

available at www.sciencedirect.com

# **ScienceDirect**





# Consideration of future consequences and decision-making patterns as determinants of conflict management styles



# Divya Upadhyay

Organisational Behaviour & Human Resources Management, Indian Institute of Management Bangalore, Bannerghatta Road, Bangalore, India

Received 9 January 2018; revised form 3 October 2018; accepted 6 March 2021; Available online 23 March 2021

#### **KEYWORDS**

Consideration of future consequences; Conflict management style; Decision-making pattern **Abstract** This research examines the influence of temporal considerations on preferences for different conflict management styles. It also explores the mediating effect of different decision-making patterns in determining these styles. This research proposes that the extent to which individuals consider future consequences of their current activities significantly influences their decision-making patterns and consequently, their preference for different conflict management styles which could be cooperative or competitive in nature. Specifically, this research found strong support for high consideration of future consequences (CFC) leading to a reduced preference for competitive behaviour, and weak support for high CFC leading to increased preference for cooperative behaviour.

© 2021 Published by Elsevier Ltd on behalf of Indian Institute of Management Bangalore. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

### Introduction

Conflict is common in social and professional life. By definition, "Conflict is the perception of differences of interests amongst people" (Thompson, 1998, p. 4). Conflicts are inevitable when decisions are taken, and the best way to deal with conflicts is to manage them. The way in which conflict is approached determines whether it is constructive or destructive (Deutsch & Coleman, 2000). Conflicts can be constructive, bringing about positive change; or destructive, leading to losses, pain and misery (Kriesberg, 1998). Given the high stakes often involved in managing conflicts, it is

important to understand the psychology behind individuals' preferences for different conflict management styles.

An individual's conflict management style is a behavioural orientation of how to approach and handle conflict, with individuals choosing a pattern of principles to guide them through the conflict process. These patterns evolve into actions and reactions that become their "style" (Thomas, 1976). Ample research focusses on the understanding of how individuals approach conflicts (Blake & Mouton, 1964; Follet, 1940; Rahim, 2002; Thomas, 1988, 1992). The importance of cooperation and competition as two main processes that underlie conflict resolution is well documented (e.g., Deutsch, 1973; Thomas, 1988). Competitive ways emerge when the attainment of one party's goals prevents that of the other party's. Cooperative ways emerge when both parties can attain their

E-mail address: Upadhyay24divya@gmail.com

goals simultaneously. Research has also shown that individuals are quite consistent in their modes of conflict resolution, within and across content domains, as well as across both real and hypothetical interpersonal conflicts (Sternberg & Dobson, 1987; Sternberg & Soriano, 1984). Further, there are widespread individual differences in the preferred styles of conflict management and these differences can be predicted by certain intellectual and personality characteristics (Sternberg & Soriano, 1984; Terhune, 1970).

The present article contributes to the micro-foundations of conflict management by focussing on the motivational antecedent and processes that lead to preferences of competitive or cooperative styles in the management of conflict. It introduces consideration of future consequences (CFC) to the study of conflict management and investigates its effects on the cooperative versus competitive conflict management styles. The focus in this article is on cooperation (concern for self as well as others) and competition (concern only for self) as these are two fundamental dimensions of conflict management (Deutsch, 1973; Thomas, 1988), and they can be theoretically linked to CFC.

The present research CFC focusses on (Strathman, Gleicher, Boninger & Edwards, 1994) to investigate systematic effects of future time perspective on cooperative versus competitive approaches to conflict management. Individual differences in the CFC have been shown to predict a wide range of personalities and socially significant behaviours (Joireman, Sprott & Spangenberg, 2005). However, to my knowledge, no published work has examined how individual differences in CFC relate to people's preferences for cooperative or competitive styles of managing conflict despite the clear relevance of the CFC construct within this domain. Drawing from the classic work on decision making patterns by Janis and Mann (1977), the present research also tests the notion that different decision-making patterns can mediate the relationship between CFC and conflict management styles.

## Consideration of future consequences

Consideration of future consequences reflects "...the extent to which people consider the potential distant outcomes of their current behaviours and the extent to which they are influenced by these potential outcomes" (Strathman et al., 1994, p.743). Research findings suggest that individuals with low CFC give a high degree of importance to the immediate consequences of their behaviour, while individuals with high CFC give a high degree of importance to the future consequences of their behaviour (Strathman et al., 1994). When individuals do not consider the future consequences of their current choice they may think that immediate goals are more important and are strongly influenced by the immediate consequences of their actions.

Consideration of future consequences captures future thoughts and has consequences for attitudes and behaviour. For instance, researchers have applied CFC and its implications in a wide variety of behaviours (such as fiscal responsibility (Joireman et al., 2005), use of tobacco and alcohol (Strathman et al., 1994), aggression (Joireman, Anderson & Strathman, 2003), physical exercise (Ouellette, Hessling,

Gibbons, Reis-Bergan & Gerrard, 2005) and health-related behaviour (Murphy & Dockray, 2018)). In the same vein, past research suggests that future thinking is important for anticipating future needs and that leads to better understanding of one's behaviour (Rebetez, Barsics, Rochat, D'Argembeau & Van der Linden, 2016).

#### **Decision-making patterns**

Leykin and Derubeis (2010) consider "...decision-making styles to be stable, trait-like patterns of approach to situations that call for a decision" (p. 506). These decision-making styles represent the likelihood of behaviour across situations and domains. For example, the vigilant decisionmaking processes are characterised by thorough consideration of all available alternatives, re-examination and review of data before making a decision. In contrast, hypervigilant decision-making strategies are characterised by a consideration of limited alternatives, rapid evaluation of data and selection of a solution without extensive review or reappraisal (Mann, Burnett & Radford, 1997). Janis and Mann (1977) stated that a predisposition to use a particular decision-making pattern is highly dependant on personality variables, such as autonomy-dependence, locus of control, optimism-pessimism, self-efficacy and other characteristics of the decision-maker, such as habitual coping style and information processing capabilities. Furthermore, it was found that decision-making styles are associated with a variety of behaviours and attitudes, for example, in choosing a college (Galotti, 1995), and choice of a birth attendant by pregnant women (for review, see Galotti, 2007).

In what follows, I discuss the proposed model, of how CFC influences conflict management styles through the mediating effect of decision-making patterns as shown in Fig. 1. To better explicate how individuals' preferences for conflict management styles get influenced by CFC and different decision-making patterns, I summarise past work relevant to this domain. Also, a model is proposed based on an integrative model of CFC (see Joireman, Strathman & Balliet, 2006) and the justification for this model is discussed. Then, I report

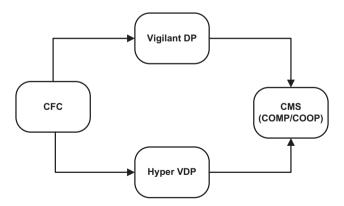


Fig. 1 Proposed motivational model for conflict management styles.

Note: CFC = Consideration of future consequences; Vigilant DP = Vigilant decision-making patterns; Hyper VDP = Hyper vigilant decision-making patterns, CMS = Conflict management styles; Coop = Cooperative Conflict Management Styles; Comp = Competitive Conflict Management Styles.

two studies that test the proposed hypotheses and finally conclude with my findings. Study 1 examines the main effect between CFC and conflict management styles. In study 2, I examine the mediating effect of different decision-making patterns on CFC and conflict management styles.

# The present research: hypothesised model

Several models have been developed to guide the construct of CFC which allows the focus on the processes involved in temporal decision-making (see Joireman King, 2016). Theoretically, the present research draws and contributes towards an integrative model of CFC (see Joireman et al., 2006). This integrative model postulates a range of inter-temporal and goal-related mental processes as mediators between CFC and eventual downstream decisions and behaviour. Taking it further in the present research, the proposed model predicts that the relationship between CFC and conflict management styles will be mediated by vigilant and hyper-vigilant decision-making patterns. I propose that the CFC measure will be positively correlated with vigilant decision-making patterns and negatively with hyper-vigilant decision-making patterns. In this research, I draw from the literature that considering future consequences of one's current behaviour make an individual focus on the long-term benefits of mutual cooperation (Wolf et al., 2009). People when managing conflicts are not simply resolving or managing an immediate situation, but are also establishing patterns of behaviour that may apply in the future; in other words, these patterns are more likely to influence distal outcomes as well.

#### CFC -Conflict management styles

In line with these ideas, Pruitt and Kimmel (1977) reported that cooperative behaviours are mostly the outcome of longrange thinking. They argue that how people behave at any given point of time depends on whether they take a short- or long-term perspective. Similarly, Axelrod (1984) discussed the importance of future interactions in promoting cooperation in the prisoner's dilemma game (PDG). Axelrod argued that cooperation emerges in the PDG when players realise that they might meet again in the future. Considering the expectation of future interactions, Insko et al. (2001) in their empirical work found that the expectation of multiple interactions, as opposed to a single interaction, shifts groups' orientations from the short-term to the long-term, and this increases cooperation. Several lines of theory and research support this link; for instance social interdependence theory (Kelley & Thibaut, 1978; Rusbult & Van Lange, 1996) assumes that on the basis of temporal and social considerations, interpersonal relationships are enhanced and individuals transform impulsive preferences into more pro-socially beneficial preferences. Previous research suggests that individuals who score high on CFC also score high on delay of gratification, hope, optimism (Strathman et al., 1994) and general future time orientation (Strathman et al., 1994; Zimbardo & Boyd, 1999), and ethical threshold (Robbins, 2018), and low on the presenthedonistic and present-fatalistic subscales of the Zimbardo Time Perspective Inventory (ZTPI) (Zimbardo & Boyd, 1999). In line with the present research, individuals who score high on CFC also report a lower level of impulsiveness, hostility and aggression (Joireman et al., 2003). Aggressive individuals focus on the immediate consequences of their hostile behaviour, which they perceive to be beneficial (such as winning an argument), while not considering the future consequences of their behaviour, which may be damaging to their relationships. On a similar note, in a recent study, Zhao, Wei, Chen and Xia (2018) found the buffering effects of CFC in reducing aggression related to psychopathy. Another study indicated that CFC predicts willingness to engage in prosocial organisational behaviour (Joireman, Daniels, George-Falvy & Kamdar, 2006). Drawing from these perspectives, I build hypothesis 1 based on the idea that individuals considering long-term consequences of their current actions may result in preferring a cooperative approach over competitive while managing their conflict.

# Mediating effect of decision-making patterns

The present research proposes that CFC has a major influence on decision-making patterns. People high on CFC will be more vigilant and less hyper-vigilant in their decisionmaking patterns. High CFC individuals will consider the distal outcome of their current choice and are therefore more likely to invest time in assimilating and seeking relevant information. High CFC individuals will evaluate the consequences of their current actions and think carefully before making a choice. On a related note, Strathman et al. (1994) found that scores on the CFC scale were significantly positively related to scores on the Big Five's personality scale extraversion, emotional stability, agreeableness, conscientiousness, and openness to experience (Hurtz & Donovan, 2000), particularly the conscientiousness dimension. Conscientiousness is the trait that denotes being thorough, organised, orderly, efficient, plan orientated, systematic and self-disciplined (Trapnell & Wiggins, 1990). Thus, drawing from this perspective, I propose that people with high CFC will be high on vigilant decision-making patterns.

This research also proposes that people with high CFC will be negatively correlated with hyper-vigilant measure. Janis and Mann (1977) defined hyper-vigilance in terms of "...disorganized mental activity where thinking becomes more simplistic" (p. 51). Hyper-vigilant decision-makers impulsively jump upon solutions that seem to assure immediate relief. Johnston, Driskell and Salas (1997) suggested that those using hyper-vigilant patterns would report less mental effort than those using the more organised vigilant strategy. Previous research has established a link between CFC and impulsiveness (Joireman et al., 2003). Impulsiveness is the tendency to act without thinking or reflecting (Zuckerman, Kuhlman, Joireman, Teta & Kraft, 1993) exhibiting a lack of self-control. Relatedly, being impulsive can be seen as acting in the interest of short-term outcomes often at the expense of long-term consequences (Ainslie & Haslam, 1992; Thaler, 1991; Trope & Fishbach, 2000; Wertenbroch, 1998). Hence, impulsiveness triggers immediate outcomes (such as short-term temporary gains). In contrast, self-control activates factors that draw attention to long-

term outcomes (such as possible win-win strategies in negotiations) and are likely to suppress impulsive behaviours. Thus, linking CFC and hyper-vigilant decision-making patterns, it is expected that people with high CFC will consider potential distant outcomes of their current behaviour and may not overlook the full range of choices they have in front of them before making decisions.

In this section, the link between decision-making patterns and conflict management styles is traced. Dosnon (1996) noted that decision-making styles correspond to personal tendencies. Decision-makers exhibit individual differences in habits and also in basic cognitive abilities: information processing, self-evaluation and self-control. which have a consistent impact on the pattern of response to different situations. Both decision-making and conflict management styles have a significant role to play in organisational settings. For healthy growth of organisations, it is important for executives to manage conflicts in a proper way and take appropriate decisions at the right time (Shabbir, Atta & Adil, 2014), Putnam (1986) argued that for effective management of conflict, it is important to explore and have a close scrutiny of decision options. Thus, I reason that decision-making patterns from a trait perspective will influence individuals' preferences for conflict management style. From a theoretical perspective, integrative conflict management is possible through a careful exploration of the interests of both sides (parties) (Friedman, Tidd, Currall & Tsai, 2000). It is reasoned that individuals with high vigilant decision-making patterns will evaluate and search various options carefully before choosing any particular conflict management style (such as confronting differences, sharing ideas and information and trying to search for integrative solutions) and also do a systematic and thorough consideration of all available alternatives considering the interests of both parties. Preference for a cooperative approach requires sufficient time to evaluate each alternative before choosing appropriate ways to resolve conflict. While choosing competitive conflict management styles (such as using physical force or coercion directed at the other party), decision-makers frantically search for ways to provide immediate solutions to conflict, without spending much time and effort in considering other constructive ways to resolve them; they may quickly reach conclusions without reviewing the situation thoroughly. Individuals who are prone to hyper-vigilant decision-making patterns are more likely to display impulsive behaviour (Janis & Mann, 1977). Drawing from past research (Janis & Mann, 1977; Joireman et al., 2003), this research suggests that impulsive individuals act quickly on their urges and are more likely to indulge in emotionally reactive behaviour without considering the future consequences of their actions. People who are more impulsive are more likely to display aggressive behaviour as a means of achieving immediate goals often at the expense of future benefits. Past research and theory support the relationship that aggressiveness may cause people to prefer more competitive approaches when managing conflict. For example, from the perspective of evolutionary psychology, Buss and Shackelford (1997) assume that humans, more than any other species, have the tendency to store resources for their survival. In addition to social exchange and stealing, people also store or gain resources through aggressive means. For example, one can use physical force to take resources from others (see Buss & Shackelford, 1997). As a result, impulsive individuals may foster more destructive solutions to interpersonal conflicts with less anticipation of future consequences of their actions (Deluty, 1985; Guerra & Slaby, 1989).

Thus, drawing from the past literature, it is hypothesised that vigilant decision-making patterns will be positively linked to the cooperative approach and hyper-vigilant strategies will be positively linked to the competitive approach. Hence, hypothesis 2 proposes that the relationship between CFC and preferred conflict management styles is mediated by vigilant and hyper-vigilant decision-making.

The proposed model, therefore, has two potential paths linking CFC to cooperative or competitive conflict management styles (Fig. 1). One path is mediated by vigilant decision-making patterns and the other path by hyper-vigilant decision-making patterns.

In summary, the following hypotheses are proposed:

Hypothesis 1: The higher the level of CFC, the greater the preference for cooperative and lower the preference for competitive conflict management styles.

Hypothesis 2: The relationship between CFC and preferred conflict management styles is mediated by vigilant and hyper-vigilant decision-making. Two studies designed to test the proposed hypotheses are reported here:

## Study 1

Study 1was designed to test hypothesis 1: the higher the level of CFC, the greater the preference for cooperative and lower the preference for competitive conflict management styles. In this study I aim to establish the main effect between CFC and conflict management styles. To measure CFC, I administered a CFC-14 scale (Joireman, Shaffer, Balliet & Strathman, 2012) to participants. The following CFC scale and conflict management styles, adapted from Sternberg and Dobson's (1987) work, were presented to participants, to measure their conflict management styles.

#### **Participants**

Participants were recruited online using Amazon's Mechanical Turk (www.mturk.com; Buhrmester, Kwang & Gosling, 2011). A total of 148 participants (male = 95 and female = 53) ranging in age from 20 to 61 years (M = 28.71, SD = 7.75) participated in this study. All the participants were Indian.

#### **Procedure**

The participants completed a demographic survey, followed by responses on CFC-14 and conflict management styles. Participants were given four styles of managing conflicts. They rated each given style of managing conflict on a seven point rating scale from 'do not like at all' to 'my preferred style' based on their personal preferences. These measures were designed on the Qualtrics' online survey platform (https://

www.qualtrics.com/). Each participant was paid \$0.20 for participating in the survey.

#### Measures

The questionnaire battery consisted of the following:

Consideration of future consequences scale. The CFC-14 (Joireman et al., 2012) has 14 items, and it measures individual difference to the extent to which people consider distant versus immediate consequences of potential behaviours(e.g. 'I am willing to sacrifice my immediate happiness or well-being in order to achieve future outcomes'), ( $\alpha$  = 0.79). Participants responded to each item on a seven point rating scale, (1 = extremely uncharacteristic of me to 7 = extremely characteristic).

Conflict management styles. In order to understand how people preferred to approach conflict, I used two items, adapted from Sternberg and Dobson (1987), for cooperative behaviour: (a) Talking with the other party about the problem, with both exchanging opinions and mutually giving consideration to each other's position and (b) Confronting differences, sharing ideas and information and trying to search for integrative solutions; (Cooperative styles  $\alpha = 0.69$ ), and 2 items for competitive behaviour: (a) Using physical force or coercion directed at the other party and (b) Emphasising my position and opinions and de-emphasising the position of the other party(Competitive styles  $\alpha = 0.64$ ) (see Table 1 for the list of styles). Sternberg and Dobson's (1987) work is well cited and I adapted my selection from their list of items. I have used two items for each cooperative and competitive styles of managing conflict (Gosling, Rentfrow & Swann, 2003). I chose these items as they seemed to fit in well with what CFC might influence.

Participants were asked to think about interpersonal conflicts and rate each given style of managing conflict on a 7-point rating scale ranging from 'do not like at all' to 'my preferred style' based on their personal preferences. It was also emphasised that there were no right or wrong answers.

#### Results and discussion

Exploratory (principal component) factor analysis with oblique (direct) rotation and factor retention condition of eigenvalue greater than one supported a two-factor

 Table 2
 Correlation between CFC scores and conflict management styles in study 1.

Conflict Management Styles	r
Using physical force or coercion directed at the other party	-0.24**
Emphasising my position and opinions and de- emphasising the position of the other party	-0.24*
Mean of competitive styles	-0.29*
Talking with the other party about the problem, with both exchanging opinions and mutually giving consideration to each other's position	0.20*
Confronting differences and sharing ideas and information and trying to search for integrative solutions	0.22**
Mean of cooperative styles	0.25**
* p<0.05, ** p<0.01.	

separation of the conflict management styles. Items and loadings can be seen in Table 1. Items loaded on the first factor concerned competitive styles of managing conflict. Two items loaded on the second factor. Items loaded on this factor pertained to cooperative styles of managing conflict. I examined the correlations between CFC scores and preferences for competitive and cooperative conflict management styles. As shown in Table 2, participants' CFC scores correlated negatively with preferences for competitive conflict management styles and correlated positively with cooperative conflict management styles. As predicted, the findings from study 1 showed a preliminary connection between CFC and conflict management styles.

## Study 2

After establishing the main effect between CFC and conflict management styles, study 2 was conducted to examine the factors that mediated the relationship between CFC and conflict management styles. I propose that when individuals consider the future consequences of their current behaviour they try to do a systematic, logical and planned information search, thorough consideration of all available alternatives, and calmly take time to evaluate each alternative before making their final decisions. In study 2, I tested whether

Items	Factor 1 Competitive	Factor 2 Cooperative
Using physical force or coercion directed at the other party	0.70	-0.10
Emphasising my position and opinions and de-emphasising the position of the other party	0.79	0.27
Talking with the other party about the problem, with both exchanging opinions and mutually giving consideration to each other's position	-0.03	0.97
Confronting differences and sharing ideas and information and trying to search for integrative solutions	0.10	0.66

decision-making patterns can mediate the relationship between CFC and conflict management styles.

## **Participants**

Participants were recruited online using Amazon's Mechanical Turk (www.mturk.com; Buhrmester et al., 2011). A total of 74 participants participated in this study. Participants were of different nationalities: Indian (78.38%), American (13.51%), Irish (1.35%), British (2.70%), Sri Lankan (1.35%), Russian (1.35%) and the Dominican (1.35%). No significant effect of different nationalities was found, and this variable is not discussed any further in this study. Attention check items were included in the questionnaire to ensure that participants were reading the instructions and questions properly and giving valid responses, details below. A total of 13 participants failed the attention check items and therefore their responses were excluded from the analysis. A total of 61 responses was considered for data analysis (male = 38 and female = 23) ranging in age from 20 to 65 years (M = 31.69, SD = 10.28).

#### **Procedure**

The participants completed measures relevant to this study and these measures were presented randomly, varying in order, to them. These measures were designed on Qualtrics' online survey platform. I also included attention check items and the participants were informed of these attention check items. Each participant was paid \$0.30 for participating in the survey.

In order to improve the reliability of the results, attentiveness check items similar to an instructional manipulation check (IMC) recommended by Oppenheimer, Meyvis and Davidenko (2009) were included. "Unlike the other questions, the IMC asks participants to ignore the standard response format and instead provide a confirmation that they have read the instruction," (p. 867). To check attentiveness of the participants, whether they are reading the instructions or not, I repeated two items and instructed the participant to not respond to that item.

#### Measures

The questionnaire battery consisted of the following: Consideration of future consequences. Same as mentioned in study 1. (CFC  $\alpha$  = 0.73).

Melbourne decision-making questionnaire. The Melbourne DMQ (Mann et al., 1997) is a 22 items instrument. For the purpose of this study I used two scales: vigilance and hyper-vigilance. The participants respond to the items by checking 'True for me' (Score 2), 'Sometimes true' (Score 1) or 'Not true for me' (Score 0). It was expected that CFC as a motivational construct influences the tendency to use vigilant (such as 'I like to consider all of the alternatives'), ( $\alpha$  = 0.76) and hyper-vigilant (such as 'I feel as if I am under tremendous time pressure when making decisions') ( $\alpha$  = 0.65) decision-making patterns.

Conflict management styles. I used the same set of conflict management styles used in Study 1 (Competitive styles  $\alpha = 0.63$ , Cooperative styles  $\alpha = 0.66$ ).

Common method bias. The variables used to test hypotheses were gathered from the same source giving rise to the possibility of the common method bias. The Harman one-factor test, one of the widely used tests for assessing the extent of common method variance (Podsakoff, MacKenzie, Lee & Podsakoff, 2003) was conducted. This involved running an exploratory factor analysis that included all the items for all the constructs used in the present study as a one-factor test for common method variance (Schriesheim, 1979). The single factor accounted for only 18.17% variance suggesting that a single factor did not emerge from the factor analysis and hence, common method bias is unlikely to be a threat to the validity of the results in this study.

#### Results and discussion

Exploratory factor analysis yielded two factors consistent with Study 1. Items and loadings can be seen in Table 3. Items loaded on the first factor concerned competitive styles of managing conflict. For competitive styles, convergent (average variance extracted is 0.71) and discriminant validity (maximum shared variance is 0.044) were calculated. Two items loaded on the second factor. Items loaded on this factor pertained to cooperative styles of managing conflict. For cooperative styles, convergent (average variance extracted is 0.70) and discriminant validity (maximum shared variance is 0.042) were calculated. In addition, a two-factor confirmatory factor analysis provided an acceptable fit to the data,  $\chi^2$  (1, N = 61) = 0.780, p = 0.37; TLI = 0.99, IFI =1.00, RMSEA = 0.00. The means, standard deviations, reliabilities and correlations between the various measures are shown in Table 4. Participants' CFC scores

Items	Factor 1 Competitive	Factor 2 Cooperative
Using physical force or coercion directed at the other party	0.77	-0.17
Emphasising my position and opinions and de-emphasising the position of the other party	0.91	0.11
Talking with the other party about the problem, with both exchanging opinions and mutually giving consideration to each other's position	-0.14	0.78
Confronting differences and sharing ideas and information and trying to search for integrative solutions	0.10	0.90

Table 4    Correlations between measures used in study 2.									
	Scales	1	2	3	4	5			
1	CFC	-							
2	Vigilant	0.45***	_						
3	HyperVig	0.31**	-0.08	_					
4	Comp	-0.30**	-0.25*	0.32**	_				
5	Coop	0.45***	0.37***	-0.27**	-0.30**	_			
	M	4.52	1.46	0.99	3.32	4.95			
	SD	0.69	0.44	0.38	1.47	1.33			
	α	0.73	0.76	0.65	0.63	0.66			

Note: CFC = Consideration of future consequences; Vigilant. = Vigilant decision-making patterns; Hyper Vig. = Hyper-vigilant decision-making patterns; Coop = Cooperative Conflict Management Styles; Comp = Competitive Conflict Management Styles. \*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01.

were positively correlated with vigilant decision coping strategy, r (61) = 0.45, p< 0.01, and negatively correlated with hyper-vigilant, r (61) = -0.31, p< 0.05.

# Testing structural model

The primary objective in study 2 was to understand the relationship between CFC and conflict management styles and examine the factors that mediated this relationship. For this purpose, I propose a model (see Fig. 1). To examine the model fit, I did structural equation modelling of the data in AMOS. To assess model fit, I used a combination of criteria. In addition to chi-square test, I examined various fit indexes including the Tucker Lewis Index (TLI) or Non-normed Fit Index (NNFI) and Incremental Fit Index (IFI). These indexes range from 0 to 1.00, with values less than 0.90 indicating a poor fit. I also examined the root mean square error of approximation (RMSEA) in which values less than 0.05 indicate a good fit and values up to 0.10 indicate a reasonable fit. In addition, I also examined the standardised root mean square residual (SRMR) where a value less than 0.08 is generally considered a good fit (Hu & Bentler, 1999).

In the model, I propose that the relation between CFC and conflict management styles by vigilant and hyper-vigilant decision-making patterns.

Path analysis. In the model, with cooperative styles, the proposed model for conflict management styles did not provide a good fit to the data even though all the paths were significant and in predicted directions,  $\chi^2$  (2, N = 61) = 5.38, p = 0.07; (TLI =6.9, IFI = 9.07 and RMSEA = 0.17, SRMR = 0.07). With competitive conflict management styles,  $\chi^2$  (2, N = 61) = 1.48, p = 0.47 (NS); (TLI = 1.01, IFI = 1.02, RMSEA = 00 and SRMR = 0.04) all indexes indicate a good fit and also, all paths were significant and in the predicted direction. In the same model, I linked the direct path from CFC and competitive conflict management styles and found this path from CFC and competitive conflict management styles was not significant. This research has evidence of mediation, but the possibility that other mediators might exist cannot be ruled out, something which can be explored in future research. However, a Sobel test was conducted and found mediation in the model (t = 2.13, p = 0.03).

Thus, in the model with CFC and competitive conflict management styles, all indexes indicate a good fit and also all paths were significant and in the predicted direction (see Fig. 2).

#### General discussion

Understanding conflict and how to manage it are vital for most human endeavours. Research has found that effectiveness of employees, teams and organisations depends on how people manage their conflict at work place (Tjosvold, 1998). The results of the present research provide insights into the psychological processes that underlie the preferences for cooperative versus competitive conflict management styles. The results provide strong support for the claim that CFC is

Final Model 
$$\chi^2~(2,\,61)=1.48,~~p=.47,~TLI=1.01,~IFI=1.02,~RMSEA=00,\\SRMR=.04$$

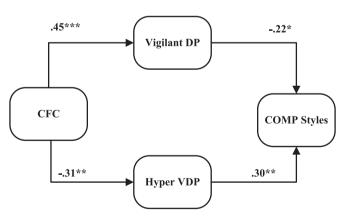


Fig. 2 Final path model for conflict management styles.

Note: Path coefficients are estimates of regression weights. TLI = Tucker Lewis Index; IFI = incremental fit index; RMSEA = root mean square error of approximation; SRMR = standardised root mean square residual (SRMR); CFC = consideration of future consequences; Vigilant DP = vigilant decision-making patterns; Hyper VDP = hyper- vigilant decision-making patterns, Comp styles = competitive conflict management styles.

linked with conflict management styles. The findings indicate that CFC is an important personality trait construct to consider in research on conflict management. The studies reported here were designed to test the hypothesis that higher the CFC, the greater the preference for cooperative ways and lower the preference for competitive ways of managing conflicts. Supporting this hypothesis, study 1 established the preliminary connection between CFC and conflict management styles. Study 2 was conducted mainly to examine what variables mediated the relationship between CFC and conflict management styles. The findings from study 2 throw light on the relationships amongst CFC, decision-making patterns and conflict management styles. In this study, it was found that individuals with high CFC are less likely to prefer competitive conflict management styles and this relationship was mediated by vigilant and hyper-vigilant decisionmaking patterns. High CFC was positively correlated with vigilant decision-making patterns and negatively correlated with hyper-vigilant decision-making patterns. The findings from the current study indicate that individuals with low (high) CFC are more (less) likely to consider limited alternatives, rapid evaluation of data, and limited review of alternatives before their decision-making. Further, it suggests that preferences for a particular decision-making pattern may be considered as one indicator of the ways conflict can be managed. Past research has found that individuals engage in more effortful, deliberate and systematic processing that involves rule-based inferences (Chaiken, 1987; Petty Cacioppo, 1986) and, deep and deliberate information search and processing may lead to high-quality decision-making (De Dreu & Carnevale, 2003; Janis & Mann, 1977). Taking it further, to reach an integrative or a cooperative solution requires exploration of several alternatives, to carefully look for and evaluate various options that interests both parties, before choosing any particular conflict management style. Thus, individuals who prefer vigilant decision-making patterns are more likely to prefer cooperative styles. This relationship between CFC and vigilant and hyper-vigilant decision-making patterns were not found with cooperative conflict management styles. The findings supported that while considering future implications of their current behaviour, individuals don't prefer competitive conflict management styles to manage their conflicts. High CFC individuals can anticipate the long term negative consequences of competitive acts as these acts can be detrimental to their interpersonal relationships. Thus, CFC has important implications for predicting non-competitive behaviour. In my view, practically speaking, this piece of research is an important area of study because when we look around, most of the decisions we take involve a temporal element, that is, our ability to see immediate or future consequences of our behaviour. Given this, individuals with high CFC may be better able to prefer rational strategy in their decision-making. This research also contributes in the integrative model of CFC (Joireman et al., 2006). The current results extend past work on an integrative model of CFC in three ways. First, this research examines the role of two individual difference variables that have received little attention till date. Second, this research provides preliminary support for a recently articulated link within the integrative model of CFC, which assumes that individual differences CFC and decision-making patterns may predict people's preferences for conflict management styles. Finally, the

current research is an overlap between two important lines of research that to date have progressed along fairly independent lines. The present studies advance work on decision-making patterns and CFC and demonstrate how such constructs interact and predict preferences for conflict management styles. To the best of my knowledge, this is the first study to have examined the effect of CFC on individuals' preferences for conflict management styles. As such, my findings are preliminary and more suggestive than definitive. Additional research is needed to enhance the robustness of this research.

#### Limitations

The scope of this research is restricted as the focus of this research is on measuring preferences for conflict management styles and not actual behaviour. Although there is a close relationship between intentions and behaviour as shown in the meta-analysis by Kim and Hunter (1993), future research is required to test it further. In addition, one limitation of this research is the use of self-report measures to assess the constructs used in the studies.

# Implications and directions for future research

The findings from the current set of studies have several interesting implications for conflict management behaviours. Theoretically, the results provide insights into the processes that underlie the preferences for cooperative versus competitive conflict management styles. An important contribution of this research is the introduction of the CFC construct to the literature on conflict management styles and decision-making patterns and its potential usefulness as a predictor in conflict management style research. The findings suggest that in promoting harmony, consideration of future consequences can be beneficial. People in conflict might very well agree on what should happen in the future and considering the future consequences of current behaviour can help them manage conflict, at the very least, not in a destructive manner. This study has important implications for the practices and policies of warfare, crisis prevention, and conflict management. I believe that research on this topic will have broad theoretical and applied implications in increasing people's concern for peace keeping, evading warfare and helpful behaviour.

The findings of this research have implications for negotiating parties and strategic social interactions. Focussing on future consequences can be advantageous for any two negotiating parties. The link between CFC and decision-making patterns can help negotiators find the necessary balance between competition and cooperation, between self-interest and others'-interests. For decision-makers, balance of attention to both self and others'-interests is critical for facilitating collaborating ways of managing conflicts.

The study of CFC has several implications for management in organisations and deserves more research attention. For example, the ability to predict how an individual will respond or behave in various conflicting situations in the workplace is a powerful resource. A systematic study of CFC, as attempted in this article, can potentially contribute to training and educating conflict management practitioners and leaders (see Sadler, Gibson & Reysen, 2017). The findings

from this line of research can also have effective interventions aimed at reducing intergroup conflicts in organisations, for example, groups entrenched in conflict can be trained to cooperate if they are induced to think about the long-term consequences of their actions. Due to motivational differences amongst team members, conflict becomes common in teams and if these conflicts are not well managed, they can be detrimental to team success. Managing conflict well is essential for sustaining organisational efficiency and effectiveness (McCann & Galbraith, 1981). In group decision-making, considering the future consequences of current actions and all available alternatives before taking decisions are more likely to benefit the stakeholders than taking decisions in haste, overlooking alternatives. This idea can be explored in future research. The findings of this study also have implications for clinical settings. Previous research has found that depressive symptoms and reduced use of vigilant decision-making were related. Also, depressed individuals are more likely to make rapid decisions to avoid the anxiety of considering options (Levkin & Derubeis, 2010). Future research can open up avenues for exploring the deeper understanding of preferences for conflict management styles especially in individuals with depressive symptoms.

#### References

- Ainslie, G., & Haslam, N. (1992). Self-control. Choice over time. Russell Sage, New York, NY.
- Axelrod, R. (1984). The evolution of cooperation. Basic Book, New York.
- Blake, R.R., & Mouton, J.S. (1964). The managerial grid. Gulf, Houston, TX.
- Buhrmester, M.D., Kwang, T., & Gosling, S.D. (2011). Amazon's mechanical Turk: A new source of inexpensive, yet high-quality, Data? *Perspectives on Psychological Science* 6 (1), 3-5.
- Buss, D.M., & Shackelford, T.K. (1997). Human aggression in evolutionary psychological perspective. *Clinical Psychology Review* 17 (6), 605-619.
- Chaiken, S. (1987). The heuristic model of persuasion. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.) Social influence: The ontario symposium. Lawrence Erlbaum, Hillsdale, NJ, pp. 3-39. Vol. 5.
- De Dreu, C.K.W., & Carnevale, P.J.D. (2003). Motivational bases for information processing and strategic choice in conflict and negotiation. In M. P. Zanna (Ed.) Advances in experimental social psychology. Academic Press, New York, pp. 235-291. Vol. 35.
- Deluty, R.H. (1985). Consistency of assertive, aggressive, and submissive behavior for children. *Journal of Personality and Social Psychology* 49 (4), 1054-1065.
- Deutsch, M. (1973). The resolution of conflict: Constructive and destructive processes. Yale University Press, New Haven.
- Deutsch, M., & Coleman, P. (2000). The handbook of conflict resolution: Theory and practice. Jossey-Bass, San Francisco.
- Dosnon, O. (1996). The indecision facing the educational and vocational choice. L'Orientation Scolaire et Professioonnelle 25 (1), 129-168.
- Follet, M.P. (1940). Constructive conflict. In H. C. Metcalf & L. Urwick (Eds.). Dynamic administration: The collected papers of Mary Parker Follett. Harper & Row, New York, pp. 30-49.
- Friedman, R.A., Tidd, S.T., Currall, S.C., & Tsai, J.C. (2000). What goes around comes around: The impact of personal conflict style on work conflict and stress. *The International Journal of Conflict Management* 11 (1), 32-55.
- Galotti, K.M. (1995). A longitudinal study of real-life decision making choosing a college. *Applied Cognitive Psychology* 9 (6), 459-484.

- Galotti, K.M. (2007). Decision structuring in important real-life choices. *Psychological Science* 18 (4), 320-325.
- Gosling, S.D., Rentfrow, P.J., & Swann, Jr, W.B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality* 37 (6), 504-528.
- Guerra, N.G., & Slaby, R.G. (1989). Evaluative factors in social problem solving by aggressive boys. *Journal of Abnormal Child Psychology* 17 (3), 277-289.
- Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modelling 6 (1), 1-55.
- Hurtz, G.M., & Donovan, J.J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology* 85 (6), 869-879.
- Insko, C.A., Schopler, J., Gaertner, L., Wildschut, T., Kozar, R., & Pinter, B. et al., (2001). Interindividual-intergroup discontinuity reduction through the anticipation of future interaction. *Journal of Personality and Social Psychology* 80 (1), 95-111.
- Janis, I.L., & Mann, L. (1977). Decision making: A psychological analysis of conflict, choice, and commitment. Free Press.
- Johnston, J.H., Driskell, J.E., & Salas, E. (1997). Vigilant and hypervigilant decision making. *Journal of Applied Psychology* 82 (4), 614-622.
- Joireman, J., Anderson, J., & Strathman, A. (2003). The aggression paradox: Understanding links among aggression, sensation seeking, and the consideration of future consequences. *Journal of Personality and Social Psychology* 84 (6), 1287-1302.
- Joireman, J., Daniels, D., George-Falvy, J., & Kamdar, D. (2006a). Organizational citizenship behaviors as a function of empathy, consideration of future consequences, and employee time horizon: An initial exploration using an in-basket simulation of OCBs. Journal of Applied Social Psychology 36 (9), 2266-2292.
- Joireman, J., & King, S. (2016). Individual differences in the consideration of future and (more) immediate consequences: A review and directions for future research. *Social and Personality Psychology Compass* 101, 313-326.
- Joireman, J., Shaffer, M.J., Balliet, D., & Strathman, A. (2012). Promotion orientation explains why future-oriented people exercise and eat healthy: Evidence from the two-factor consideration of future consequences-14 scale. *Personality & Social Psychology Bulletin* 38 (10), 1272-1287.
- Joireman, J., Sprott, D.E., & Spangenberg, E.R. (2005). Fiscal responsibility and the consideration of future consequences. *Personality and Individual Differences* 39 (6), 1159-1168.
- Joireman, J., Strathman, A., & Balliet, D. (2006b). Considering future consequences: An integrative model. In L. Sanna & E. Chang (Eds.). Judgments over time: The interplay of thoughts, feelings, and behaviors. Oxford University Press, Oxford, pp. 82-99.
- Kelley, H.H., & Thibaut, J.W. (1978). Interpersonal relations: A theory of interdependence. Wiley, New York.
- Kim, M.S., & Hunter, J.E. (1993). Relationships among attitudes, behavioral intentions, and behavior a meta-analysis of past research, Part 2. *Communication Research* 20 (3), 331-364.
- Kriesberg, L. (1998). Constructive conflicts: From escalation to resolution. Rowman & Littiefield, New York.
- Leykin, Y., & Derubeis, R.J. (2010). Decision-making styles and depressive symptomatology: Development of the decision styles questionnaire. *Judgement and Decision Making* 5 (7), 506-515.
- Mann, L., Burnett, P., & Radford, M. (1997). The Melbourne decision making questionnaire: An instrument for measuring patterns for coping with decisional conflict. *Journal of Behavioral Decision Making* 10 (1), 1-19.
- McCann, J., & Galbraith, J.R. (1981). Interdepartmental relations. In P. C. Nystrom & W. H. Starbuck (Eds.). Handbook of organizational design. Oxford University Press, New York, pp. 60-84.
- Murphy, L., & Dockray, S. (2018). The consideration of future consequences and health behaviour: A meta-analysis. *Health Psychology Review* 1-25.

Oppenheimer, D.M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology* 45 (4), 867-872.

- Ouellette, J.A., Hessling, R., Gibbons, F.X., Reis-Bergan, M., & Gerrard, M. (2005). Using images to increase exercise behavior: Prototypes versus possible selves. *Personality & Social Psychology Bulletin* 31 (5), 610-620.
- Petty, R.E., & Cacioppo, J.T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.). Advances in experimental social psychology. Academic Press, New York, pp. 123-205. Vol. 19.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88 (5), 879-903.
- Pruitt, D.G., & Kimmel, M.J. (1977). Twenty years of experimental gaming: Critique, synthesis, and suggestions for the future. *Annual Review of Psychology* 28 (1), 362-392.
- Putnam, L.L. (1986). Conflict in group decision-making. In R. Y. Hirokawa & M. S. Poole(Eds.). Communication and group decision making. Sage, Beverly Hills, CA, pp. 175-196.
- Rahim, M.A. (2002). Toward a theory of managing organizational conflict. *The International Journal of Conflict Management* 13 (3), 206-235.
- Rebetez, M.M.L., Barsics, C., Rochat, L., D'Argembeau, A., & Van der Linden, M. (2016). Procrastination, consideration of future consequences, and episodic future thinking. *Consciousness and Cognition* 42, 286-292.
- Robbins, T.L. (2018). Examining the link between one's consideration of future consequences and potential ethical threshold. *Archives of Psychology* 2 (5), 1-10.
- Rusbult, C.E., & Van Lange, P.A.M. (1996). Interdependence processes. In E. T. Higgins & A. W. Kruglanski (Eds.). Social psychology: Handbook of basic principles. Guilford Press, New York, pp. 564-596.
- Sadler, T.D., Gibson, S., & Reysen, S. (2017). The effect of a leadership training program on consideration of future consequences. *Journal of Leadership Studies* 10 (4), 35-42.
- Schriesheim, C.A. (1979). Similarity of individual directed leader behavior descriptions. Academy of Management Journal 22 (2), 345-355.
- Shabbir, N., Atta, M., & Adil, A. (2014). Conflict management and decision making styles in college management. *Journal of Behavioural Sciences* 24 (2), 52-68.
- Sternberg, R.J., & Dobson, D.M. (1987). Resolving interpersonal conflicts: An analysis of stylistic consistency. *Journal of Personality and Social Psychology* 52 (4), 794-812.

- Sternberg, R.J., & Soriano, L.J. (1984). Styles of conflict resolution. *Journal of Personality and Social Psychology* 47 (1), 115-126.
- Strathman, A., Gleicher, F., Boninger, D.S., & Edwards, C.S. (1994). The consideration of future consequences: Weighing immediate and distant outcomes of behavior. *Journal of Personality and Social Psychology* 66 (4), 742-752.
- Terhune, K.W. (1970). The effects of personality in co-operation and conflict. In P. Swingle (Ed.). The structure of conflict. Academic Press, New York, pp. 193-234.
- Thaler, R.H. (1991). Quasi rational economics. Russell Sage Foundation, New York.
- Thomas, K.W. (1976). Conflict and conflict management, in M. D. Dunnette (Ed.). Handbook of industrial and organizational psychology. Rand-McNally, Chicago, pp. 889-935.
- Thomas, K.W. (1988). The conflict-handling modes: Toward more precise theory. *Management Communication Quarterly* 1 (3), 430-436.
- Thomas, K.W. (1992). Conflict and conflict management: Reflections and update. *Journal of Organizational Behavior* 13 (3), 265-274.
- Thompson, L. (1998). The mind and heart of the negotiator. Prentice-Hall, Upper Saddle River, NJ.
- Tjosvold, D. (1998). Cooperative and competitive goal approach to conflict: Accomplishments and challenges. *Applied Psychology* 47 (3), 285-313.
- Trapnell, P.D., & Wiggins, J.S. (1990). Extension of the interpersonal adjective scales to include the big five dimensions of personality. *Journal of Personality and Social Psychology* 59 (4), 781-790.
- Trope, Y., & Fishbach, A. (2000). Counteractive self-control in overcoming temptation. *Journal of Personality and Social Psychology* 79 (4), 493-506.
- Wertenbroch, K. (1998). Consumption self-control by rationing purchase quantities of virtue and vice. *Marketing Science* 17 (4), 317-337.
- Wolf, S.T., Cohen, T.R., Kirchner, J.L., Rea, A., Montoya, R.M., & Insko, C.A. (2009). Reducing intergroup conflict through the consideration of future consequences. *European Journal of Social Psychology* 39 (5), 831-841.
- Zhao, Y., Wei, J., Chen, Y., & Xia, L. (2018). Consideration of future consequences (CFC) serves as a buffer against aggression related to psychopathy. *PloS one* 13 (9), e0203663.
- Zimbardo, P.G., & Boyd, J.N. (1999). Putting time in perspective: A valid, reliable individual-differences metric. *Journal of Personality and Social Psychology* 77 (6), 1271-1288.
- Zuckerman, M., Kuhlman, D.M., Joireman, J., Teta, P., & Kraft, M. (1993). A comparison of three structural models for personality: The big three, the big five, and the alternative five. *Journal of Personality and Social Psychology* 65 (4), 757-768.