back to pre-intervention levels at

post-intervention. Thus, Hypothesis 12 was supported for rumination only.

Table 23.

Study IV: Descriptive statistics, alpha coefficients number of items/surveys, and item-total

correlations across all time points.

Scale	*M*	*SD*	α	Min – Max Scale	Pre (1)	Day (13)	Wk (2)	Pst (1)	CS (1)	Item-Total Corr.
						(# of Surveys) # of Items				
Level 2										
Age (years)	45.0	8.62	--	27 - 59	1	–	–	–	–	–
Sex (M=1, F=2)	1.88	3.40	--	1-2	1	–	–	–	–	–
Tenure (years)	11.25	7.71	--	.58 - 29	1	–	–	–	–	–
Level 1										
FWC-SD	1.99	0.59	.89	1 - 5	3	3	3	3	3	.85 - .89
FWC-RN	2.86	0.84	.85	1 - 5	4	4	4	4	4	.76 - .86
FWC-T	2.50	1.01	.70	1 - 5	3	3	3	3	3	.73 - .86
SIQ	2.97	.24	.58	1 - 5	6	6	6	6	–	.39 - .71
Rumination	2.79	0.67	.93	1 - 4	4	–	4	4	4	.85 - .92
ER	3.80	0.57	.74	1 - 5	4	–	4	4	4	.59 - .83
Psyc. Dist.	3.67	0.40	.69	1 - 5	11	–	11	11	11	.29 - .60
PT	3.49	0.55	.61	1 - 5	7	–	7	7	7	.24 - .67
EC	3.67	0.59	.27	1 - 5	7	–	7	7	7	.33 - .60
Life Fun.	2.71	0.46	.42	1 - 5	5	5	5	5	–	.42 - .59
LPHA	1.82	0.61	.74	1 - 5	5	5	5	5	–	.73 - .78
GHQ (R)	2.45	0.62	.78	1 - 5	12	6	6	12	–	.78 - .86
Phys.	2.31	0.87	.58	1 - 5	4	4	4	4	–	.61 - .75

Notes: SIQ = Social Interaction Quality, F-SD = Focal Work Conflict, Social Discord Subscale, F-NA = Focal Work Conflict Relational Negativity Subscale, F-T = Focal Work Conflict Threat Subscale, L Fun = Life Function, LPHA = Low Pleasure Low Arousal Job Affect, GHQ (R) = General Health Questionnaire (Psychological Health Symptoms), Phys. = Physical Health Symptoms.

Table 24.

Study IV: Descriptive statistics, correlations, and alpha coefficients (shown on the diagonal) for daily survey scales.

	N	M	SD_{w-p}	SD_{b-p}	ICC	2	3	4	5	6	7	8	9	10
1 Age	24	43	--	8.44	--	-.15	-.21	-.27	-.15	-.08	-.24	-.10	.01	.09
2 Sex	24	1.87	--	0.33	--	--	.20	-.13	-.01	-.06	.03	-.11	-.05	.00
3 SIQ	263	2.71	.75	.32	.16	--	(.56)	.46[a]	.09	-.04	.37	.16	.00	.01
4 FWC-SD	258	1.95	.70	.53	.36	--	.02	(.91)	.72[c]	.56[b]	.13	.44[a]	.40	.33
5 FWC-RN	258	2.75	.86	.81	.47	--	.13[a]	.66[c]	(.85)	.77[c]	-.22	.59[b]	.65[c]	.65[c]
6 FWC-T	258	2.40	.77	.96	.61	--	.01	.60[c]	.74[c]	(.72)	-.34	.77[c]	.80[c]	.74[c]
7 L Fun.	263	2.72	.41	.45	.54	--	.24[c]	-.07	-.09	-.10	(.45)	-.44[a]	-.48[a]	-.57[b]
8 LPHA	258	1.77	.60	.58	.48	--	.07	.45[c]	.59[c]	.61[c]	-.23[c]	(.75)	.93[c]	.88[c]
9 GHQ (R)	263	2.12	.61	.93	.70	--	.03	.41[c]	.55[c]	.62[c]	-.28[c]	.75[c]	(.79)	.95[c]
10 Phys. Sym.	263	2.19	.69	.89	.62	--	.05	.29[c]	.41[c]	.40[c]	-.17[b]	.60[c]	.74[c]	(.55)

Notes: SIQ = Social Interaction Quality, F-SD = Focal Work Conflict, Social Discord Subscale, F-RN Focal Work Conflict Relational Negativity Subscale, F-T = Focal Work Conflict Threat Subscale, L Fun = Life Function, LPHA = Low Pleasure Low Arousal Job Affect, GHQ (R) = General Health Questionnaire Reverse-coded (Psychological Health Symptoms), Phys. = Physical Health

Symptoms, Rum = Rumination, ER = Emotion Regulation, PD = Psychological Distancing, PT = Perspective-taking, EC = Empathic Concern. SD_{w-p} is standard deviation within-person; SD_{b-p} is standard deviation between-persons; ICC is intraclass correlation (proportion of variance that is between-person). Correlations below the diagonal are within-person; correlations above the diagonal are between-person. Reliability coefficients are shown on the diagonal. *M*, *SD*, ICC, and correlations were calculated using MPlus two-level basic analysis (Kelloway, 2015). Alpha coefficients were calculated using HLM null models (Nezlek, 2011). Age and sex are Level-2 (person) variables and all other variables are Level-1. Missing data were deleted pair-wise.

[a] = p < .05; [b] = p < .01

Table 25.

Study IV: Descriptive statistics, correlations, and alpha coefficients for weekly survey scales.

		N	M	$SD_{\text{w-p}}$	$SD_{\text{b-p}}$	ICC	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Age	24	43	--	8.44	--	-.15	-.06	.03	-.08	-.03	-.25	-.06	.15	.06	-.23	.09	-.21	.18	-.14
2	Sex	24	1.87	--	.33	--	--	.03	-.06	-.08	-.18	.04	-.15	.00	.08	-.14	.21	.25	.38	.32
3	SIQ	87	3.62	.77	.33	.15	--	(.67)	.08	-.33	-.25	-.01	.03	-.29	-.41[a]	-.08	.04	-.08	.18	.32
4	F-SD	85	2.16	.69	.51	.34	--	-.22[a]	(.84)	.51[a]	.75[c]	-.01	.67[c]	.51[a]	.29	.40	-.66[c]	.30	-.17	.08
5	F-RN	86	3.20	.89	.62	.33	--	-.24[a]	.56[c]	(.84)	.70[c]	-.22	.54[b]	.55[b]	.51[a]	.51[a]	-.61[b]	.32	-.28	-.25
6	F-T	86	2.68	.83	.86	.52	--	-.13	.41[c]	.69[c]	(.67)	-.22	.83[c]	.79[c]	.54[c]	.75[c]	-.69[c]	.50[a]	.04	.14
7	L Fun.	88	2.80	.41	.34	.41	--	.39[c]	-.19	-.28[b]	-.26[a]	(.39)	-.29	-.36	-.52[b]	-.22[c]	.25	-.04	-.24	.11
8	LPHA	87	1.99	.53	.55	.52	--	-.33[b]	.47[c]	.53[c]	.54[c]	-.48[c]	(.66)	.85[c]	.65[c]	.62[c]	-.79[c]	.29	.01	-.05
9	GHQ	88	2.38	.64	.74	.58	--	-.42[c]	.51[c]	.60[c]	.63[c]	-.44[c]	.76[c]	(.74)	.84[c]	.67[c]	-.59[b]	.21	.18	.06
10	Phys.	88	2.56	.75	.82	.54	--	-.26[a]	.38[c]	.49[c]	.45[c]	-.34[b]	.64[c]	.75[b]	(.56)	.48[b]	-.41[a]	.21	.11	-.20
11	Rum	86	2.77	.69	.69	.40	--	-.29[b]	.27[a]	.59[c]	.61[c]	-.44[c]	.54[c]	.54[c]	.55[c]	(.93)	-.54[b]	.25	-.06	.39
12	ER	86	3.81	.55	.57	.40	--	.16	-.14	-.21	-.31[a]	.33[b]	-.48[a]	-.46[a]	-.33[b]	-.28[a]	(.74)	.04	.50[a]	.30

		N	*M*	SD_{w-p}	SD_{b-p}	ICC	2	3	4	5	6	7	8	9	10	11	12	13	14	15
13	PD	86	3.65	.43	.33	.38	--	.03	-.22[a]	-.06	-.24[a]	.11	-.19	-.17	-.07	-.05	.32[b]	(.69)	.49[a]	.30
14	PT	90	3.78	.54	.43	.39	--	.08	-.14	-.14	-.27[b]	.09	-.18	-.21	.06	-.18	.34[b]	.16	(.61)	.68[c]
15	EC	90	4.07	.46	.60	.63	--	-.01	-.25[a]	-.09	-.03	.14	-.22	-.18	-.06	.09	.13	.15	.32[b]	(.27)

Notes: SIQ = Social Interaction Quality, F-SD = Focal Work Conflict, Social Discord Subscale, F-RN Focal Work Conflict Relational Negativity Subscale, F-T = Focal Work Conflict Threat Subscale, L Fun = Life Function, LPHA = Low Pleasure Low Arousal Job Affect, GHQ (R) = General Health Questionnaire Reverse-coded (Psychological Health Symptoms), Phys. = Physical Health Symptoms, Rum = Rumination, ER = Emotion Regulation, PD = Psychological Distancing, PT = Perspective-taking, EC = Empathic Concern. SD_{w-p} is standard deviation within-person; SD_{b-p} is standard deviation between-persons; ICC is intraclass correlation (proportion of variance that is between-person). Correlations below the diagonal are within-person; correlations above the diagonal are between-person. Reliability coefficients are shown on the diagonal. *M*, *SD*, ICC, and correlations were calculated using MPlus two-level basic analysis (Kelloway, 2015). Alpha coefficients were calculated using HLM null models (Nezlek, 2011). Age and sex are Level-2 (person) variables and all other variables are Level-1. Missing data were deleted pair-wise.
[a] = p < .05; [b] = p < .01

Table 26.

Study IV: Descriptive statistics and correlations for sleep and heart rate.

		N	M	$SD_{\text{w-p}}$	$SD_{\text{b-p}}$	ICC	2	3	4	5	6	7
1	Age	19	43.79	--	7.81	--	-.01	.08	.15	.26	.19	-.02
2	Sex	19	1.90	--	0.31	--	--	.09	.11	.12	.17	.39
3	Minutes Asleep	623	274.70	80.78	31.03	.13	--	--	-.37	$.67^{b}$	.45	.27
4	Minutes Awake	623	184.80	66.44	37.37	.24	--	$.44^{c}$	--	.01	$.65^{b}$	-.32
5	Number of Wakings	623	1.90	1.50	0.78	.21	--	$.34^{c}$	$.49^{c}$	--	$.61^{b}$	.04
6	Minutes in Bed	623	472.41	126.09	37.67	.08	--	$.88^{c}$	$.81^{c}$	$.49^{c}$	--	-.09
7	Average Heart Rate	786	67.06	3.19	8.32	.87	--	$.11^{b}$	$.09^{a}$	.07	$.13^{b}$	--

Notes: $SD_{\text{w-p}}$ is standard deviation within-person; $SD_{\text{b-p}}$ is standard deviation between-persons; ICC is intraclass correlation (proportion of variance that is between-person). Correlations below the diagonal are within-person; correlations above the diagonal are between-person. M, SD, ICC, and correlations were calculated using MPlus two-level basic analysis (Kelloway, 2015). Age and sex are Level-2 (person) variables and all other variables are Level-1. Missing data were deleted pair-wise. $^{a} = p < .05$; $^{b} = p < .01$

Table 27.

Study IV: Summary of HLM within-person analysis predicting function and strain from focal work conflict pre/post intervention.

Model	SIQ	FWC-SD	FWC-RN	FWC-T	Life Fun.	LPHA	GHQ	Phys. Sym.
Variables	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
Model A (null)								
Intercept	3.62 (.08)	2.17^c (.13)	3.21^c (.15)	2.70^c (.20)	2.79^c (.08)	2.02^c (.12)	2.42^c (.16)	2.63^c (.16)
ICC	1.00	.33	.29	.49	.37	.49	.57	.53
Model B								
Intercept	3.47^c (.00)	2.22^c (.14)	3.41^c (.17)	3.03^c (.21)	2.72^c (.07)	2.16^c (.16)	2.59^c	2.73^c (.17)
Elapsed Days	.01 (.00)	-.00 (.00)	-.01^a (.00)	-.01^b (.00)	.00 (.00)	-.00 (.00)	-.01^a (.00)	-.00 (.00)
R$^2_{change}$	.022	-.012	.004	.045	.014	-.027	-.011	-.025
Model C								
Intercept	3.48^c (.11)	2.52^c (.18)	3.79^c (.17)	3.38^c (.23)	2.65^c (.07)	2.44^c (.15)	2.96^c (.17)	3.25^c (.19)
Elapsed Days	.00 (.00)	.01^a (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.01^c (.00)
Pre/Post	.48 (.26)	-.71^c (.16)	-.86^c (.22)	-.85^c (.24)	.15 (.14)	-.67^c (.13)	-.89^c (.16)	-1.23^c (.14)
R$^2_{change}$	.06	.08	.07	.12	.02	.20	.12	.19
Model D								
Intercept		2.47^c (.17)	3.72^c (.18)	3.39^c (.23)	2.72^c (.08)	2.37^c (.14)	2.87^c (.15)	3.20^c (.18)

Model	SIQ	FWC-SD	FWC-RN	FWC-T	Life Fun.	LPHA	GHQ	Phys. Sym.
Variables	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*
Elapsed Days		.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.01[c] (.00)
Pre/Post		-.66[c] (.15)	-.78[b] (.24)	-.86[c] (.22)	.08 (.13)	-.60[c] (.12)	-.81[c] (.15)	-1.18[c] (.14)
SIQ		-.14 (.11)	-.20 (.20)	.03 (.16)	.21[b] (.08)	-.19[a] (.08)	-.26[c] (.06)	-.16 (.08)
R^2_{change}		.08	.20	.19	.20	.08	.20	.19
Model E								
Intercept					2.76[c] (.10)	2.28[c] (.14)	2.78[c] (.15)	3.12[c] (.19)
Elapsed Days					.00 (.00)	.00 (.00)	.00 (.00)	.01[b] (.00)
Pre/Post					.00 (.15)	-.42[b] (.15)	-.58[b] (.19)	-.94[c] (.17)
SIQ					.23[b] (.09)	-.19[a] (.08)	-.21[b] (.07)	-.17 (.10)
FWC-SD					-.06 (.05)	.24[b] (.07)	.29[b] (.10)	.21 (.11)
R^2_{change}					.07	.17	.13	.16
Model F								
Intercept					2.78[c] (.09)	2.24[c] (.13)	2.73[c] (.15)	3.08[c] (.19)
Elapsed Days					.00 (.00)	.00 (.00)	.01[a] (.00)	.01[c] (.00)

Model	SIQ	FWC-SD	FWC-RN	FWC-T	Life Fun.	LPHA	GHQ	Phys. Sym.
Variables	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*
Pre/Post					.00 (.12)	-.38[a] (.15)	-.59[c] (.17)	-.99[c] (.14)
SIQ					.22[a] (.08)	-.18[b] (.07)	-.19[c] (.05)	-.12 (.08)
FWC-RN					-.09 (.06)	.23[c] (.05)	.27[c] (.07)	.23[a] (.09)
R^2_{change}					.07	.19	.17	.21
Model G								
Intercept					2.82[c] (.10)	2.19[c] (.13)	2.64[c] (.14)	3.06[c] (.18)
Elapsed Days					.00 (.00)	.00 (.00)	.01[b] (.00)	.01[c] (.00)
Pre/Post					-.04 (.13)	-.35[a] (.14)	-.51[b] (.18)	-1.00[c] (.13)
SIQ					.24[b] (.08)	-.23[c] (.07)	-.26[c] (.07)	-.18[a] (.09)
FWC-T					-.13 (.07)	.26[c] (.06)	.36[c] (.07)	.20[a] (.10)
R^2_{change}					.08	.20	.19	.20

Notes: HLM = hierarchical linear modeling; Level 1: $n = 96$; Level 2: $n = 24$. Table shows unstandardized estimates followed by robust standard errors in parentheses; all variables were entered as uncentred except FWC predictor variables, which were entered as group-centred. SIQ = Social Interaction Quality; 1CC = estimate of the between-person variance. R^2_{change} = change in effect size compared to null models computed using the formula outlined by Snijders & Bosker (1999). Missing data excluded pairwise. [a] p <.05; [b] p <.01; [c] p <.001
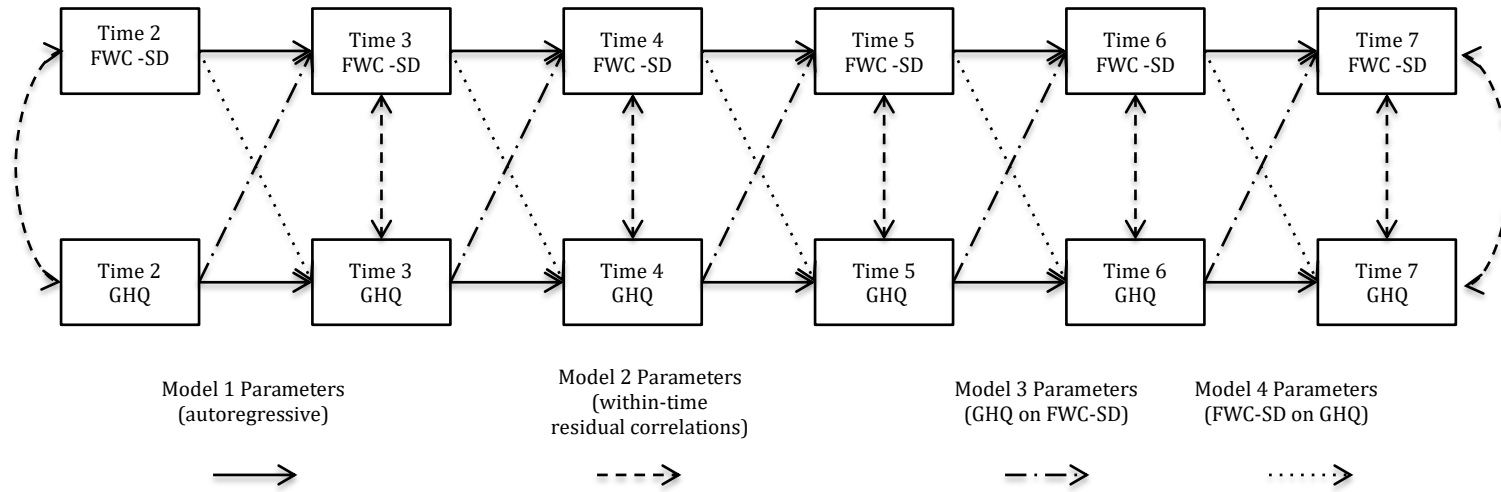
Table 28.

Study IV: Summary of HLM within-person analysis predicting sleep and average heart rate from elapsed days and pre/post.

Model Variables	Minutes Asleep	Minutes Awake	Number of Wakings	Minutes in Bed	Average Daily Heart Rate
	B (SE)	*B (SE)*	*B (SE)*	*B (SE)*	*B (SE)*
Model A (null)					
Intercept	271.89[c] (8.28)	183.77[c] (9.05)	1.78[c] (.18)	469.05[c] (10.43)	67.11[c] (1.93)
ICC	.13	.24	.19	.09	.92
Model B					
Intercept	279.28[c] (9.36)	192.61[c] (9.87)	1.85[c] (.20)	485.41[c] (12.70)	67.31[c] (1.93)
Elapsed Days	-.33 (.17)	-.40[b] (.14)	-.00 (.00)	-.72[b] (.27)	-.01 (.00)
R^2_{change}	.00	.01	-.01	.00	.00

Model Variables	Minutes Asleep	Minutes Awake	Number of Wakings	Minutes in Bed	Average Daily Heart Rate
Model C					
Intercept	280.09^c (10.15)	195.20^c (10.29)	1.89^c (.20)	488.58^c (14.20)	67.43^c (1.92)
Pre/Post	-12.61 (7.39)	-17.86	-.17 (.13)	-29.75^b (12.75)	$-.49^a$ (.22)
R^2_{change}	.00	.00	.00	.01	.01
Model D					
Intercept	281.09^c (9.79)	196.05^c (10.26)	1.89^c (.21)	490.66^c (13.44)	67.44^c (1.92)
Elapsed Days	-.24 (.23)	-.22 (.19)	-.00 (.00)	-.46 (.35)	-.00 (.00)
Pre/Post	-6.01 (9.82)	-11.68 (8.22)	-.14 (.19)	-17.00 (15.00)	-.45 (.28)
R^2_{change}	.00	.00	.00	.00	.01

Notes: HLM = hierarchical linear modeling. Level 1: $n = 14$ for HR; $n = 19$ for all other variables; Level 2: $n = 623$ for HR; $n = 787$ for all other variables. Table shows unstandardized estimates followed by standard errors in parentheses (Level 2 n is too small for robust standard error); all variables were entered as uncentred. 1CC = estimate of the between-person variance. R^2_{change} = change in effect size compared to null models computed using the formula outlined by Snijders & Bosker (1999). Missing data excluded pairwise.

[a] $p <.05$; [b] $p <.01$; [c] $p <.001$.

Figure 3: Study IV: Sample cross-lagged model depicting FWC-SD and GHQ.

Table 29:

Study IV: Summary results of cross-lagged models using Time 2 to Time 8 diary data.

Variable/Model	χ^2	*df*	RMSEA	CFI	SRMR	Comparison	$\Delta\chi^2$	Δdf
FWC-SD/Life Function								
Model 1: Autoregressive	280.11	66	0.39	0.35	0.27			
Model 2: Add Correlated Errors	274.46	61	0.42	0.27	0.21	Model 2 vs. Model 1	5.65	5
Model 3: FWC-SD → Life Function	267.06	55	0.44	0.28	0.21	Model 3 vs. Model 2	7.40	6
Model 4: Life Function → FWC-SD	262.93	56	0.43	0.29	0.21	Model 4 vs. Model 2	11.53[a]	5
FWC-RN/Life Fun.								
Model 1: Autoregressive	225.84	66	0.34	0.38	0.23			
Model 2: Add Correlated Errors	246.83	61	0.39	0.35	0.20	Model 2 vs. Model 1	-20.99	5
Model 3: FWC-RN → Life Function	244.10	55	0.42	0.34	0.20	Model 3 vs. Model 2	2.72	6
Model 4: Life Function → FWC-RN	239.44	56	0.41	0.36	0.19	Model 4 vs. Model 2	7.39	5

FWC-T/Life Fun.

Variable/Model	χ^2	*df*	RMSEA	CFI	SRMR	Comparison	$\Delta\chi^2$	Δdf
Model 1: Autoregressive	219.73	66	0.33	0.51	0.24			
Model 2: Add Correlated Errors	244.77	61	0.39	0.46	0.23	Model 2 vs. Model 1	-25.04	5
Model 3: FWC-T → Life Function	241.72	55	0.41	0.45	0.21	Model 3 vs. Model 2	3.05	6
Model 4: Life Function→ FWC-T	238.76	56	0.40	0.46	0.19	Model 4 vs. Model 2	6.02	5
FWC-SD/LPHA								
Model 1: Autoregressive	422.88	78	0.47	0.27	0.31			
Model 2: Add Correlated Errors	346.74	72	0.41	0.39	0.22	Model 2 vs. Model 1	76.14	6
Model 3: FWC-SD → LPHA	337.73	66	0.42	0.40	0.21	Model 3 vs. Model 2	9.00	6
Model 4: LPHA → FWC-SD	342.24	66	0.43	0.39	0.21	Model 4 vs. Model 2	4.50	6
FWC-RN/LPHA								
Model 1: Autoregressive	413.67	78	0.46	0.30	0.36			
Model 2: Add Correlated Errors	273.86	72	0.35	0.50	0.22	Model 2 vs. Model 1	139.81	6

Variable/Model	χ^2	*df*	RMSEA	CFI	SRMR	Comparison	$\Delta\chi^2$	Δdf
Model 3: FWC-RN → LPHA	272.73	66	0.37	0.49	0.22	Model 3 vs. Model 2	1.13	6
Model 4: LPHA → FWC-RN	269.88	66	0.37	0.49	0.18	Model 4 vs. Model 2	3.98	6
FWC-T/LPHA								
Model 1: Autoregressive	416.13	78	0.46	0.39	0.34			
Model 2: Add Correlated Errors	341.53	72	0.40	0.50	0.28	Model 2 vs. Model 1	74.60	6
Model 3: FWC-T → LPHA	330.88	66	0.42	0.51	0.18	Model 3 vs. Model 2	10.65	6
Model 4: LPHA → FWC-T	329.04	66	0.42	0.51	0.18	Model 4 vs. Model 2	12.49	6
FWC-SD/GHQ								
Model 1: Autoregressive	418.98	78	0.46	0.33	0.31			
Model 2: Add Correlated Errors	286.79	72	0.35	0.51	0.20	Model 2 vs. Model 1	132.18	6
Model 3: FWC-SD → GHQ	281.10	66	0.37	0.51	0.22	Model 3 vs. Model 2	5.70	6
Model 4: GHQ → FWC-SD	280.91	66	0.37	0.51	0.18	Model 4 vs. Model 2	5.88	6

Variable/Model	χ^2	*df*	RMSEA	CFI	SRMR	Comparison	$\Delta\chi^2$	Δdf
FWC-RN/GHQ								
Model 1: Autoregressive	304.90	78	0.37	0.45	0.40			
Model 2: Add Correlated Errors	277.86	72	0.35	0.55	0.21	Model 2 vs. Model 1	27.04	6
Model 3: FWC-RN → GHQ	274.99	66	0.36	0.54	0.23	Model 3 vs. Model 2	2.87	6
Model 4: GHQ → FWC-RN	269.84	66	0.36	0.55	0.15	Model 4 vs. Model 2	8.02	6
FWC-T/GHQ								
Model 1: Autoregressive	373.04	78	0.42	0.44	0.49			
Model 2: Add Correlated Errors	280.74	72	0.35	0.61	0.24	Model 2 vs. Model 1	92.30	6
Model 3: FWC-T → GHQ	276.75	66	0.37	0.60	0.20	Model 3 vs. Model 2	3.99	6
Model 4: GHQ → FWC-T	264.86	66	0.35	0.62	0.14	Model 4 vs. Model 2	15.87[a]	6
FWC-SD/Phys. Sym.								
Model 1: Autoregressive	302.25	65	0.43	0.35	0.26			

Variable/Model	χ^2	df	RMSEA	CFI	SRMR	Comparison	$\Delta\chi^2$	Δdf
Model 2: Add Correlated Errors	270.96	61	0.42	0.42	0.21	Model 2 vs. Model 1	31.29	4
Model 3: FWC-SD → Phys. Sym.	263.69	55	0.44	0.43	0.20	Model 3 vs. Model 2	7.27	6
Model 4: Phys. Sym. → FWC-SD	269.30	56	0.44	0.42	0.22	Model 4 vs. Model 2	1.66	5
FWC-RN/Phys. Sym.								
Model 1: Autoregressive	280.50	66	0.39	0.41	0.32			
Model 2: Add Correlated Errors	261.53	61	0.41	0.46	0.27	Model 2 vs. Model 1	18.97	5
Model 3: FWC-RN → Phys. Sym.	253.70	55	0.43	0.47	0.19	Model 3 vs. Model 2	7.83	6
Model 4: Phys. Sym. → FWC-RN	249.96	56	0.42	0.48	0.21	Model 4 vs. Model 2	11.57[a]	5
FWC-T/Phys. Sym.								
Model 1: Autoregressive	309.59	66	0.42	0.46	0.38			
Model 2: Add Correlated Errors	271.39	61	0.42	0.53	0.32	Model 2 vs. Model 1	38.20	5
Model 3: FWC-T → Phys. Sym.	253.71	55	0.43	0.56	0.19	Model 3 vs. Model 2	17.69[a]	6

Variable/Model	χ^2	*df*	RMSEA	CFI	SRMR	Comparison	$\Delta\chi^2$	Δdf
Model 4: Phys. Sym. → FWC-T	248.32	56	0.41	0.57	0.28	Model 4 vs. Model 2	23.08[a]	5

Notes: χ^2(df) = chi-squared (degrees of freedom); RMSEA = root mean square error of approximation; CFI = comparative fit index; AIC = Akaike information criterion; FWC-SD = Focal work conflict social discord subscale; FWC-RN = Focal work conflict relational negativity subscale; FWC-T = Focal work conflict threat subscale; LPHA = Low pleasure low arousal; GHQ = General Health Questionnaire Psychological Symptoms; Phys. Sym. = Physical health symptoms.
[a] $p < .05$

Table 30:

Study IV: HLM Summary results for conflict competency growth curve analyses.

Model		Rumination	Emotion Regulation	Psychological Distancing	Perspective-taking	Empathic Concern
	Variables	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
Model A (null)						
	Intercept	2.78^c (.14)	3.80^c (.11)	3.65^c (.08)	3.50^c (.11)	3.68^c (.12)
	ICC	.37	.41	.35	.44	.45
Model B						
	Intercept	2.96^c (.18)	3.74^c (.10)	3.61^c (.09)	3.42^c (.12)	3.62^c (.12)
	Elapsed Days	-.01 (.01)	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
	R^2_{change}	.02	-.02	-.01	-.02	-.02
Model C						
	Intercept	2.84^c (.17)	3.79^c (.11)	3.64^c (.08)	3.40^c (.13)	3.62^c (.12)
	Elapsed Days	-.00 (.00)	-.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
	SIQ	-.24^b (.08)	.10 (.06)	.05 (.06)	-.05 (.05)	.01 (.05)
	R^2_{change}	.07	.00	-.01	-.05	-.02
Model D						
	Intercept	3.02^c (.17)	3.71^c (.14)	3.64^c (.07)	3.30^c (.15)	3.59^c (.13)

Model Variables	Rumination *B (SE)*	Emotion Regulation *B (SE)*	Psychological Distancing *B (SE)*	Perspective- taking *B (SE)*	Empathic Concern *B (SE)*
Elapsed Days	.01 (.00)	-.00 (.00)	.00 (.00)	-.00 (.00)	.00 (.00)
SIQ	-.15[a] (.06)	.06 (.07)	.05 (.06)	-.10 (.07)	-.02 (.06)
Linear Growth	-.28[b] (.09)	.13 (.10)	.00 (.07)	.16 (.09)	.06 (.07
R^2_{change}	.08	.01	-.02	.02	-.01

Notes: HLM = hierarchical linear modeling. SIQ = Social Interaction Quality; Level 1: $n = 24$ Level 2: $n = 86$ to 90. Table shows unstandardized estimates followed by robust standard errors in parentheses; all variables were entered as uncentred except SIQ, which was centred on the person mean. 1CC = estimate of the between-person variance. R^2_{change} = change in effect size compared to null models computed using the formula outlined by Snijders & Bosker (1999). Missing data excluded pairwise.

[a] $p < .05$; [b] $p < .01$; [c] $p < .001$

Study IV Discussion

Study IV results show that the conflict coaching intervention reduced focal work conflict severity and employee strain. The diary study method uses repeated measures taken from the same participants over time and controls for individual differences and extraneous factors. That is, the data collection method used here provides evidence that conflict coaching, and not merely the passing of time, resolution of conflict, or some other variable, is causally related to employee strain. This finding bolsters prior cross-sectional research reporting that informal conflict management programs are associated with improved well-being and reduced absenteeism (e.g., Gilin Oore et al., in preparation) to indicate that conflict coaching is an effective organizational intervention. Conflict is prevalent in organizations: 85% of employees report being involved in at least one focal work conflict. In addition, work conflict represents staggering personal, relational, and financial costs (CPP, 2008). Thus, organizations are well advised to invest in conflict coaching as a means of reducing conflict severity and employee strain.

This study provides evidence that individuals decrease negative rumination while experiencing a work conflict and receiving assistance from an in-house conflict specialist. One possible explanation for this finding is that conflict coaching reduces work conflict severity and, in turn, the negative thoughts associated with being in conflict concurrently diminish. On the other hand, it is possible that employees learn cognitive techniques, such as cognitive reframing, that are helpful for reducing habitual rumination during future conflicts. Additional experimental research may be helpful in assessing whether rumination is reduced because it is concurrently intertwined with conflict severity or because employees learn to better manage this negative habit.

The approach to conflict coaching under investigation here was founded on the transformative model. The transformative model has its roots in family and community conflict resolution and was adapted for organizations by Bush and Folger (1994). This model was the basis for the Resolve Employment Disputes, Reach Equitable Solutions Swiftly (REDRESS) program, which effectively reduced widespread and severe conflict within the US postal service (Nabatchi & Blomgren Binghan, 2010). Within the transformative model, conflict specialists aim to empower individuals to develop and express their own solutions to problems while also recognizing their conflict partner's views and needs (Nabatchi, Bingham, & Moon, 2010). Since its inception, the transformative model has expanded from its sole focus on mediation to include conflict coaching and has become more widespread with training programs across North America (e.g., https://uwaterloo.ca/conflict-management/workshops/all-workshops-offered/transformative-mediation) and Europe (e.g., http://www.transformative-mediation.eu). Thus, the results show that the transformative approach to conflict coaching is effective. However, these results may not generalize to other conflict coaching methodologies. Additional evaluation on various approaches to conflict coaching and other informal conflict management services (e.g., mediation) is needed.

Although the pre/post sleep and heart rate results are not as clear, the findings do suggest that problematic sleeping patterns (i.e., number of wakings and minutes in bed) and average daily heart rate improve over time or in association with the intervention. To my knowledge, this is the first biological evidence of work conflict's harmful effects. Additional research is needed to replicate these findings and to remove two potential confounds: completing the surveys and wearing the fitness tracker. First, completing the

surveys called attention to the focal work conflict and strain variables, which may have disrupted sleep and elevated heart rate. Second, the novelty of wearing a fitness tracker may have disturbed typical sleep patterns. Future researcher should focus only on biological data collection and recruit workers who routinely use these devices.

There are at least two possible reasons why the life function scale did not differ from pre- to post-intervention and was not significantly related to the FWC subscales. First, the life function measure is a causal indicator scale: it combines disparate aspects of one's current activities relative to typical habits (i.e., frequency of relations with family, connecting with friends, volunteering, exercise and activity, healthy eating). These items are not interchangeable, and therefore internal consistency is not an appropriate measure of scale reliability (Spector & Jex, 1998). Nevertheless, low internal consistency can attenuate the relationships between variables (Crocker & Algina, 1986). However, the physical strain scale is also a causal indicator scale that demonstrated low reliability in the present research and relationships between physical strain and other study variables were statistically significant. This leads to the second possible explanation: that the experimental life function scale lacks validity. Future researchers attempting to explore "life functioning" may benefit from a more rigourous approach to scale development.

The findings provide further evidence of the nascent FWC scale's internal consistency (FWC-SD α = .89; FWC-RN α = .85; and FWC-T α = .70) and validity, in that each of the FWC subscales accounted for additional variance in strain outcomes after accounting for covariates.

Autoregressive analyses of data representing seven occasions of pre-intervention focal work conflict severity life function, negative work emotions, and psychological and

physical strain did not clarify directionality of the work conflict/strain relationship.

Results may relate to data collection timing. Researchers have reported that group-level

relationship conflict is prospectively related to angry mood later the same day but not the

next day (Meier et al., 2013). As a reminder, data collection for the present study

occurred once daily and at four weekly intervals. More frequent data collection may be

needed to provide further evidence of causality. In addition, more research is needed to

link proximal outcomes (such as negative emotions) to distal outcomes (such as

psychological and physical health symptoms) with work conflict.

The present study investigated five variables as potential conflict management

competencies that develop over time. Four of these variables—emotion regulation,

psychological distancing, perspective taking, and empathic concern—did not significantly

change during the time span of the present research. One explanation is that work

conflict elicits a flight response (Dijkstra, van Dierendonck, & Evers, 2005) that disrupts

the ability to develop skills. Alternatively, it is possible that these competencies develop

over a longer time span than the present research captured. However, the growth curve

results show that for these participants within the duration of this research, lowering

rumination was effective in reducing conflict severity. Fortunately, there are practical

ways to reduce negative work rumination. A recent cross-sectional study found that

recovery and relaxation mediated the relationship between negative work rumination and

insomnia (Demsky, Fritz, Hammer, and Black, 2018). In addition, longitudinal research

linked an internet-based mindfulness intervention to reduced rumination (Querstret,

Cropley, & Fife-Schaw, 2017). Taken together, these studies suggest that conflict

practitioners may wish to target rumination and activities associated with reducing rumination in their conflict interventions.

Limitations

It is difficult to conduct research with a sample of workers who are experiencing a work conflict and receiving in-house conflict coaching. In particular, assessing workers experiences prior to conflict intervention is challenging. The present research was conducted with an organization in which workers routinely waited for appointments with the in-house conflict specialist. This waiting period enabled pre-intervention data collection. Notably, the pre-intervention data collection occurred after the participant had spoken to the in-house program *coordinator*. This program coordinator had been trained in conflict management and had considerable experience in calming employees who often present as extremely upset when experiencing work conflict (personal conversation with B. Solarz, Feb. 8, 2016). One speculates that, as a result, the true level of pre-intervention conflict severity may not have been fully captured in this sample.

The quantity of missing data (i.e., 9% of surveys; 15% of variables) is well above Tabachnick and Fidell's (2007) heuristic that missing $\geq 5\%$ of the data may pose a problem with generalizability. However, the pattern of missing data is more serious than the amount of missing data (Tabachnick & Fidell, 2007) and an examination of the pattern of missing data suggests that the missing values are likely to be more extreme (i.e., higher strain levels). It is possible that this pattern of missing data directly relates to work conflict: Past research has shown that incivility (Oore et al., 2010) and work conflict (Oore et al., 2018) are associated with strain and absenteeism. Thus it is possible that participants with more severe work conflicts may have been too strained to complete

the diary entries, or may have been absent from work (and therefore not responsive to the researchers prompts). However, this line of reasoning is speculative and the threat to generalizability is a limitation of this study.

Another limitation to the generalizability of Study IV is that the conflict program may be idiosyncratic to the program design or to personal characteristics of the conflict specialist. The program was first established as a one-year pilot project grounded in conflict competency development and alternative dispute resolution (LeBlanc, 2012). In particular, the conflict program office was physically remote from executive and human resource offices, the conflict specialist reported at arm's length from the organization's human resources department, the program was situated within a conflict management system that provided formal services (e.g., grievances, formal reports), client interactions were strictly confidential, and clients could select from a variety of services (e.g., conflict coaching, mediation). The conflict specialist had extensive experience in dispute resolution and was certified in transformative mediation. Transformative mediation is an effective conflict resolution approach that was developed for the US Postal Service (Nabatchi & Blomgren Bingham, 2001). Thus the program was based on established best practices and staffed with a conflict specialist; caution is recommended when generalizing the present results to dissimilar programs and staff.

Conclusion

In conclusion, Study IV provided evidence in support of in-house conflict resolution programs. The evidence presented shows that in-house conflict coaching is an effective way of reducing conflict severity and managing one's negative is a key conflict competency.

General Discussion

The present research began with a basic question: what is work conflict? The answer to that question has drifted over time. Classical theories held that work conflict consisted of specific set of behaviours, emotions, and cognitions that were inexorably entangled (e.g., Pondy, 1967). More recent theories shifted from the tenet that conflict is a global construct to differentiate affective/relational conflict from cognitive/task conflict (e.g., Jehn, 1993). Contemporary definitions have typically defined how the conflict process begins but have neglected to specify the conflict state (e.g., "workplace conflict emerges when one party—be it an individual or group of individuals—perceives its goals, values, or opinions being thwarted by an interdependent counterpart"; p. 6, De Dreu, 2008). Thus, prior historical and contemporary definitions have not clearly answered this question and the psychological experience of being *in conflict* remained obscure.

Notably, social discord was included as a necessary condition of work conflict (Study I), omitted in preliminary scale development (Study II), and then included for final scale development (Study III) and the diary study of conflict management (Studies IV). Given my vacillation, one may wonder whether or not social discord is indeed a necessary condition of work conflict. However there are at least two reasons why social discord should be retained in the model and measurement of work conflict. First, although one can argue, as I did above, that social discord is merely a trigger of work conflict, the critical incidents provided evidence that other facets of work conflict can precede social discord. For example, one participant reported that he disliked his coworker (relational negativity) for three years before the social discord occurred. Thus, social discord should not be omitted on the grounds that it is a trigger and not a facet of

work conflict. Second, although the relationship between social discord and outcome variables included in Studies III and IV was weak when compared with the other facets of work conflict, social discord may be a stronger predictor of variables that were not examined in the present research. For example, social discord may be more powerful than relational negativity/threat in predicting the relationship between focal work conflict and team performance or team psychological safety because social discord is more readily observed.

With regard to conflict management, identifying the facets of work conflict is essential to the design of conflict interventions and leadership development. With the concise definition of work conflict presented here, practitioners can fine-tune interventions to directly address the expected psychological experience of work conflict. For example, practitioners can train workers to more fully appreciate the complexity of the conflict experience, which may lead to greater understanding and compassion towards self and others. In addition, conflict coaching could include probes that encourage workers to more fully express their experiences, which, in turn, may provide additional information for practitioners to explore and reframe conflict behaviours, thoughts, and emotions. Finally, as noted above, supervisors spend a great deal of time dealing with work conflict between subordinates. As Study I demonstrated, this effort is often perceived as unhelpful or even detrimental to employees. With focal work conflict training, supervisors can validate their employees' negative feelings and directly reduce perceived threats without placing themselves in the difficult position of hearing both sides of the story and judging right from wrong.

In summary, prior theoretic definitions may have been sufficient because past research focused on conflict frequency across episodes and was primarily concerned with predictors and outcomes (Jehn, 1993; Spector and Jex, 1998; Tjosvold, 2008). That is, both ICS and ICAWS measure prevalence of work *conflicts*, but not the severity of a focal work conflict. The present research departed from prevalence studies to specify what work conflict is, to examine how focal work conflict relates to mental and physical health, and to explore the efficacy of an in-house conflict intervention.

As a first step toward conducting this research, I used prior theoretic work to define the psychological experience of work conflict as composed of four factors. That is, three well-trained and experienced conflict management practitioners representing health care, education, and military industries and 19 individuals who recalled their own experiences of work conflict across industries affirmed the initial definition. In addition, qualitative research and thematic analysis indicated that work conflict themes fit the definition. However, two quantitative cross-sectional studies provided empirical data indicating that negative emotions and interpersonal dissonance represent one factor in a 3-factor solution. Thus, work conflict is defined as a state of *social discord* (i.e., norm violation or interpersonal friction) characterized by *relational negativity* (i.e., negative emotions and relational dissonance) that poses a *threat* to some core human need or state (i.e., one's interests, identity, security, or sense of inclusion state).

In addition to defining the psychological state of work conflict and providing a scale to assess severity of a focal work conflict, the present study indicates that rumination interventions can be useful in reducing conflict severity and its negative effects. In addition, conflict coaching is an effective intervention for reducing employee

strain associated with focal work conflicts. Taken together, the present research makes a

significant and unique contribution to the work conflict literature and prompts further

research to explore focal work conflict and conflict severity.

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Appendix A

Practitioner Interview Guide

Thank you for agreeing to this interview!

I am creating a new scale to assess workers' perceptions and experiences of workplace conflict. After the new scale is developed and evaluated, I will use it in a diary study to assess conflict perceptions during a period of time when workers are receiving services from an in-house conflict resolution program. The goal of the diary study is to better understand how workplace conflict programs help employees cope with their current work conflict, build competency to better manage future disputes, and restore well-being and functioning to pre-conflict levels. Developing a good quality scale is a first step toward this goal, and this interview will help to develop that scale.

Your input is important because without it, the scale development effort would be based primarily on scholarly research and popular books on the topic. Although information from those sources is invaluable, I am hoping to develop a scale that captures the day-to-day experiences of people working through a conflict, a topic that you understand very well given your position in this organization. Capturing aspects of the organization's culture or other contextual factors may also be important to understanding aspects of work conflict that may be specific to a particular workplace.

If it is okay with you, I'd like to record this interview and have it transcribed for analysis. After I complete the transcription and analysis, I will erase the recording. The information you provide will remain confidential.

Do you have any questions?

1. How do you define work conflict?
2. How does being involved in a work conflict affect participants' well-being?
    -   Emotional well-being?
    -   Physical well-being?
3. How does being involved in a work conflict affect participants' functioning?
    -   At work?
    -   At home?
    -   Other?
4. How does work conflict affect participants?
    -   Coworkers?
    -   Supervisors?
    -   Workgroups?
    -   The organization?
5. How does being involved in a work conflict affect working relationships?
    -   Are relationships improved? If so, in what ways?

- Are relationships deteriorated? If so, in what ways?

6. How do participants report feeling during work conflict?
    - Do participants report positive feelings or emotions?
    - What worries participants about being involved in a conflict at work?
7. How do participants report feeling after work conflict?
    - Do participants report lingering positive feelings or emotions?
    - Do participants report lingering negative feelings or emotions?
8. Are there things about your organization or industry that might not be relevant to other organizations or industries?
    - Organizational or social norms?
    - Characteristics of organizational members or leadership?

I have a few questions that will help us prepare for the planned diary study. The information you provide here will help to ensure that we are gathering the right information at the appropriate time.

9. In what ways does your work help participants reduce the intensity of workplace conflict develop competencies related to conflict management?
10. Based on your observations, how soon after intervention sessions do participants feel better? Develop competencies?
11. I'd like to include at least one physiological measure during the diary study. In your opinion, would participants be willing/benefit from tracking their heart rate/blood pressure/sleep patterns?
12. Final thoughts/ideas/comments?

Thank you for your participation in this interview!

Appendix B

Critical Incident Interview Guide

Thank you for agreeing to this interview.

I am investigating people's experiences of conflict at work. The purpose of this research is to better understand what causes conflict and what it's like to be involved in conflict at work. I hope to develop a few survey items that can be used to assess the intensity of a particular workplace conflict.

- Do you have any questions about my study? Would you like to have more information about workplace conflict?
- If it is okay with you, I'd like to record this interview and have it transcribed for analysis. After I complete the transcription, I will erase the voice recording.
- The information you provide will remain confidential. As we discussed during the informed consent process, your information will be combined with information collected from other interviews and analyzed to better understand common experiences of workplace conflict.
- You can stop the interview at any time; just let me know you'd prefer not to continue.
- You may change your mind about having your interview included in the study. If that happens, you can contact me up to a week after we complete the interview and I'll simply delete your interview.

Do you have any questions before we begin?

To learn more about work conflict, I'd like you to tell me about a couple situations or events when you were involved in a conflict at work. For the first situation, I'd like you to think of a work conflict event that was a positive experience, or led to a better working relationship, or resulted in an accomplishment, or led to a better decision. Please take a few minutes and think about a time when you experienced such a conflict at work.

1. Starting at the very beginning, before the conflict even started, what caused the *first* feelings of tension between you and the person you were in conflict with, the 'other' person?
2. What happened that escalated this tension into a conflict at work?
3. I'd like to gather a little information about the other person. You can use a fake name to refer to this person if you wish and if you use a real name, I'll change it to a pseudonym in my records.
   - What is your relationship with the other person (peer, subordinate, supervisor, etc.)?
   - Did you have less power, more power, or equal power to the other person?

- About how old is the other person (older or younger or about the same age as you)?
- Is the other person male or female?

4. Briefly describe what happened *during* the workplace conflict.
    - Expand on any events that were important to the conflict?
5. Think about your own response *during* this conflict at work:
    - How did you feel?
        - How else?
    - Do you remember feeling really intense feelings, like you were going to lose your cool, during the conflict?
        - What intense emotions did you experience?
    - What did you think about when you were involved in this conflict?
        - What else?
    - Were you worried during the conflict?
        - If yes, what were you worried about?
        - Are those worries resolved?
    - What did you do during the conflict?
        - Are you pleased about how you behaved?
        - Any regrets about the way you behaved?
        - Anything else?
6. I'd like you to think about you and the other person for a moment.
    - How did you feel about your relationship with the other person *before* the conflict?
    - How important was this relationship to you and to your work?
    - Did you think about your relationship with the other person during the conflict? Explain.
    - Did the relationship change as a result of the conflict?
    - Explain.

7. Did you attempt to get any help dealing with the conflict at work?
    - Who helped you (conflict specialist, HR, EAP, other)?
    - Was this effective (helpful, harmful, or no effect)?

8. What else should I know about this particular workplace conflict?

Now I'd like you to think of a workplace conflict event that was negative, because it resulted in a worsened working relationship, or got in the way of getting something done, or led to a poor decision.

Repeat questions 1 to 8

Before we end the interview, I'd like to get your thoughts on our emerging definition of conflict at work.

> *Workplace conflict is a state of social discord characterized by negative emotions (e.g., frustration, anger, and anxiety) and the perception of interpersonal dissonance (a sense that something is wrong with the relationship). People at work are in a state of conflict when one or more parties perceive that an ongoing or unresolved dispute poses a threat to any core human state (i.e., one's interests, identity, security, or sense of inclusion).*

- **Negative emotions** are feelings of frustration, hostility, tension, anger, jealousy, or bad/uncomfortable emotions.

- **Interpersonal dissonance** is feeling unsettled or uncomfortable as a result of a disconnect between the state of the relationship during conflict and the state of the relationship when things are good.

- **Threat** to one's ego, identity, self-esteem, social esteem, and sense of belonging, fear of retaliation and escalating mistreatment in the form of aggression and violence.

Does this definition make sense to you? Does it define your experiences of workplace conflict? If not, what needs to change?

Appendix C

Item Generation Instructions

Thank you for agreeing to generate survey items.

I am creating a new scale to assess workplace conflict. To develop this scale, I first reviewed the literature in this field to develop a working definition of workplace conflict. Then three conflict resolution practitioners provided their expertise based on their training and practical knowledge. In addition, fourteen workers representing healthcare, post-secondary education, and several other industries relayed critical incidents of positive and negative workplace conflict events during one-hour interviews. Qualitative data were analyzed and the working definition was tweaked in response to the two sets of interviews.

After the new scale is developed and evaluated, it will be used in a diary study to assess workplace conflict over a period of time when workers are receiving services from in-house conflict resolution programs. The goal of the diary study is to better understand how workplace conflict programs help employees cope with a current workplace conflict event, build competency to better manage future disputes, and restore well-being and functioning to pre-conflict levels. Developing a scale is a first step toward this goal and the items you generate will help to develop the scale.

The operational definition of workplace conflict follows:

> *Workplace conflict is a state of social discord characterized by **negative emotions** (e.g., frustration, anger, and anxiety) and the perception of **interpersonal dissonance** (a sense that something is wrong with one or more relationships). People at work are in a state of conflict when one or more parties perceive that an ongoing or unresolved conflict poses a **threat** to any core human state (i.e., one's interests, identity, security, sense of inclusion, or values).*

If you have questions about or suggestions for improving the definition, please note them here:

Item Specifications
- The following table provides item specifications to guide you in generating items.
- New item attributes are contrasted with attributes of established scales to assist in understanding the specifications.
- Sample items are provided to help you develop new items.

New Scale Item Attributes	Selected Attributes of Established Scale Items
Assess a *particular* workplace conflict. e.g., This conflict is negatively affecting my relationship with the person who shares this dispute.	Assess amount or *prevalence* of conflicts in the workplace in general. E.g., Much plotting takes place behind the scenes (Cox, 1998).
Assess workplace conflict defined as interpersonal dissonance, negative affect, and perception of threat. e.g., I am worried that my coworkers feel differently about me as a result of this conflict.	Assess workplace conflict defined as disagreement, negative affect, or interference. E.g., How often are there disagreements about who should do what in your workgroup? (Jehn & Mannix, 2001)
Based on a model wherein topics of dispute are viewed as causes of conflict rather than different types.	Based on a model wherein the topic of conflict equates to different types of conflict (i.e., task/cognitive, process, relational/affective).
Assess conflict as a global construct that includes emotional, cognitive, and behaviour as aspects or facets of conflict at work.	Assess emotional conflict separate from cognitive conflict (Amason & Schweiger, 1996)
Assess one's perception of interpersonal *interactions* e.g., I don't know where I stand with the person I am in conflict with.	Assess one's perception as a *target* of mistreatment. E.g., How often are people rude to you at work? (Spector, 1998)
Assess workplace conflict at the individual level. e.g., The relationship between myself and the other party in conflict is not as good as it should be.	Assess conflict at the group, intergroup, or organizational level. E.g., How much conflict is there in your group about roles and responsibilities? (Jehn, 1995)

The definition has at least three themes:

1. **Negative emotions** include feeling frustrated, hostile, tense, angry, disheartened, defeated, demoralized, miserable, afraid/terrified, betrayed, isolated, jealous, or bad/uncomfortable emotions.

2. **Interpersonal dissonance** is feeling unsettled or uncomfortable as a result of a disconnect between the state of the relationship during conflict and the state of the relationship when things are good.

3. **Threat** of losing one's job; threat to identify, self-esteem, self-worth, social-esteem, or sense of belonging (e.g., having no voice), threat of retaliation and escalating mistreatment in the form of aggression and violence. Threat to one's own or the other party's mental and physical health.

Sample Lead-in and Survey Items:
Please recall the workplace conflict that prompted you to contact the conflict resolution program at your work. Consider your thoughts and feelings about this conflict situation at <u>this moment</u>.
- What is the state of your relationship with the <u>person</u>(s) you are in conflict with?
  1. My relationship with the other person(s) is poor.
  2. Something must be done to improve this relationship.
  3. I would rather not work with this person anymore.
- How you currently <u>feel</u> about this workplace conflict?
  4. I am extremely frustrated with the current situation.
  5. I feel worried and anxious as a result of this dispute.
  6. I feel depressed and hopeless about the conflict.
- What is your impression of the impact of this conflict?
  7. People at work seem to be avoiding/shunning me.
  8. It's harder to achieve my goals because of this conflict.
  9. I think less of myself as a result of my own conflict behaviour

If there are any additional themes that should be added, please feel free to record them and generate relevant items in the blank rows below.

Please generate 3-5 items for each work conflict theme.

Appendix D

Item Review Instructions

Thank you for agreeing to review items for the new workplace conflict scale.

The purpose of the scale is to assess workers' perceptions and experiences during workplace conflict. After the new scale is developed and evaluated, I will use it in a diary study to assess workplace conflict over a period of time when workers are receiving services from in-house conflict resolution programs. The goal of the diary study is to better understand how workplace conflict programs help employees cope with their current workplace conflict event, build competency to better manage future disputes, and restore well-being and functioning to pre-conflict levels. Developing a good quality scale is a first step toward this goal, and this review task will improve the quality of the new items.

Please report:

Name: _____

Position (MSc Student, PhD Student, etc.): _____

Age: _____

Sex: _____

Instructions

Please critically review items and make changes to this document using the track changes tool.
- Remove items that are
    - biased,
    - redundant, or
    - inconsistent with the definition of workplace conflict (see next page).

- Rephrase items to improve/correct
    - clarity,
    - readability,
    - tense, and
    - grammar.

Draft Item	Revised Item(s)	Comments
Sample 1: I feel frustrated and angry with the person I am in conflict with.	I feel frustrated with the person I am in conflict with. I feel angry at the person I am in conflict with.	Double-barreled Grammatical error noted but not corrected because it is conventional and easy to understand.
Sample 2: Sometimes my teammates are offended by customers.		Remove: not consistent with the definition.

Definition

Workplace conflict is a state of social discord characterized by confusion or negative emotions (e.g., frustration, anger, and anxiety) and the perception of interpersonal dissonance (a sense that something is wrong with one or more relationships). People at work are in a state of conflict when one or more parties perceive that an ongoing or unresolved conflict poses a threat to any core human need or state (e.g., one's interests, identity, security, belongingness, or values).

Social discord involves tension and/or mistreatment behaviour such as incivility, or aggression between two or more people at work.

Confusion is a sense of chaos, befuddlement, or muddiness.

Negative emotions include feeling frustrated, hostile, tense, angry, disheartened, defeated, demoralized, miserable, afraid/terrified, betrayed, isolated, jealous, or bad/uncomfortable emotions.

Interpersonal dissonance is feeling unsettled or uncomfortable as a result of a disconnect between the state of the relationship during conflict and the state of the relationship when things are good.

Threat of losing one's job; threat to one's identity, self-esteem, self-worth, social-esteem, sense of belonging, or of having little or no voice/influence, threat of retaliation and escalating mistreatment in the form of aggression and violence. Threat to one's own or the other party's mental and physical health.

Appendix E

Sorting Instructions

Thank you for agreeing to participate in this sorting task.

I am creating a new scale to assess workers' perceptions and experiences of work conflict. After the new scale is developed and evaluated, I will use it in a diary study to assess work conflict perceptions over a period of time when workers are receiving services from in-house conflict resolution programs. The goal of the diary study is to better understand how work conflict programs help employees cope with their current work conflict event, build competency to better manage future disputes, and restore well-being and functioning to pre-conflict levels. Developing a good quality scale is a first step toward this goal, and this sorting task will be used to help develop that scale.

The first step of the sorting task is to group similar items into categories. The items were developed by researchers and from interviews with conflict resolution specialists working in the organizations that will participate in the diary study, so it is possible that some items are distinct to a particular organization. After you have sorted the items in categories, I'll develop a label for each category with the aim of identifying a set of proposed facets of the work conflict construct.

Step	Description
1.	Read the first item aloud and place it to establish the first grouping.
2.	Read the second item aloud. Working independently, decide and record whether this item belongs with an established grouping or on its own.
3.	Repeat steps 2 until all items are sorted
4.	Review groupings and develop labels to describe groupings.

Appendix F

Item Matching Instructions

Thank you for agreeing to match items for the new workplace conflict scale.

The purpose of the scale is to assess workers' perceptions and experiences during workplace conflict. After the new scale is developed and evaluated, I will conduct a validation study with the aim to use the scale in a diary study. The goal of the diary study is to better understand how workplace conflict programs help employees cope with their current workplace conflict event, build competency to better manage future disputes, and restore well-being and functioning to pre-conflict levels. Developing a good quality scale is a first step toward this goal, and this matching task will help to identify the best scale items.

Instructions
1. Please analyze each item of the 44 items and select the theme(s) that best match the item.
2. If the item doesn't seem to fit any of the listed themes, please select 'other' and identify the new theme in the 'Specify Other' column.
3. If you have thoughts about how to improve the items or any other comments, please note them in the 'Ideas, suggestions, explanations, etc.' column.

Themes
- **Threat** is the perception of a risk to one's identity (personal or professional), health, financial stability, social network, or other core human need/state.
- **Negative emotions** include feeling frustration, anger, fear, betrayal, isolation, or other bad/uncomfortable emotions.
- **Interpersonal dissonance** is a sense that something is wrong with the relationship between you and other(s) involved in the conflict.
- **Confusion** is a sense of chaos, befuddlement, or muddiness.
- **Social discord** involves tension and/or mistreatment behaviour such as incivility, or aggression between two or more people at work.

Important Note: Items may match more than one theme -- please **select all that apply.**

Appendix G

Practitioner Interview Summary

Data from the practitioner interviews transcripts were parsed into sixteen themes. The following table shows the themes, descriptions and verbatim exemplars, and how the data informed the present research. Themes marked with an asterisk informed Study I CIT interview design.

#	Theme	Description and Verbatim Exemplars	Use
1.	Conflict Competency	Conflict competencies refer to the knowledge, skills, abilities, and other attributes that practitioners aim to develop through training or while helping clients manage a focal work conflict. 'When I provide training, I tend to focus on some key skill sets such as assumptions, conflict management styles, heightening people's awareness in regard to non-verbal communication, active listening, and use of I statements.'	Helped to specify Study IV mediators, the possible developmental processes that alleviate work conflict severity.
2.	*Conflict Emotions	Conflict emotions are the affective states that clients experience as part of work conflict. 'Emotions are typically negative. Or I think clients would describe them as negative. These are not emotions they enjoy feeling. So we're not talking about joy and happiness, right. We're talking about some kind of anxiety, anger, frustration, or depression.'	Informed Study I CIT interviews by specifying work conflict emotions.

#	Theme	Description and Verbatim Exemplars	Use
3.	Coworker Impacts	Coworker impacts are work conflict outcomes related to organizational members not directly involved in a focal work conflict. 'I think it can be very difficult for people who are observing conflict. It's distracting as well for coworkers. It lends itself to building of alliances, which is a natural human thing to do.'	Helped to specify Study II, III, and IV outcomes.
4.	Job Performance	Job performance refers to the effects of work conflict on disputants' ability to function at work. 'Work conflict affects their [workers] ability to do their jobs effectively.'	Helped to specify Study II, III, and IV outcomes.
5.	High Conflict Personality	High conflict personalities is a term used to describe individuals who, intentionally or unintentionally, instigate or perpetuate work conflict. 'Some people thrive on this: you know, they love conflict. They love stirring stuff up.'	Retained as a possible explanation for unexpected or divergent results in Study IV.

#	Theme	Description and Verbatim Exemplars	Use
6.	Leaders' Conflict Handling	Leaders' management of conflict refers to how supervisors and others holding management roles deal with conflict. 'Often conflict is poorly handled not just by the folks on the ground but people higher up the chain. You know, management doesn't necessarily deal with it effectively. It gets swept under the carpet. Or rather than sort of try something informal like mediation or some other form of ADR, people are disciplined, you know, they're moved, or they're punished. And the problem isn't necessarily resolved.'	Helped to specify a list of confounds that may relate to fluctuations in work conflict in Study IV.
7.	Life Function	Life function refers to the effects of work conflict on disputants' lives beyond work. 'People often report taking things out on their families. You know, related to the conflict, that their families suffer for that.'	Helped to specify Study II, III, and IV outcomes.
8.	Organization Culture	Organizational culture refers to the social norms for dealing with work conflict. 'There is a very low tolerance within this organization for any overt types of big conflict.'	Retained as a possible explanation for unexpected or divergent results in Study IV.

#	Theme	Description and Verbatim Exemplars	Use
9.	Health Impacts	Health impacts are the effects of work conflict on disputants' physical health. 'People in conflict report headaches, throwing up on the way to work, feeling sick at the idea of having to engage with certain people, no energy, and people report weight gain as a result.'	Helped to specify Study II, III, and IV outcomes.
10.	Psychological Impacts	Psychological impacts are the effects of work conflict on disputants' mental health. 'Work conflict affects clients' mental health, their psychological health, and their emotional health.'	Helped to specify Study II, III, and IV outcomes.
11.	*Work Relationships	Relational impacts are the effects of work conflict on disputants' work relationships. 'People have the experience that they've been able to work through some difficult things here. It makes the relationship stronger.' 'Poorly managed conflict can have hugely negative impacts on relationships. It can destroy relationships.'	Informed Study I CIT interviews by specifying relationship difficulties.

#	Theme	Description and Verbatim Exemplars	Use
12.	Conflict Program Impacts	Conflict program impacts are effects of the conflict program assistance to disputants. 'Some people report that they feel like a weight has been lifted off their shoulders, they feel relieved. Other people might not necessarily verbalize that but it's quite clear just from their body language, from just their energy that you can see that they feel better.'	Helped to specify Study IV mediators, the possible developmental processes that alleviate work conflict severity
13.	Social Impacts	Social impacts are the effects of work conflict on disputants' interaction with organizational members. 'Some people isolate themselves when they're in conflict. So they become isolated from others.'	Helped to specify Study II, III, and IV outcomes.
14.	*Threats	Threats are the aspect of work or self that disputants perceive to be in jeopardy as part of work conflict. 'People in conflict worry about job loss, fear loss of security, damage to reputation, and their own reactionary behaviour.'	Informed Study I by specifying aspects of work and self that disputants perceive to be in jeopardy as part of work conflict.

#	Theme	Description and Verbatim Exemplars	Use
15.	Conflict Severity Triggers	Conflict severity triggers are work events that are expected to increase or decrease work conflict severity. 'Being in proximity of the person that they're most in conflict with will cause them [the program participant] to be more distressed. Being around people who are friends with the other person can be a trigger.'	Helped to specify a list of confounds that may relate to fluctuations in work conflict in Study IV.
16.	Workgroup Impacts	Workgroup impacts are the effects of work conflict on the disputants' interactions with their team. 'Conflict affects peoples' ability to interact in a healthy way with their colleagues.'	Helped to specify Study II, III, and IV outcomes.

Appendix H

CIT Interviews: Initial Codes

The following table shows NVivo results of 118 initial CIT codes in alphabetic order, as well as the number of cases included in those codes and the number of coded references.

#	Initial code name	Theme	# of Cases	# of References
1.	Alcohol intoxication	SD	2	3
2.	Took steps to resolve conflict	G	19	47
3.	Baited into an argument	SD	2	2
4.	Disputants became more careful	ID	6	10
5.	Boss excluded participant	SD	3	9
6.	Boss favoured some workers	SD	3	4
7.	Boss micromanaged	SD	1	1
8.	Boss undermined	SD	2	3
9.	Changed boundaries with disputant	ID	1	1
10.	Changed level of respect among disputants	ID	10	10
11.	Changed level of trust among disputants	ID	8	11
12.	Co-worker favouritism	SD	1	1
13.	Complained to boss	SD	3	5
14.	Concerned for family members	T	2	2
15.	Concerned for finances	T	3	3
16.	Concerned for job	T	10	16
17.	Concerned for other's well-being	T	6	7
18.	Concerned for own career	T	3	4
19.	Concerned for own health/experiencing symptoms	T	8	8
20.	Mental illness	SD	1	1
21.	Concerned for professional status	T	10	14
22.	Concerned for staff	T	1	1
23.	Conflict strategies	G	12	17
24.	Cried	SD	2	2
25.	Department provided poor quality service	SD	1	1
26.	Department was not valued	SD	1	1
27.	Different management styles among disputants	SD	3	5

#	Initial code name	Theme	# of Cases	# of References
28.	Different values among disputants	ID	2	2
29.	Different work ethics among disputants	SD	2	5
30.	Disagreement between disputants	SD	6	6
31.	Disliked disputant	ID	5	12
32.	Disputant was uncooperative	SD	2	2
33.	Disputant's personality changed	SD	1	1
34.	Disputants swore	SD	4	4
35.	Expectations were not met	SD	11	20
36.	Experienced aggressive behaviours	SD	8	10
37.	Experienced harassment	SD	1	1
38.	Experienced mocking	SD	1	1
39.	Experienced rude behaviour	SD	3	3
40.	Experienced sexism	SD	1	1
41.	Worried about own health	T	1	1
42.	Felt angry	NA	20	25
43.	Felt annoyed	NA	1	1
44.	Felt anxious	NA	8	15
45.	Felt betrayed by disputant/organization	ID	11	19
46.	Felt blamed	NA	4	4
47.	Felt confused	NA	4	5
48.	Felt defeated	NA	2	2
49.	Felt depressed	NA	1	1
50.	Felt desperate	NA	1	1
51.	Felt disappointed	NA	8	10
52.	Felt disgusted	NA	2	2
53.	Felt doubtful	NA	3	4
54.	Felt dreadful	NA	3	3
55.	Felt empathetic	NA	1	1
56.	Felt enraged	NA	1	1
57.	Felt frightened	NA	4	4
58.	Felt frustrated	NA	15	17
59.	Felt guilty	NA	3	3
60.	Felt helpless	NA	5	5
61.	Felt horrified	NA	1	1
62.	Felt hurt	NA	4	5

#	Initial code name	Theme	# of Cases	# of References
63.	Felt icy	NA	3	3
64.	Felt inadequate	NA	3	3
65.	Felt inferior to disputant	NA	2	2
66.	Felt intimidated	NA	1	1
67.	Felt miserable	NA	1	2
68.	Felt overwhelmed	NA	1	2
69.	Felt personally attacked	NA	1	1
70.	Felt regret	NA	1	1
71.	Felt sad	NA	3	3
72.	Felt shocked	NA	5	6
73.	Felt superior over disputant	ID	2	2
74.	Felt uncertain	NA	3	3
75.	Felt uncomfortable	NA	1	2
76.	Felt upset	NA	3	3
77.	Gossiping among Workers	SD	4	5
78.	Had to Redo Work	SD	1	2
79.	Illegal or Unethical Behaviour	SD	1	1
80.	Instrumental Support was at Risk	T	1	1
81.	Lying	SD	6	9
82.	Organizational culture	G	4	4
83.	Organizational restructuring	SD	1	3
84.	Outcomes	G	22	52
85.	Participant stayed silent	SD	2	3
86.	Participant instigated conflict	SD	1	1
87.	Participant's input was not considered/valued	SD	1	1
88.	Performance evaluation disagreement	SD	3	6
89.	Quality of Service at Risk	T	7	11
90.	Questioned own identity	T	4	5
91.	Questioned own leadership ability	T	2	2
92.	Raised voices/yelling	SD	9	13
93.	Recognition not Fair	SD	1	1
94.	Reputation at Risk	T	5	8
95.	Resented disputant	ID	1	1
96.	Secrecy among Workers/Leaders	SD	1	1

#	Initial code name	Theme	# of Cases	# of References
97.	Stealing Credit for Participant's Work	SD	1	1
98.	Storming off	SD	2	2
99.	Strained disputant relations	ID	10	13
100.	Supervisor was uncivil/abusive	SD	6	12
101.	Group functioning at risk	T	3	3
102.	Tension among disputants	ID	7	9
103.	Threat of violence	T	1	1
104.	Unable to attain goals	T	1	2
105.	Uncivil communication	SD	9	11
106.	Uncivil email	SD	3	6
107.	Unexplained absence from meetings	SD	1	1
108.	Unfair workloads	SD	1	1
109.	Work/decision responsibilities unclear	SD	5	7
110.	Working relationships were at risk	T	9	10

Appendix I

Comprehensive CIT Results

Introduction

This appendix contains a summary report of critical incidents interviews. Each of the 19 participants was invited to provide one positive and one negative work conflict event. Three participants were unable to recall a work conflict that was a positive experience or yielded some positive outcome and only recalled a negative critical incident. The resulting 35 cases or critical incidents of work conflict were analyzed using NVivo for Mac.

The following table depicts the themes and subthemes directly related to the definition of work conflict and the four proposed conditions of social discord, negative affect, interpersonal dissonance, and threat. Each of the subthemes is described and selected participant quotes are provided (*in parentheses*) to augment descriptions.

Work Conflict Definition

The following table shows the CIT themes and subthemes resulting from the qualitative analysis of work conflict definition.

Social Discord		Negative Affect		Interpersonal Dissonance	Threat
1. Bureaucratic • Work not valued • Input not considered • Unclear responsibilities • Restructuring • Unfair workloads 2. Counterproductive work behaviours • Alcohol use • Inappropriate physical action • Inappropriate verbal action • Poor attendance • Poor quality work 3. Illness 4. Incivility 5.Violation of norms • Complaining to the boss	6. Interpersonal relations • General communication • Disagreement • Unmet expectations • Icy • Personal attack • Personality change • Silence • Secrecy • Sexism • Uncooperative 7. Leadership/Mgmt. • Abusive supervision • Exclusion • Favouritism • Micromanaging • Undermining • Management style • Performance appraisal • Recognition 8. Team function	1. High arousal • Angry • Anxious • Frightened • Frustrated • Shocked • Annoyed • Disgusted • Intimidated • Miserable	2. Low arousal • Disappointed • Helpless • Defeated • Confused • Guilty • Inadequate • Inferior • Sad • Depressed • Uncertain • Regretful • Uncomfortable • Sympathetic • Desperate	1. Aversion • Disliked • Disrespected • Resentful • Differing values 2. Distrust • Untrusting • Betrayal 3. Instability • More careful • Strained • Superior • Tension	1. Resources • Identity • Leadership • Job, finances, career • Professional reputation • Work relationship • Health • Violence • Family • Team function 2. Others' well-being 3. Quality of service

Social Discord		Negative Affect	Interpersonal Dissonance	Threat
• Crying	• Favouritism			
	• Gossip			

Social Discord

1. Bureaucratic

Work not valued. One participant reported that a reduction in the perceived value of his department contributed to the work conflict. Prior to the conflict, his department's work was strategically important and publically recognized by senior leaders. The department's value, and senior leaders' positive regard, seemed to plunge for reasons unknown to the participant.

Input not considered. One participant led his peers in an attempt to provide feedback on their leader's seemingly unwise and autocratic decision related to customer service. The leader's apparent inflexible response contributed to the work conflict.

Unclear responsibilities. Six participants explained that unclear responsibilities contributed to their work conflicts. For example, an executive director of a non-profit organization reported that an individual board member requested an action that, by policy, must come from the board collective. Decision-making responsibilities were unclear to this board member. In another example, a participant made changes to her department's internet page that were challenged by the information technology staff who had overall accountability for the organization's entire website. The participant reported that she and her disputant remain unclear about their respective responsibilities for web content.

Restructuring. One participant reported that a potential organizational restructure contributed to a work conflict. That is, union members organized against outsourcing and relations between union members and the director responsible for the work deteriorated.

Unfair workloads. Two incidents included perceptions of unfair workloads. One participant recalled how she instigated a conflict with a coworker because her coworker seemed to spend too much time on personal calls and didn't carry her fair share of the workload. In the other incident, the participant described how the disputant's refusal to take on her fair share of the work created tension among the work group.

2. Counterproductive Work Behaviours

Alcohol use. Two participants recalled alcohol use as a contributing factor to their work conflicts. In one instance, an intoxicated coworker repeatedly berated the participant during their telephone interactions. In the second case, a participant's peers consumed in alcohol at their place of business in violation of organizational policy.

Inappropriate physical action. There were three incidents involving inappropriate physical action. In one case, a technical worker's supervisor ran after her, poked his finger in her face, and spit in her face as he yelled at her (coworkers came to her defense). In the remaining two cases, each participant recalled that a disputant stormed out of a meeting.

Inappropriate verbal action. Twenty-eight of the incidents included inappropriate verbal action. Aggression was the most common form and was reported in 17 cases. Some of aggressive behaviours were passive, such as a disputant removing the participants' name from their organizational chart. Other behaviours were active, such as shouting or yelling.

The second most common reported inappropriate verbal action was lying, which was reported in six cases. Participants reported that their disputants lied to avoid repercussions related to poor performance. For example, one disputant claimed to have provided the proper paper work to a payroll clerk (the participant) after the disputant's subordinate did not receive compensation for overtime. Other lies seemed more vindictive: one participant reported that her disputant became jealous when the participant received media attention and then denied giving the participant permission to invite media into their private workplace. Another participant reported that his disputant sent emails describing untrue events to their mutual supervisor after the participant refused the disputant's vacation request.

There were four incidents that included swearing. Three participants reported that swearing contributed to their work conflicts. One participant swore at the disputant after they disagreed about how to manage a subordinate's poor performance. One participant swore after the disputant asked the same question four times. Finally, one participant reported that her supervisor swore at her when she authored a report that did not meet his expectations.

The three remaining inappropriate verbal actions involved taking credit for another's work, sexually inappropriate speech or 'locker room talk,' and mocking.

Poor attendance. In one case, a director reported that a peer repeatedly missed important meetings even after repeated commitments to attend and that this behaviour contributed to the work conflict.

Poor quality work. In four cases, participants reported that poor quality work contributed to work conflicts. One participant reported that her refusal to complete unethical tasks (input incorrect information on an employee record) contributed to the work conflict. Another participant believed that his department's reputation for poor quality work led a disputant to argue that the participant's work was poor. Finally, apparent differences in work ethic (slacking) were relevant in two work conflicts.

3. Illness

Two work conflict cases involved physical and mental illness. In one case, a participant reported that her supervisor was being treated for a narcissistic personality disorder that contributed to the conflict. In a second case, a disputant blamed his own combative behaviour on physical illness after the participant confronted him.

4. Incivility

Participants reported that incivility contributed to 11 work conflict incidents. In three cases, participants reported that the disputant used uncivil terminology in apparent attempts to bait the participant into arguing. There were four reported instances that included inappropriately blaming participants for workplace problems. Finally, four incidents included rude behavior, such as not responding to polite greetings.

5. Violation of norms

Complaining to the boss. In three instances, disputants apparently reported participants' inappropriate behaviour to the participants' supervisors without first discussing the problem with the participant, in violation of organizational norms.

Crying. In two incidents, participants reported that disputants cried at meetings. The participants reported that disputant's behaviour was overly dramatic and a violation of social norms.

6. Interpersonal Relations

General communication. Twelve incidents included misunderstandings related to communication among disputants. In three cases, the communication problems involved email. For example, a delay in email messaging left staff unaware that their supervisor had been fired, subordinated were upset that they were not informed in a timely manner and this communication breakdown contributed to the work conflict. The remaining nine cases involved more subtle differences in communication style: Interpersonal conversations were described as abrupt, participants relayed that disputants did not seem to understand their requests, or communications 'broke down.'

Disagreement. In six cases, disputants disagreed with decisions or procedures. In four of these incidents, the participant adamantly believed that their own approach to the work was more ethical or would result in better customer service than the approach proposed by the disputant. In one instance, the participant believed that her supervisor's assessment of the quality of a report was too harsh. In the remaining incident, the disputant disagreed that the participant followed proper procedure when denying a vacation request.

Unmet expectations. There were 11 incidents in which unmet expectations contributed to the work conflicts. For example, one participant reported that a conflict ensued when she became frustrated with the disputant's inability to learn how to complete tasks.

Icy. Three participants relayed that icy or cold interpersonal interactions contributed to the work conflict.

Personal attack. In one incident, the participant reported that they felt personally attacked when a disputant (her supervisor) berated her in front of her coworkers.

Personality change. In one case, a participant noted a change in the disputant's personality: the disputant's (her supervisor) friendly interactions shifted to become unfriendly for a reason that only became apparent months later (the supervisor's marriage had broken down).

Secrecy. One participant was instructed to keep information from her supervisor. The supervisor sensed that information was being withheld and, reportedly, instigated a work conflict.

Sexism. One female participant believed that her male subordinate was unhappy reporting to a female and this apparent sexism contributed to the work conflict.

Silence. In two cases, participants remained silent to avoid conflict. For example, one participant described how she repeatedly arranged the display of merchandise on store shelves during her day shift only to have her disputant reorganize the supplies during the night shift.

Uncooperative. Two participants described coworker interactions that were competitive rather than cooperative.

7. Leadership and Management

Abusive supervision. Six cases included acts of supervisor abuse. Participants described verbal attacks, supervisors who repeatedly and aggressively barked orders at staff, and withholding of organizational resources (e.g., travel funds).

Exclusion. In three incidents, participants reported that their supervisor/disputants purposefully exclude them from office events or meetings.

Favouritism. In three cases participants reported recognition and rewards were bestowed on favoured but undeserving organizational members.

Micromanaging. In one case, a supervisor scrutinized the participant's arrival, break, lunch, and departure times.

Undermining. In two incidents, the participant's supervisors undermined the participants' work, suddenly shifting from praise to criticism.

Management style. Participants noted differences between their own and the disputants' management style. For example, one participant described herself as a participatory leader and bristled at her subordinate's directive style.

Performance appraisal. Three incidents involved performance appraisals in which the disputants were dissatisfied with their supervisor's (participant's) performance ratings and this contributed to the work conflict.

Recognition. One participant reported that a disputant felt that he was not fairly recognized for his work and this contributed to the work conflict.

8. Team Function

Favouritism. One participant reported that he contributed to conflict when he treated one coworker to lunch and left other coworkers behind.

Gossip. Gossip among coworkers contributed to work conflict in four incidents. In each of these incidents, participants explained that they discussed a conflict in an effort to gain perspectives. However, each participant suspected that sharing stories created a shared animosity toward the disputant.

Negative Affect

Most participants reported feeling several high and low arousal emotions over the duration of the conflict (e.g., *[I felt], just disappointed, angry. I would say disappointed first. I got angry when they wouldn't get back to me and resolve the issue because it was sort of hanging over me, right. And so lack of understanding and grief. Right? Grieving the loss of the relationship later, yeah.*) Other participants experienced multiple emotions at once (e.g., *I was mostly angry and feeling helpless because I was thinking they were going to get what they want regardless of what's best for the community; [I felt] Fear, frustration, angst, agitation, definitely stress*).

1. High Arousal

Angry. The most commonly reported high arousal negative emotion was anger, which was reported in 24 cases. The intensity of anger ranged from low (e.g., *I was a little ticked off that he wasn't doing his job right*) to high (*I was so angry I actually got up and went for a walk outside).*

Anxious. In eight incidents, participants reported feeling anxious (e.g., *I felt very anxious and would wake up suddenly with my heart beating.)* In one instance, a physician prescribed anti-anxiety medication to help a participant manage her conflict-related anxiety.

Frightened. Participants reported feeling frightened or afraid of the possible outcomes in four cases (e.g., *I just was terrified. I am a single person with a mortgage. You know, what am I going to do*)?

Frustrated. In 15 incidents, participants relayed their frustration with the situation (e.g. *Oh, I was frustrated. I was thinking sweet mother!)* or with the disputant (e.g., *sometimes I was really just frustrated with him*).

Shocked. Participants reported feeling shocked at the disputant's behaviour (e.g., *The first response I think when somebody yells at you when you're not expecting it and when they are essentially, you know, seen as your superior, and in front of your colleagues, well, the first gut reaction is what the fuck, what's happening here?)* or in response to the situation (e.g., *I felt, to say something cliché, like the rug was pulled out from under my feet).*

Other High Arousal Negative Emotions. In addition to the high-arousal emotions reported above, participants reported feeling annoyed (1 case), disgusted (2 cases), intimidated (1 case) and miserable (1 case).

2.   **Low Arousal**

Disappointed. The most commonly reported low arousal negative emotion was disappointment, which was reported in eight cases. In five of these cases, participants felt disappointed as a result of the lack of support they received from their organization during the work conflict (e.g*., I remember feeling let down that in this scenario, that me as an employee or anybody else in the situation wasn't getting any positive type of solution or support*). Two participants were disappointed in themselves because of their own decisions (e.g., *So, I was disappointed in myself, I guess, for picking someone* [hiring] *who turned out to be a disaster*). In the final case, a participant expressed disappointment that the work conflict affected his relationship with his disputant.

Helpless, defeated. In seven incidents, participants reported feeling helpless or defeated during the work conflict (e.g., *I just [felt] this kind of punched in the gut feeling of helplessness, and just all my plans are gone).* One participant described a failed attempt to advance a subordinate's performance (i.e., *I was feeling defeated. Like I got advice and we did the training, and nothing changed*).

Confused. In four incidents, participants reported feeling in response to the disputant's behaviour, which seemed to shift dramatically and without provocation (e.g., *And then all of a sudden there was this turnabout and a systematic destruction or attempted destruction of this entity*).

Guilty. In three incidents, participants reported feeling guilty. In one of these cases, the participant yelled at the disputant and felt guilty when the disputant cried. In the other two cases, the participants reported feeling guilty even though they felt they had done nothing wrong (e.g., *I guess because I felt like I did something wrong, even though I know I didn't*).

Inadequate or inferior. In five incidents, participants reported feeling inadequate or inferior. In three of these cases, the participants reported feeling inadequate because they were unable to fulfill their own performance expectations (e.g., [I felt] i*nadequate, I guess. Just really felt like, gosh, I'm not very good at this*). In two cases, the participants felt inferior to the disputant.

Sad, depressed. In three incidents, participants reported feeling sad and in an additional incident, the participant reported depression and suicidal thoughts.

Uncertain. In three incidents, participants reported feeling uncertain about how they should behave.

Other low arousal negative emotions. In addition to the low arousal negative emotions noted above, four other low-arousal negative emotions were reported. One participant reported that she regretted allowing others to see her upset. In another incident, a participant reported feeling uncomfortable. A third participant described feeling sympathetic when he provided average performance ratings to a subordinate who expected to receive above average ratings. Finally a fourth participant reported feeling desperate because he feared losing his job.

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Relational Dissonance

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Participants reported interpersonal dissonance in the form of aversion (dislike, disrespect, resentment, differing values) between the disputants, distrust, and instability within the relationship.

1.   Aversion

Disliked. In six incidents, participants reported that a sense of dislike contributed to the work conflict. In one incident, the both disputants appeared to dislike each other. In this case, the participant relayed that she 'couldn't stand' her supervisor, and that this feeling of animosity was reciprocated (e.g., [my supervisor] *basically told me I was an idiot and swore at me).* In three cases, the participant reported that they developed a dislike toward their disputant when they first met (e.g., *the day I met this person, just I found him to be unpersonable* (sic). In the two cases, the participants reported sustained animosity among disputants.

Disrespected. Participants reported that disrespect developed among disputants in 11 incidents. In one case, a supervisor reported that she lost the respect of a subordinate team members when, in following organizational policy, she was unable to reveal her rationale for firing their direct supervisor. Another participant reported that she lost respect for a peer who abused alcohol during work hours. In a final example, a participant reported that she lost respect for the disputant because he did not provide good service to their clients.

Resentful. In one incident, the disputant seemed to resent the participant's success at work.

Differing values. In two incidents, participants reported a clash of values (e.g., *I always felt kind of offended by [disputant's] values. Even though there was no like conflict, it's just… I didn't like his values*).

2.   Distrust

Untrusting. In 8 cases, participants reported an erosion of trust as part of the work conflict (e.g., *before the conflict, I thought they seemed a nice person, knew their business. After these conflicts, that person will never again have my full trust*). One participant reported that this feeling of distrust affected her work behaviour (e.g., *I felt that whenever decisions were made about something, I had to put it in writing*). Another participant's distrust was so extreme that he refused to work with the disputant (e.g., *I do not want to work with her ever again. And if I have to, I will leave the workplace. I'm going to leave, physically remove myself from there because I don't trust her as a human being*).

Betrayal. In 11 incidents, participants reported feeling betrayed during the conflict. In two of these cases, participants reported that the organization betrayed them when they reneged on implied or explicit hiring promises (e.g., *it turned out the position that they had intended for me was now in question as to whether or not it would exist…. I was under the impression that, you know, I finish my training I do a good job, and there's probably a spot for me. Only to find out all of a sudden there isn't*). In the remaining 9 incidents, a participant felt betrayed by the disputant (e.g., *And I just said to her, you understand that when you call my director, you put in place a number of levers right away. Why wouldn't you have just called me?*).

3.   Instability

More careful. In five incidents, participants reported being extra careful when interacting with disputants. One participant reported that she now prepares for conflict when she interacts with her disputant (e.g., *I always have that assumption that I think that she is going to contradict or be difficult even though I'm sure that may not necessarily be the case. But I always go in before having a conversation with her knowing to be ready for that*). One participant described carefully monitoring her own speech acts in order to avoid hurting the participant (e.g., *I was very concerned that I not speak unkindly to him or belittle him in any way*).

Strained. In nine incidents, participants reported that their relationship was strained during the work conflict. Some participants reported that this strain was severe (e.g., *I must say it was brutal. And I often think about what she felt, and was she as miserable as I was? I think she was. And I wanted to know… I mean I can remember pleading with her, saying, "Tell me what I can do to make this better. I will do anything in my power to make*

this working relationship better. Anything." Nothing. So yeah, it was a terrible experience. Other participants reported less intense strain (e.g., *I just realized the relationship was more or less, you know, deteriorated. And by that time I didn't really want it. I didn't even enjoy having coffee with him or anything because I didn't really respect him very much. Once I'd started to realize like that he didn't treat me the same as other leaders for whatever reason, I felt that it was because of my gender, I have to say that kind of…after a few months of that, I just kind of didn't care about the relationship*).

Superior. One participant reported two incidents in which her relations with the disputants were negatively affected by her own feelings of superiority (e.g., [I have a] *superiority complex. I'm just going to scream at you because you're stunned. Stunned has become my buzzword at work. Everybody is stunned*).

Tension. In eight incidents, participants reported tense relations with their disputant. One participant reported that her disputant (a subordinate) could sense this tension (*I think [the disputant] would feel the tension, would feel that I wasn't happy. But I just couldn't say it out loud.* In another incident, there was tension between a subordinate team and their leader (the participant) during meeting to discuss a proposed organizational restructure (e.g., *they were very pointed right from the outset…. It created tension between the supervisors and the management and myself*). One participant reported subtle tension during a dispute between himself and his supervisor (*there was no raising of voices. It was just agitation and quietness. And if a decision wasn't agreed upon wholeheartedly and enthusiastically, you may feel that in a lack of cordial atmosphere).* Another participant reported similar levels of tension between himself and his subordinate (*we never got into shouting matches or name-calling. You know, it was, I think, always reasonably respectful. He did have a way of, you know, squinting his eyes at me that was a little intimidating).*

Threat

1.   Threat to Resources

Identity. In four incidents, participants reported that their self-identity was threatened (*I also took a good long look at myself too. You know, because maybe it is me*).

Leadership. Three incidents included threats to the participants' leadership, one worried about how his team would perceive him after he fired one of their colleagues and the other described a brief struggle for control while facilitating a meeting.

Job, Finances, Career. In 10 incidents, participants worried that they would lose their job (e.g., *the way things were unfolding, it was clearly a…I can't think of the term off the top of my head, but a systematic termination or dismissal*). In three cases, participants relayed financial concerns. In two cases, the financial concerns related to the threat of job loss. In the third case, a participant worried that the work conflict had impacted his team's ability to meet a sales target, and, as a result, he may not receive his quarterly bonus. In three incidents, participants described potential threats to their career or future

employment (e.g., [I worried] *where else can I go? Are my skills being utilized? So you're just questioning your career path*).

Professional Reputation. Participants reported that a threat to their professional reputations in 15 incidents (e.g., *I was just worried about how this whole thing would look for me in terms of having been involved in a conflict. It's kind of like being in a car accident that wasn't your fault. You're still going to get nailed somehow on your premiums or something*; *I guess the primary thing is like how am I going to show that I didn't do something wrong, that I did follow the right process? I think that was a big piece, saying I kind of feeling like I need to validate myself*).

Work Relationship. In nine incidents, participants reported that their relationship with a disputant was at risk (e.g., *I was worried that this would escalate and we would never patch things up. This particular person had more than a year left in the program with me. It's a long time to hate the person you sit next to. So I worried about that*). One participant reported that a work conflict with his supervisor threatened his access to discretionary resources (e.g., *there was no standardized procedure for a request. It was simply the manager's prerogative. And so*, [when there were opportunities to attend conferences], *some went far and wide, and some never left the cube*).

Health. Participants reported that they were worried about their own mental or physical health in eight incidents (e.g., *I guess it occupied my thoughts that this could have had an impact, I think, on my mental health; I was worried about my mental health, about my physical health, yes. Because it was starting to make me ill*).

Violence. In one incident, a participant worried that the conflict may become violent (*the odd time I thought, you know, gee, this could get me beat up, this could damage my car. My house is in the phone book*).

Family. In two incidents, participants felt that family members were negatively affected by their work conflict. In one of these cases, the participant worried that he was burdening his family by venting his conflict-related frustration at home. In the second case, the participant worried about telling his spouse that he might lose is job.

Team Function. In three incidents, participants reported that their team's ability to function had deteriorated as a result of the conflict.

2. Others' Well-being

One participant was concerned that employees were negatively affected by her conflict with their supervisor. In six incidents, participants worried that about the disputant's well-being (e.g., *I worried something might be wrong personally with this fellow. I think he was under a lot of stress – job uncertainty*).

3. Quality of Service

In eight incidents, participants worried about poor quality service (e.g., *I worried that the service was being affected. We are not providing the service that we should be providing. And that's looking badly on me because I'm a team with you. And you're doing all these things that I don't agree with, and I don't know how to tell you to stop doing them without respecting that you have the right to make these decisions. But that your decisions are now reflecting poorly on me*).

Antecedents and Outcomes

This section presents participants reports of antecedents, immediate responses, and long-term outcomes related to the critical work conflict incidents. These findings are not directly related to the definition of work conflict: These themes are observations about one predictor and several outcomes of work conflict. The results are included to provide a complete report of the qualitative data.

Multiple Provocations

Every CIT consisted of multiple provocations. That is, participants reported that when one or more one or two of work conflict conditions were present, they did not consider themselves to be 'in conflict' but perceived that a work conflict may occur. In a few instances, a major transgression (e.g., yelling, publically humiliating) initiated discontent but the participants did not perceive themselves to be *in conflict* until attempts to restore normal relations failed. In most instances, several minor events seemingly accumulated before participants considered themselves to be *in conflict*.

Conflict Management Behaviours

The interview guide prompted participants to report their own conflict management or resolution attempts. In 17 cases, participants changed their behaviour in attempt to manage work conflicts. In seven of these cases, participants tried to calm the situation by regulating their own emotions (*I did not let her know that it bothered me*; *I tried to show the individual respect and to keep my voice calm*). In four cases, participants referred to organizational procedures in attempt to gain the cooperation of the disputant (*and what I did was stick to the proper procedure).* In two cases, participants experiencing protracted conflicts with their supervisors simply complied with their supervisors' demands. In one case, a participant reduced contact with the disputant. In a similar but more extreme response, a participant refused to speak to any person holding a supervisory position after a protracted conflict with one of his supervisors. One participant used an established conflict management process to resolve the conflict. In one case, a participant accommodated any request that the disputant made (*I was throwing over control to her 'whatever you want to do, it's all good'*).

Supervisor Responses

In 27 of the 35 cases, participants consulted with their supervisor during the conflict. Leaders were most helpful when the coached or supported the participant while the

conflict was ongoing, which occurred in 26% of the cases. In 63% of these cases, leaders avoided or took no action to resolve the work conflicts. For the remaining 11% of cases, participants reported that their leaders were involved but not helpful. Gathering information on leaders' motivations was beyond the scope of this study and more research is needed to better understand the reasons why leaders fail to take effective action.

External Assistance
The interview guide prompted participants to discuss external assistance. In 19 cases, participants recalled looking for outside help to resolve work conflicts. In two additional cases, a single participant sought prior assistance because he anticipated a conflict in response to a delivering lower than expected ratings during a performance appraisal or in response to firing an employee. Two participants read conflict-related publications (e.g., Fierce Conversations) in an attempt to develop their own resolution strategies. One participant called the union to clarify her employee rights. In five cases, participants consulted with colleagues to ensure that their own behaviours seemed reasonable. Two participants accessed in-house alternative dispute resolution (ADR), and when the conflict persisted, made formal complaints. In one case, a participant held meetings for the purpose of improving communication with a group affected by the conflict. One participant sought external legal advice and another received medical treatment for anxiety related to the work conflict. In four cases, participants attempted to talk to the disputant to resolve the conflict.

Participants reported only four of these approaches were helpful: reading conflict related publications helped both participants to develop better conflict management skills. Consulting with colleagues and seeking legal council helped six participants by enhancing their perspective of the organization or the disputant. Getting assistance in advance was helpful to the one participant who chose this approach, he reported feeling more confident after he consulted with his organization's Human Resources department. Finally, in one of the four cases in which a participant directly approached the disputant, she was able to resolve the conflict. In summary, participants attempts to resolve conflict with external assistance was successful in 11 of 19 cases. Notably, participants reported two CITs that involved their in-house conflict resolution program and both were unsuccessful (*We tried ADR and that failed*).

Organizational Health and Well-being
The structured interview was designed to explore the psychological state of work conflict and not outcomes of work conflict. Nonetheless, in 22 of the 35 cases, participants offered their perspectives on the outcomes of work conflict. Although 14 of these cases were purported to be positive critical incidents, only 6 provided evidence of positive outcomes: One participant reported that a work conflict helped her to become a better leader (*I felt proud and confident because I was doing something that, when I became a manager, was the thing I dreaded the most*); two participants recalled that a work conflict resulted in their own voluntary turnover; one participant reported that trust between a subordinate group herself (their supervisor) was enhanced; and finally, two participants

reported that work conflict resulted in improved working relationships (*…the relationship got much better… I listened to everything he said and worked through what he had asked me to work through).* The remaining 18 cases provided evidence of negative outcomes, including social exclusion *(I was absolutely cut out of everything, shunned at work)* mental health symptoms *(I laid in bed for three days… and I went almost suicidal*; *it got to the point where I was having anxiety attacks on my way to work*); reduced physical health *(I remember being exhausted… I threw up)*, reduced organizational citizenship behaviours, and, in nine instances, involuntary turnover of the participant or disputant.

Appendix J

Preliminary Survey Items

This survey asks various questions about the conflict you are currently experiencing at work. Please respond as honestly as possible—there are no right or wrong responses to these survey items. Consider your thoughts and feelings about this particular conflict situation over the past day. Indicate your level of agreement from 1 = Completely Disagree to 5 = Completely Agree.

Social Discord

1.   My communication with the other person/people involved feels strained.
2.   I rarely agreed with what this person said
3.   This person always seemed to be upset with me
4.   There is a tense silence between myself and others involved in this conflict.
5.   My relationship with the other person/people is cold.
6.   Myself and other parties in dispute only speak when necessary.

Interpersonal Dissonance

7.   My relationship with the other person(s) is poor.
8.   Something must be done to improve my relationship(s) in this situation.
9.   I would rather not work with the person I am in conflict with anymore.
10. This conflict unsettles me
11. This conflict has me doubting that we can work together
12. I am walking on egg shells
13. It is difficult for me to imagine our relationship getting back on track after this conflict.
14. I dread running into the other person/people involved in this situation.
15. I am spending a great deal of time strategizing how to deal with the situation.
16. This situation has led me to act in ways I am not proud of.
17. I cannot stop thinking about the situation.
18. It feels like something is very wrong between myself and the other person/people in the conflict.
19. I have to walk on eggshells around this person or situation at work.
20. This issue has become a 'hot button' or 'touchy subject' that cannot be discussed calmly.
21. When I thought about interacting with this person, I felt anxious.
22. I avoided this person whenever I could
23. I had difficulty controlling myself when I had to interact with this person
24. Compared to my usual good relationship with (the other party??), now it is strained and uncomfortable.
25. I believe we see 'eye to eye' and our interests are aligned [Reverse-scored]

26. I no longer feel comfortable in my work interactions with the other party and I avoid them socially.

27. I do not engage in 'small talk' with the people I am in conflict with.
28. I can't stop thinking about how unfair this situation is.
29. I'm worried that this conflict will affect the way I work with the other person/people in the future.

Negative Affect

30. I am extremely frustrated with the current situation.
31. I feel worried and anxious as a result of this dispute.
32. I feel depressed and hopeless about the conflict.
33. I am angry with the person(s) I am in conflict with.
34. I am scared of the person(s) I am in conflict with.
35. I wake at night worried about this conflict.
36. I don't want to come to work because of this conflict.
37. This situation makes my heart pound in fear.
38. I 'see red' (feel rage) regarding this situation.
39. I have felt hateful toward the other person/people involved.
40. I can tell that others involved in this situation hate me.
41. I have difficulty controlling my anger over this situation.
42. I have lost my temper in this situation.
43. This situation is frustrating for me.
44. I feel ashamed of my own actions in this conflict.
45. I have a sense of dread coming to work because of this situation.
46. I feel disappointed in other people because of this conflict.
47. I get angry about the unfairness or imbalance of the situation.
48. I have felt hopeless about the chances of this situation improving.
49. I worry about what others are thinking of me because of this conflict.
50. I want to get even with the other person/ other people in this conflict.
51. The other person/ people involved deserve/s whatever bad outcomes they get as a result of this conflict.
52. I have felt shocked at what has happened.
53. I have felt stunned by other people's behavior in this situation.
54. My heart was pounding in my ears when these incidents happened.
55. I lost sleep because of the situation.
56. This person made me feel angry.
57. I felt frustrated when I had to interact with this person.
58. I had trouble concentrating on my work because of this person.

59. In terms of the party I am in conflict with:
    a. I feel angry
    b. I feel hurt
    c. I feel betrayed
    d. I feel happy {Reverse-scored]
    e. I feel afraid
60. Reflecting on the conflict makes me feel like crying.
61. I feel pretty calm about the whole thing (reversed coding).
62. My feelings are really hurt by the other person.
63. My feelings are really hurt by the conflict situation.
64. I am annoyed about the conflict situation.
65. I am under a lot of pressure because of this conflict.
66. I needed to talk about the conflict with someone else just to relieve the pressure.
67. Because of this conflict, I feel alienated from my coworkers and others at work.
68. I feel powerless to improve the situation.
69. I feel inadequate when it comes to this conflict.
70. I regret some of the things I did in reaction to this conflict.

Threat

71. People at work seem to be avoiding/shunning me.
72. It's harder to achieve my goals because of this conflict.
73. I think less of myself as a result of my own conflict behaviour.
74. I believe that this conflict poses a serious threat to my job
75. I feel attacked in this conflict
76. I cannot be myself in this conflict.
77. I have needed to defend myself against the other person/other people's story about me.
78. I have felt afraid of losing things that are important to me.
79. Friendships that I care about are at stake in this conflict.
80. I have thought 'what if I lose everything' because of this.
81. I worry about how my work relationships will suffer from this situation.
82. I worry about losing financial security because of this conflict.
83. I worry about my professional reputation because of this issue.
84. My career may not advance as I'd hoped after this situation.
85. This conflict jeopardizes how others view my expertise.
86. I had a lot to lose in this situation
87. I feel disrespected by this person
88. My job was at risk because of this person.
89. My relationship with others at work were at risk due to this person
90. This situation made me think poorly about myself

91. I am afraid of repercussions to my career and reputation from this conflict.
92. This conflict is negatively affecting my health and well-being
93. I don't feel as confident or effective in my job as I used to.
94. I worry that people are saying negative things behind my back, spreading bad gossip or rumours, related to this conflict.
95. I still feel valued by my colleagues and the organization despite this conflict {Reverse-scored]
96. I feel emotionally safe {Reverse-scored]
97. I'm worried that the other person will raise their voice or yell at me.
98. I worry that the conflict is affecting our clients/customers/patients.

Confusion

99. I have spent a lot of time just trying to 'figure out' what is happening in this conflict.
100. I find myself running over and over in my head what I have done and said in this conflict.
101. I can no longer tell whether I am right or I am wrong about this issue.
102. I spend a lot of time trying to figure out why the other person/people involved would act this way.
103. Reflecting on the conflict makes me feel upset.
104. I feel like the rug has been pulled out from under me.
105. I can't understand why people are so upset.
106. It doesn't make sense that we are unable to settle this in a reasonable way.
107. Things never get a chance to settle.

Appendix K

Item Review and Sorting Results

The following table shows revised items, raters' sorting results, and the author's assigned themes. The Revised Item column contains items that were retained and edited for grammar. The Raters' Sorting Labels column contains the results of the sorting task: Five graduate students worked independently, divided the items into groups without a priori theory, and created a label to signify the topic of each group. The Condition column contains the work conflict condition that the item was intended to represent/. Retained items are marked with an asterisk.

#	Revised Item	Raters' Sorting Labels	Condition
* 1.	It was difficult for me to imagine our relationship getting back on track.	1 outcome: perception of other, 1 outcome, 1 disappointment, 2 relationships	Interpersonal dissonance
2.	My mental health was at risk because of this conflict.	1 outcome: well-being, 2 well being, 2 outcome	Threat
* 3.	My communication with the other person/people involved in the conflict felt strained.	1 process: communication, 1 relationship, 1 avoidance, 1 outcome, 1 disappointment	Interpersonal dissonance
4.	At the height of the conflict, I didn't feel as confident in my job as I used to.	1 outcome: job performance, 1 feelings, 1 well-being, 1 outcome/risk	Negative Affect
* 5.	I dreaded running into the other person/people involved in this conflict.	1 outcome: anxiety, 1 feelings, 1 worry, 1 relationship, 1 avoidance	Negative affect
* 6.	I worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.	1 outcome: anxiety, 1 cognitive response, 2 worry, 1 missing	Threat
* 7.	It felt like something was very wrong between myself and the other person/people in the conflict.	1 process: communication, 1 feelings, 1 confusion, 1 relationship, 1 perception	Interpersonal dissonance

#	Revised Item	Raters' Sorting Labels	Condition
8.	I found myself going over and over in my head what I had done and said in this conflict.	1 outcome: rumination, 1 cognitive response, 1 confusion, 2 worry/rumination	Confusion
9.	I spent a great deal of time strategizing about how to deal with the other person/people involved in the conflict.	1 outcome: rumination, 1 cognitive response, 1 strategizing, 1 rumination, 1 relationships	Interpersonal dissonance
10.	I worried that the other person/people would raise their voice or yell at me.	1 reaction: fear, 1 feelings, 2 worry, 1 missing	Threat
* 11.	The conflict led me to act in ways I am not proud of.	1 outcome: guilt, 2 behavioural response/reaction, 2 shame/guilt/regret	Social discord
* 12.	I worried that the conflict was affecting my clients/customers/patients.	2 outcome, professional threat/negative consequence friends/job, 1 productivity, 1 cognitive response, 1 worry/rumination	Threat
* 13.	I couldn't stop thinking about how to fix my relationship with the other person/people.	1 outcome: rumination, 1 cognitive response, 1 confusion, 1 rumination, 1 relationships	Interpersonal dissonance
* 14.	I spent a lot of time just trying to 'figure out' what was happening in the conflict.	1 outcome: rumination, 1 cognitive response, 1 strategizing, 2 rumination/worry	Confusion
15.	I had to walk on eggshells around this conflict situation at work.	1 outcome: avoidance, 1 behavioural response, 1 productivity, 1 risks, 1 missing	Social discord

#	Revised Item	Raters' Sorting Labels	Condition
16.	I found myself going over and over in my head what other people had done and said in this conflict.	1 outcome: rumination, 1 cognitive response, 1 confusion, 2 rumination/worry	Confusion
* 17.	The conflict was a 'hot button' or 'touchy subject' that couldn't be discussed calmly.	1 outcome: avoidance, 1 outcome, 1 anger, 1 risks, 1 missing	Social discord
* 18.	I wasn't able to tell whether I was right or wrong about issues related to the conflict	1 reaction: surprise/confusion, 1 cognitive response, 1 confusion, 1 worry/rumination, 1 missing	Confusion
19.	When I thought about interacting with the other person/people I felt anxious.	1 outcome: anxiety, 1 feelings, 1 fear/helplessness, 1 wellbeing, 1 avoidance	Negative affect
20.	I spent a lot of time trying to figure out why the other person/people involved would act this way.	1 outcome: rumination, 1 cognitive response, 1 strategizing, 2 rumination/worry	Confusion
* 21.	I avoided the person/people involved in the conflict whenever possible.	1 outcome: avoidance, 1 behavioural response, 1 worry, 1 relationship, 1 avoidance	Social discord
22.	I couldn't understand why the other person/people were so upset about this situation.	1 reaction: surprise/confusion, 1 cognitive response, 1 confusion, 1 worry/rumination	Confusion
* 23.	I rarely agreed with anything the other person/people said.	1 process: communication, 1 behavioural response, 1 anger, 1 relationship, 1 anger	Social discord
24.	I thought less of myself as a result of my own conflict behaviour.	1 outcome: guilt, 1 outcome, 2 shame/guilt/regret, 1 wellbeing	Negative Affect
25.	The other person/people always seemed to be upset with me.	1 outcome: perception of others, 1 feelings, 1 shame/regret, 1 relationships, 1 risks	Interpersonal dissonance

#	Revised Item	Raters' Sorting Labels	Condition
* 26.	This conflict posed a serious threat to my job.	1 outcome: threat, 1 outcome, 1 productivity, 1 negative consequences, 1 consequences/risks	Threat
27.	I had difficulty controlling myself when I had to interact with the other person/people.	1 outcome: avoidance, 1 behavioural response, 1 anger, 1 relationship, 1 reaction	Social discord
28.	I felt like I was under attack during the conflict at work.	1 reaction: hurt, 1 feelings, 2 fear/helplessness/hopelessness, 1 perception	Threat
* 29.	My relationship with the other person/people was strained.	1 outcome: avoidance, 1 outcome, 1 disappointment, 2 relationships	Interpersonal dissonance
30.	I could not be myself in this conflict.	1 process: communication, 1 feelings, 1 psychosomatic symptoms, 1 reaction, 1 missing	Confusion
* 31.	My relationship with the other person/people wasn't what it should have been.	1 outcome: avoidance, 1 feelings, 1 disappointment, 2 relationships	Interpersonal dissonance
* 32.	I felt afraid of losing things that were important to me.	1 reaction: fear, 1 cognitive response, 1 worry, 1 negative consequences, 1 perception	Threat
33.	I avoided the other person/people socially.	1 outcome: avoidance, 1 behavioural response, 1 worry, 1 relationship, 1 avoidance	Social discord
* 34.	Friendships that I cared about were at stake during this conflict.	1 personal outcome, 1 outcome, 1 worry, 1 negative consequences, 1 consequences/risks	Threat
* 35.	Myself and the other person/people only spoke when absolutely necessary.	1 outcome: avoidance, 1 behavioural response, 1 strategizing, 1 relationship, 1 avoidance	Interpersonal dissonance

#	Revised Item	Raters' Sorting Labels	Condition
36.	Valued work relationships were in jeopardy because of this conflict.	1 outcome: perception of others, 1 outcome, 1 productivity, 1 negative consequences, 1 consequences/risks.	Threat
37.	I did not engage in 'small talk' with the people I was in conflict with.	1 outcome: avoidance, 1 behavioural response, 1 strategizing, 1 relationship, 1 avoidance	Social discord
38.	I worried about losing financial security because of this conflict.	1 outcome: wellbeing, 1 cognitive response, 1 productivity, 1 negative consequence, 1 worry/rumination	Threat
* 39.	I worried that the conflict would affect my ability to continue to work with the other person/people.	1 outcome: anxiety, 1 cognitive response, 1 productivity, 1 negative consequence, 1 worry/rumination	Threat
* 40.	I worried about my professional reputation because of the conflict.	1 outcome: professional threat, 1 cognitive response, 1 productivity, 1 negative consequences, 1 worry/rumination	Threat
* 41.	I felt worried and anxious about the conflict situation at work.	1 outcome anxiety, 1 cognitive response, 1 productivity, 1 health and well-being, 1 perception	Negative affect
42.	I had a lot to lose in this conflict situation.	1 outcome, professional threat, 1 feelings, 1 worry, 2 negative consequences/risk	Threat
43.	I was depressed as a result of the conflict.	1 outcome well-being, 1 outcome, 1 psychosomatic symptoms, 2 psychological health/well-being	Negative affect
44.	I felt disrespected by the person/people I was in conflict with.	1 reaction- hurt, 1 feelings, 1 disappointment, 1 perception, 1 missing	Social discord

#	Revised Item	Raters' Sorting Labels	Condition
45.	I was scared of the person/people I was in conflict with.	1 reaction: fear, 1 feelings, 2 hopelessness/helplessness/fear, 1 avoidance	Negative affect
46.	My job was at risk because of the other person/people.	1 outcome: professional threat, 1 outcome, 1 productivity, 2 negative consequences/risks	Threat
* 47.	I had trouble sleeping as a result of the conflict at work.	1 outcome: well-being, 1 outcome, 1 psychomatic complaints, 2 psychological health/well-being	Negative affect
48.	My relationships with people at work were at risk due to the other person/people.	1 outcome: relationship, 1 outcome, 1 productivity, 2 negative consequences/risks	Threat
* 49.	This situation made my heart pound in fear.	1 reaction: fear, 1 outcome, 1 psychomatic symptoms, 1 psychological health/well-being, 1 avoidance	Negative affect
* 50.	I was afraid of repercussions to my career as a result of this conflict.	1 outcome: professional threat, 1 feelings, 1 productivity, 2 negative consequences/risk	Threat
* 51.	I 'saw red' (felt rage) regarding the conflict situation.	1 reaction: anger, 1 feelings, 1 hostile/anger, 1 psychological health/well-being, 1 reaction	Negative affect
52.	I was afraid of repercussions to my reputation because of this conflict.	1 outcome: professional threat, 1 feelings, 1 shame/regret, 2 negative consequences/risks	Threat
* 53.	I felt hateful toward the other person/people involved.	1 reaction: anger, 1 feelings, 1 hostile/anger, 1 psychological health/well-being, 1 perception	Negative affect

#	Revised Item	Raters' Sorting Labels	Condition
* 54.	My physical health was at risk because of this conflict.	1 outcome: well-being, 1 outcome, 1 psychomatic symptoms, 2 psychological health/well-being	Threat
55.	I could tell that others involved in this situation hated me.	1 outcome: perception of other, 1 feelings, 1 shame/regret, 1 consequences/risks, 1 missing	Negative affect
* 56.	My well-being was in jeopardy as a result of this conflict.	1 outcome: well-being, 1 outcome, 1 psychomatic symptoms, 1 psychological health/well-being, 1 consequences/risks	Threat
57.	I had difficulty controlling my anger over this situation.	1 reaction: anger, 1 feelings, 1 hostile/anger, 1 psychological health/well-being, 1 reaction	Negative affect
* 58.	Because of this conflict, I felt alienated from my coworkers and others at work.	1 outcome: anxiety, 1 outcome, 1 productivity, 1 perception, 1 missing	Negative affect
59.	I lost my temper during the conflict.	1 reaction: anger, 1 behavioural response, 1 hostile/anger, 1 psychological health/well-being, 1 reaction	Negative affect
* 60.	I felt powerless to improve the conflict situation.	1 reaction: helplessness, 1 feelings. 2 fear/helplessness/hopelessness, 1 perception	Negative affect
* 61.	This conflict situation was frustrating for me.	1 reaction: frustration, 1 feelings, 1 hostile/anger, 1 reaction, 1 missing	Negative affect
* 62.	I felt inadequate when dealing with the conflict.	1 reaction: helplessness, 1 feelings, 1 fear/helplessness/hopelessness, 1 perception	Negative affect

#	Revised Item	Raters' Sorting Labels	Condition
63.	I was ashamed of my own actions in this conflict.	1 reaction: surprise, 1 feelings, 1 shame/regret, 1 guild/regret, 1 reaction	Negative Affect
64.	I regretted some of the things I did in reaction to the conflict.	1 outcome: guilt, 1 outcome, 1 shame/regret, 1 guilt/regret, 1 reaction	Negative Affect
* 65.	I had a sense of dread coming to work because of the conflict situation.	1 outcome: anxiety, 1 feelings, 1 worry, 2 psychological health/well-being,	Negative affect
66.	People at work avoided me.	1 outcome: perception of other, 1 outcome, 1 worry, 1 consequences/risks, 1 missing	Threat
67.	I was disappointed in other people because of this conflict.	1 outcome: perception of other, 1 outcome, 1 disappointment, 1 reaction, 1 missing	Social outcome
* 68.	It was harder to achieve my goals because of this conflict.	1 outcome: job performance, 1 outcome, 1 productivity, 1 consequences/risks, 1 missing	Threat
69.	I felt angry about the unfairness of the situation.	1 reaction: anger, 1 feelings, 1 hostile/anger, 1 psychological health/well-being, 1 perception	Negative affect
70.	I often felt like crying during the conflict.	1 reaction: hurt, 1 feelings, 1 fear/helplessness, 1 psychological health/well-being, 1 perception	Negative affect
* 71.	I felt hopeless about the chances of this situation improving.	1 reaction: helplessness, 1 feelings, 2 fear/helplessness/hopelessness, 1 perception	Negative affect
* 72.	I was annoyed about the conflict situation.	1 reaction: frustration, 1 feelings, 1 hostile/anger, 1 psychological health/well-being, 1 reaction	Negative affect

#	Revised Item	Raters' Sorting Labels	Condition
* 73.	I worried about what others were thinking of me because of this conflict.	1 outcome: anxiety 1 cognitive response, 2 worry/rumination, 1 missing	Threat
74.	I was under a lot of pressure because of this conflict.	1 outcome: anxiety, 1 outcome, 1 psychosomatic symptoms, 1 psychological well-being, 1 consequences/risks	Negative affect
75.	I wanted to get even with the other person/people in this conflict.	1 reaction: anger, 1 feelings, 1 hostile/anger, 1 relationship, 1 reaction	Negative affect
* 76.	I felt angry toward the other person/people involved in the conflict.	1 reaction: anger, 1 feelings, 1 hostile/anger, 1 psychological health/well-being, 1 perception	Negative affect
* 77.	I thought that the other person/people deserved whatever bad outcome they got as a result of the conflict.	1 reaction: anger, 1 cognitive response, 1 hostile/anger, 1 relationship, 1 reaction	Negative affect
78.	I felt hurt by the other person/people.	1 reaction: hurt, 1 feelings, fear/helplessness, 1 psychological health/well-being, 1 perception	Negative affect
* 79.	I felt shocked at what had happened.	1 reaction: surprise/confusion, 1 feelings, 1 fear/helplessness, 1 psychological health/well-being, 1 perception	Confusion
* 80.	I felt betrayed by the other person/people.	1 reaction: hurt, 1 feelings, 1 fear/helplessness, 1 perception, 1 missing	Negative affect
81.	I had trouble concentrating on my work because of this person/people.	1 outcome: job performance, 1 outcome, 1 productivity, 1 rumination, 1 well-being	Confusion

#	Revised Item	Raters' Sorting Labels	Condition
82.	I felt afraid of the other person/people.	1 reaction: fear, 1 feelings, 2 fear/helplessness, hopelessness, 1 perception.	Negative affect

Appendix L

Item Matching Results

The following table shows the results of ten graduate students matching the retained items to the categories of Social Discord (SD), Negative Affect (NA), Interpersonal Dissonance (ID), Threat (T), and Confusion (C). Instructions permitted the assignment of items to one or more categories and, as a result, the number of matches may exceed 10. Item matchers also provided comments to substantiate their decisions.

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
1	Y	It was difficult for me to imagine our relationship getting back on track.	1	0	9	0	2	0	
3	Y	My communication with the other person/people involved in the conflict felt strained.	7	1	7	1	1	0	More so Int. Diss. Could be Conf. if person is 'feeling' the strain but unsure why. I.e., the word 'felt', to me, sounds like there is some confusion, whereas 'is strained' would more solidly categorize it into the Int. Diss. theme, I think.
5	Y	I dreaded running into the other person/people involved in this conflict.	7	5	5	0	0	1 Negative thoughts/ cognitions	The sense of dread is the focus here for me. Not sure if that is an emotional reaction, or a cognitive one. There would also be tension though... so social discord seems relevant.

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
6	Y	I worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.	4	4	2	6	0	1 Negative thought	(1) Again, this seems much more cognitive than anything to me. Also, there is a *fear of* social discord (i.e., perhaps not actual social discord, which brings the focus back to the cognitive aspect - that the person is worrying). (2) Maybe 'negative' instead of 'bad'?
7	Y	It felt like something was very wrong between myself and the other person/people in the conflict.	2	2	10	0	0	0	Should 'myself' be 'me'?
11	N	The conflict led me to act in ways I am not proud of.	2	7	0	2	1		This one is tough for me. Is the focus that they are feeling regretful (NE), or that they did bad things to the other person (SD)?
12	Y	I worried that the conflict was affecting my clients/customers/patients.	0	3	0	10	0	0	
13	N	I couldn't stop thinking about how to fix my relationship with the other person/people.	0	2	7	0	2	1 Rumination	This sounds very cognitively focused to me. Also, there is a definite proactive aspect to it, such that the person is thinking about ways to improve the situation

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
14	Y	I spent a lot of time just trying to 'figure out' what was happening in the conflict.	1	2	0	0	8	0	Excellent item for social discord
17	N	The conflict was a 'hot button' or 'touchy subject' that couldn't be discussed calmly.	3	6	0	0	1	2	This doesn't seem to fit anywhere - it suggests that emotions would run high and social discord might ensue should the topic be breached.
18	N	I wasn't able to tell whether I was right or wrong about issues related to the conflict	0	0	0	0	10	0	
21	N	I avoided the person/people involved in the conflict whenever possible.	5	2	3	1	0	1 Action response	Could be social discord if the person is intentionally ignoring the other? / Is there a similar item near the beginning?
23	N	I rarely agreed with anything the other person/people said.	6	0	5	0	0	0	Sounds like could be discord if the disagreeing is intentional. I had a hard time finding a theme for this one - I picked interpersonal dissonance because it made the most sense but I don't think this item fits extremely well with any of the themes and I am not sure if this means before, after or during the conflict - needs clarification/ Unsure about this one but I chose it because social discord includes 'tension'

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
26	N	This conflict posed a serious threat to my job.	0	0	0	10	0	0	
29	Y	My communication with the other person/people was strained.	7	1	7	1	1	0	More so Int. Diss. Could be Conf. if person is 'feeling' the strain but unsure why. I.e., the word 'felt', to me, sounds like there is some confusion, whereas 'is strained' would more solidly categorize it into the Int. Diss. theme, I think.
31	N	My relationship with the other person/people wasn't what it should have been.	2	0	10	0	0	0	Cognitive? Again, the state of 'worry' seems more cognitive to me than emotional
32	Y	I felt afraid of losing things that were important to me.	0	8	0	6	0	0	
34	N	Friendships that I cared about were at stake during this conflict.	1	1	3	6	0	0	
35	N	Myself and the other person/people only spoke when absolutely necessary.	7	1	4	0	0	0	(1) 'Myself' should probably be 'I'--the other person/people and 'I' or reversed is grammatically correct. (2) Grammatically incorrect

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
39	Y	I worried that the conflict would affect my ability to continue to work with the other person/people.	2	3	5	7	0	0	
40	N	I worried about my professional reputation because of the conflict.	0	3	0	10	0	0	
41	N	I felt worried and anxious about the conflict situation at work.	0	10	0	0	0	1	
47	N	I had trouble sleeping as a result of the conflict at work.	0	7	0	5	2	1 Physiological strain	Hard to say why an individual would have trouble sleeping (e.g., emotions running too high [NE], thinking too much about the conflict [C/M]. This one seems to describe a more distal reaction - not sure about this item
49	N	This situation made my heart pound in fear.	0	8	0	4	0	1 Physiological reactions	Probably falls more under the 'negative emotions' category, but heart pounding may also be a threat to one's health (e.g., symptom of anxiety)
50	N	I was afraid of repercussions to my career as a result of this conflict. I worried that this conflict would threaten my job/career.	0	3	0	10	0	1 Sounds more cognitive than emotional	Worry is a negative emotion (or may be thought of us a negative emotion by respondents, but the worry originates due to a perceived threat to one's career

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
51	N	I 'saw red' (felt rage) regarding the conflict situation.	0	9	0	1	0	0	
53	N	I felt hateful toward the other person/people involved.	3	10	0	0	0	0	As I'm going through this I'm wondering whether social discord should be defined strictly behaviourally, where as dissonance and emotions are only emotions/attitudes to help clarify.
54	N	My physical health was at risk because of this conflict.	0	2	0	9	0	1 Physiological strain	
58	Y	I felt isolated from my coworkers as a result of this conflict.	3	7	1	3	0	2 Relationships with others	Maybe this 'other' category that I've suggested will fall under 'interpersonal dissonance', but right now, as it is defined, I'm interpreting the 'between you and other(s) involved in the conflict' to mean that other people (re: coworkers) are not involved directly
60	N	I felt powerless to improve the conflict situation.	0	8	0	2	2	0	
61	Y	This conflict situation was extremely frustrating for me.	0	10	0	0	0	0	

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
62	Y	I felt inadequate when dealing with the conflict.	0	10	0	4	3	1 Negative thought	(1) Probably falls within negative emotions, but might cross-load a bit with the other categorizations given that feeling inadequate may be perceived as a threat to one's professional capabilities. (2) Feeling inadequate also seems to be a cognitive process to me
64	N	I regretted some of the things I did in reaction to the conflict.	1	10	0	1	0	0	
65	N	I had a sense of dread coming to work because of the conflict situation.	3	9	0	2	0	0	Again, dreading to me seems like a cognitive thing... dreading
68	Y	It was harder to achieve my goals because of this conflict.	1	1	0	10	1	0	
71	N	I felt hopeless about the chances of this situation improving.	1	8	1	1	0	0	
72	N	I was annoyed about the conflict situation.	1	10	0	0	0	0	

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
73	N	I worried about what others were thinking of me because of this conflict.	1	5	0	7	0	1 Relationship with others	Again, cognitive sounding
76	Y	I felt angry toward the other person/people involved in the conflict.	0	10	2	0	0	0	
77	N	I thought that the other person/people deserved whatever bad outcomes they got as a result of the conflict.	5	6	1	0	1	1 Negative thought	(1) This one is tough. I would say mostly negative emotions... though it seems more cognitive than emotional (other than there is likely anger involved to perpetuate such cognitions). (2) Seems more cognitive like the one I labeled Rumination, but in a negative way instead of positive
79	N	I felt shocked at what had happened.	0	7	0	0	6	1 Cognitive	(1) Shock seems to be a cognitive reaction more than anything else? Or does shock suggest that one is so cognitively surprised that an emotional response occurs? (2) Feeling shocked suggests surprise and possibly confusion, but is also likely to be associated with negative emotions (why was the person shocked? a sense of betrayal, etc.)

#	Retained	Item Text	SD	NA	ID	T	C	Other	Comments
80	N	I felt betrayed by the other person	1	9	3	0	5	1	

Appendix M

Study II ESEM Model Statistics

Study II Final FWC Scale: Means, Standard Deviations, Ranges, and Inter-item

Correlations for FWC Items[1]

Item	M	SD	Range	FWC2	FWC3	FWC5	FWC6	FWC9	FWC10
FWC2	3.33	1.22	1-5						
FWC3	3.79	1.14	1-5	.67					
FWC5	3.56	1.25	1-5	.53	.58				
FWC6	3.81	1.18	1-5	.55	.63	.63			
FWC9	2.71	1.42	1-5	.48	.43	.42	.51		
FWC10	2.93	1.43	1-5	.41	.35	.32	.38	.49	
FWC14	2.26	1.32	1-5	.35	.31	.25	.32	.44	.60

[1]Note: All correlations are significant at $p \leq .001$; n = 1012 to 1023: missing data are deleted listwise. FWC-NAID consists of items 2, 3, 5 and 6; FWC-T consists of items 9, 10, and 14.

Appendix N

Social Discord Items

Original Social Discord Items

The following items were developed along with other potential conflict scale items but were not selected for the CDHA/SMU PPOC study. These items were either developed to assess social discord or were assigned to the social discord theme during item review.

1. My relationship with the other person/people has been strained.
2. I have rarely agreed with anything the other person said.
3. I have had difficulty controlling myself when I had to interact with the other person/people.
4. I have avoided the other person/people socially.
5. I have avoided the person/people involved in the conflict whenever possible.
6. I have not engaged in 'small talk' with the people I was in conflict with.
7. I felt disrespected by the person/people I was in conflict with.
8. Myself and the other person/people only spoke when absolutely necessary.
9. The conflict was a 'hot button' or 'touchy subject' that couldn't be discussed calmly.
10. I had to walk on eggshells around this conflict situation at work.
11. I was ashamed of my own actions in this conflict.
12. I thought less of myself as a result of my own conflict behaviour.
13. I felt like I was under attack during the conflict at work.

Following is list of randomly selected excerpts depicting social discord behaviors reported by Study II participants. The author used this list of verbatim excerpts to generate 13 additional social discord items for a follow-up scale validation study.

1. Cursed and swore and left room and slammed door.
2. Consistently rude and outspoken to all staff. Tells people to shut up, etc.
3. Talking bad to me
4. Direct her abuse at others
5. Person standing over me and verbally attacking me
6. Argument at times
7. Some tension
8. Tension, but avoid each other
9. Avoidance
10. Cruel criticism
11. Walked by during my 20 minutes at that seat and said, loud enough for me to hear "that desk is for nursing!!!!" 10 minutes after I left the desk 2 signs were taped to the desk saying "nursing only!!!"
12. Control, micro-management and condescending responses
13. Constant tension for a year

14. Tears in the staff room almost weekly, strained relationships
15. Was avoiding her as much as I could
16. Was a bully and bullied several people in the work place.
17. Avoid talking to her
18. Some tension
19. Reaction was very intense
20. With an argument when it first began, then became less frequent with mild disagreements on how I do my work
21. Extremely charged, volatile, aggressive
22. To victimization, multiple crying meetings and but continued lack of responsibility and continued lying.
23. The other employee just didn't speak to me for about 1 week. Answered work questions only, was abrupt and ended call as quickly as possible.
24. The tension between us
25. That difficult awkward position
26. I felt as though I was treated extremely poorly
27. The person who became the director of the new team kept trying to find any mistakes I would have made
28. He would not speak with me unless I spoke directly to him.
29. I was rudely spoken to
30. For now, we speak to each other if we have something work related to say, otherwise we do not speak to each other
31. The conflict was never really intense, just a disagreement and mostly involved tension with avoiding each other - was more about feelings of being disrespected/undervalued than the disagreement
32. Speak when needed, but most times I just keep my distance.
33. Progressed to no one speaking to the abuser
34. Nit picky and an embarrassment to me
35. Family members comment on her outburst and her behaviour
36. Said "don't you wish you had taken the course and university I took to put you where I am today"?
37. But only addressing this person when totally necessary, and otherwise no longer making friendly chats with them
38. I was visibly more tense at work, and unhappy
39. One co-worker told me that they told this person that it was none of their business what was going on, and they shouldn't be saying that behind my back
40. I felt I needed to defend my own honour and reputation against what had been said about me.
41. Said "I did not realize you were so stupid you could not figure this out on your own"
42. I expressed what it was what he did that upset me
43. After that we were able to be cordial with one another but there was still that "elephant in the room" to a small degree when we would interact for work purposes.

44. It never did progress into anything as I did not want to get into a conflict in front of patients
45. Rant
46. There is ongoing tension every time this committee meets
47. We recognize that we need a stronger committee chair that can handles these outbursts more appropriately
48. It was intense from the first time the staff person made me aware of her feelings and continued to escalate for the whole period she was an employee
49. The patient did come again to see my co-worker and I avoided her. I had asked my co-worker if she wanted me to apologize to the patient. She thought it best to leave it alone. I made sure to keep well away from the patient.
50. She was snappy and negative that I avoided her
51. She talks down to everyone and raised her voice in meetings
52. It is not too intense but it is needling
53. I have avoided the individual, haven't made an effort to talk to him, and he has avoided me, not showing up at our previously scheduled leadership meetings
54. There were no more than a few words said.
55. The conflict started out with just tension and progressed into expressing the tension and aggravation
56. The conflict lasted about an hour but the tension lasted for weeks.
57. Very intense first, not arguments, just disagreeing with the decision.
58. The e-mails got more aggressive and angry in tone until they were copied to me for help

Additional Social Discord Items
The following thirteen items were developed after recognizing that the PPOC study items only weakly represented the social discord theme. The written excerpts of social discord within descriptions of work conflict informed item writing for the following items.

1. There has been a disagreement between me and the other person at work
2. There is an ongoing argument between myself and the other person
3. The way I interact with the other person has been disrupted
4. The other person and I have only spoken when absolutely necessary
5. There has been a breakdown in my relationship with the other person
6. The other person has treated me with disrespect
7. The other person has been rude to me.
8. There has been tension or awkwardness between me and the other person
9. There has been friction between myself and the other person
10. The clash between me and the other person remains unresolved
11. There is ongoing tension as a result of the social breakdown
12. There is ongoing tension as a result of the clash
13. The other person and I have done nasty things to each other

Appendix O

Study III Online Survey

Work Conflict REB File #: 16-111

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Hello Potential Participant,

You are invited to participate in a research study conducted by Diane LeBlanc of the Department of Psychology at Saint Mary's University. This study is supported through funding received from the Social Sciences and Humanities Research Council (SSHRC). The main purpose of this study is to test a new measure of *work conflict* and to examine how it relates to other workplace attitudes and behaviours. *Work conflict* is described as tension, arguments, or difficulty with other people at work. Working with others often involves some conflict. Conflicts may result from a specific problem or struggle between people, or simply when people's personalities cause them to not 'get along' well. The conflict can have been about anything, and have been between multiple people, or just you and one other person.

This study will be conducted online and will take approximately 20 minutes to complete (depending on your speed). Participating in this study involves responding to questions related to work conflict and other workplace attitudes and behaviours. In addition, you will be asked to provide some demographic information (e.g., age, gender) and information about your job (e.g., occupation, tenure).

This study is open to members of the general public who are **working part-time or full-time and are 18 years or older**. Your participation in this study is completely voluntary and you have the right to withdraw at any time without penalty or explanation prior to completing and submitting the online questionnaire. If you wish to withdraw from the study, simply stop responding to the survey items and close the browser. As we will not be collecting any identifying information, we will be unable to identify and remove your responses after you have completed the survey.

Some participants may feel uncomfortable answering some questions. If you experience negative emotions as a result of participating in this study, you may wish to contact one of the student investigators or the research supervisor (see contact information below), your EAP, family physician or other trusted advisor.

All data collected for this study will be kept confidential by the research team. Published

results of this study will only pertain to the group of participants and not individual participants. This study uses an online survey application called Qualtrics, which encrypts and stores all information on a secure server in Ireland. The results of this study will be presented at research conferences and may be submitted to a scientific journal for publication. If you want to receive a copy of the results, you can send an email to Diane LeBlanc (diane.leblanc@smu.ca) below and we will send it to you after the study is complete. The data will be kept confidential on a secure computer at Saint Mary's University. Once the data are downloaded from Qualtrics, they will be compiled in a dataset that will be stored in Canada for five years after the study is published.

This study will contribute to understanding how work conflict relates to other workplace attitudes and behaviours. Your responses will contribute to the scientific study of behaviours in the workplace and ongoing research at Saint Mary's University.

Certification:
This research has been reviewed and approved by the Saint Mary's University Research Ethics Board. If you have any questions or concerns about ethical matters, you may contact the Chair of the Saint Mary's University Research Ethics Board at ethics@smu.ca or 902-420-5728.

Student Investigator	Faculty Supervisor
Diane LeBlanc	Dr. Debra Gilin Oore
PhD Candidate	Assistant Professor
Saint Mary's University	Saint Mary's University
Department of Psychology	Department of Psychology
902-818-2623	902-420-5846
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Agreement:

I understand what this study is about and appreciate the risks and benefits. I understand that my participation is voluntary and that I can end my participation at any time.

Please note that by clicking "**I consent**" you are providing informed consent to participate.
☐ I Consent
☐ I do NOT consent

Are you currently working a part-time or full time job?
☐ Yes full-time
☐ Yes part-time
☐ No

What is your age?

□ 17 or younger (17) ... 100 or older (100)

Work conflicts are tensions, arguments, or difficulties that arise when working with other people, that may result from a specific work situation, a struggle between people, or simply when people's personalities cause them to not 'get along' well. Work conflicts vary in severity - some are minor events while others are major events, and they vary in duration - some are over in a few minutes, others unfold over several days, months, or even years.

Are you <u>currently</u> experiencing a work conflict?
□ yes □ no
What is your gender?
□Male
□Female
□Other

How long have you worked at your current job?
Years _____
Months _____

On average, how many hours do you work per week?

Hours _____

In which industry are you currently employed?
□ Forestry, fishing, hunting or agriculture support (1)
□ Mining (2)
□ Utilities (3)
□ Construction (4)
□ Manufacturing (5)
□ Wholesale trade (6)
□ Retail trade (7)
□ Transportation or warehousing (8)
□ Information (9)
□ Finance or insurance (10)
□ Real estate or rental and leasing (11)
□ Professional, scientific or technical services (12)
□ Management of companies or enterprises (13)
□ Admin, support, waste management or remediation services (14)
□ Educational services (15)
□ Health care or social assistance (16)
□ Arts, entertainment or recreation (17)

☐ Accommodation or food services (18)
☐ Other services (except public administration) (19)
☐ Unclassified establishments (20)

Please indicate your occupation:
▼ Management, professional, and related (1) ... Educator (11)

What is the highest level of education you have achieved?
☐ Some elementary (1)
☐ Completed grade 9 (2)
☐ Some high school (3)
☐ Completed high school (4)
☐ Some college (5)
☐ Completed college (6)
☐ Some university (7)
☐ University degree (8)
☐ Some graduate studies (9)
☐ Graduate degree (10)
☐ Doctorate degree (11)

Do you identify yourself as part of a minority group or other diverse population (based on social, ethnic, sexual orientation, ability, or other characteristic)?
☐ Yes (1)
☐ No (0)
☐ Prefer not to answer (2)

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word.

Indicate to what **extent you feel this way in general**.
Response scale: 5-points from *Very Slightly or Not at All* to *Very Much*

1. Scared
2. Afraid
3. Upset
4. Distressed
5. Jittery
6. Nervous
7. Ashamed
8. Guilty
9. Irritable
10. Hostile

Considering all of your job duties and responsibilities, <u>how would your supervisor or boss</u> rate the following about your work **over the past week?**

Response Scale: 5-points from *Poor* to *Excellent*

1. The amount of work that you accomplished
2. The quality of your work
3. Your overall performance
4. How much you helped make other workers productive
5. How much you helped others who have heavy workloads
6. How much you helped others who have been absent

Compared to a typical week, how would you rate the frequency of the following activities **over the past week?**

Response Scale: 5-points from *Far Less Frequent* to *Far More Frequent*

1. Relations with family
2. Connecting with friends
3. Volunteering
4. Exercise and activity
5. Healthy eating

Please rate your agreement with the following:

Response Scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. I plan on leaving my job within the next year
2. I have been actively looking for other jobs
3. I want to remain in my job
4. Overall, I am satisfied with my job

While at work over <u>the past week</u>, **how much time did you spend dealing with the conflict** (e.g., talking to others, going for a walk to calm down)?
Number of Hours: _____

While at work over the <u>past week</u>, **how much time were you distracted, worried, or thinking about the conflict?**
Number of Hours: _____

Sometimes people miss work during conflicts, either to avoid the conflict or because the conflict has made them unwell or uneasy. Please estimate **how many days you missed either partly or entirely because of the conflict** <u>over the past week.</u>
Absent Days (1) _____

The items below prompt you to think about the conflict you are currently experiencing at work. Consider you and the person(s) you are in conflict with **over the past week.**

Response Scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. We argued with one another
2. There were awkward or tense interactions between us
3. We had a power struggle
4. We were rude or disrespectful toward one another
5. At least one of us raised our voice in frustration or anger
6. I have spent a lot of time just trying to 'figure out' what was happening in the conflict.
7. It has felt like something was very wrong between me and the other person.
8. My communication with the other person has felt strained.
9. It has been difficult for me to imagine our relationship getting back on track.
10. I have felt angry toward the other person.
11. The conflict situation has been extremely frustrating for me.
12. I have felt betrayed by the other person.
13. I have felt inadequate when dealing with the conflict.
14. I have felt afraid of losing things that were important to me.
15. I have worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.
16. I have worried that the conflict was affecting my clients/customers/patients.
17. I have dreaded running into the other person.

18. I have worried that the conflict would affect my ability to work with the other person.

19. I have felt isolated from my co-workers as a result of this conflict.

20. It has been harder to achieve my goals because of this conflict.

21. I felt shocked at what had happened.

22. Myself and the other person/people only spoke when absolutely necessary.

23. I worried about my professional reputation because of the conflict.

24. Friendships that I cared about were at stake during this conflict.

25. I wasn't able to tell whether I was right or wrong about issues related to the conflict.

26. My relationship with the other person/people was strained because of our disagreement.

27. I felt worried and anxious about the conflict situation at work

28. The conflict felt like an attack on my identity

29. Important working relationships were at risk as a result of the conflict.

30. I worried that people would think less of me because of the conflict

Compared to the person(s) I am in conflict with, in my workplace:
☐ I have more power
☐ I have less power
☐ I have equal power

Over the past week, have you had contact with the following people or groups? If so, please rate how connecting with each person or group affected the intensity or severity of the conflict:

Response Scale: 5-points from *Much Worse* to *Much Better* or *No Contact*

1. the person or people you are in conflict with

2. a conflict mediator or specialist in your organization

3. your supervisor

4. coworkers

5. friends at work

6. friends at home

7. family

8. others (please specify)

Below are a number of emotions that a person might feel because of their job. Please rate how often any part of your job (e.g., your work, coworkers, supervisors, clients, pay) has made you feel that emotion. **Over the past week,** my job made me feel...

Response Scale: 5-points from *Never* to *Always*

1. angry
2. anxious
3. at ease
4. bored
5. calm
6. content
7. depressed
8. discouraged
9. disgusted
10. ecstatic
11. energetic
12. enthusiastic
13. excited
14. fatigued
15. frightened
16. furious
17. gloomy
18. inspired
19. relaxed
20. satisfied

Over the past week,, have you...

Response scale: 5-points from *Never* to *Always*

1. been able to concentrate on whatever you're doing?
2. lost much sleep over worry?
3. felt that you are playing a useful part in things?
4. felt capable of making decisions about things?
5. felt constantly under strain?
6. felt you couldn't overcome your difficulties?
7. been able to enjoy your day-to-day activities?
8. been able to face up to your problems?
9. been feeling unhappy or depressed?
10. been losing confidence in yourself?
11. been thinking of yourself as a worthless person?
12. been feeling reasonably happy, all things considered?

Over the past week, how often have you experienced:

Response scale: 5-points from *Never* to *Daily*

1. back strain
2. headaches
3. repetitive strain injuries (injuries from repetitive work tasks)
4. gastro-intestinal discomfort (stomach/ digestive problems)
5. sleep disturbances (problems getting to sleep or staying asleep, poor quality sleep)
6. stress-related anxiety

Below are several questions regarding the extent to which you think about the negative experiences of work conflict. Please check the box that best represents your answer to each question. **Over the past week**, how often have you…

Response scale: 4-points from *Never* to *Often*

1. replayed negative aspects of the work conflict in your mind even after you left work?
2. found yourself preoccupied with the negative aspects of the work conflicts even after you left work?
3. thought back to bad things related to work conflict even when you were away from work?
4. kept thinking about the negative conflict that happened at work even when you were away from work?
5. This is an attention filter: Please select rarely

Please consider the work you do in your job in general, and rate the extent to which you agree or disagree with each statement:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. My work is important to the organization.
2. I feel I am recognized for the work I do.
3. It is hard for me to keep up with the workload.
4. It is difficult to balance my work and family demands.
5. My job allows me to use my skills and abilities.
6. My co-workers treat me with respect and courtesy.

These items ask about your work group. If you work in more than one group or area, think of the one you work with most as you rate the following items:

Response scale: 5-points from *Never* to *Very Often*

1. How often do you get into arguments with others at work?
2. How often do other people yell at you at work?
3. How often are people rude to you at work?
4. How often do other people do nasty things to you at work?
5. How often do people get angry while working in your group?

6. How frequently do you have disagreements within your work group about the job or tasks you perform?

7. How often do people in your work group have conflicting opinions about the job or tasks you are working on?

8. How often are there disagreements about who should do what in your work group?

9. How often do you disagree about resource allocation in your work group?

These items ask about your work group. If you work in more than one group or area, think of the one you work with most as you rate the following items:

Response scale: 5-points from *None* to *A Lot*

1. How much relationship tension is there in your work group?

2. How much emotional conflict is there in your work group?

3. How much conflict of ideas is there in your work group?

4. How much conflict is there in your group about roles and responsibilities?

Please rate the following statements using a scale from 1-5, with 1 meaning "does not describe me well" and 5 meaning "describes me very well" over **the past week**.

Response scale: 5-points from *Does not describe me well* to *Describes me very well*

1. I found it difficult to see things from the "other person's" point of view

2. When I was sure I was right about something, I didn't waste much time listening to other people's arguments

3. I believed that there were two sides to the story and tried to look at them both

4. When I was upset at someone, I tried to "put myself in their shoes" for a while

5. I tried to look at everybody's side of the disagreement before I made a decision

6. I tried to understand my coworkers better by imagining how things look from their perspective

7. Before criticizing someone, I tried to imagine how I would feel if I were in their place

Please rate the following statements using a scale from 1-5, with 1 meaning "does not describe me well" and 5 meaning "describes me very well" over **the past week**.

Response scale: 5-points from *Does not describe me well* to *Describes me very well*

1. Other people's misfortunes did not disturb me a great deal
2. I had tender, concerned feelings for people less fortunate than me
3. When I saw someone being treated unfairly, I didn't feel very much pity for them
4. I was often quite touched by things that I saw happen
5. I would have described myself as a pretty soft-hearted person
6. I didn't feel very sorry for other people when they were having problems
7. When I saw someone being taken advantage of, I felt kind of protective towards them

While dealing with the **work conflict over the past week**, I:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. I was able to control my temper and handle difficulties rationally
2. I was quite capable of controlling my own emotions
3. I was always able to calm down quickly when I was very angry
4. I had good control over my own emotions

To help myself manage the **work conflict over the past wee**k, I…

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. Imagined how my choices will effect me a year from now
2. Thought about how important this conflict will seem in a week
3. Mostly focused on myself in the present moment
4. Looked at my options for resolving the conflict from every angle
5. Considered how the conflict would be different in another workplace
6. Imagined myself in a different space or setting
7. Thought how someone I respect would handle this situation different from me
8. Imagined how a role model would behave during this conflict
9. Wondered how others would manage the conflict differently than me

10. Asked myself 'what if' questions about various options for dealing with the conflict

11. Wondered how I will act as the conflict situation changes

12. Thought creatively about ways me to change the conflict situation

Dear Participant,

Thank you for your participation in this study on work conflict. The information you provided will be used to complete a research project which aims to share emerging knowledge with a broad research and practice community through seminars, conferences, presentations, and/or journal articles.

It can be uncomfortable answering questions about work conflict. These reactions are usually temporary and fade in a short time. However, if you are experiencing unpleasant reactions that persist, you may wish to contact the student investigator or the research supervisor (see contact information below), your EAP, family physician, or other trusted advisor.

Please be assured that all data will remain anonymous and confidential. If you would like to receive a summary of the results of the study, please email Diane LeBlanc (diane.leblanc@smu.ca) and, upon completion of the study, a summary of the results will be emailed to you.

As with all Saint Mary's University projects involving human participants, this project was reviewed by and received research ethics approval through the Saint Mary's University Research Ethics Board. Should you have any comments or concerns about ethical matters, please contact the Chair of the Research Ethics Board at 902-420-5728 or ethics@smu.ca.

Thank you very much for your time. We very much appreciate your contribution to our research.

If you have any questions regarding this study please email the student researcher or supervisor.

Student Investigator   Faculty Supervisor

Diane LeBlanc   Dr. Debra Gilin Oore
PhD Candidate   Assistant Professor
Saint Mary's University   Saint Mary's University
Department of Psychology   Department of Psychology
902-818-2623   902-420-5846
diane.leblanc@smu.ca   debra.gilin@smu.ca

Additional resources for managing workplace conflict can be found at the Partnership for Productive Organizational Conflict site here: http://www.smu.ca/centres-and-institutes/ppoc-resource-for-handling-workplace-conflict.html.

Appendix P

PCA Eigenvalues for FWC, 28 items

Total Variance Explained			
Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	11.05	39.47	39.47
2	2.45	8.76	48.23
3	1.37	4.90	53.13
4	1.21	4.31	57.44
5	.96	3.43	60.87
6	.84	3.01	63.87
7	.79	2.82	66.69
8	.75	2.66	69.36
9	.71	2.56	71.91
10	.65	2.30	74.21
11	.61	2.17	76.39
12	.60	2.14	78.52
13	.58	2.09	80.61
14	.53	1.89	82.50
15	.51	1.84	84.33
16	.48	1.72	86.05
17	.46	1.62	87.68
18	.44	1.56	89.24
19	.42	1.51	90.75
20	.38	1.36	92.10
21	.37	1.32	93.42
22	.34	1.22	94.64
23	.30	1.07	95.71
24	.27	.97	96.68
25	.25	.90	97.59
26	.23	.83	98.42
27	.23	.82	99.24
28	.21	.76	100.00

Appendix Q

Study III: Moderator Graphs
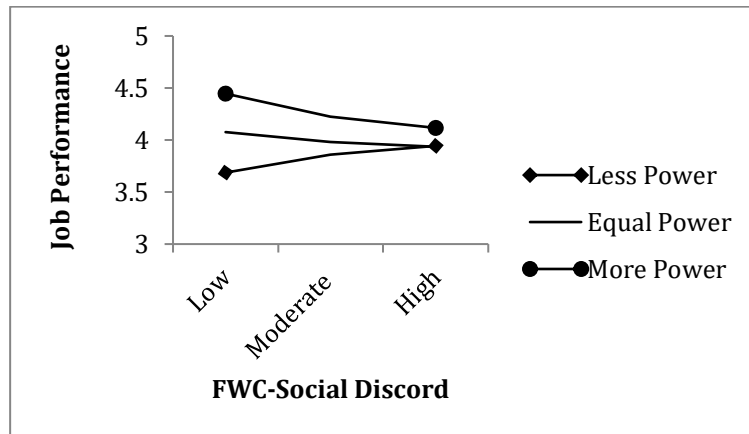
FWC-SD predicting job performance when respondents have less, equal, or more power

relative to their conflict partner. Contrary to prediction, in the less power condition

FWC-SD severity predicted an increase in performance.
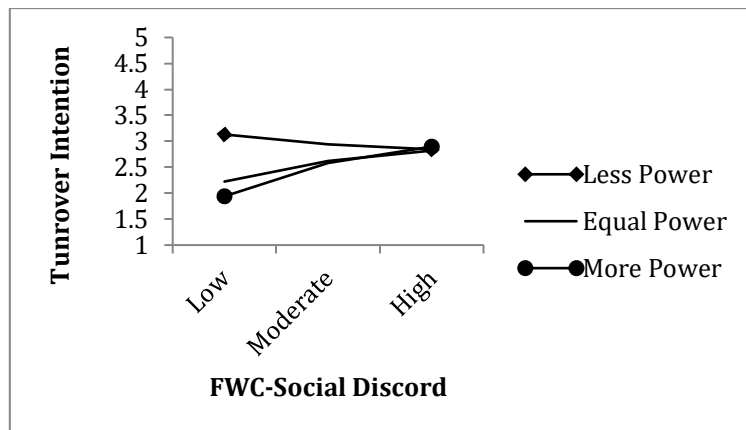
FWC-SD predicting turnover intention when respondents have less, equal, or more power

relative to their conflict partner. Contrary to prediction, in the less power condition

FWC-SD severity predicted a decrease in turnover intention.
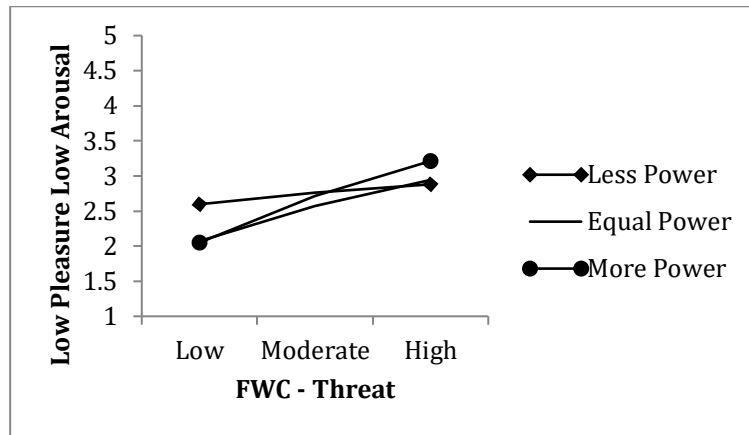
FWC-T predicting LPLA job-affective well-being when respondents have less, equal, or more power relative to their conflict partner. Contrary to prediction, the less power condition had no moderating effect on FWC-T predicting negative job affect.
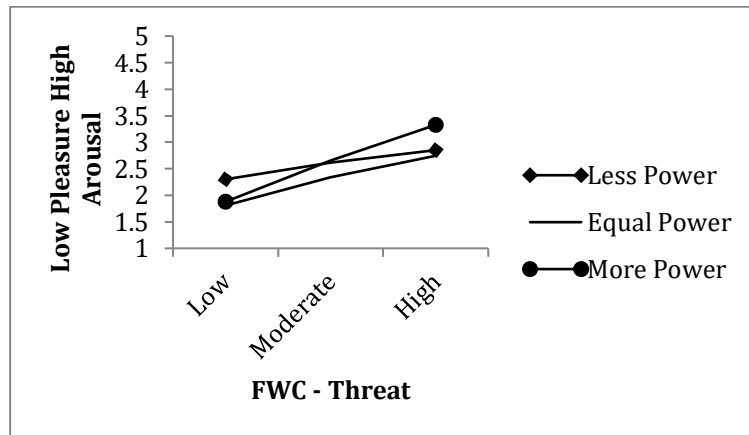
FWC-T predicting LPHA job-affective well-being when respondents have less, equal, or more power relative to their disputants. Contrary to prediction, the less power condition weakened and the more power condition strengthened the relationship between FWC-T predicting negative job affect.
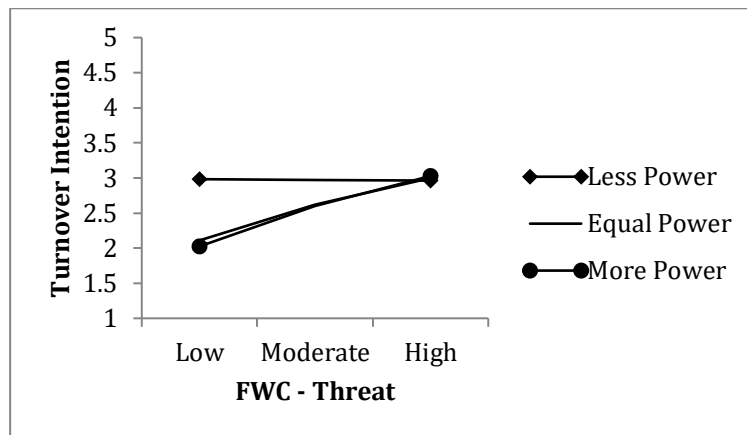
FWC-T predicting turnover intention when respondents have less, equal, or more power relative to their disputants. Contrary to prediction, the less power condition had no moderating effect on FWC-T predicting negative turnover intention.
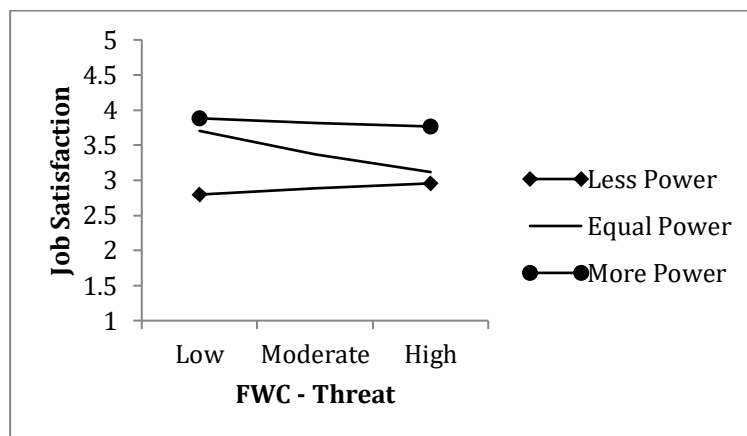
FWC-T predicting job satisfaction when respondents have less, equal, or more power relative to their disputants. Contrary to prediction, the less power condition had no moderating effect on FWC-T predicting job satisfaction.
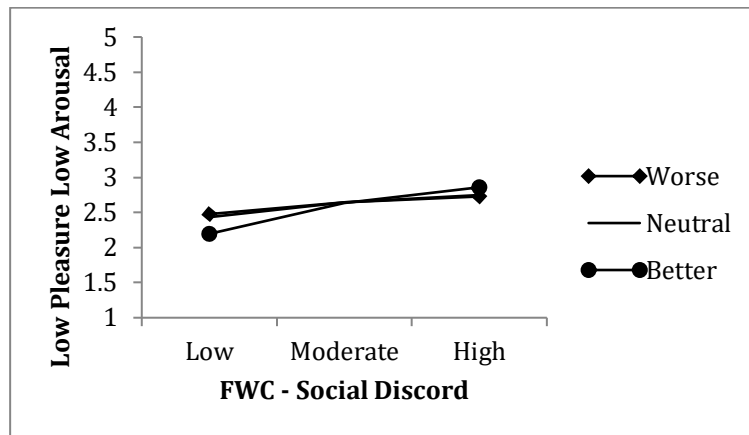
FWC-SD predicting LPHA moderated by social interaction quality. Results were mixed: helpful social interaction quality was as predicted when social discord was low.
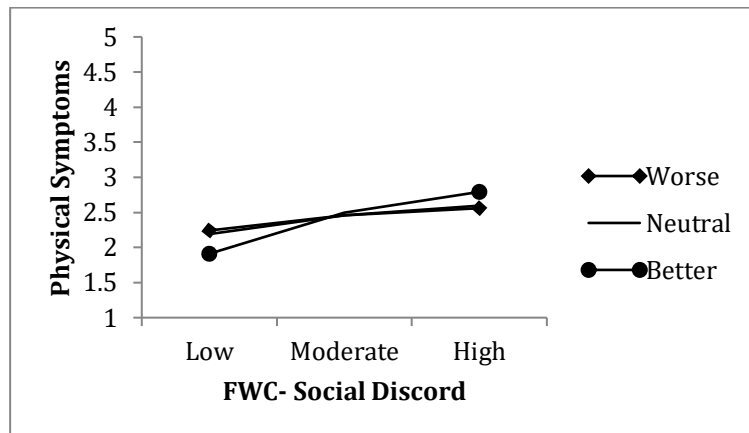
FWC-SD predicting physical symptoms moderated by social interaction quality. Results were mixed: helpful social interaction quality was as predicted when social discord was low.
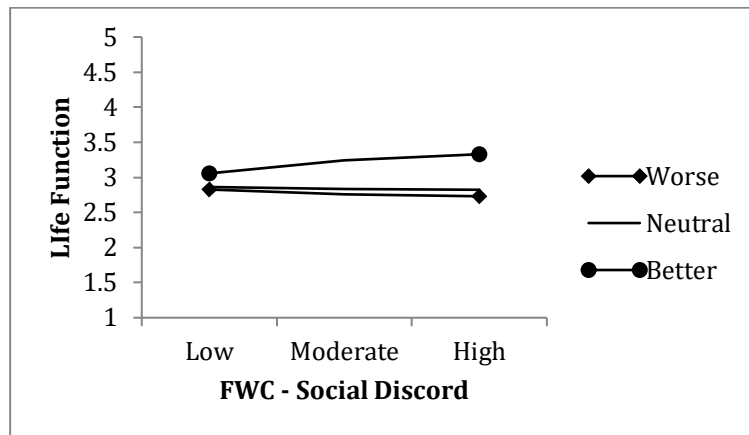
FWC-SD predicting life function moderated by social interaction quality. Results were as predicted: Social interaction quality buffered the negative effects of work conflict.
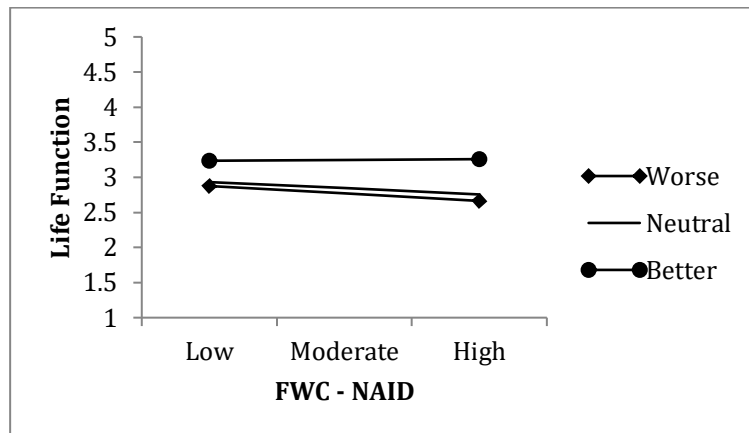
FWC-NAID predicting life function moderated by social interaction quality. Results were as predicted: social interaction quality buffered the negative effects of work conflict.
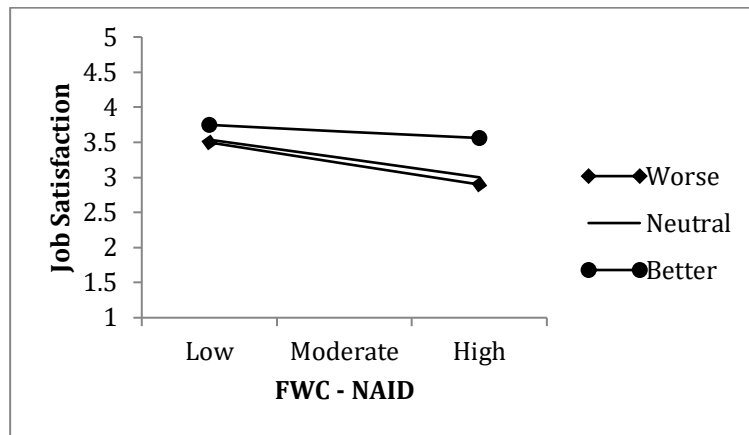
FWC-NAID predicting job satisfaction moderated by social interaction quality. Results were as predicted: Helpful social interaction quality buffered the negative effects of work conflict.
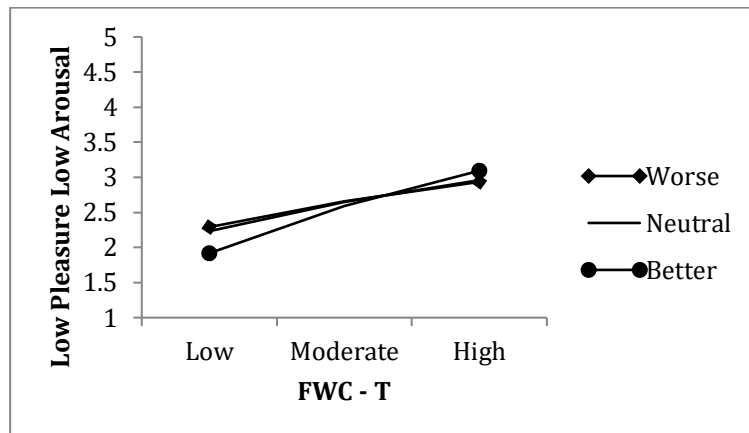
FWC-T predicting LPLA job affective well-being moderated by social interaction quality. Results were mixed: helpful social interaction quality was as predicted when social discord was low.
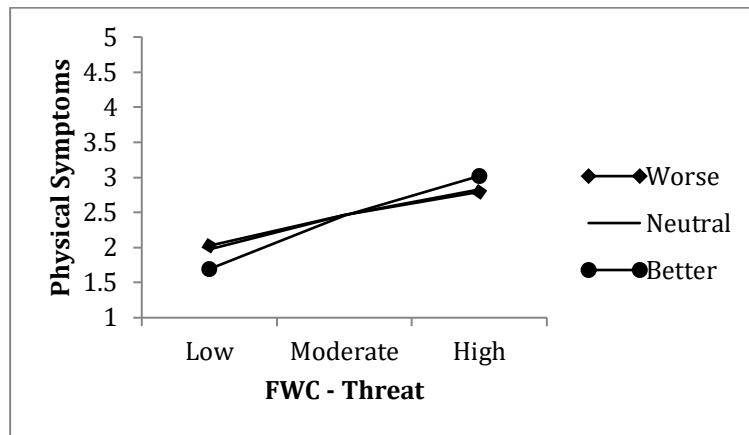
FWC-T predicting physical symptoms moderated by social interaction quality. Results were mixed: social interaction quality was as predicted when social discord was low.
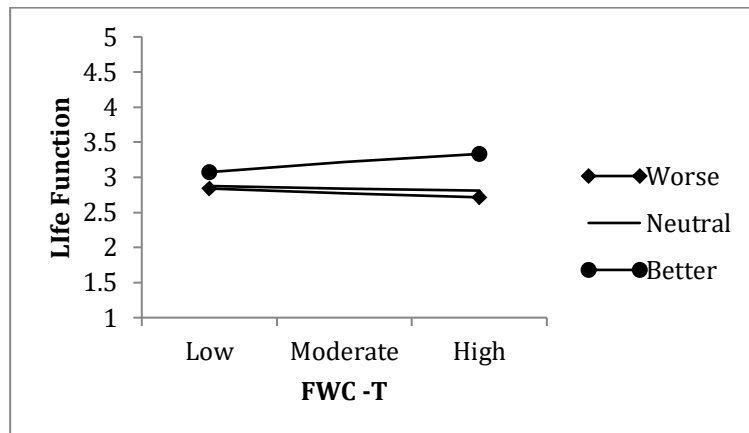
FWC-T predicting life function moderated by social interaction quality. Results were as predicted: social interaction quality buffered the negative effects of work conflict.

Appendix R

Study III: Scree Plot for Principal Component Analysis of FWC Items.
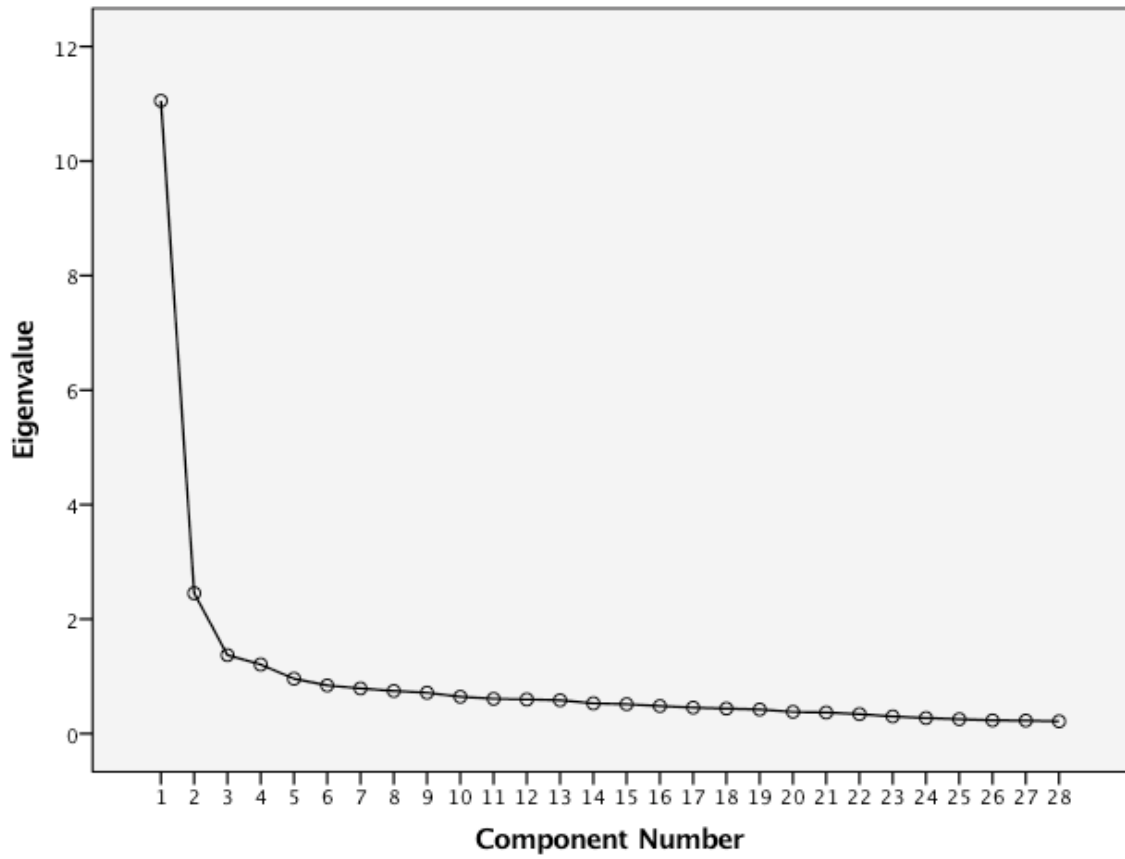
Appendix S

Study IV Informed Consent Process and Form

Informed Consent Form Non-Interventional Study

STUDY TITLE:	Partnership for Productive Organizational Conflict - Individual Effects of Conflict Resolution: A Diary Study
PRINCIPAL INVESTIGATOR:	Dr. Debra Gilin Oore
STUDY SPONSOR:	Saint Mary's University
FUNDER:	This study is being funded by SSHRC

_____

1. Introduction

You have been invited to take part in a research study. A research study is a way of gathering information on a treatment, procedure, or medical device, or to answer a question about something that is not well understood. Taking part in this study is voluntary. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for, what risks you might take, and what benefits you might receive. This consent form explains the study.

You may take as much time as you wish to decide whether or not to participate. Feel free to discuss it with your friends and family.

Please ask the research team to clarify anything you do not understand or would like to know more about. Make sure all your questions are answered to your satisfaction before deciding whether to participate in this research study.

The researchers will:
- Discuss the study with you
- Answer your questions
- Be available during the study to deal with problems and answer questions

You are being asked to consider participating in this study because you are experiencing a work conflict and have contacted the conflict resolution program for training, mediation, coaching, or other service.

If you decide not to take part or if you leave the study early, your conflict resolution program services will not be affected. Your job will not be affected either way – whether you participate in this study or not – no one involved in this research will read your personnel record or place any information, including whether or not you decided to participate, in your file about your involvement in this research.

2. Why Is This Study Being Conducted?

This study is being conducted to learn more about work conflict, how people manage conflicts at work, and how conflict affects employee's well-being and function. Work

conflicts can be difficult and can have lasting negative impacts. We aim to better understand how conflict resolution programs work so we can pass this knowledge along, making it easier for other people and organizations to better manage conflict at work.

Researchers have established that conflict can be harmful and for this reason, our study delves deeper into work conflict to see if we can figure out *how* people cope and develop conflict management skills over time.

3. How Long Will I Be In The Study?
The length of this study for participants is about 3 weeks. The entire study is expected to take 1 year to complete and the results should be known in 2 years.

4. How Many People Will Take Part In This Study?
It is anticipated that about 150 people will participate in this study throughout Nova Scotia. About 75 people from Nova Scotia Health Authority will participate in this study. The other 75 participants will be recruited from another organization.

5. How Is The Study Being Done?
This study is a survey-designed research project involving the conflict resolution program and people receiving services from the program. The conflict resolution program will provide information on the services provided (e.g., training, mediation, coaching) and the conflict resolution specialist will complete a questionnaire to provide her impressions of you, specifically, of five competencies related to conflict and conflict management. That is, the conflict resolution specialist will provide her perspective of each participant's conflict management style and skills, as well as some information about the work conflict that participants are dealing with.

You will be asked to complete a 20-30 minute questionnaire up to one week before you receive a conflict resolution program service, then a 5-10 minute diary entry once a day for 14 days, and finally a 20-30 minute questionnaire one week after your final diary entry. In total, your participation in this research project will take about 3 or 4 hours of your time over 3 weeks.

6. What Will Happen If I Take Part In This Study?
If you agree to take part in this study, the conflict resolution program coordinator (Holly Dempsey) will loan you a fitness monitor. She will explain how to use this device to track heart rate and sleep patterns. Then, you will be asked to complete the first questionnaires and diary entry.

Questionnaire 1
For the first on-line questionnaire, you will report minimal demographic information (e.g. age, occupation) that will be used to describe the research sample. Then, you will be asked to report your own well-being and function, and several personal characteristics that are relevant to managing work conflict. Most survey items ask you to rate your

agreement with a statement or indicate the frequencies with which you experience certain behaviours. You will also have the opportunity to write comments if you wish.

Diary Entries
Each diary entry is an on-line survey. The research assistant or a researcher will send you an electronic message to prompt you to complete each diary entry. You will provide information about the conflict and report how you have been feeling and what you have been thinking about for the past 24 hours with each entry. In addition, you will be asked to measure your heart rate and sleeping patterns using the fitness monitor. Again, most survey items ask you to respond using an agreement scale and you will have an opportunity to provide daily comments if you wish.

Questionnaire 2
The final part of the study involves completing a 20-minute on-line questionnaire approximately one week after you have finished the last diary entry. This questionnaire is very similar to the first one but you will also have the opportunity to describe your conflict scenario as well as report on your experiences with the conflict resolution program.

You can withdraw from this study anytime. Simply stop completing a questionnaire or diary entry at your discretion. We would appreciate an email notifying us that you wish to withdraw but it is not necessary to let us know.

7. Are There Risks To The Study?
There are two main foreseeable risks: emotional and social/reputational.

(1) Emotional risk: Reporting about a conflict at work may intensify or prolong feelings of anger, frustration, and worry. To reduce this risk you may want to discuss your reactions to the questionnaires and diary study entries with the conflict resolution specialist. Also, at the end of each questionnaire, we have provided a list of additional resources that you can use immediately to help you deal with your current situation and to become more effective at dealing with conflict at work.

In addition, we recognize that you may find the questionnaires you receive during this study to be upsetting or distressing, and therefore you do not have to answer those questions you find too distressing.

(2) Social/ reputational risk: Private and sensitive information—about conflicts with others at work—may be described on your survey. You may be concerned others at your workplace could learn about the conflict situation from answering the survey. To reduce this risk the data you provide to describe the conflict will only be viewed by a graduate student investigator and a research assistant at Saint Mary's University. Individual answers will never by seen by anyone at your organization and the Conflict Resolution

Program staff will not view any survey answers (they will be shown only average patterns of answers added across groups of participants).

To further protect your information, we will not keep your name or other information that may identify you with the questionnaire and diary study responses; only a code number. Files that link your name to the code number will be kept in a secure place. Although no one can absolutely guarantee confidentiality, using a code number decreases the chance that someone other than the research staff or other authorized groups or persons (discussed later in the consent form) will ever be able to link your name to your sample or to any test results.

8. Are There Benefits Of Participating In This Study?
We cannot guarantee or promise that you will receive any benefits from this research. However, possible benefits include: You may gain insight and ideas to improve conflict skills if you choose to receive individualized feedback on your contributions. You will gather information about resources available at your workplace to help you better cope with work conflict. You may enjoy providing the organization with your feedback on the Conflict Resolution Program. Your participation may help your colleagues by helping NSHA to develop more effective conflict resolution practices. Your participation may help researchers understand how conflict resolution programs work and this information can be used to improve conflict resolution programs at more workplaces around Canada**.**

When you complete this study, you will receive a $30.00 gift card in recognition of your time and contribution to this research. In addition, all participants will be entered in a draw to win one of the ten fitness monitors that will be used in the study. If you withdraw from the study, you can still receive the gift card and be eligible to win a fitness monitor. Simply send an email to the principal investigator, Debra Gilin Oore (debra.gilin@smu.ca) letting her know to include you.

9. What Happens at the End of the Study?
It is anticipated that the results of this study will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you cannot be identified. A summary of the results will be posted on the PPOC website (http://www.smu.ca/centres-and-institutes/ppoc-research-initiatives.html) and we'll inform you when the findings are available.

10. What Are My Responsibilities?
As a study participant you will be expected to:
- Follow the directions of the research team;
- Report any problems that you experience that you think might be related to participating in the study;
- Return the research equipment to the conflict resolution coordinator in a timely manner.
- Agree not to use the research equipment for any illegal activities.

11. Can My Participation in this Study End Early?
Yes. If you chose to participate and later change your mind, you can say no and stop the research at any time. If you choose to withdraw from this study, your decision will have no effect on your current or future relationship with the conflict resolution program or your employment. A decision to stop being in the study will not affect any work performance evaluations you may have.

If you choose to withdrawal, you can have all of your personal data removed from the study so that it will not be included in study analyses <u>or</u> data collected up until that point can be included in the study analyses – just let us know what you prefer. If you wish to withdraw your consent please inform the research team. If we don't hear from you and you simply stop completing surveys, we will retain collected information for analysis.

Also, Saint Mary's University, the Nova Scotia Health Authority Research Ethics Board and the principal investigator have the right to stop participant recruitment or cancel the study at any time.

Lastly, the principal investigator may decide to remove you from this study without your consent for any of the following reasons:

➢ You do not follow the directions of the research team;
➢ You are experiencing side effects that are harmful to your health or well-being;
➢ There is new information that shows that being in this study is not in your best interests;

If you are withdrawn from this study, the principal investigator will discuss the reasons with you.

12. What About New Information?
You will be told about any other new information that might affect your health, welfare, or willingness to stay in the study and will be asked whether you wish to continue taking part in the study or not.

13. Will It Cost Me Anything?
Participation in this study will not involve any additional costs to you.

<u>Research Related Injury</u>
If you become ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. Your signature on this form only indicates that you have understood to your satisfaction the information regarding your participation in the study and agree to participate as a subject. In no way does this waive your legal rights nor release the principal investigator, the research staff, the study sponsor or involved institutions from their legal and professional responsibilities.

14. What About My Privacy and Confidentiality?
Protecting your privacy is an important part of this study. Every effort to protect your privacy will be made. If the results of this study are presented to the public, nobody will be able to tell that you were in the study.

However, complete privacy cannot be guaranteed. For example, the principal investigator may be required by law to allow access to research records.

If you decide to participate in this study, the research team will collect only the personal information they need for this study:

- Diversity Status (whether you identify as part of a minority group)
- Age
- Sex
- Occupation
- Employment Status
- Tenure

Access to Records
The research does not involve access to your health records. No one involved in this study will look at your personnel record or health information for any reason.

De-identified study data may be transferred to the sponsor and researchers working for and with the sponsor.

Study data that is sent outside of the Nova Scotia Health Authority will be used for the research purposes explained in this consent form.

The research team and the other people listed above will keep the information they see or receive about you confidential, to the extent permitted by applicable laws. Even though the risk of identifying you from the study data is very small, it can never be completely eliminated.

The research team will keep any personal information about you in a secure and confidential location for 7 years and then destroy it according to NSHA policy. Your personal information will not be shared with others without your permission.

After your part in the study ends, we may continue to review your health records for safety and data accuracy until the study is finished or you withdraw your consent.

You have the right to be informed of the results of this study once the entire study is complete.

The REB and people working for or with the REB may also contact you personally for quality assurance purposes.

<u>Your access to records</u>
You have the right to access, review, and request changes to your study data.

15. Declaration of Financial Interest
The Social Studies and Humanities Research Council (SSHRC) is reimbursing the principal investigator and/or the principal investigator's institution to conduct this study. The amount of payment is sufficient to cover the costs of conducting the study.

16. What About Questions or Problems?
For further information about the study you may call the principal investigator, who is the person in charge of this study, and/or any other research team member listed below.

The principal investigator is Debra Gilin Oore
Email: debra.gilin@smu.ca
Telephone: 902 491-6211

The student researcher is Diane LeBlanc
Email: diane.leblanc@smu.ca
Telephone: 902 818-2623

The conflict resolution program coordinator is Holly Dempsey
Email: holly.dempsey@nshealth.ca
Telephone: 902 473-2417

17. What Are My Rights?
You have the right to all information that could help you make a decision about participating in this study. You also have the right to ask questions about this study and your rights as a research participant, and to have these questions answered to your satisfaction before you make any decision. You also have the right to ask questions and to receive answers throughout this study.

If you have any questions about your rights as a research participant, contact Patient Relations at (902) 473-2133 or <u>healthcareexperience@nshealth.ca</u>

In the next part you will be asked if you agree (consent) to join this study. If the answer is "yes", please sign the form.

18. Consent Form Signature Page

I have reviewed all of the information in this consent form related to the study called:
    Individual Effects of Conflict Resolution: A Diary Study
I have been given the opportunity to discuss this study. All of my questions have been answered to my satisfaction.

This signature on this consent form means that I agree to take part in this study. I understand that I am free to withdraw at any time without affecting my conflict resolution program services.

_____   _____   _____
/ _____ / ____
Signature of Participant   Name (Printed)   Year   Month   Day*

_____   _____   _____
/ _____ / ____
Signature of Person Conducting   Name (Printed)   Year   Month   Day*
Consent Discussion

_____   _____   _____
/ _____ / ____
Signature of Investigator   Name (Printed)   Year   Month   Day*

Note: Please fill in the dates personally

I will be given a signed copy of this consent form.

Appendix T
Study IV Surveys
Pre-Intervention Survey
Please enter your full initials, and the day of birth. For example, if your name is John Eric Smith and you're born on the 17th, you would enter JES17: [　　　　　　]

What is your employment status?

☐ Permanent Full-time ☐Permanent Part-time ☐ Casual/Temporary
Age: [　　　　　　]
Sex:　☐Male ☐ Female ☐ Other
How long have you worked at NSHA (including prior to mergers)?
Years: [　　　　] Months: [　　　　　]
On average, how many hours do you work per week? [　　　　　]

Which category best describes your job at Nova Scotia Health Authority?
○　Nurse
○　Physician / surgeon
○　Allied health care (e.g., pharmacist, social worker, dietitian, health professional)
○　Office or clerical (e.g., clerk, equipment operator)
○　Support (e.g., food services, janitorial staff)
○　Confidential exclusion
○　Senior management (executive, director)
○　Health Services Manager (HSM)
○　Manager (other than HSM)
○　Supervisor
○　Research
○　Other

Do you identify yourself as part of a minority group or other diverse population (based on social, ethnic, sexual orientation, ability, or other characteristic)?
☐Yes ☐ No ☐ Prefer not to answer
Compared to a typical week, how would you rate the frequency of the following during the past week?

Response scale: 5-points from *Far less frequently* to *Far more frequently*
1. Relations with family
2. Connecting with friends
3. Volunteering
4. Exercise and activity
5. Healthy eating

Below are a number of emotions that a person might feel because of their job. Please rate how often any part of your job (e.g., your work, coworkers, supervisors, clients, pay) has made you feel that emotion. <u>Over the past week, my job made me feel...</u>

Response scale: 5-points from *Never* to *Always*
1. Angry
2. Anxious
3. Disgusted
4. Frightened
5. Furious

<u>Over the past week</u>, have you...

Response scale: 5-points from *Never* to *Always*

1. Been able to concentrate on whatever you're doing?
2. lost much sleep over worry?
3. felt that you are playing a useful part in things?
4. felt capable of making decisions about things?
5. felt constantly under strain?
6. felt you couldn't overcome your difficulties?
7. been able to enjoy your day-to-day activities?
8. been able to face up to your problems?
9. been feeling unhappy or depressed?
10. been losing confidence in yourself?
11. been thinking of yourself as a worthless person?
12. been feeling reasonably happy, all things considered?

<u>Over the past week</u>, how often have you experienced:

Response scale: 5-points from *Never* to *Daily*

1. back strain
2. headaches
3. repetitive strain injuries (injuries from repetitive work tasks)
4. gastro-intestinal discomfort (stomach/ digestive problems)
5. sleep disturbances (problems getting to sleep or staying asleep, poor quality sleep)
6. stress-related anxiety

While dealing with the work conflict over the past week, I:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. was able to control my temper and handle difficulties rationally
2. was quite capable of controlling my own emotions
3. was always able to calm down quickly when I was very angry
4. had good control over my own emotions

Below are several questions regarding the extent to which you think about the negative experiences of work conflict. Please check the box that best represents your answer to each question. Over the past week, how often have you…

Response scale: 4-points from *Never* to *Often*
1. replayed negative aspects of the work conflict in your mind even after you left work?
2. found yourself preoccupied with the negative aspects of the work conflicts even after you left work?
3. thought back to bad things related to work conflict even when you were away from work?
4. kept thinking about the negative conflict that happened at work even when you were away from work?

Please rate the following statements: Over the past week...

Response scale: 5-points from *Does not describe me well* to *Describes me very well*
1. I found it difficult to see things from the "other person's" point of view
2. When I was sure I was right about something, I didn't waste much time listening to other people's arguments
3. I believed that there were two sides to the story and tried to look at them both
4. When I was upset at someone, I tried to "put myself in their shoes" for a while
5. I tried to look at everybody's side of the disagreement before I made a decision
6. I tried to understand my coworkers better by imagining how things look from their perspective
7. Before criticizing someone, I tried to imagine how I would feel if I were in their place
8. Other people's misfortunes did not disturb me a great deal
9. I had tender, concerned feelings for people less fortunate than me
10. When I saw someone being treated unfairly, I didn't feel very much pity for them
11. I was often quite touched by things that I saw happen
12. I would have described myself as a pretty soft-hearted person
13. I didn't feel very sorry for other people when they were having problems
14. When I saw someone being taken advantage of, I felt kind of protective towards them

To help myself manage this work conflict over the past week, I…

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. Imagined how my choices will effect me a year from now
2. Thought about how important this conflict will seem in a week
3. Looked at my options for resolving the conflict from every angle
4. Considered how the conflict would be different in another workplace
5. Imagined myself in a different space or setting
6. Thought how someone I respect would handle this situation different from me
7. Imagined how a role model would behave during this conflict
8. Wondered how others would manage the conflict differently than me
9. Asked myself 'what if' questions about various options for dealing with the conflict
10. Wondered how I will act as the conflict situation changes
11. Thought creatively about ways me to change the conflict situation

Over the past 7 days, while dealing with the conflict, I have:

Response scale: 5-points from *Far Too Little* to *Far Too Much*

1. Collaborative or Integrating
2. Accommodating or Obliging
3. Avoiding
4. Compromising
5. Competing or Dominating

Social Interaction Quality

Over the past week, have you had contact with the following people or groups? If so, how did the contact make you feel?

Response scale: 5-points from *Much Worse* to *Much Better* or *No Contact*

1. The person(s) you are in conflict with?
2. The Conflict Specialist?
3. The Conflict Program Coordinator?
4. Your supervisor, lead, or manager?
5. Coworkers?
6. Friends at work?
7. Friends at home?
8. Family?
9. Spouse?
10. Other People?

The items below prompt you to think about the conflict you are currently experiencing at work. Consider you and the person(s) you are in conflict with over the past week:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. We argued with one another
2. We were rude or disrespectful toward one another
3. At least one of us raised our voice in frustration or anger
4. I have felt angry toward the other person.
5. The conflict situation has been extremely frustrating for me.
6. It has felt like something was very wrong between me and the other person.
7. My communication with the other person has felt strained.
8. I have felt afraid of losing things that were important to me.
9. I have worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.
10. I have felt isolated from my co-workers as a result of this conflict.

Comments
Please provide any information that you think may be important or helpful to this research.

[ ]

Thank You
Please press the 'submit' button below to complete your diary entry.

Daily Diary Survey

Please enter your full initials, and the day of birth:
For example, if your name is John Eric Smith and you're born on the 17th, you would enter JES17:

How much did you work over the past 24 hours?
○ Not at all: I did NOT work over the past 24 hours
○ I worked this many hours: _____

What shift did you work over the past 24 hours?
Shift   ○ Day Shift
        ○ Evening Shift
        ○ Night Shift
        ○ Other

Below are a number of emotions that a person might feel because of their job. Please rate how often any part of your job (e.g., your work, coworkers, supervisors, clients, pay) has made you feel that emotion. <u>Over the past 24 hours, my job made me feel...</u>

1. Angry
2. Anxious
3. Disgusted
4. Frightened
5. Furious

<u>Over the past 24 hours</u>, how often have you experienced:

Response scale: 5-points from *Never* to *Daily*

1. headaches
2. gastro-intestinal discomfort (stomach/ digestive problems)
3. sleep disturbances (problems getting to sleep or staying asleep, poor quality sleep)
4. stress-related anxiety

Over the past 24 hours, have you....

Response scale: 5-points from *Never* to *Always*

1. lost much sleep over worry?
2. felt constantly under strain?
3. felt you couldn't overcome your difficulties?
4. been feeling unhappy or depressed?
5. been losing confidence in yourself?

6. been thinking of yourself as a worthless person?

Compared to a typical day, how would you rate the frequency of the following during the past 24 hours?

Response scale: 5-points from *Far Less Frequently* to *Far More Frequently*
1. Relations with family
2. Connecting with friends
3. Volunteering
4. Exercise and activity
5. Healthy eating

The items below prompt you to think about the conflict you are currently experiencing at work. Consider you and the person(s) you are in conflict with over the past 24 hours.

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. We argued with one another
2. We were rude or disrespectful toward one another
3. At least one of us raised our voice in frustration or anger
4. I have felt angry toward the other person.
5. The conflict situation has been extremely frustrating for me.
6. It has felt like something was very wrong between me and the other person.
7. My communication with the other person has felt strained.
8. I have felt afraid of losing things that were important to me.
9. I have worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.
10. I have felt isolated from my co-workers as a result of this conflict.

Social Interaction Quality

Over the past 24 hours, have you had contact with the following people or groups? If so, how did the contact make you feel?

Response scale: 5-points from *Much Worse* to *Much Better* or *No Contact*
1. The person(s) you are in conflict with?
2. The Conflict Specialist?
3. Your supervisor, lead, or manager?
4. People at work?
5. Friends at home?
6. Family?

Please provide any information that you think may be important or helpful to this research:

Thank You

Weekly Diary Survey

While dealing with the work conflict over the past week, I:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. was able to control my temper and handle difficulties rationally
2. was quite capable of controlling my own emotions
3. was always able to calm down quickly when I was very angry
4. had good control over my own emotions

Below are several questions regarding the extent to which you think about the negative experiences of work conflict. Please check the box that best represents your answer to each question. Over the past week, how often have you…

Response scale: 4-points from *Never* to *Often*
1. replayed negative aspects of the work conflict in your mind even after you left work?
2. found yourself preoccupied with the negative aspects of the work conflicts even after you left work?
3. thought back to bad things related to work conflict even when you were away from work?
4. kept thinking about the negative conflict that happened at work even when you were away from work?

Please rate the following statements: Over the past week...

Response scale: 5-points from *Does not describe me well* to *Describes me very well*
1. I found it difficult to see things from the "other person's" point of view
2. When I was sure I was right about something, I didn't waste much time listening to other people's arguments
3. I believed that there were two sides to the story and tried to look at them both
4. When I was upset at someone, I tried to "put myself in their shoes" for a while
5. I tried to look at everybody's side of the disagreement before I made a decision
6. I tried to understand my coworkers better by imagining how things look from their perspective
7. Before criticizing someone, I tried to imagine how I would feel if I were in their place
8. Other people's misfortunes did not disturb me a great deal
9. I had tender, concerned feelings for people less fortunate than me
10. When I saw someone being treated unfairly, I didn't feel very much pity for them
11. I was often quite touched by things that I saw happen
12. I would have described myself as a pretty soft-hearted person
13. I didn't feel very sorry for other people when they were having problems
14. When I saw someone being taken advantage of, I felt kind of protective towards them

To help myself manage this work conflict over the past week, I…

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. Imagined how my choices will effect me a year from now
2. Thought about how important this conflict will seem in a week
3. Looked at my options for resolving the conflict from every angle
4. Considered how the conflict would be different in another workplace
5. Imagined myself in a different space or setting
6. Thought how someone I respect would handle this situation different from me
7. Imagined how a role model would behave during this conflict
8. Wondered how others would manage the conflict differently than me
9. Asked myself 'what if' questions about various options for dealing with the conflict
10. Wondered how I will act as the conflict situation changes
11. Thought creatively about ways me to change the conflict situation

Over the past 7 days, while dealing with the conflict, I have:

Response scale: 5-points from *Far Too Little* to *Far Too Much*

1. Collaborative or Integrating
2. Accommodating or Obliging
3. Avoiding
4. Compromising
5. Competing or Dominating

Social Interaction Quality

Over the past week, have you had contact with the following people or groups? If so, how did the contact make you feel?

Response scale: 5-points from *Much Worse* to *Much Better* or *No Contact*
1. The person(s) you are in conflict with?
2. The Conflict Specialist?
3. Your supervisor, lead, or manager?
4. People at work?
5. Friends at home?
6. Family?

Comments
Please provide any information that you think may be important or helpful to this research:

Thank You

Post-Intervention Survey

Please enter your full initials, and the day of birth:
For example, if your name is John Eric Smith and you're born on the 17th, you would enter JES17:

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Compared to a typical day, how would you rate the frequency of the following during the past week?

Response scale: 5-points from *Far Less Frequently* to *Far More Frequently*

1. Relations with family
2. Connecting with friends
3. Volunteering
4. Exercise and activity
5. Healthy eating

Below are a number of emotions that a person might feel because of their job. Please rate how often any part of your job (e.g., your work, coworkers, supervisors, clients, pay) has made you feel that emotion. <u>Over the past week, my job made me feel...</u>

1. Angry
2. Anxious
3. Disgusted
4. Frightened
5. Furious

<u>Over the past week</u>, have you...

Response scale: 5-points from *Never* to *Always*

1. been able to concentrate on whatever you're doing?
2. lost much sleep over worry?
3. felt that you are playing a useful part in things?
4. felt capable of making decisions about things?
5. felt constantly under strain?
6. felt you couldn't overcome your difficulties?
7. been able to enjoy your day-to-day activities?
8. been able to face up to your problems?
9. been feeling unhappy or depressed?
10. been losing confidence in yourself?
11. been thinking of yourself as a worthless person?
12. been feeling reasonably happy, all things considered?

Over the past week, how often have you experienced:

Response scale: 5-points from *Never* to *Daily*

1. back strain
2. headaches
3. repetitive strain injuries (injuries from repetitive work tasks)
4. gastro-intestinal discomfort (stomach/ digestive problems)
5. sleep disturbances (problems getting to sleep or staying asleep, poor quality sleep)
6. stress-related anxiety

While dealing with the work conflict over the past week, I:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. was able to control my temper and handle difficulties rationally
2. was quite capable of controlling my own emotions
3. was always able to calm down quickly when I was very angry
4. had good control over my own emotions

Below are several questions regarding the extent to which you think about the negative experiences of work conflict. Please check the box that best represents your answer to each question. Over the past week, how often have you…

Response scale: 4-points from *Never* to *Often*
1. replayed negative aspects of the work conflict in your mind even after you left work?
2. found yourself preoccupied with the negative aspects of the work conflicts even after you left work?
3. thought back to bad things related to work conflict even when you were away from work?
4. kept thinking about the negative conflict that happened at work even when you were away from work?

Please rate the following statements: Over the past week...

Response scale: 5-points from *Does not describe me well* to *Describes me very well*
1. I found it difficult to see things from the "other person's" point of view
2. When I was sure I was right about something, I didn't waste much time listening to other people's arguments
3. I believed that there were two sides to the story and tried to look at them both
4. When I was upset at someone, I tried to "put myself in their shoes" for a while
5. I tried to look at everybody's side of the disagreement before I made a decision
6. I tried to understand my coworkers better by imagining how things look from their

    perspective
7. Before criticizing someone, I tried to imagine how I would feel if I were in their place
8. Other people's misfortunes did not disturb me a great deal
9. I had tender, concerned feelings for people less fortunate than me
10. When I saw someone being treated unfairly, I didn't feel very much pity for them
11. I was often quite touched by things that I saw happen
12. I would have described myself as a pretty soft-hearted person
13. I didn't feel very sorry for other people when they were having problems
14. When I saw someone being taken advantage of, I felt kind of protective towards them

Over the past 7 days, while dealing with the conflict, I have:

Response scale: 5-points from *Far Too Little* to *Far Too Much*

1. Collaborative or Integrating
2. Accommodating or Obliging
3. Avoiding
4. Compromising
5. Competing or Dominating

Conflict Description

This survey is confidential. If you provide names, they will be removed from your response before we analyze your responses. Please briefly describe the conflict, including what happened, (i.e., events/actions taken) the thoughts and feelings you experienced, and the impact the conflict is having on you (such as effects to your work, well-being, social life, mental and emotional health, etc.).

Even if you were in conflict with multiple people in this situation, please consider the person you were most in conflict (the disputant) with for the following questions.

Disputant's Sex: ☐Male ☐ Female ☐ Other
Disputant's Age:
○ 100 or older

Disputant's Job Position:

○ Higher than mine (i.e., they were my supervisor, or had a higher position in a different area)
○ Equal to mine (i.e., they were my co-worker, or had a similar position in a different area)
○ Below mine (i.e., they were my subordinate, or had a lower position in a different area)
○ Other (please specify below)

Compared to the person(s) I am in conflict with, in my workplace:
- ○ I have more power
- ○ I have less power
- ○ I have equal power

Social Interaction Quality

Over the past week, have you had contact with the following people or groups? If so, how did the contact make you feel?

Response scale: 5-points from *Much Worse* to *Much Better* or *No Contact*

1. The person(s) you are in conflict with?
2. The Conflict Specialist?
3. The Conflict Program Coordinator?
4. Your supervisor, lead, or manager?
5. Coworkers?
6. Friends at home?
7. Family?
8. Others?

The items below prompt you to think about the conflict you are currently experiencing at work. Consider you and the person(s) you are in conflict with over the past week:

Response scale: 5-points from *Strongly Disagree* to *Strongly Agree*

1. We argued with one another
2. We were rude or disrespectful toward one another
3. At least one of us raised our voice in frustration or anger
4. I have felt angry toward the other person.
5. The conflict situation has been extremely frustrating for me.
6. It has felt like something was very wrong between me and the other person.
7. My communication with the other person has felt strained.
8. I have felt afraid of losing things that were important to me.
9. I have worried that people were saying negative things behind my back, spreading bad gossip or rumours about me.
10. I have felt isolated from my co-workers as a result of this conflict.

Comments
Please provide any information that you think may be important or helpful to this research.

Thank you for your participation in this study on work conflict.

The information you provided will be used to complete a research project which aims to share emerging knowledge with a broad research and practice community through seminars, conferences, presentations, and/or journal articles.

It can be uncomfortable answering questions about work conflict. These reactions are usually temporary and fade in a short time. However, if you are experiencing unpleasant reactions that persist, you may wish to contact the student investigator or the research supervisor (see contact information below), your EAP, family physician, or other trusted advisor.

Please be assured that all data will remain anonymous and confidential. Diane LeBlanc will contact you shortly after you have completed the final survey to provide feedback on your personal strengths regarding work conflict management.

This project was reviewed by and received research ethics approval through the Nova Scotia Health Authority Research Ethics Board. Thank you very much for your time. We very much appreciate your contribution to our research. If you have any questions regarding this study please email the student researcher or supervisor.

Student Investigator	Faculty Supervisor
Diane LeBlanc	Dr. Debra Gilin Oore
PhD Candidate	Assistant Professor
Saint Mary's University	Saint Mary's University
Department of Psychology	Department of Psychology
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diane.leblanc@smu.ca	debra.gilin@smu.ca

REB # NSHA-RS/2016-073

Again, thank you for your participation. To complete the survey and submit your responses click the " Submit " button below.

Conflict Specialist Survey

Client Name:

Date:

How many times did you meet with this this participant for the
focal conflict?

Intervention Type
- ○ Training
- ○ If training, how many hours _____
- ○ Conflict Coaching
- ○ Mediation
- ○ Other, please specify _____

Topics Discussed:

	Not at all	Touched on	A major focus
The other person's perspective or story	○	○	○
The other person's emotions or feelings	○	○	○
Seeing things from a distance (e.g., passing of time, co-worker or other organizational members' viewpoints, metaphors, zooming out to see a bigger picture, etc.)	○	○	○
Conflict styles (e.g., collaborative, competitive)	○	○	○
Regulating or managing own emotions, normalizing physiological and psychological reactions	○	○	○
Reducing negative thoughts or unproductive ruminations.	○	○	○

Conflict Intensity
How intense was this conflict for the participant?
- ○ Not at all
- ○ Mildly
- ○ Somewhat
- ○ Very
- ○ Extremely

Focal Conflict Severity

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
At least one disputant argued with the other	○	○	○	○	○
At least one disputant was rude or disrespectful toward the other	○	○	○	○	○
At least one of the disputants raised voices in frustration or anger	○	○	○	○	○
Your client felt angry toward the other person.	○	○	○	○	○
The conflict situation has been extremely frustrating for your client.	○	○	○	○	○
Your client has felt like something was very wrong between them and the other person.	○	○	○	○	○
Your client's communication with the other person was strained.	○	○	○	○	○
Your client felt afraid of losing things that were important.	○	○	○	○	○
Your client worried that people were saying negative things behind his/her back, spreading bad gossip or rumours.	○	○	○	○	○
Your client felt isolated from co-workers as a result of this conflict.	○	○	○	○	○

Participant's Regulation of Emotion
Based on your interactions with the participant, please rate his/her tendency to regulate their emotions:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. She/he is able to control his/her temper and handle difficulties rationally	○	○	○	○	○
2. She/he is quite capable of controlling my her/his emotions	○	○	○	○	○
3. She/he can always calm down quickly when she/he is very angry	○	○	○	○	○
4. She/he has good control over her/his own emotions	○	○	○	○	○

Participant's Psychological Distancing
When the participant is faced with a difficult problem or decision, he/she would

	Does not describe the participant well	Describes the participant somewhat	Describes the participant very well
Imagine how his/her choices would affect her a year from now	○	○	○
Think about how important this conflict will seem in a week	○	○	○
Look at his/her options for resolving the conflict from every angle	○	○	○
Consider how the conflict would be different in another workplace	○	○	○
Imagine him/herself in a different space or setting	○	○	○
Think about how someone he/she respects would handle this situation differently from him/her	○	○	○
Imagine how a role model would behave during this conflict	○	○	○
Wonder how others would manage the conflict differently than him/her	○	○	○
Ask 'what if' questions about various options for dealing with the conflict	○	○	○
Wonder how he/she will act as the conflict situation changes	○	○	○
Think creatively about ways to change the conflict situation	○	○	○

Participant's Rumination
Based on your interactions with the participant, please rate his/her tendency to think about the negative experiences of work conflict over the past week.

	Never	Rarely	Sometimes	Often
replay negative work events in his/her mind even after he/she left work?	○	○	○	○
find him/herself preoccupied with the negative aspects of the job even after he/she left work?	○	○	○	○
think back to the bad things that happened at work even when away from work?	○	○	○	○
keep thinking about the negative things that happened at work even when he/she was away from work?	○	○	○	○

Participant's Perspective Taking and Empathic Concern

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The participant found it difficult to see things from the "other person's" point of view.	○	○	○	○	○
If he/she was sure he/she was right about something, the participant didn't waste much time listening to other people's arguments.	○	○	○	○	○
The participant believed that there were two sides to the story and tried to look at them both.	○	○	○	○	○
When he/she was upset at someone, the participant tried to "put herself in their shoes" for a while.	○	○	○	○	○
The participant tried to look at everybody's side of the disagreement before he/she made a decision.	○	○	○	○	○
The participant tried to understand co-workers better by imagining how things look from their perspective.	○	○	○	○	○
Before criticizing someone, the participant tried to imagine how he/she would feel if she were in their place.	○	○	○	○	○
Other people's misfortunes would not have disturbed the participant a	○	○	○	○	○

great deal.

The participant had tender, concerned feelings for people less fortunate.	○	○	○	○	○
If the participant saw someone being treated unfairly, he/she wouldn't feel very much pity for them.	○	○	○	○	○
The participant was often quite touched by things that he/she saw happen.	○	○	○	○	○
The participant would describe him/herself as a pretty soft-hearted person.	○	○	○	○	○
The participant didn't feel very sorry for other people when they were having problems.	○	○	○	○	○
When the participant saw someone being taken advantage of, he/she would feel kind of protective towards them	○	○	○	○	○

Participant Conflict Style
Based on your interactions with the participant, please rate their habitual use of conflict styles.

	Far Too Little	Too Little	About Right	Too Much	Far Too Much
Collaborative or Integrating	○	○	○	○	○
Accommodating or Obliging	○	○	○	○	○
Avoiding	○	○	○	○	○
Compromising	○	○	○	○	○
Competing or Dominating	○	○	○	○	○

Comments
Please provide any information that you think may be important or helpful to this research:

Thank You
You have completed this survey. Please press the 'submit' button below.

Appendix U
Study IV Data Cleaning

The following table describes Study IV data collection problems and actions taken to

bring cases into better alignment with the ideal data collection approach.

ID#	Data Collection Problem	Data Cleaning Action
5	The participant postponed her intake appointment by one month but data collection was not adjusted: The post-intake diary entry was completed prior to intake.	Coded post-intake diary entry as missing data.
10	The participant intake appointment occurred on Diary Day 4 of data collection but the pre-diary study was completed as scheduled.	Moved Diary Day 4 data to post-intake.
13	The participant completed the post-intake and post-intervention surveys prior to intake and intervention.	Coded post-intake and post-intervention data as missing.
20	The participant completed the post-intake diary entry prior to intake and completed one post-intervention daily entry prior to intervention.	Coded post-intake survey as missing and moved post-intervention predictor and outcome data to pre-intervention
21	The participant rescheduled the intervention but all diary entries and post surveys were complete.	Treat case as 'intake only'