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Abstract

This research examines the relationships among individualism-collectivism (IND-COL), conflict management styles and conflict satisfaction. The authors aim to explain some of the inconclusive findings in the literature related to IND-COL and conflict styles by studying IND-COL as *states*, rather than dispositional *traits*. By taking a dynamic approach to conceptualizing IND-COL and measuring IND-COL over time, we investigate how different ratios of individualistic-to-collectivistic orientations are associated with different conflict management styles. Results show that individuals who employed a *balanced* focus (1:1 ratio) of both individualistic and collectivistic orientations utilized an integrative style in conflict more than individuals with either a strong individualistic or collectivistic orientation. Integrative style was associated with higher levels of satisfaction with conflict outcomes, processes, relationships, goal attainment and job satisfaction at work. Individuals with predominant focus on individualism utilized a dominating style more, whereas individuals with predominant focus on collectivism utilized obliging and avoiding styles. Furthermore, results show that state-level IND-COL is a better predictor of conflict management styles than trait-level IND-COL. Past research has focused on studying IND-COL primarily as a *trait* variable at the individual level, but we examine IND-COL as *states* in relation to conflict management styles. In addition, we investigate the *combined* and *optimal* effects of both individualism and collectivism value-orientations on conflict management styles.

Keywords: *conflict management, conflict styles, culture, individualism-collectivism, optimality*

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**The Combined Effect of Individualism – Collectivism on Conflict Styles and Satisfaction:
An Analysis at the Individual Level***

Regina Kim and Peter T. Coleman

Given the increasing importance of intercultural negotiation and conflict management in global business and politics, scholars have studied so-called *East-West differences* and repeatedly observed two patterns of findings. First, East Asians rely more heavily on non-confrontational styles such as obliging the other party's needs or avoiding explicit discussion of conflict when compared to Westerners. In contrast, Westerners are more inclined to use assertive, competing styles with their counterpart and attempt to impose their preferred solution to conflict (Burgoon, Dillard, Doran, & Miller, 1982; Ohbuchi & Takahashi, 1994). Researchers typically link cultural differences in individualistic versus collectivistic values to these contrasting conflict management styles (Cai & Fink, 2002; Ting-Toomey, 1988; Oetzel & Ting-Toomey, 2003; Gabrielidis, Stephan, Ybarra, Pearson & Villareal, 1997; Leung & Bond, 1988). Specifically collectivists, who are believed to value preserving relationships above achieving their own goals, prefer accommodating the other party's needs and avoiding conflicts, whereas individualists, who reportedly value individual achievements over relationships, prefer engaging in competing or dominating styles in conflict situations (Ohbuchi & Takahashi, 1994; Friedman, Chi, & Liu, 2006; Morris et al., 1998).

Several studies have found inconsistent and inconclusive results regarding the effects of these East-West differences on preferences for conflict management. For example, Cai and Fink (2002) found that avoiding styles of conflict management were more likely to be used by individualists than by collectivists and that the two groups did not differ in their use of the dominating style. On the other hand, in a comparison of Korean-Americans and European - Americans conflict styles, Kim-Jo, Benet-Martínez and Ozer (2010) revealed that the two groups did not differ significantly in their use of the avoiding style. In addition, numerous studies have

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failed to identify differences in preferences for integrative style between individualistic and collectivistic groups (Boonsathorn, 2007). This is particularly noteworthy given that the integrative style is the most celebrated strategy across cultures (Cardon & Okoro, 2010), largely due to its strong association with mutually positive outcomes (Pruitt & Carnevale, 1993; Pruitt, Carnevale, Ben-Yoav, Nochajski, & Van Slyck, 1983). These mixed results are indeed perplexing, and cast doubt on the validity of the constructs of individualism-collectivism for predicting differences in conflict styles.

Nevertheless, the confusion caused by these contrasting findings may reflect methodological limitations rather than conceptual. In fact, several limitations have been identified in the way cultural differences have been operationalized and measured. First, the dominant approach to studying culturally-derived traits as general value orientations (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Kagitcibasi & Poortinga, 2000) assumes that they are stable over time and somewhat unresponsive to situational variation. Despite the fact that “the evidence of everyday life reveals that sometimes individuals act in culturally typical manners and sometimes not...” and that “a trait model, much like a stereotype, implies a pervasive continual influence on culture” (Morris & Fu, 2001, p. 328), the trait approach continues to govern. A second limitation, despite Hofstede’s (1980) admonitions, is that a large proportion of cross-cultural research employs Hofstede’s ratings of country-level individualism as proxies for individual-level assessments of individualism, rather than assessing the situation directly (Oyserman, Coon, & Kimmelmeier, 2002). This approach can lead to *cultural attribution fallacy* (Matsumoto & Yoo, 2006), or the inference that something cultural about the groups being compared produce the observed differences when there is no empirical justification for this inference. Also, the emphasis of this approach is placed on differences between countries, thus portraying cultural communities as holding mutually exclusive, stable, and uniform views (Cooper & Denner, 1998), rather than recognizing variation and change amongst individuals within each group.

A third limitation surfaces in the misunderstanding that although an accumulation of recent research suggests individualism-collectivism may be better understood as two orthogonal constructs and not as a bipolar, single dimension (Oyserman et al., 2002; Rhee, Uleman, & Lee, 1996; Triandis & Gelfand, 1998), most studies continue to utilize the bipolar, single dimension approach. According to the meta-analysis by Oyserman et al. (2002), only 36 out of 170 studies

examining psychological implications of individualism-collectivism assessed both individualism and collectivism as distinct dimensions.

This paper attempts to reconcile the contradictory findings from prior research on individualism-collectivism and conflict styles by employing a new methodological paradigm informed by dynamical-systems theory (Vallacher & Nowak, 1994). This approach measures individualism-collectivism as orthogonal constructs through the capture and coding of temporal data known as the Mouse Paradigm (Vallacher & Nowak, 1994), and thereby investigates the *combined* and *optimal* effects of both individualism and collectivism value-orientations on conflict management styles. Further, we have investigated how disputants' concerns with both individualistic and collectivistic values operate in tandem to affect the types of behavioral strategies employed in social conflict at work.

This paper has five parts. First, we outline the history of the theory of individualism-collectivism and how it is studied in relation to conflict management. Next, we discuss some of the limitations of most standard methods of studying culture in conflict studies. Third, we describe four different conflict management styles and how they impact organizational outcomes. Fourth, we propose a new method for capturing the *combined* and *optimal* effects of both individualism and collectivism. The hypotheses, study methods and findings are presented in this section. In closing, we discuss the implications and limitations of the study.

Theoretical Background

Individualism - Collectivism

Individualism-collectivism is a commonly used compound descriptor and dimension in cross-cultural research (Hofstede, 1980; Hui, 1988; Ting-Toomey, 1988; Triandis, 1988). The terms individualism-collectivism were first introduced by Hofstede (1980), and since then these concepts have been widely used to explain differences in the ways people think and act in the West and the East. According to a PsycNET search of individualism-collectivism, 1,736 articles have been published since 1988 with 279 articles published on individualism-collectivism and conflict.

Individualism is marked by a social pattern that consists of loosely linked individuals who view themselves as mainly independent of collectives. Individualistic people are primarily motivated by their own preferences, needs, rights, and the transactional contracts they have established with others. They give priority to their personal goals over the goals of others and

emphasize economically rational analyses of the advantages and disadvantages more than associating with others. In addition, people in individualistic cultures view interactions within relationships and groups as occurring between independent individuals, and thus, disagreements and conflicts are accepted as a natural and inevitable aspect of social life (Ohbuchi, Fukushima & Tedeschi, 1999).

Collectivism, on the other hand, is defined as a social pattern consisting of closely linked individuals who see themselves as parts of one or more collectives (family, co-workers, tribe, and nation). People who are collectivistic are willing to give priority to the goals of the group over their own personal goals and they emphasize their connectedness to members of these groups. Not surprisingly, collectivists dislike social disagreement and overt confrontations that could jeopardize harmony in the group.

Individualism-Collectivism at the Individual Level

Although the individualism-collectivism label was originally used to refer to characteristics of societies, it may be used to distinguish between people with individualistic and collectivistic dispositions, respectively, independent of the societal culture in which they live. On a collective level, including larger societal entities, individualism-collectivism has been described as a stable characteristic differentiating between nations (Hofstede, 2001). Individuals, however, can align their individualism-collectivism depending on situational cues (e.g. Goncalo & Staw, 2006; Oyserman, Coon, & Kimmelmeier, 2002; Singelis, 1994). As Triandis (1995) noted, there are individualists and collectivists in every society, simply as a result of differing environmental influences and/or predispositions.

Markus and Kitayama (1991) alluded to this notion of individualism-collectivism as an individual-level construct, with the notion that individuals are different in the way they view themselves as either being separate from or connected to their social environment (e.g. interdependent self-construal versus independent self-construal). Thus, the concept of self-construal is a personal predisposition reflecting the self-related aspect of individualism-collectivism (Oyserman et al., 2002).

In Hofstede's original studies (1980), individualism-collectivism was operationalized as opposite poles on a unidimensional continuum. According to this model, a person with strong individualistic attitudes possesses weak collectivistic attitudes. However, more recently, individualism-collectivism have been conceptualized not as two opposite poles of a

unidimensional factor, but as two relatively independent factors at both cultural and individual levels (Triandis, Bontempo, Villareal, Asai & Lucca, 1988; Realo, Koido, Ceulemans, & Allik, 2002). Triandis and colleagues agreed that the picture of bipolar unidimensionality is “oversimplified, because it implies an opposition between individualism and collectivism” (Triandis et al., 1988, p. 355), and supported a two-dimensional unipolar model.

In order to represent the structure of individualism-collectivism as two unipolar dimensions, Triandis and colleagues (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis & Gelfand, 1998) identified two orthogonal subtypes of individualism and collectivism: horizontal and vertical. They proposed that the most important attributes of individualism and collectivism are the horizontal and vertical aspects of social relations—referring to the extent of equality versus hierarchy in one’s social relationships. The major assumption of the model is that these four orientations (vertical individualists, horizontal individualists, vertical collectivists, horizontal collectivists) are orthogonal to one another and this assumption has received empirical support (Singelis et al., 1995; Triandis et al., 1998).

Rhee, Uleman and Lee (1996) also assumed orthogonality of individualism-collectivism dimensions by crossing the constructs with two reference-group domains: kin and non-kin. Similar to that of the Triandis colleagues, this team proposed the four orientations (kin-based individualism, non-kin individualism, kin-based collectivism and non-kin collectivism) represent orthogonal subtypes of individualism and collectivism and demonstrated empirical support for this model.

Undoubtedly, the aforementioned research has contributed significantly to the understanding of the individualism-collectivism construct. However, these models have limitations when examining variations *within* individuals. First, the crossing of individualism and collectivism with horizontal and vertical aspects of social relations (equality versus hierarchy) makes it difficult to disentangle the effects of two cultural constructs: individualism-collectivism and power imbalance, an extent to which one accepts and expects that power is distributed unequally. Also, it remains unclear into which of the four categories a person with both high individualistic and high collectivistic attitudes would fall.

Similarly, the Rhee et al. model (1996) suggests that individualistic and collectivistic cultural frames are universally available but differentially likely to be brought online into working memory depending on the reference group. For example, one may have an

individualistic orientation when interacting with his coworkers but have a collectivistic orientation when interacting with his family members. However, this model assumes that it is unlikely for any individual to have both individualistic and collectivistic attitudes when interacting with a specific reference group. This assumption contradicts the two-dimensional, unipolar model of individualism-collectivism because according to the model, individuals can display both individualistic and collectivistic attitudes while interacting with a specific reference group.

Taken together, we suggest the time is ripe for a new approach to examine individualism-collectivism dynamically at the individual level—as *states* rather than *traits*. In addition, we aim to explore the *combined* effect of individualism and collectivism on conflict styles. We predict that states of individualism-collectivism will be a better predictor of conflict management styles compared to trait-level measures of individualism-collectivism.

Conflict Management Styles

Since Blake and Mouton's (1964) initial research on conflict styles, several two dimensional dual-concern models depicting conflict styles have been developed (Rahim, 1983; Pruitt & Rubin, 1986, Thomas & Kilmann, 1974). The dual-concern model identifies four different conflict-handling styles based on two dimensions: degree of concern for self and concern for others. Concern for self represents the importance of solving a conflict by advancing one's own priorities. Concern for others represents the felt importance of ensuring the other person gets a desirable solution to the conflict. These two dimensions define four conflict styles: integrative (high concern for self and others), dominating (high concern for self, low concern for others), obliging (low concern for self and high concern for others), and avoiding (low concern for self and others). Some versions of the dual concern model (Blake & Mouton, 1964; Rahim, 1983) include a fifth style, *compromising*, which is characterized by moderate concern for self and moderate concern for others. However, our view is consistent with Pruitt and Kim's (2004) view in that we consider *compromising* a type of integrative style, not a distinct style.

A *dominating* style is characterized by a concern for one's own outcomes and would be expected to lead to a focus on achieving one's own goals in the conflict. It is a confrontational approach that emphasizes the enforcement of one person's choices over those of the other. Putnam and Wilson (1982) state that tactics commonly used to resolve disagreements in this

style include: directive communication about the issue, persistent argument for one's own position, and an attempt to take control of the interaction.

An *avoiding* style describes behavior that serves to minimize addressing the conflict explicitly, either by ignoring it or shifting attention to a different issue. This style is usually accompanied by withdrawal, as an individual using this style typically fails to satisfy both his or her concerns as well as the concerns of the other party. This style is often used when the potential ramifications of confronting the other party seem to outweigh the benefits of resolving the conflict.

An *obliging* style is characterized by a high concern for the other's outcomes and a low concern for self, and this style leads to a tendency to make concessions to one's partner. This non-confrontational style emphasizes preserving the relationship with the other person rather than pursuing an outcome that only meets an individual's own concerns. Obliging seemingly provides an easy way to settle disputes since one party gives in to the other party so that conflict is reduced. However, because the interests of the person who is obliging are not addressed, his issues are unlikely to be resolved and a sustainable agreement between the two parties is less likely to be reached (Cai & Fink, 2002).

Lastly, an *integrative* style is associated with high concern for self and for others, so efforts would be made to insure that both parties' outcomes are maximized. Thus, an integrative style concentrates on problem solving in a collaborative manner. Individuals with this style face conflict directly and try to find new and creative solutions to problems by focusing on their own needs as well as the needs of others. In addition, integrative style implies an attempt to arrive at solutions and outcomes that are satisfying to all members.

Integrative Style and Satisfaction

Research has suggested that the most effective conflict style is the integrative style because it is most likely to yield win-win solutions (Pruitt & Carnevale, 1993; Lewicki, Weiss, & Lewin, 1992; Pruitt & Kim, 2004). Integrative style is characterized by a "willingness to exchange information openly, to address differences constructively and to make every effort to pursue a solution that will be mutually acceptable" (Cai & Fink, 2002). Integrative styles have been associated with relational satisfaction (Canary & Cupach, 1988) and satisfaction with conflict resolution (Weider-Hatfield & Hatfield, 1995).

In experimental research that manipulated concern for self and others, the highest levels of joint gain and satisfaction were achieved when both parties had high concern for self and high concern for other (Pruitt et al., 1983). In field studies in organizations, supervisors who used an integrative style achieved more behavioral compliance from subordinates and the subordinates reported higher satisfaction with the supervisors (Lee, 2008; Korbanik, Baril, & Watson, 1993).

Because of the positive outcomes associated with integrative style, many studies have examined the relationship between individualism-collectivism and integrative style, but the results have been inconclusive (Cai & Fink, 2002; Ting-Toomey, 1988; Kim-Jo et al., 2010; Boonsathorn, 2007). As previously mentioned, past research on individualism-collectivism and conflict styles has contributed significantly to our current understanding of the relationship between individualism-collectivism and conflict styles. However, because of the limitations relative to how these constructs are measured, we suggest a new approach that examines individualism-collectivism dynamically at the individual level—as *states* rather than *traits*. By employing a new methodological paradigm informed by dynamical-systems theory (Nowak & Vallacher, 1994, Vallacher, Coleman, Nowak, & Bui-Wrzosinska, 2010), we prescribe to the measurement of individualism-collectivism through orthogonal constructs using a method for capturing and coding temporal data: the Mouse Paradigm (Vallacher & Nowak, 1994), and have investigated the *combined* and *optimal* effects of both individualism and collectivism value-orientations on conflict management styles.

Current Study and Hypotheses

H1: *State* measures of individualism-collectivism will be a better predictor of conflict styles than *trait* measures of individualism-collectivism. In this study, we aim to offer a new approach to the study of the effects of individual-level individualism-collectivism on conflict styles. We propose that studying individualism-collectivism as a *state* variable that varies over time, rather than as a stable trait variable, is appropriate to the study of conflict, as conflict situations are continually in flux. Hence, we suggest that temporal state measures of individualism-collectivism will be a better predictor of conflict management styles than trait-level measures of individualism-collectivism.

H2: Individuals with a stronger individualistic orientation (who spend more time in the individualistic orientation compared to collectivistic orientation) will utilize a dominating style more often than avoiding, obliging and integrative styles.

H3: Individuals with a stronger collectivistic orientation (who spend more time in the collectivistic orientation compared to individualistic orientation) will utilize avoiding and obliging styles more often than dominating and integrative styles. Consistent with prior research on the effects of differences in cultural value orientations of individualism-collectivism on conflict management tendencies (Ting-Toomey, 1988; Gabrielidis, Stephan, Ybarra, Dos Santos Pearson, & Villareal, 1997; Leung & Bond, 1984; Oetzel, 1998), we predict that people who have stronger preferences for individualistic orientations will prefer dominating tactics to pursue their own personal interests in conflict situations, and that people who have stronger preferences for collectivistic orientations will prefer non-confrontational tactics such as obliging and avoiding because of their concern for social harmony and positive social relationships.

H4: Individuals who employ a *balanced* individualistic and collectivistic orientation (1:1 ratio) over time will utilize the integrative style more often than individuals with either a strong individualistic or collectivistic orientation. By measuring individualism-collectivism as orthogonal constructs in terms of the amount of time spent on either orientation, we will also investigate their *combined* effects on conflict styles. Because resolving social conflicts constructively and durably often involves understanding and advocating for one's own goals as well as for those of the other party (Ting-Toomey et al., 1991; Oetzel & Ting-Toomey, 2003), we propose that a *combined* orientation of both individualism and collectivism will be associated with more integrative tactics that would most likely satisfy both party's needs.

H5: Individuals who utilize the integrative style will have higher satisfaction with conflict processes, outcomes and relationship compared to individuals who utilize dominating, obliging or avoiding styles. Lastly, we explore the link between different conflict management styles and satisfaction with conflict processes and outcomes at work. Consistent with the literature, we predict that the integrative style will be positively related to higher satisfaction with conflict.

Method

Participants. Sixty-five participants were recruited from a large Northeastern university. Their ages ranged from 18 to 67 years, with a mean of 27.2 years and a standard deviation of 7.8 years. The overall gender composition was 80% female and 20% male. Participants varied in ethnic background (52.3% White, 6.2% Black/African Americans, 3.1% Hispanic/Latin Americans, and 38.5% Asian/Pacific Islanders) and in educational background (7.7% had a high

school diploma, 75.4% had a bachelor's degree, and 16.9% had a master's degree). The average years of work experience was in the 3-5 year range. In order to examine whether ethnicity and/or time spent in the United States had an effect on the outcome variables, we included items addressing these questions. However, ethnic background and years spent in the United States was not correlated with any of the variables. Gender, age, educational background and years of work experience were also not significant predictors of outcome variables so they were excluded from further analyses.

Procedure

Prior to the laboratory session, participants were first asked to complete an online questionnaire that assessed dispositional characteristics of individualism-collectivism (Kato & Markus, 1993). After one week, participants were invited to the laboratory for a 30-minute session. During this private session they were asked to recall an important conflict that they had at work, and audio record their narrative of the conflict for five minutes. More specifically, they were asked to concentrate on the following two questions and to say aloud anything that came to mind: *What was particularly important to you in this conflict? How did you respond and why?* Next, participants were asked to listen to their audio recording about the conflict and code for individualism and collectivism using the Mouse Paradigm, which required them to sit at a computer and move the cursor to the left side of the screen if they felt that they were in the individualistic mode, move the cursor to the right side of the screen if they felt that they were in the collectivistic mode, and keep the cursor in the middle of the screen if neutral (see Mouse Paradigm). The data captured participants' moment-to-moment orientation as they listened to their own stream-of-consciousness about the conflict. Lastly, they were asked to complete an online questionnaire which included measures of conflict management styles (Rahim, 1983), satisfaction with conflict processes, relationship and outcomes (Kugler, Coleman, & Fuchs, 2011), perception of overall goal attainment (Kugler et al., 2011), satisfaction with coworkers (Bishop & Dow Scott, 2000), job satisfaction (Van Katwyk, Fox, Spector, & Kelloway, 2000) and self-efficacy (Schwarzer, Babler, Kwiatek, & Schroder, 1997). Upon the completion of the final questionnaire, participants were debriefed and received a monetary compensation of \$15.

Measures

Mouse Paradigm – a temporal measure of individualism-collectivism. In order to examine the *combined* effects of individualism and collectivism on conflict management styles,

we utilized the mouse paradigm, which registers the position of a computer-mouse for every second of a recorded conversation. The Mouse Paradigm is a computer-program developed by Vallacher and Nowak (Vallacher, Nowak, & Kaufman, 1994; Vallacher & Nowak, 1994) and has been used to study social judgment (Vallacher et al.), dynamics of the self, (Nowak, Vallacher, Tesser, & Borkowski, 2000), and evaluation of in-group/out-group members (Haddad, 2000). The Mouse Paradigm enabled us to capture the moment-to-moment dynamics of the participants' transitions between individualistic and collectivistic orientations while they coded their stream-of-consciousness recordings about an important conflict. The left side of the screen was defined as *individualistic* and the right side was defined as *collectivistic* and the middle was defined as *neither*. Cartesian coordinates, representing the position of the mouse pointer, were collected every second over the duration of their stream-of-consciousness, ranging from 44 seconds to 585 seconds, yielding on average 282 data points per participant (SD=124).

The descriptions of individualism and collectivism were derived from domains assessed in individualism-collectivism scales (Oyserman et al., 2002). According to meta-analysis by Oyserman et al., the domains assessed in individualism included independence, goals, competition, and uniqueness and the domains assessed in collectivism included relatedness, belongingness, duty, harmony and seeking advice (Table 1).

Conflict styles. The Rahim Organizational Conflict Inventory-II (ROCI-II) (Rahim, 1983) was utilized to assess the conflict styles (used with permission from the Center for Advanced Studies in Management). The measure consists of 28 items measuring five conflict styles: dominating, obliging, avoiding, integrative and compromising. For our analysis, a total of 20 items were extracted from the ROCI-II to include only dominating (e.g. "I used my authority to make a decision in my favor"; $\alpha=.82$), obliging (e.g. "I tried to satisfy the others' needs"; $\alpha=.88$), avoiding (e.g. "I tried to stay away from disagreement with the other"; $\alpha=.79$), and integrative (e.g. "I tried to work with the other to find solutions that satisfy both our expectations"; $\alpha=.81$) items. The items were slightly modified so that they read in the past tense (e.g. "I used my influence to get my ideas accepted" instead of "I use my influence to get my ideas accepted") so that participants could answer the questions based on their behavioral responses to the conflict situations that they audio-recorded. Participants were asked the extent to which they agreed or disagreed with each item (1= strongly disagree, 7= strongly agree).

Table 1.

Descriptions of Individualism-Collectivism

Individualism

- You were primarily motivated by your own preferences, needs and rights.
- You valued accomplishing what no one else could accomplish.
- Your primary focus was on getting what you wanted and achieving your goals.
- You gave priority to your personal goals over the goals of others.
- You valued the rational analyses of the advantages and disadvantages more than associating with others.
- You cared about being unique and separate from others.

Collectivism

- Maintaining a harmonious relationship with your counterpart was more important to you than your accomplishment.
- You sought advice from others.
- You valued associating with the other(s) and helping him/her/them more than the rational analyses of who was at an advantage and disadvantage.
- Your felt that you should make an effort to accommodate the other person's needs even if it meant you had to make a sacrifice.

Conflict satisfaction and other job-related outcomes. Following Kugler et al. (2011), three subscales of satisfaction with the conflict were examined with 3 items per subscale: satisfaction with the process ($\alpha=.86$), satisfaction with the outcome ($\alpha=.86$) and satisfaction with the relationship ($\alpha=.89$). Another item (e.g. “To what extent do you think you would have attained what you were aiming for in this situation?”) measured participants’ perceptions of anticipated goal attainment in the conflict situation ($\alpha=.96$). More general work satisfaction was assessed using the Job-Related Affective Well-Being Scale (JAWS; Van Katwyk et al., 2000) and satisfaction with coworkers (Bishop & Dow Scott, 2000). JAWS consisted of 30 items: 15 positive affect ($\alpha=.93$) and 15 negative affect ($\alpha=.89$). Satisfaction with coworkers scale (Bishop

& Dow Scott, 2000) consisted of 4 items ($\alpha=.78$). Lastly, self-efficacy was measured with a ten-item scale by Schwarzer, Bäßler, Kwiatek, and Schröder (1997; $\alpha = .90$).

Trait-level of individualism-collectivism. Prior to the lab study, participants' trait-level of individualism and collectivism were measured using an independence/interdependence measure developed by Kato and Markus (1993). The scale had four subscales: concerns with others (9 items; $\alpha=.81$), maintaining self-other bonds (7 items; $\alpha=.52$), self-other differentiation (8 items; $\alpha=.61$) and self-knowledge (7 items; $\alpha=.74$). Concerns with others (e.g. "How I behave depends upon the people around in the situation") and maintaining self-other bonds (e.g. "It is important to maintain harmony in the group") were comprised of interdependence and self-other differentiation (e.g. "Nothing can keep me from doing something if I want to do it"). Self-knowledge (e.g. "No matter what the situation or setting is, I am always true to myself") comprised independence. Because *maintaining self-other bonds* (interdependence) and *self-other differentiation* (independence) subscales had low reliabilities, they were excluded from the analysis.

Results

Individualism-collectivism and conflict styles. In order to examine the effects of individualism-collectivism on conflict styles, we first calculated an individualism-collectivism score (referred to as IC ratio hereafter). The IC ratio was calculated by dividing the percentage of time spent with an individualism focus by the percentage of time spent with a collectivism focus. To ensure a symmetrical distribution, we used the logarithmic term of this ratio. Thus, the formula of IC ratio was: $\ln (\% \text{ individualism focus} / \% \text{ collectivism focus})$. A positive ratio described a predominant focus on individualism, a negative ratio, a predominant focus on collectivism, and a ratio of zero described a balanced focus on both individualism and collectivism. Hypothesis 1 stated that *state* measures of individualism- collectivism would be a better predictor of conflict styles than *trait* measures of individualism-collectivism. In order to test this hypothesis, we conducted stepwise multiple regressions for each of the conflict styles. For dominating style, we predicted that individuals holding a stronger individualistic orientation (more time spent in the individualistic orientation compared to collectivistic orientation) would utilize dominating style more often than other conflict styles (Hypothesis 2). We found a significant correlation between a predominant focus on individualism and dominating style ($r=.39, p<.001$). In order to determine if the state measure of individualism-collectivism was a

better predictor of conflict styles than the trait measure of individualism-collectivism, we also conducted stepwise multiple linear regressions. The results showed that trait measures of independence and interdependence were not significant predictors, $\beta = .03$, $t(62) = .27$, $p = .79$ and $\beta = -.05$, $t(62) = -.38$, $p = .70$, respectively. On the other hand, our temporal measure of individualism-collectivism significantly predicted the dominating style in that a predominant focus on individualistic orientation was associated with dominating style, $\beta = .40$, $t(61) = 3.35$, $p = .001$. The temporal measure also explained a significant proportion of variance in dominating style, $R^2 = .16$, $F(3,61) = 11.21$, $p = .001$. Therefore, H2 was supported.

Hypothesis 3 stated that individuals with a stronger collectivistic orientation would utilize avoiding and obliging styles and indeed, a predominant focus on collectivism was significantly correlated with obliging ($r = .51$, $p < .001$) and avoiding styles ($r = .32$, $p < .01$). Regression analysis for obliging showed that trait-level independence-interdependence as measured by Kato and Markus (1993) was not a significant predictor, $\beta = .10$, $t(62) = .78$, $p = .44$ and $\beta = .01$, $t(62) = .06$, $p = .95$, respectively. On the other hand, the temporal measure of individualism-collectivism significantly predicted obliging style in that a predominant focus on collectivistic orientation was associated with obliging style, $\beta = -.51$, $t(61) = -4.64$, $p < .001$. The temporal measure also explained a significant proportion of variance in obliging style, $R^2 = .27$, $F(3,61) = 21.50$, $p < .001$. Regression analysis for avoiding showed similar results; trait-level independence-interdependence was not a significant predictor, $\beta = -.06$, $t(62) = -.48$, $p = .64$ and $\beta = .09$, $t(62) = .70$, $p = .49$, respectively. The temporal measure of individualism-collectivism significantly predicted avoiding style, $\beta = -.32$, $t(61) = -2.64$, $p < .05$. Temporal measure also explained a significant proportion of variance in avoiding style, $R^2 = .11$, $F(3,61) = 6.97$, $p = .01$. Therefore, H3 was also supported.

Hypothesis 4 stated that individuals who employ a more *balanced focus* of both individualistic and collectivistic orientations would utilize an integrative style more than individuals with either a strong individualistic or collectivistic orientation. In other words, a balanced focus would be associated with integrative style more than an unbalanced focus of either a predominantly individualistic focus or collectivistic focus. Hence, we predicted that integrative would not have a linear relationship with individualism-collectivism but instead, would have an inverted U-shaped relationship: a predominantly individualistic focus and a predominantly collectivistic focus (unbalanced foci) would be associated less with the integrative

style than a balanced focus. Regression analysis for the integrative style showed that trait-level independence-interdependence was not a significant predictor, $\beta = .16$, $t(62) = 1.32$, $p = .19$ and $\beta = -.07$, $t(62) = -.60$, $p = .55$, respectively. As predicted, results showed that squared ratio of individualism-to-collectivism significantly predicted integrative style, $\beta = -.27$, $t(61) = -2.11$, $p < .05$. Temporal measure also explained a significant proportion of variance in integrative style, $R^2 = .13$, $F(3,61) = 4.47$, $p < .05$. In order to test if there is a linear relationship, we also included a non-squared ratio of individualism-collectivism in the regression equation, and we found that there is no linear relationship, $\beta = -.19$, $t(61) = -1.57$, $p = .12$. Therefore, Hypothesis 4 was supported.

Table 2.
Regression analysis

Independent Variables	Dominating	Obliging	Avoiding	Integrative
Independence (trait)	.03	.10	-.06	.16
Interdependence (trait)	-.05	.01	.09	-.07
ICratio (temporal)	.39**	-.51***	-.32*	-.19
Squared ICratio	-	-	-	-.27*
R²	.16	.27	.11	.13
Adjusted R²	.12	.23	.07	.08
Model F	11.21**	7.44***	6.97*	4.47*

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

As we predicted, state measures of individualism-collectivism was a better predictor of conflict styles than trait measures of individualism-collectivism, hence Hypothesis 1 was also supported (see Table 2 for summary).

Conflict Styles and Satisfaction. We also examined the link between conflict management styles and satisfaction with conflict processes, outcomes and relationships at work. Hypothesis 5 stated that an integrative style would associate with higher levels of satisfaction with conflict outcomes, processes and relationship. As predicted, integrative style was positively correlated with satisfaction with conflict processes ($r = .57$, $p < .001$), outcomes ($r = .40$, $p < .001$)

and relationships ($r = .50, p < .001$). Therefore, Hypothesis 5 was also supported. We were interested to learn a dominating style was also positively correlated with satisfaction with outcomes ($r = .37, p < .01$) but not with processes and relationships.

Table 3.

Means, Standard Deviations, and Correlations between Conflict Styles and Satisfaction

Measure	Integrative	Dominating	Obliging	Avoiding
Mean	4.28	3.33	4.08	4.02
SD	1.40	1.35	1.46	1.46
Satisfaction with outcome	.40**	.37*	-.06	-.11
Satisfaction with process	.57**	-.05	.23	-.07
Satisfaction with relationship	.50**	-.02	.13	-.22
Goal attainment	.48**	.49**	-.09	-.10
Job related positive affect	.09	-.09	.04	-.21
Job related negative affect	-.27*	.13	-.12	.18
Satisfaction with coworkers	-.06	-.01	-.16	-.29*

** $p < .01$ * $p < .05$

Similarly, integrative style was positively correlated with goal attainment ($r = .48, p < .001$) as was dominating style ($r = .49, p < .001$). Results of the Job-related Affective Well-being Scale (JAWS) showed that a negative affect was negatively correlated with integrative style ($r = -.27, p < .05$) although a positive affect was not correlated with any conflict styles. Satisfaction with co-worker scale was negatively related with avoiding style ($r = -.29, p < .05$) (Table 3).

General Discussion

The objectives of this study were to 1) conceptualize and measure individualism-collectivism as orthogonal constructs and examine the relative influence of these value orientations *within individuals over time* on conflict management styles; 2) shift the focus from a

priori categorization of individualism-collectivism based on nationality to assessing individualism-collectivism directly and individually; and 3) examine variations within individuals rather than across cultures on these dimensions. We accomplished this by examining the combined effects of individualistic and collectivistic orientations on conflict management styles and employing a method for studying the ratios of individualistic-to-collectivistic orientations over time and their impact on conflict styles. Furthermore, we investigated how different value orientations and conflict styles affect satisfaction with conflict outcomes, processes, and relationships at work.

We proposed and supported five hypotheses. This study builds on prior research in the area and extends it by examining the *combined* effects of individualism and collectivism on conflict styles. Several studies examined the effect of self-construals on conflict styles and found evidence that both independent and interdependent self-construals are correlated with integrative conflict styles (Ting-Toomey et al., 1991; Oetzel & Ting-Toomey, 2003). By using a dynamical method that captures a moment-to-moment account of the conflict story, we were able to also identify that a *balanced* ratio of individualistic and collectivistic orientation was associated with use of an integrative style. We found that individuals who employed a *balanced focus* of both individualistic and collectivistic orientations utilized an integrative style more than individuals with either a strong individualistic or collectivistic orientation. Given that integrative styles involve an emphasis on both the concern for self (self-interest) and concern for other (considering others' needs), individuals with a balanced focus of both individualistic and collectivistic orientations utilized an integrative style more often compared to individuals with an unbalanced focus.

Moreover, the integrative style was positively correlated with satisfaction with conflict processes, outcomes and relationships. However, it was interesting to find that a dominating style was also positively related to satisfaction with outcomes but not with satisfaction with processes and relationships. Although we did not anticipate this result, it is logical that people who use dominating style would be satisfied with conflict outcomes in this particular culture (U.S.) and work context because they use their authority and power to reach an outcome that they desire. Similarly, both integrative and dominating styles were positively correlated with goal attainment. Assessment of job-related affective well-being revealed that although integrative style was not positively correlated with positive affect, it was negatively correlated

with negative affect. Because this was a correlational study, we could not assume causality but we could infer that people who utilized an integrative style felt a significantly less negative affect compared to people who did not utilize integrative style. In addition, satisfaction with coworker was negatively related with avoiding style. One explanation may be that although usage of avoiding style may seem suitable for preventing uncomfortable or difficult conversations and hence maintaining relationships in the short term, the unresolved conflict will result in dissatisfaction in the long term.

Most studies that directly measure cultural orientations (i.e. independence-interdependence) use trait-level measures (Gabrielidis et al., 1997; Leung & Bond, 1989; Ohbuchi & Takahashi, 1994; Morris et al., 1998). Although there are inconsistent findings in the literature, a substantial amount of research has shown that collectivism is related to integrative, avoidance and obliging styles and individualism is related to dominating styles (Ting-Toomey, 1988; Oetzel & Ting-Toomey, 2003). However, it is important to note that our results did not replicate these findings: trait-level measures of individualism-collectivism were not significant predictors of conflict styles. One possible explanation may be that because the conflict styles measurement items were modified to be in the past tense, following the audio-recording of conflict stories, trait-level measures may not have been a significant predictor of conflict styles. Another alternative explanation may be that there were issues with the trait-level measures of independence-interdependence. As Levine et al. (2003) argued, there may be major flaws with the scales designed to measure self-construals because interdependence is defined as a situationally determined and variable sense of self, yet the trait measure does not take account of the contextual factors. Thus, the current research extends research by examining and understanding cultural values as *state* variables rather than *trait* variables.

Limitations and Conclusions

There are several limitations in this study. As indicated in our method section, our sample size consisted of 65 individuals. Although the Mouse Paradigm methodology captures conflict dynamics over time, yielding on average 282 data points per participant in our study, (see Vallacher et al., 1994 for details about the methodology and sample size), a bigger sample size would help make the findings more generalizable.

While the current study suggests that a balance between individualistic and collectivistic orientations lead one to use integrative style which ultimately results in goal attainment and

satisfaction with conflict outcomes, processes and relationships, it is difficult to assume causality between the variables. Future research using an experimental design will be necessary to test the causal relationships between the combined effects of individualism-collectivism, conflicts styles and conflict satisfaction. Moreover, the current study examines the ratio of individualistic and collectivistic orientations but does not take account of the duration of time participants stayed in these two orientations. In other words, a person who stayed in each orientation forty percent of the time (forty percent in individualistic orientation and forty percent in collectivistic orientation) had the same IC ratio as a person who stayed in each orientation twenty percent of the time. Also, future research should examine the ordinal effect of individualism and collectivism. A person who moves from an individualistic orientation to collectivistic orientation over time may utilize different conflict styles when compared to a person who moves from a collectivistic orientation to an individualistic orientation.

Taken together, the present study introduces a new methodology to test the effects of individualism-collectivism on conflict styles. Moreover, we suggest that there is an *optimal* combination of individualism-collectivism orientations in social conflicts in that the balance of two constructs or a 1:1 ratio of individualism-collectivism leads to more use of an integrative style, which then leads to more constructive conflict outcomes and satisfaction. Conceptually, scholars have noted the importance of measuring individualism-collectivism as separate constructs and argued against using *a priori* categorization according to ethnicity or nationality. By utilizing a tool that measures individuals' orientations over time, we offer a methodology to test individualism-collectivism as orthogonal constructs and examine the combined effects of individualistic and collectivistic orientations on conflict management styles.

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