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Individual Task Conflict Asymmetry and Peer Ratings of Member Effectiveness

Shirley Wang¹, Astrid C. Homan², and Karen Jehn³

Abstract
The present article explores the effects of individual task conflict asymmetry—a member’s task conflict perception relative to others on the team—on peer ratings of that member’s effectiveness. In two studies of student teams, we find that individuals who perceive more conflict than their teammates are rated as more effective team members. This effect is explained by uncertainty experienced by the high task conflict perceiver, which acts as a catalyst for additional effort expansion toward team goals. By turning our attention to peer ratings of member effectiveness, we offer an optimistic side to individual task conflict asymmetry.

Keywords
conflict asymmetry, task conflict, uncertainty, effectiveness ratings

Task conflicts—disagreements among group members about the content of the tasks being performed, including differences in viewpoints, ideas, and opinions (Jehn, 1995)—are an embedded component of work teams. Especially in an

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interdependent setting, it is inevitable that members will at times experience different goals, preferences, and perspectives about the task. Previous research has nicely illustrated the main effects of task conflict on team functioning, the processes that drive this relationship, and contextual factors that moderate both main effects and mediators (for a review, see De Wit, Greer, & Jehn, 2012). Interestingly, the majority of this research has conceptualized intragroup task conflict as a shared team property, focusing on the aggregate experience of conflict (e.g., Le & Jarzabkowski, 2015; Lee, Earley, Lituchy, & Wagner, 1991).

Departing from this assumption, the team conflict domain has recently opened a dialogue that seeks to explore alternate ways in which individual conflict perceptions can emerge to form meaningful group-level constructs (Thatcher & Phillips, 2010). The basis for this reexamination is the acknowledgment that consensus may more often be the exception than the norm and that valuable insights on team-level outcomes can be gained by examining patterns of dissensus (Klein & Kozlowski, 2000). To this end, researchers have examined how various patterns of dissensus, such as uniform (Jehn, Rispens, & Thatcher, 2010) and nonuniform (Sinha, Janardhanan, Greer, Conlon, & Edwards, 2016) distributions of task conflict perceptions at the team level influence team outcomes.

What has largely been ignored in these new developments, however, are inquiries into the individuals who experience relatively more or less task conflict in their work teams. The lack of attention regarding the effects of variations in individual perceptions of conflict is somewhat surprising given the robust body of work that has shown that individual perceptions of task conflict have significant impact on affect, cognition, strategies, and behavior (Kruglanski & Klar, 1987; Mather & Yngvesson, 1981; Pinkley, 1990; Pinkley & Northcraft, 1994).

Research on the emotionality of conflict suggests that negative affect is often automatically engendered during the experience of task-related disagreements because people have a difficult time separating their viewpoints from their sense of self (De Dreu & Van Knippenberg, 2005; Yang & Mossholder, 2004). We build on the mood-as-input framework, which converges on the theme that individuals use their affective state as information regarding their current effectiveness levels (Clore & Huntsinger, 2007; George & Zhou, 2002; Kooij-De Bode, Van Knippenberg, & Van Ginkel, 2010), to argue that negative affect may signal that inadequate effective behaviors are expanded toward task accomplishment and increase member uncertainty regarding the likelihood of achieving team goals.

We introduce here the notion that being a high task conflict perceiver can actually be a catalyst for expanding effort toward collective goals. We propose that unique dynamics are engendered in teams with asymmetrical task conflict configurations but that only high perceivers carry the negative
psychological burden of working in such teams. Specifically, we propose that high perceivers may be more likely to experience negative affect and that this triggers feelings of uncertainty regarding the likelihood of the team attaining the team’s goals. Paradoxically, these dynamics can propel high task conflict perceivers to contribute more effort to collective goals and be rated by their peers as a more effective team member.

We focus on peer ratings of effectiveness because members of the same team have the best vantage point through which to observe each other’s behavior (Loughry, Ohland, & Moore, 2007), making peers uniquely qualified to gauge performance. Peers also have the best understanding of what is required of the team members for the task and what constitutes high versus low performance (Shore, Shore, & Thornton, 1992). Furthermore, a number of meta-analyses have found converging evidence for the reliability and validity of peer evaluations. Peer ratings, as compared with self- and supervisor ratings, are the strongest predictor of future job advancement, tap unique information above and beyond other rating methods, and exhibit the highest correlation with third-party observations (Conway & Huffcutt, 1997; Harris & Schaubroek, 1988; Kane & Lawler, 1978; Lewin & Zwany, 1976). We test our model across two studies. The first study, conducted using a sample of 247 MBA students, finds a direct relationship between high task conflict perceivers and peer ratings of member effectiveness. The second study, conducted using a sample of 106 undergraduate students, finds that this relationship is mediated by member uncertainty.

Our research extends the literature on team conflict by moving beyond the influence of team-level distributions in conflict perceptions by investigating the experiences of individuals in those teams. This agenda answers a call by team- and multilevel researchers to scratch below the surface of the collective and into the microdynamics of individual action (Humphrey & Aime, 2014). By examining the motivation and behaviors of the individuals in teams, one can gain further insight into the way that individual-level constructs emerge to affect team-level outcomes. In addition, our study offers an optimistic lens by proposing a beneficial effect of perceiving high task conflict. Although previous research has theorized and found high task conflict perceptions to be correlated with negative consequences, we posit that by turning our attention to peer ratings, this relationship may reverse as high task conflict perceivers are seen as more effective in the eyes of others.

**Individual Task Conflict Asymmetry**

Individual task conflict asymmetry refers to a member’s task conflict perceptions relative to other team members. Individual task conflict asymmetry,
therefore, can range from higher to lower compared with the team’s average. This conceptualization has been referred to as a frog–pond variable (Glick & Roberts, 1984; Klein, Dansereau, & Hall, 1994; Klein & Kozlowski, 2000) because the emergence of the lower level property is relative to that of others in the higher level unit (e.g., the same frog will be large in a small pond but small in a large pond). Large positive perceivers experience high levels of conflict in a team whose other members experience low levels of conflict. Moderate positive (negative) perceivers experience more (less) conflict than their teammates, but the overall dispersion is smaller. Finally, large negative perceivers experience low levels of conflict in a team that other members experience high levels of conflict. We operationalize individual task conflict asymmetry as a continuum ranging from large positive (hereafter referred to as high conflict perceivers) to large negative (hereafter referred to as low conflict perceivers).

Individual variation in conflict perceptions can arise from a number of sources. At the individual level, research suggests that beliefs regarding the consequences of task conflict on performance (Avgar & Neuman, 2015) and an individual’s culture (Gelfand et al., 2001) provide lenses through which conflict is interpreted, which, in turn, affect sensitivity to the presence of conflict. For instance, Avgar and Neuman (2015) proposed that believing task conflict has severe negative consequences can lead members to be hypervigilant and experience more conflict as such individuals encode ambiguous situations as conflict laden. Furthermore, individuals from different cultural backgrounds are sensitive to different aspects of conflict (Gelfand et al., 2001), changing conflict experiences as a function of what the conflict is about or how it is expressed (e.g., conflict regarding infringement on personal autonomy is attended to more often in individualistic cultures; covert conflict is noticed more often in collectivist cultures). Structurally, where members are located in their network or hierarchy might also influence conflict experiences. Avgar and Neuman (2015) found that members who are relied upon by many to accomplish the task, and thus centrally located in the workflow network, are more attuned to the presence of task conflict. Although it is beyond the scope of our research to empirically examine the antecedents of conflict perceptions, we address some possibilities for future research in a later section. Given the possible variability in conflict perceptions, we argue that it is interesting to understand how individuals who perceive relatively more task conflict than others experience their team as well as how their team members respond to them.

Experiences of Individual Task Conflict Asymmetry

Experiencing more task conflict than fellow group members can have important negative consequences for the focal individual (Jehn et al., 2010; Jehn,
Rupert, & Nauta, 2006). Individuals who experience more task conflict than their peers are likely to experience increased levels of negative affect. First, humans have a fundamental need for consistency and to believe that others share their perception of reality—experiencing more task conflict than peers creates an inconsistency in one’s social environment and induces threat (Van den Bos, 2009). In this respect, the similarity–attraction paradigm proposes that people feel more affinity toward others who hold similar beliefs (Byrne, 1971). Indeed, empirical evidence suggests that individuals with dissimilar beliefs like each other less, communicate less frequently, have less satisfying work relationships, and are more likely to leave (see Williams & O’Reilly, 1998). This makes partaking in a series of team interactions (e.g., team meetings, verbal and electronic conversations), yet being (made) aware that one’s teammates experience different realities inherently uncomfortable and anxiety provoking (Van den Bos, 2009). In contrast, being able to predict how others will interpret and react to new stimuli is comforting and reduces negative affect. Given that high conflict perceivers are most distal to their teammates, in the pessimistic direction, they should experience relatively more negative affect than moderate or low conflict perceivers.

Implicit in our argument is that low perceivers who are equally distant in conflict perceptions, but in the optimistic direction, are unlikely to be susceptible to the negative affect experienced by high perceivers. In support of this idea, research on conflict asymmetry has shown that low perceivers experience higher affective outcomes such as satisfaction (Jehn & Chatman, 2000; Jehn et al., 2010). Low perceivers may not pick up on information that others experience a heightened level of conflict. Research on conflict asymmetry has found that high perceivers use more conciliatory conflict resolution strategies (De Dreu, Kluwer, & Nauta, 2008) and are more motivated to present their arguments in a careful and politically sensitive manner (Sinha et al., 2016) because they recognize their lack of power. In a nonhierarchical team setting, high perceivers recognize that they do not have more or less power than others to affect change and will, thus, want to present any divergent opinions in a noncombative manner. As a result, any signal received by a low perceiver that others experience a high(er) level of conflict is likely to come through in a low intensity and ambiguous manner that may not make the other seem that different, and as such will not illuminate the asymmetry. Low perceivers, therefore, may not be able to perceive that high perceivers experience a different level of conflict and will, thus, not be affected by the threat that is provoked from dissimilar others.

Second, experiencing task conflict in general, and in asymmetrical configurations especially, can lead to negative affect (De Wit et al., 2012; Jehn et al., 2010). Research on the emotionality of conflict suggests that
individuals can become dissatisfied when they interpret challenges to their viewpoints as challenges to their person. However, it is more often the norm than the exception for individuals to develop ownership of their argument and adopt their viewpoints as part of their extended selves (De Dreu & Van Knippenberg, 2005). This explains why task-related conflict often turns emotional (Yang & Mossholder, 2004), decreases satisfaction, is frustrating, and leads to turnover (Jehn, 1995; Jehn & Bendersky, 2003; Simons & Peterson, 2000). Being in an asymmetrical situation can make matters worse because low perceivers may not even pick up on their fellow teammates’ concerns. Therefore, in addition to feeling personally challenged, high perceivers may also feel belittled and disrespected (De Dreu et al., 2008; Jehn, De Wit, Barreto, & Rink, 2015; Simon & Sturmer, 2005). In support of this, research on romantic relationships has found that partners who perceive more conflict than their spouses are less satisfied in their relationship because of increased anxiety and distress about the future (Campbell, Simpson, Boldry, & Kashy, 2005).

In sum, most previous research has indicated that high conflict perceivers will experience negative consequences such as negative affect, lowered satisfaction, and absenteeism. In the present research, we propose that the downside of perceiving high task conflict—experiencing heightened negative affect—can paradoxically act as a catalyst that drives individual effectiveness (as rated by one’s peers). We use research on mood as input (Clore & Huntsinger, 2007) to predict that high conflict perceivers experience high uncertainty—defined as the lacking of precise knowledge about the likelihood of events (Hogarth, 1987)—in their teams. Being in a team in which one experiences significantly more conflict than others can create doubt about projected performance levels. In collective tasks, one way for individuals to decrease uncertainty regarding the ability to achieve a team goal is to contribute effort toward goal accomplishment. The social compensation theory of motivation (Williams & Karau, 1991) and social identity theory (Tajfel & Turner, 1986) provide the framework for this argument. We further propose that individual effort will be noticed by one’s peers and translated into higher peer ratings of member effectiveness.

**Individual Task Conflict Asymmetry, Individual Effectiveness, and Uncertainty**

Mood-as-input theory proposes that individuals use their affective feelings as a basis for judgment (Clore & Huntsinger, 2007). We use this theory to explain why felt negative affect may trigger uncertainty about team performance and, in turn, propel high perceivers to be more effective. Moods
inform the individual of whether everything is fine and can continue as they are, or whether attention and possible action are required. When members make evaluations about the valence of their team, they ask themselves “how do I feel about it” (Schwarz & Clore, 1983)? If the reply is negative, members are likely to attribute the cause of this reaction to the most salient goal of a work team—team performance. Felt negative affect can cast doubts on current team performance and signal to the high perceiver that current levels are not fine and that proactive effort is needed to right the course (Van Kleef, Homan, & Cheshin, 2012). Kooij-de Bode et al. (2010) found that participants who experienced high state negative affect engaged in deeper intragroup dialogue because of what such moods signaled to those individuals—that team performance may not be up to standards and that successful goal achievement is not certain.

This line of reasoning leads to the prediction that uncertainty should mediate the relationship between high conflict perception and individual effectiveness. Uncertainty is defined as not knowing the precise likelihood of events (Hogarth, 1987) and has been associated with the experience of negative affect (Gudykunst & Nishida, 2001). As we have argued, the negative affect experienced by high conflict perceivers is likely visualized in uncertainty about future team performance. This should, in turn, engender concern about how things will progress and whether the team can ultimately pull together to accomplish their task. Uncertainty is unpleasant when task accomplishment is important, and agentic actors should seek to reduce it as much as possible (Lipshitz & Strauss, 1997).

In a team setting, in which performance is the product of collective effort, one way to reduce uncertainty is to put forth more individual effort toward goal achievement. Social compensation (Williams & Karau, 1991) occurs when two conditions are met—when a team member believes that current performance levels are insufficient to meet team goals and when the collective product is meaningful to that member. Under these conditions, the member will be motivated to work harder. On a collective task, this implies that expectations about teammates’ input level should influence one’s own effectiveness. High task conflict perceivers, because of their uncertainty with current performance levels, should be motivated to expand effort to increase the probability of achieving high team performance. Conversely, when individuals are not uncertain, they should be more confident in their teammates and perceive a lower correlation between individual effort and high performance, which would not trigger an increase in individual effectiveness.

The second necessary condition for social compensation to occur, and an assumption of our current model, is that members find the rewards of success meaningful. Although this may not be the case in all teams, we propose that
in many academic (and organizational) settings, the consequences of high performance are quite substantial. These can include material benefits (e.g., salary, bonus), status (e.g., promotion, awards, honors), resources for the future (e.g., high grades, recommendations), and positive affect (e.g., self-validation). We would argue that most team members find one or multiple of these outcomes to be desirable. Consistent with these ideas, Williams and Karau (1991) found that on a collective task, when members expected their teammates to perform poorly, they were willing to work harder to compensate for their teammate provided that the outcomes were valuable.

In addition, research on social identity theory (Tajfel & Turner, 1986) would also predict that when uncertainty is high, members should be willing to work harder. One aspect of this theory is that individuals garner positive self-evaluation through membership in high-status teams. Teams can achieve high status by performing well (Ellemers, De Gilder, & Haslam, 2004). Individuals who are uncertain about the performance of their team should, thus, be motivated to contribute effort as a way to elevate the status of their team (Ellemers et al., 2004). Consistent with the notion that individuals care about the evaluation of their team, Harkins and Szymanski (1989) found that members were less likely to free ride when they believed that their team’s performance would be compared with other teams.

We contend that individual effort will be noticed by peers and translated into higher peer ratings of effectiveness. In situations with high outcome interdependence, such as in a team setting, members should be highly vigilant about who is contributing what. We thus propose the following:

**H1:** As a focal member’s individual task conflict asymmetry increases, that member will be rated as more effective by his or her peers.

**H2:** Focal member’s uncertainty will mediate the positive relationship between his or her individual task conflict asymmetry and peer ratings of the focal member’s effectiveness. A member who perceives higher levels of task conflict, relative to his or her teammates, will be more uncertain, which will, in turn, lead to higher peer ratings of that member’s effectiveness.

**Method**

We tested our hypotheses using two quasi-experimental studies of student teams, one using a sample of 247 MBA teams in an Australian university, and the other using a sample of 106 undergraduate teams in an American university. We use survey items at multiple points in time to measure the independent, dependent, mediator, and control variables. In the first study, we test the
direct relationship between individual conflict asymmetry and peer ratings of member effectiveness (H1). In the second study, we test both hypotheses and examine the mediating role of uncertainty.

**Study 1**

**Participants and Design**

A total of 247 MBA students in 76 teams from a large Australian university participated as a part of their course. Team size ranged from three to four (49 three-person teams, 25 four-person teams). The demographic breakdown is as follows: 71% of participants were male, the average age was 31 years ($SD = 4.87$ years), 55% were Caucasian, 26% were Asian, and 11% were Black. Participants had an average of 5.2 years of previous work experience ($SD = 3.97$ years).

The students worked together for the duration of the semester to complete a team project that comprised 45% of students’ grade. The project required team members to develop their negotiation skills by writing an in-depth memo on the topic of negotiation. Teams had a large amount of autonomy on how to approach the project, and could choose to analyze a past negotiation situation, conduct interviews with a negotiation expert, or develop a new negotiation exercise. Because of the open nature of the project, teams had to make sense of a complex environment, converge on a strategy, and execute that strategy.

Surveys were administered at three time points: Demographic data and individual competitive orientation were measured at the beginning, conflict perceptions were measured at the midpoint, and round-robin peer ratings of member effectiveness were measured at the end of the course when all assignments were turned in but prior to receiving course grades.

**Measures**

**Task conflict asymmetry.** We measured task conflict using three items adapted from Jehn’s (1995) scale. All measures used in this study are rated on a 7-point Likert-type scale. We created the individual conflict asymmetry measure by taking the dyadic difference in conflict perceptions between each focal member and every other member on the team and then averaging these differences. This is the same procedure outlined in Jehn et al. (2010) and can be described by the formula: $\frac{1}{n} \sum x_i - x_j$, where $x_i$ is the focal members’ conflict score, $x_j$ is the conflict score of member $j$, and $n$ is the team size. This measure is based in the relational demography literature (Tsui &
O’Reilly, 1989), which assesses the distance of a focal member from that of all other members on the team. We modified the relational demography measure by taking away the absolute value because we are interested in the directionality of the asymmetry. A positive score implies that the focal member perceived more conflict than his or her teammates (e.g., high perceivers), whereas a negative score implies that the focal member perceived less (e.g., low perceivers). The individual task conflict asymmetry score ranged from −4 to +4. The task conflict scale exhibited good internal reliability (α = .75).

Peer ratings of member effectiveness. Although peers are a legitimate source of information, no well-accepted scale on individual effectiveness has been consistently used in a peer-rating context. We created a three-item scale based on the work of Loughry and colleagues (2007) because this was the only research to our knowledge that combined theory on team effectiveness and peer ratings in the development of a measure for individual member effectiveness (Comprehensive Assessment of Team Member Effectiveness [CATME]). Their research points to five categories of behavior that contribute to member effectiveness. These categories can be classified as being task- and team focused (Cannon-Bowers, Salas, & Converse, 1993). Based on these insights, we measured member effectiveness by asking participants to rate the extent to which the focal member was hardworking, has leadership capabilities, and is trustworthy. These three constructs clearly map onto core aspects of effectiveness, as supported by previous work (Borman, White, & Dorsey, 1995; Erez, Lepine, & Elms, 2002; Marks, Mathieu, & Zaccaro, 2001; Simons & Peterson, 2000). The three items exhibited good internal validity (α = .91).

Controls. Given that there is often a high correlation between the different types of conflict (De Wit et al., 2012), we controlled for relationship conflict asymmetry and process conflict asymmetry to ensure that task conflict and not any other type of conflict drove the effects. We also wanted to make sure that asymmetric configurations in task conflict perceptions exhibited an influence above and beyond mean levels of conflict and, thus, controlled for average task, relationship, and process conflict. We measured relationship conflict using three items and process conflict using two items adapted from Jehn (1995). Relationship conflict (α = .78) and process conflict (α = .74) exhibited good internal reliability. We measured asymmetry in relationship and process conflict using the same formula as above. We controlled for participant gender by creating a binary variable because there is ample evidence that gender influences attribution of behavior (Rudman & Glick, 2001). Finally, we controlled for individual competitive orientation to avoid
confounding general tendencies to be more effective and conflict perceptions (for instance, individuals who are highly competitive may perceive more conflict and expand more task effort). We measured individual competitive orientation using two items, “I always try to win the most from the other person” and “I try to be competitive.” This scale exhibited good internal reliability (α = .78).

In both Study 1 and Study 2, we tested our hypotheses using hierarchical linear modeling (Raudenbush & Bryk, 2001) and nested individuals within their corresponding team to control for nonindependent error terms between individuals of the same team.

### Results

Means, standard deviations, and correlations for all measures at the individual level are reported in Table 1. Substantive analyses are replicated in Table 2. In H1, we predicted that high task conflict perceivers would be seen as more effective teammates. Indeed, task conflict asymmetry significantly predicts peer ratings of teammate effectiveness (β = .13, p = .02), controlling for relationship conflict and process conflict asymmetry as well as mean levels of conflict. In addition, the model including task conflict asymmetry provides a significantly better fit than the model with only controls, Δχ² (df = 1) = 5.6, p = .02. These results support H1.

Study 1 provided support for the main effect between individual conflict asymmetry and peer ratings of focal member’s effectiveness (H1). In Study 2, we extend this finding by examining the mediating role of uncertainty (H2), using a similar method.

### Table 1. Study 1: Descriptive Statistics (N = 247).

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.29</td>
<td>0.45</td>
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<td></td>
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<tr>
<td>Competitive</td>
<td>3.51</td>
<td>1.35</td>
<td>−.09</td>
<td></td>
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<tr>
<td>3 PC mean</td>
<td>2.32</td>
<td>0.78</td>
<td>.02</td>
<td>.08</td>
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<td></td>
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<tr>
<td>4 RC mean</td>
<td>1.55</td>
<td>0.53</td>
<td>.01</td>
<td>.08</td>
<td>.65***</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>5 TC mean</td>
<td>3.47</td>
<td>0.96</td>
<td>.03</td>
<td>.24***</td>
<td>.19**</td>
<td>.19**</td>
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<tr>
<td>6 PC asymmetry</td>
<td>0.00</td>
<td>1.21</td>
<td>.04</td>
<td>.00</td>
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<td>.00</td>
<td>.00</td>
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<tr>
<td>7 RC asymmetry</td>
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<td>0.80</td>
<td>−.07</td>
<td>−.01</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.28***</td>
<td></td>
<td></td>
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<tr>
<td>8 TC asymmetry</td>
<td>0.00</td>
<td>1.29</td>
<td>.02</td>
<td>−.01</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.33***</td>
<td>.27***</td>
<td></td>
</tr>
<tr>
<td>9 Effectiveness</td>
<td>5.98</td>
<td>1.17</td>
<td>−.07</td>
<td>−.12*</td>
<td>.21***</td>
<td>.01</td>
<td>.16**</td>
<td>.17**</td>
<td>.20**</td>
<td></td>
</tr>
</tbody>
</table>

Note. PC = process conflict; RC = relationship conflict; TC = task conflict. *p < .1. **p < .05. ***p < .01. ****p < .001.

...
Table 2. Study 1: Hierarchical Linear Modeling Analyses of Task Conflict Asymmetry on Member Effectiveness ($N=247$).

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Controls</th>
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<tbody>
<tr>
<td></td>
<td>Gender</td>
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<td>.02</td>
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<tr>
<td></td>
<td>Determined</td>
<td>−.05</td>
<td>−.05</td>
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<tr>
<td></td>
<td>PC mean</td>
<td>.04</td>
<td>.04</td>
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<tr>
<td></td>
<td>RC mean</td>
<td>−.5*</td>
<td>−.5*</td>
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<tr>
<td></td>
<td>TC mean</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>PC asymmetry</td>
<td>.12*</td>
<td>.09</td>
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<tr>
<td></td>
<td>RC asymmetry</td>
<td>.19*</td>
<td>.15+</td>
</tr>
<tr>
<td></td>
<td>TC asymmetry</td>
<td></td>
<td>.13*</td>
</tr>
</tbody>
</table>

Note. PC = process conflict; RC = relationship conflict; TC = task conflict.
+ $p < .1$. *$p < .05$. **$p < .01$. ***$p < .001$.

Study 2

Participants and Design

A total of 106 undergraduate students in 21 teams from a midsized university in the United States participated as a part of their course. Team size ranged from three to six (one three-person team, 17 five-person teams, three six-person teams). The demographic breakdown is as follows: 56% of participants were male, the average age was 19.83 years ($SD = 1.76$ years), 49% were Asian, 42% were Caucasian, and 7% were Black.

Students worked together for the duration of the semester to complete a team project that comprised 25% of their grade. The project required team members to choose an organization and create a plan of action for a problem that the organization is facing (e.g., motivation issues, retention, conflict, culture). Students were asked to write an in-depth memo on their organization. They had to focus on a problem that the organization was currently facing or on a new directive that the organization wanted to undertake, provide an analysis of root causes or impactful leverage points, and a feasible plan of action for how the organization should move forward. Teams had a large amount of autonomy on how to approach the project, how to collect data (i.e., interviews, surveys, archival information), and which course concepts to focus on. Similar to the project in Study 1, teams had to make sense of a complex environment, converge on a strategy, and execute that strategy.
We administered surveys at four time points: Demographic data were measured at the beginning, conflict perceptions were measured at the midpoint, uncertainty was measured between the midpoint and the end of the course, and round-robin peer ratings of member effectiveness were measured at the end of the course when all assignments were turned in but prior to receiving course grades.

**Measures**

**Task conflict asymmetry.** Task conflict asymmetry was measured with the same items and method as in Study 1. The task conflict scale exhibited good internal reliability ($\alpha = .70$).

**Effectiveness.** We measured perception of the focal member’s effectiveness using the same round-robin scale as Study 1. This scale exhibited good internal validity ($\alpha = .85$).

**Uncertainty.** Uncertainty of the focal person was measured using a two-item scale. The items were “I am unsure about what is going on in this team” and “things are unclear about what is happening in this team.” This scale exhibited good internal validity ($\alpha = .92$).

**Controls.** We measured relationship and process conflict asymmetry using the same scales and method of calculation as in Study 1 (relationship conflict $\alpha = .79$, process conflict $\alpha = .78$). We also controlled for mean levels of conflict and gender. In Study 1, we controlled for individual competitive orientation to avoid confounding general tendencies to be more effective and conflict perception. In this study, we controlled for this tendency by asking participants how determined they felt to complete this task well (measured at Time 3). We used a different control from Study 1 to ensure that a more proximal measure of desire to expand effort was not an omitted variable (for instance, individuals who are highly determined may perceive more conflict and expand more task effort for conflict perceptions).

**Results**

Means, standard deviations, and correlations for all measures at the individual level are reported in Table 3. Substantive analyses are replicated in Table 4. H1 predicted that high task conflict perceivers would be seen as more effective teammates. Task conflict asymmetry significantly predicts peer ratings of teammate effectiveness ($\beta = .13$, $p = .03$), controlling for
relationship conflict and process conflict asymmetry as well as mean levels of conflict. In addition, the model including task conflict asymmetry provides a significantly better fit than the model with only controls \( \Delta \chi^2 (df = 1) = 4.78 \) (\( p = .03 \)). These results support H1.

In H2, we proposed that uncertainty mediates the relationship between high task conflict perception and peer ratings of member effectiveness. To examine this mediation, we followed the steps laid out by Baron and Kenny.

### Table 3. Study 2: Descriptive Statistics (N = 106).

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.44</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determined</td>
<td>4.85</td>
<td>1.52</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC mean</td>
<td>2.7</td>
<td>0.69</td>
<td>.00</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC mean</td>
<td>2.2</td>
<td>0.53</td>
<td>.01</td>
<td>-.06</td>
<td>.77***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC mean</td>
<td>3.1</td>
<td>0.57</td>
<td>.04</td>
<td>-.01</td>
<td>.67***</td>
<td>.57***</td>
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<td></td>
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<tr>
<td>PC asymmetry</td>
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<td>1.23</td>
<td>-.02</td>
<td>-.13</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC asymmetry</td>
<td>0.00</td>
<td>1.05</td>
<td>-.12</td>
<td>-.06</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.59***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC asymmetry</td>
<td>0.00</td>
<td>1.05</td>
<td>-.12</td>
<td>-.06</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.59***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty</td>
<td>2.35</td>
<td>1.58</td>
<td>-.05</td>
<td>-.05</td>
<td>.09</td>
<td>.04</td>
<td>.09</td>
<td>.18*</td>
<td>.17*</td>
<td>.24*</td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>5.16</td>
<td>0.6</td>
<td>-.05</td>
<td>-.15</td>
<td>-.20*</td>
<td>-.01</td>
<td>-.09</td>
<td>-.03</td>
<td>.13</td>
<td>.14</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* PC = process conflict; RC = relationship conflict; TC = task conflict. 
\( +p < .1. \; *p < .05. \; **p < .01. \; ***p < .001. \)

### Table 4. Study 2: Hierarchical Linear Modeling Mediation Analyses (N = 106).

<table>
<thead>
<tr>
<th>Controls</th>
<th>Uncertainty</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.15</td>
<td>.04</td>
</tr>
<tr>
<td>Determined</td>
<td>-.03</td>
<td>.04</td>
</tr>
<tr>
<td>PC mean</td>
<td>.14</td>
<td>.04</td>
</tr>
<tr>
<td>RC mean</td>
<td>-.15</td>
<td>-.27</td>
</tr>
<tr>
<td>TC mean</td>
<td>.19</td>
<td>.17</td>
</tr>
<tr>
<td>PC asymmetry</td>
<td>.15</td>
<td>-.07</td>
</tr>
<tr>
<td>RC asymmetry</td>
<td>.17</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note.* PC = process conflict; RC = relationship conflict; TC = task conflict. 
\( +p < .1. \; *p < .05. \; **p < .01. \; ***p < .001. \)
Results from Table 4 indicate that task conflict asymmetry marginally predicts uncertainty ($\beta = 0.28$, $p = 0.07$) and that uncertainty significantly predicts peer ratings of member effectiveness ($\beta = 0.08$, $p = 0.02$). When both task conflict asymmetry and uncertainty are entered simultaneously, the effects of conflict asymmetry on peer ratings of effectiveness are reduced to marginally significant ($\beta = 0.11$, $p = 0.06$).

We further tested this mediation by using bootstrapping analysis, a strategy that does not make assumptions about the shape of the sampling distribution of the indirect effect, thus producing relatively robust results (Edwards & Lambert, 2007). To make statistical inferences about this mediating effect, we used the PROCESS macro (Hayes, 2013). This macro allows the user to examine the direct, indirect (mediated), and total effects of individual task conflict asymmetry on peer ratings of effectiveness, through uncertainty. We used the bias-corrected bootstrapping specification with 10,000 samples (Hayes, 2013). Analyses showed that the 90th percentile confidence interval (CI) for the indirect effect was significant (i.e., did not include 0; point estimate = 0.02, CI = [0.002, 0.064]). However, this CI was not significant at the 95th percentile. These results provide marginal support for H2.

**Discussion**

The present research moves beyond conceptualizing task conflict as an emergent team-level property to examining the individuals within those teams. We find that individual task conflict asymmetry—individual perceptions of task conflict relative to others on the team—significantly influences individual experiences and behaviors. Specifically, across two studies, we find that high task conflict perceivers are judged as more effective by their peers and that this relationship can be partially explained by felt uncertainty.

The present research contributes to existing theory on team task conflict. Previous research on this topic has mainly examined the impact of average levels of task conflict on team processes and outcomes, emphasizing the shared aspect of conflict. Under this conceptualization, variance in conflict experience is treated as an error term instead of a variable of interest. Our results demonstrate that individual differences in perceptions of task conflict, considered relative to others, influence individual behaviors in the pursuit of collective goals. This finding adds to our understanding of the relationship between task conflict and performance by shedding light on how individual conflict experiences affect effectiveness in the team.

The current study also advances our understanding of individual conflict asymmetry by offering a positive outcome of high task conflict perception.
Earlier work by Jehn and colleagues (2010) theorized and found that high perceivers self-reported worse individual performance in the team because of felt negative cooperation and communication from their teammates. Our research supplements this finding by proposing that judgments of performance can vary vastly depending on the point of reference. Our research shows that when judged by their peers, high task perceivers are actually seen as performing more effectively than their low perceiving counterparts. This story is not inconsistent with Jehn et al.’s (2010) finding because our research shows that high perceivers do shoulder a disproportionate amount of the team burden by feeling more uncertain about performance. It may not be a large jump to posit that these feelings of uncertainty are correlated with feelings of low performance and team cooperation and communication as experienced by the high perceiver. Our addition to this story is that feelings of uncertainty can actually be a source of motivation, which is noticed by fellow team members.

It should be noted that the results from the current study might seem, at first blush, inconsistent with research conducted by Jehn et al. (2006). Their research found that, for employees in the educational sector, mediation had a negative impact on work motivation for individuals who experienced high task conflict asymmetry compared with individuals who experienced low task conflict asymmetry. These results are not entirely surprising given the setting of their research. First, their research question centers on the effects of work motivation after mediation has occurred. It is possible that the mediation process itself highlighted differences in perceptions of task conflict and, thus, worsened outcomes. There is evidence from their qualitative piece that bringing this asymmetry to light actually caused hurt feelings and parties to become more entrenched in their original perspective. In the current research, we never explicitly delineated time for participants to express their conflict concerns. The impact of individual conflict asymmetry may have, thus, been more contained with negative affect functioning at the individual level instead of bubbling up to the team level, facilitating its transformation to member effectiveness. Second, Jehn and colleagues surveyed employees who worked more independently than the student teams we focused on in the current study. Educators likely have their own performance metrics, such as individual student evaluations. Although they might need to consult each other for advice from time to time and collaborate on class planning or administrative duties, they are chiefly accountable for and rewarded on individual performance. Under situations of low interdependence, even if negative affect and uncertainty are experienced, it is unlikely to translate to higher effectiveness toward team goals as individual rewards are not tied to collective outputs.
Limitations and Future Directions

There are some limitations in the current research that should be kept in mind when interpreting results. First, the use of student teams may raise questions of generalizability to an organizational setting. Organizational teams may have some inherent characteristics that make them different from student teams such as the expectation of continued employment and a less restricted tenure and age range. However, we believe that the presence of real consequences (e.g., grades) and external pressures (e.g., reputation, competitive culture) makes student teams an adequate parallel to organizational work teams. In addition, we found the same results across two studies that sampled vastly different types of students (e.g., undergraduates vs. graduates, American university vs. Australian university), which provides some assurance to the robustness of our findings. Future research, however, would benefit from replicating these results in an organizational setting and across different organizational fields that may exhibit different work dynamics.

Even though previous research has illustrated that uncertainty and negative affect often go hand in hand (Gudykunst & Nishida, 2001; Thomsen, 2006), our data only speak to the mediating role of uncertainty. Unfortunately, we did not directly measure negative affect. Capturing negative affect and linking it directly to uncertainty would provide even more evidence for our core theory. Fortunately, there are well-established findings in the conflict literature that experiencing high task conflict is unpleasant and threatening (for a review, see De Wit et al., 2012). Furthermore, mood-as-input research (Clore & Huntsinger, 2007) suggests that individuals make attributions about the current state of affairs (i.e., performance level) based on their affective reactions. Therefore, our argument that individual conflict asymmetry increases negative affect, which, in turn, creates uncertainty regarding the adequacy of current team performance, exists within the context of well-established theory and empirical evidence. However, proof of this relationship would provide additional support for our arguments and future research could take a more fine-grained approach, and directly measures negative affect as well as uncertainty.

Relatedly, our measure of uncertainty was broad. Prior conceptualization of team processes has made the distinction between task-based and team-based orientations (Cannon-Bowers et al., 1993). Admittedly, the items measuring uncertainty were worded as more team based. We chose this measure because in student work teams who come together for the duration of the semester, the main goal is task accomplishment (as opposed to social groups or longer term work teams who may additionally be concerned about relational dynamics). As such, asking uncertainty toward the team should trigger
a mind-set regarding uncertainty toward the task as that is the most salient aspect of such teams (Bakker, 2010). Of course, future research should generate items that are more focused on uncertainty regarding the task and examine whether the effects proposed in this research can be replicated.

Although we controlled for potentially omitted variables that may be correlated with both perception of task conflict and performance (Study 1: competitive orientation, Study 2: determination), we cannot fully rule out the possibility of other omitted variables. For instance, a fundamental component of Salovey and Mayer’s (1990) model of emotional intelligence (EI) is the ability to perceive emotions. It is possible that individuals high on EI are both adept at recognizing the presence of task conflict and effective team members, as prior research has found a link between EI and managing interpersonal dynamics (Farh, Seo, & Tesluk, 2012). Future research should take a two-pronged approach along this line. First, research on individual conflict asymmetry may benefit from examining antecedents of conflict perceptions. Notable research in this area has found that beliefs, culture, and structural position can determine conflict experiences (Avgar & Neuman, 2015; Gelfand et al., 2001). Future research may also want to examine individual difference variables that are related to emotional capabilities, task performance, or both, such as EI, personality, intelligence, and leader disposition. Researchers can also examine structural antecedents such as team hierarchy, organizational policies, and firm demographics. Second, future models that consider the link between conflict perceptions and performance should control for variables that are related to both the independent and dependent variables. The model in the present research would also be strengthened by future replications that control for those variables, beyond competitive orientation and determination.

As mentioned previously, we focused on peer ratings of member effectiveness for a number of theoretical and empirical reasons. However, despite the advantages of using peer ratings, there are also some disadvantages. Critics of peer ratings have pointed out that they can be susceptible to biasing rater–ratee relationship factors that are unrelated to task competencies, such as friendship or in-group membership (Borman et al., 1995). For instance, research on social categorization (Williams & O’Reilly, 1998) has found that in-group members like each other more. Although there is no way to parse out whether or how much such biasing effects influenced members’ ratings of each other, there are a number of reasons we believe these effects were minimized in the current research. First, research using the similarity–attraction model has found that when members of equal status work toward a common goal, categorization of members into an us-versus-them camp decreases (Tajfel & Turner, 1986). In addition, as time progresses, members are more
likely to base liking on deep-level instead of surface-level characteristics (Harrison, Price, & Bell, 1998). Therefore, it is possible that any effects of liking on peer ratings of effectiveness are actually mediated by task-relevant characteristics such as how hardworking or trustworthy a teammate is. Nonetheless, future research would benefit from taking a multisource approach and examine whether and how the proposed relationships are affected by different rater sources.

Our current research also raises a number of interesting questions for future research. For instance, our findings suggest that although high perceivers are seen as more effective team members, the mechanism through which this happens—feeling uncertain—can be unpleasant and anxiety inducing. This perspective begs the question of how sustainable this heightened performance is over the long run. Presumably, constantly second guessing one’s teammates and having to compensate for their lack of accountability would violate norms of equity (Carrell & Dittrich, 1978). Furthermore, taking an emotional contagion lens (Barsade, 2002), is it possible that in long-standing teams, high perceivers eventually “catch” the less negative affective tone of low perceivers? And, would this mitigate high perceivers’ effectiveness? A fruitful area for future research may be to examine the downstream effects of individual conflict asymmetry. For instance, on the negative side, do high perceivers report less satisfaction and intention to stay? On the positive side, is it possible that, over time, high perceivers garner recognition for their contribution and are more likely to be promoted in their organizations? Or, as would be suggested by the emotional contagion literature, do members adjust toward a common affective tone, diminishing the effects of individual task conflict asymmetry?

Another area for future research is to examine the role of task meaningfulness in predicting our model. Implicit in our arguments is that high conflict perceivers found the task meaningful enough on some dimension (e.g., learning, grade, reputation, self-esteem) to care about the outcome, thus driving the positive relationship between uncertainty and effectiveness. If the team product is meaningless to the high conflict perceiver, this member will not be very motivated to increase effectiveness even if he or she is uncertain about team outcomes because high performance will not lead to any valued rewards (Williams & Karau, 1991). In the current research, we believe that because of the competitiveness of the universities sampled, students mostly cared about high performance. This meant that we mainly sampled participants who perceived the task to be highly important. Future research should consider examining the role of task meaningfulness as a moderator to our proposed model and compare the effects of individual conflict asymmetry on outcomes in situations with high and low outcome importance.
Conclusion

The team conflict literature has recently begun dialoging about dispersion in conflict perceptions and we add to this conversation by examining the individuals that comprise the teams. We find that, counter to what previous theories may have predicted, high task conflict perceivers can actually be highly effective members. Our research further confirms that the construct of individual conflict asymmetry—differences in perceptions of conflict, relative to that of one’s teammates—is an important predictor of individual behavior. We hope that future research can continue to explore questions related to this construct and examine the long-term ramifications of high conflict perception as well as consider the possible moderators, such as outcome importance, in affecting our proposed model.

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Notes

1. For instance, one of the strongest correlates of positive performance ratings is the extent to which members are hardworking (Borman, White, & Dorsey, 1995). Contribution to the task is the most direct way in which an individual can affect team performance. Leadership capabilities are also an important aspect of teamwork (Fleishman et al., 1991), especially in self-managed teams (Erez, Lepine, & Elms, 2002). Effective leadership facilitates the cocreation of meaning and enables coordination mechanisms that are necessary for task accomplishment (Ericksen & Dyer, 2004; Marks, Mathieu, & Zaccaro, 2001). Finally, a predictive element of being an effective teammate is being trusted by others. Trust affects a range of team processes, such as speaking up, productive interactions, and effective social exchange relationships (Dirks & Ferrin, 2001; Jones & George, 1998).

2. In both studies, we conducted the same analyses as reported below without controlling for mean conflict types and found the same pattern of results.

3. We conducted post hoc analyses of team-level variables. Specifically, we examined whether team conflict asymmetry (operationalized as the standard deviation
of task, relationship, and process conflict) predicted team-level performance (operationalized as the grade on the team project). No effects were significant.

References


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