I Can't Work Like This: The Effects of Action-State Orientation Diversity on Relationship Conflict in Teams

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Action-state orientation (ASO) is a self-regulatory motivational difference reflecting the extent to which individuals will initiate action, avoid distractions, and persist in the face of obstacles or failure. Although differences in action- and state-oriented members are likely to harm team outcomes, the impact of ASO diversity on team functioning has not been explored. Therefore, this study examined the effects of ASO diversity on team relationship conflict, as well as the moderating effects of transition processes and interpersonal processes. Results indicated that teams with high levels of ASO diversity (i.e., having a mixture of action-oriented and state-oriented members) reported higher levels of relationship conflict. Further, interpersonal processes, but not transition processes, moderated the ASO diversity-relationship conflict link. These results draw attention to a novel form of team diversity that increases interpersonal disagreement and emotional friction between members as well as identify a means of mitigating these effects through processes that facilitate confidence building, affect management, and conflict resolution.

Keywords: action-state orientation, team processes, transition processes, interpersonal processes, team conflict, relationship conflict, team diversity

INTRODUCTION

Anita is having a difficult time coordinating efforts with her teammates, Malik and Jane, as they continue to work on a group project for their Economics class. Anita was irritated when she started on her part of the project right away but neither Malik nor Jane had started their work. When their original plan had to be scrapped for reasons outside of the team's control, Anita rebounded readily but Malik and Jane remained frustrated by the setback for several days. Further, Anita is used to persisting when things get difficult, but Malik and Jane always seem ready to give up when obstacles arise. These experiences have frequently led to moments of emotional tension among Anita, Malik, and Jane.

As the above example illustrates, member differences in motivation may cause conflict in teams. One salient motivational difference is the predisposition to either maintain intentions toward goal-attainment or instead attend to some other mental activity that is incompatible with the goal (Kuhl, 1992). Action-state orientation (ASO) is a self-regulatory motivational difference focusing on the ability to maintain intentions and reflects how much an individual will initiate action, avoid distractions, and persist in the face of obstacles or failure (Kuhl, 1994b). Action-oriented individuals get started early, move forward quickly

after experiencing setbacks, and persevere despite challenges (Kuhl, 1994a). On the other hand, state-oriented individuals hesitate before getting started, have a hard time returning to work following setbacks, and tend to stop one task and switch to another when the first becomes challenging (Kuhl, 1994a). Anita in the above vignette represents an action-oriented individual, while Malik and Jane represent state-oriented individuals.

Given the salience of effective goal striving at work (Diefendorff & Chandler, 2011), research on ASO at the individual level has demonstrated ASO's importance in work settings, influencing variables such as performance ratings (Diefendorff et al., 2000), memory (Jostmann & Koole, 2006), organizational citizenship behavior (Diefendorff et al., 2000), and creativity (Bledow et al, 2021). What is not known, however, is how differences in ASO play out in team settings when group members must work together interdependently. Having a mixture of action-oriented and state-oriented individuals on a team may lead to interpersonal conflicts. For example, having some members who get started right away and others who hesitate before beginning may lead to frustration when coordination is impeded. Further, when state-oriented members frequently give up on their work, action-oriented members may end up carrying the brunt of the group's responsibilities, leading to resentment over perceptions of low workload sharing. Such interpersonal tension can easily undermine team performance and reduce productivity (de Wit et al., 2012).

Therefore, the purpose of this study was to explore the effects of ASO diversity on team outcomes as well as mediators and moderators of this relationship. Specifically, we examined the effect of ASO diversity on relationship conflict (i.e., emotional tension, anger, or interpersonal friction) and team performance, as moderated by transition (mission analysis, goal specification, and strategic planning) and interpersonal (conflict management, motivating/confidence building, and affect management) processes.

CONTRIBUTIONS

The first contribution of this study was to expand ASO research to the team level of analysis. Most research has examined ASO at the individual-level, and a few studies have examined ASO within dyads (Backes et al, 2017; Mulier, 2012). To the authors' knowledge, ASO has not been investigated at the team level of analysis, which is unfortunate because differences in ASO not only likely exist among team members but also may result in dysfunctional team outcomes. Having a mixture of people who want to get started right away and others who are predisposed to hesitate on the same team is likely to cause emotional tension that threatens performance, especially when members have to work closely together. Further, uneven workload distribution and feelings of frustration or anger may be particularly salient in a team setting when task demands and team structure require high interdependence, as is the case for this study's sample.

Second, we expanded the team diversity literature by examining the effects of ASO diversity on team relationship conflict. Team diversity researchers have explored demographic and broad personality differences such as gender (Curșeu & Schruijer, 2010; Mohammed & Angell, 2004), Big Five traits (Neuman et al. 1999), temporal orientation (Mohammed & Nadkarni, 2011; Mohammed & Nadkarni, 2014), and achievement motivation (Knapp et al., 2015). ASO, however, remains an unexplored form of diversity. The omission of this type of self-regulatory motivational difference from the diversity literature is regrettable due to the potential for differences in action-orientation and state-orientation on teams to foster dysfunctional conflict which harms team performance (de Wit et al., 2012).

Finally, this study answered a common call in the team diversity literature to explore moderators (e.g. Guillaume et al., 2017; Van Knippenberg & Schippers, 2007) by examining the conditions under which the ASO diversity-team conflict relationships are stronger or weaker. This will not only contribute to theory but also provide important guidance to practitioners, managers, and employees in work teams. By identifying factors that mitigate the interpersonal friction created by ASO diversity, this study can assist team facilitators and leaders in navigating the complex intragroup dynamics created when action-oriented and state-oriented individuals work together toward a common goal.

THEORETICAL BACKGROUND

Action-State Orientation
Definition

ASO is an individual difference in volitional control during goal-striving (Kuhl, 1994a). Volition "refers to a central executive function in charge of coordinating many different 'sub-functions' to reach a particular goal and to shield our behavior from competing external or internal action tendencies," (Kazén & Quirin, 2018, p. 15). When striving toward a goal, action-oriented individuals are more likely to *initiate* action, *disengage* from thoughts about failure, and *persist* through one task rather than jumping around to different activities (Kuhl 1994a). State-oriented people, on the other hand, are more likely to *hesitate* before starting a task, become *preoccupied* with a failure, and behave with *volatility* by switching tasks before completion (Kuhl, 1994a).

Theoretical Origins

The theory of ASO is built largely upon Kuhl's (1987) Motivational Maintenance System (MMS), which helps maintain intentions or mediate behavior changes when a goal becomes unattainable. Action-oriented individuals have a more active MMS, so they more readily maintain motivation and focus when striving toward their goals. State-oriented individuals, on the other hand, have a more impaired MMS, so their motivation can more easily wane and their intention to achieve their initial goals shift. ASO focuses on the actual *enactment* of a goal, or goal striving (Kuhl, 1994a) rather than traditional motivation theory which focuses on goal *setting* (Locke & Latham, 1994; Locke & Latham, 2006). Goal setting variables tend to focus on cognitions about achieving one's goal, whereas goal striving is more closely related to self-regulation in task implementation (Diefendorff et al., 2000).

Dimensions

ASO is comprised of three dimensions: hesitation versus initiative, preoccupation versus disengagement, and volatility versus persistence (Kuhl, 1994b). The hesitation versus initiative, or hesitation, dimension reflects the degree to which individuals either begin their tasks right away or put off starting them (Kuhl, 1994a). Action-oriented individuals tend to take longer to begin tasks than state-oriented individuals (Kuhl, 1994b).

The preoccupation versus disengagement, or preoccupation, dimension reflects how much individuals ruminate on negative states and intrusive thoughts (Kuhl, 1994b). Action-oriented individuals tend to disengage from negative and distracting thoughts, leaving more cognitive resources to focus on the task at hand (Kuhl, 1994a). State-oriented individuals, on the other hand, become preoccupied and ruminate over failures or other bad experiences (Kuhl, 1994b).

The volatility versus persistence, or volatility, dimension reflects the ability to maintain focus and resist distraction (Kuhl 1994a). Action-oriented individuals tend to persist until completing a task, whereas state-oriented individuals are prone to distraction and are more likely to quit prematurely (Kuhl 1994b). While hesitation and preoccupation reflect an individual's ability to escape from a state-oriented mode, volatility refers more to how long an individual can remain in an action-oriented mode (Kuhl, 1994a).

ASO Research

At the individual level of analysis, action-orientation is predictive of performance in both academic (Diefendorff, 2004) and organizational (Diefendorff et al., 2000) contexts. To illustrate, in a sample of 247 student employees working across a variety of occupations (e.g., engineering, healthcare, sales, management), those low in hesitation received higher performance ratings for both job relevant as well as voluntary duties (Diefendorff et al., 2000). In addition to performance, ASO and its individual dimensions have been found to moderate stress and life balance (Gröpel & Kuhl, 2009), intrinsic motivation and adaptive selling (Jaramillo et al., 2007), job-search intention and job-search intensity (Song et al., 2006), positive affect and next-day time spent searching for jobs (Wanberg et al., 2010), and organizational citizenship behaviors (Diefendorff et al., 2000).

While state-orientation tends to be viewed more negatively, Kuhl (1994a) argues that it can be helpful depending on the task and context. For example, complicated or risky tasks may benefit from the extra time and thought taken by state-oriented individuals (Hall et al., 2001). Following this reasoning, Diefendorff and colleagues (2000) found that those high on preoccupation received higher job performance ratings, potentially because these individuals acted with more caution and thought in their responsibilities. In addition, Diefendorff (2004) found not only lower hesitation, but also higher preoccupation scores predicted better exam performance, indicating that state-oriented individuals find their high preoccupation to help during testing. Bledow et al. (2021) explored an inverted u-shaped relationship between ASO and individual creativity such that creativity was highest for individuals with mid-range ASO scores when job autonomy was low.

While the majority of ASO research has been conducted on individuals, a few studies have explored ASO at the dyadic level. Mulier (2012) examined the influence of ASO on leader-member exchange (LMX) and found higher LMX scores when supervisors and subordinates were more similar on the preoccupation dimension or were more different on the hesitation dimension. Backes and colleagues (2017) explored how ASO influenced sources of stress in romantic couples, finding that the relationship satisfaction of state-oriented individuals and their partners was more dependent on external stress (i.e. stress occurring somewhere other than in the relationship, such as failing an important class at school or having a demanding client at work) than action-oriented individuals and their partners. Building on dyadic evidence of the influences of ASO similarity, we expand this literature by examining ASO diversity at the team level.

Relationship Conflict

Relationship conflict is one of two types of intragroup conflict that have received the most attention in the team literature, alongside task conflict. Whereas task conflict examines disagreement over the substance or content of a task, relationship conflict focuses on interpersonal disagreements and emotional friction that can arise between team members (Jehn & Bendersky, 2003). Relationship conflict is specifically defined as "affective components, such as feeling tension and friction … [as well as] personal issues such as dislike among group members and feelings such as annoyance, frustration, and irritation" (Jehn & Mannix, 2001, p. 238).

A meta-analysis of 80 studies found relationship conflict to be negatively associated with group performance, and that this association was stronger when relationship conflict and process conflict co-occurred (de Wit et al., 2012). Further, relationship conflict was also negatively related to more proximal outcomes such as group trust, commitment, satisfaction, cohesion, positive affect, group member identification, and organizational citizenship behavior as well as positively related to counterproductive workplace behavior (de Wit et al., 2012). Relationship conflict also moderated the relationships that task conflict had with team performance, group member satisfaction, and group member cohesion, such that these relationships were more negative when relationship conflict and task conflict co-occur.

Numerous types of team diversity have been shown to predict relationship conflict. Surface-level demographic characteristics (i.e., traits that are visible or readily apparent; Harrison et al, 2002), such as gender and race positively predicted relationship conflict (Jehn et al., 1999). Additionally, several deep-level characteristics (i.e., traits that are not typically visible such as personality or beliefs; Harrison et al., 2002), such as time urgency diversity (i.e., differences in whether members feel chronically hurried or not; Mohammed & Angell, 2004), values diversity (i.e., disagreement over the team's task and mission; Liang et al., 2012), and extraversion diversity (Tekleab & Quigley, 2014) positively predicted relationship conflict.

Building on and expanding this research, we examined ASO diversity as a predictor of relationship conflict. Despite the high probability that group members will have varying motivational orientations and the potential for these differences to result in interpersonal friction, ASO has been an unexplored form of diversity operating in teams.

HYPOTHESIS DEVELOPMENT

Hypothesis 1: Main Effect of ASO Diversity on Relationship Conflict

State-oriented people tend to start their work later as well as take more frequent breaks than action-oriented people (Kuhl, 1994a). If action-oriented members are beginning their work sooner and working more steadily, they may end up getting more done than their state-oriented teammates. This could lead to action-oriented members perceiving low workload sharing as they contribute more to taskwork completion than state-oriented members. Low workload sharing has been shown to exacerbate the negative impact that relationship conflict has on team performance (Alipour et al., 2017). Conditions of low workload sharing are also conceptually similar to conditions of high social loafing (Tata, 1999), and social loafing is positively correlated with relationship conflict (Singh et al., 2017). It is reasonable to expect, then, that if action-oriented members perceive state-oriented members to not fairly share the workload, they may feel irritated or angry with their state-oriented teammates. Perceptions that state-oriented members are not pulling their weight may also cause action-oriented members to consider their teammates to have less integrity. Lower levels of perceived integrity have been shown to predict lower positive interpersonal emotion (Lee et al., 2011). In such circumstances, action-oriented members are likely to feel more negatively toward state-oriented members, thereby increasing the potential for relationship conflict.

High levels of state orientation are characterized by frequently feeling overwhelmed by challenging work or ruminating on failure (Kuhl, 1994a). Therefore, state-oriented people tend to get caught up in thinking about their work rather than acting on it. Since state-oriented members experience more negative affect in response to their work (Kuhl, 1994a), they may respond poorly to friction with their teammates. Research shows that those with high state-orientation report lower affect after they see others with angry facial expressions, whereas action-oriented people do not experience this same emotional shift (Jostmann et al., 2005). Therefore, when action-oriented members feel frustrated with state-oriented members, it may cause a surge of negative emotions within state-oriented members which compounds their existing feelings of task-related stress. Additionally, given that action-state orientation is a relatively stable characteristic (Kuhl, 1994a), it is likely strongly tied to an individual's self-concept. Tension directed toward state-oriented members for not working as much may, therefore, be perceived as an ego threat (Baumeister & Boden, 1998). Such ego threats can increase feelings of hostility toward action-oriented teammates and make conflict resolution more challenging (De Dreu & van Knippenberg, 2005). Further, when action-oriented members express frustration that state-oriented members are not doing enough work, state-oriented members may view this as a failure and retreat further into rumination. Such rumination would cause them to get less work done, angering action-oriented members more and leading to a cycle of increasing relationship conflict.

In sum, when action-oriented members and state-oriented members work together on the same team, emotional friction and personality conflicts are likely to arise. Action-oriented members may perceive state-oriented members as not having the integrity to equally share the workload, leading to feelings of anger due to unfair labor distributions. State-oriented people are likely to experience worse affect and hostility in response to their teammates' anger. Further this anger may increase state-oriented members' perception of failure, leading to rumination, getting less work done, and eventually more anger from their action-oriented teammates. Therefore, teams with high amounts of action-state orientation diversity are likely to experience higher levels of relationship conflict.

Hypothesis 1: ASO diversity will positively predict relationship conflict.

The Moderating Effects of Team Processes

In their recurring phase model of team processes, Marks and colleagues (2001) describe a taxonomy of three processes: interpersonal processes, transition processes, and action processes. Interpersonal processes represent team member relationship management and involve building confidence and regulating affect. Transition processes capture the emphasis on reflection and planning, and more specifically describe periods "when teams focus primarily on evaluation and/or planning activities to guide their

accomplishment of a goal or objective" (Marks et al., 2001, pg. 364). Action processes typically follow transition processes and involve team members engaged in tasks and activities directly related to goal accomplishment, such as tracking task progress or assisting team members.

The current research examined interpersonal processes as a moderator of the relationship between ASO diversity and relationship conflict. Teams that engage in interpersonal processes help motivate each other, which may influence state-oriented people to attend to their work more readily and so prevent action-oriented team members from feeling angry when state-oriented members repeatedly stop working. Further, interpersonal processes involve teams actively managing members' emotions which calm members who feel frustrated with their teammates or others who feel overwhelmed by their work. Finally, teams high in interpersonal processes more actively talk through disagreements over plans or ideas which can prevent tensions from arising, while also actively managing personality clashes that do occur. Marks and colleagues, (2001) also theorize interpersonal processes to occur during all phases of a team's lifespan, and so represent a constant force for preventing or reducing anger and friction among teammates.

This research also investigated transition processes as a moderator for two primary reasons. First, teams that take the time to analyze their mission and form strategies for how and when their work will get done may encourage more uniformity in when members begin their work or respond to setbacks. This uniformity could help prevent friction from arising by reducing how much state-oriented members inappropriately switch tasks or stop working entirely. Second, during discussions where team members specify their goals and develop their work plan, they may gain a sense of each other's action-state orientation. Such knowledge would allow members to assign tasks according to these individual differences such that preferences for starting quickly or taking frequent breaks would not be disruptive and lead to personality conflicts or outbursts of anger.

Action processes were not focused on in this study because they are not as relevant to the frustration and emotional friction elements that are core to relationship conflict. More specifically, action processes include activities that are more directly related to task accomplishment, whereas relationship conflict involves anger, interpersonal tension, or personality conflict (Jehn & Mannix, 2001; Marks et al., 2001). Therefore, of the three processes outlined by Marks and colleagues (2001), this study's model includes transition processes and interpersonal processes but not action processes.

Hypothesis 2: Moderating Effect of Transition Processes

Transition processes are measured across three dimensions: mission analysis, goal specification, and strategy formulation and planning (Marks et al., 2001). In mission analysis, team members identify main tasks, time frames, member abilities, and resources. Goal specification describes the identification of timeframes for task accomplishment as well as goal and subgoal prioritization. Strategy formulation and planning captures communication and planning for expected and unexpected events, discussion of expectations and task-related information, and team member role assignment (Marks et al., 2001). Taken together, transition processes mark the periods when team members assess past performance and strategize for the future (Marks et al., 2001). Research indicates that teams engaging in planning experience higher performance outcomes (Hiller et al., 2006; LePine et al., 2008; Mathieu & Schulze, 2006; Mathieu & Rapp, 2009; Maynard et al., 2007). Meta-analyses have found that transition processes had a positive relationship with team performance, member satisfaction, cohesion, team potency (LePine et al., 2018), and team cognition (DeChurch & Mesmer-Magnus, 2010). When transition processes are high, teams engage in activities to analyze their mission, specify goals, and form strategies (Marks et al., 2001). Research suggests that agreeing about plans and processes early on in a team's life predicts lower levels of relationship conflict later (Greer et al., 2008; Liang et al., 2007). Therefore, it is expected that when action- and state-oriented members take the time to plan things out at the onset of the team, it should help circumvent the relationship conflict that would have otherwise arisen. One way that such strategy formulation can help is by collaboratively determining member roles and responsibilities. This would allow state-oriented people the opportunity to realistically discuss the type and amount of work they believe they can accomplish in each timeframe. Establishing these expectations ahead of time, and in collaboration with the entire team, should facilitate the work of state-oriented members.

State-oriented members may also be able to volunteer for work that is less likely to cause them to feel stressed and overwhelmed when transition processes are high, resulting in less hesitation and stopping. If state-oriented members are stopping less because they strategically planned which tasks they would perform best and how they would complete their work, there should be more even workload sharing. If everyone is pulling their weight on the team, both action- and state-oriented members should feel satisfied with each other's contributions to the group's goals and frustration that otherwise would have arisen from low workload sharing would be prevented. In turn, if action-oriented members are not feeling angry with state-oriented members, then state-oriented members should similarly not feel the ego threat that would have arisen when their teammates perceive them as having low integrity or engaging in social loafing.

When teams are low in transition processes, however, they are expected to experience more relationship conflict among ASO-diverse members. Since members have not taken the time to specify their goals and form plans to accomplish these goals, they do not have the opportunity to proactively determine the best strategies based on individual members' strengths and weaknesses. This makes it more likely that state-oriented members will be assigned roles that may not be fully clear until the plan is underway and they are expected to begin working. At that point, if the task appears too daunting, they are likely to hesitate before starting, whereas their action-oriented teammates will swiftly begin their work (Kuhl, 1994a). Along the way, members may meet unexpected roadblocks that were not planned for, leading state-oriented members to feel overwhelmed and begin ruminating over the setback while action-oriented members continue working (Kuhl, 1994a). These patterns will likely result in unequal work distribution, causing anger in action-oriented individuals and reciprocated hostility in state-oriented individuals. Overall, relationship conflict is more likely to emerge in ASO-diverse teams that do not determine a plan for how they will strive toward their goals as a group.

Hypothesis 2: Transition processes will moderate the positive relationship between ASO diversity and relationship conflict, such that this relationship will be less positive when transition processes are high and/or more positive when transition processes are low.

Hypothesis 3: Moderating Effect of Interpersonal Processes

Marks and colleagues (2001) describe interpersonal processes across three dimensions: conflict management, motivating/confidence building, and affect management. In conflict management, team members both preemptively and reactively address team conflict that may, or did, arise. Motivating/confidence building involves team members working to form a sense of collective confidence and motivation as they strive together toward goal achievement. Finally, affect management involves members helping to regulate each other's emotions, such as reducing frustration or encouraging excitement. In their meta-analysis, LePine and colleagues' (2008) found that interpersonal processes were positively related to team performance, team member satisfaction, team cohesion and team potency.

When interpersonal processes are high, teams engage in activities that can help resolve relationship conflict by regulating members' emotions, building each members' confidence and motivation, and managing disagreements (Marks et al., 2001). If team members help regulate each other's emotions, they may be able to help calm the anger that action-oriented people feel toward state-oriented people when they perceive an unfair workload distribution. Members can help listen to each other's frustrations and calm down action-oriented members when they are feeling particularly irritated by helping them to keep the big picture in mind. In addition, members may help calm state-oriented individuals down when they feel overwhelmed by their work and help motivate them to return to their current task despite the challenge. This can help state-oriented members engage or reengage with their work more readily, quelling the anger of action-oriented members which in turn prevents hurt feelings on the part of state-oriented members and reduces the overall emotional tension on the team. Finally, teams high in interpersonal processes make conscious efforts to reduce conflict when it arises by helping to clarify disagreements on what needs to get done and how to do it, but also actively talking out any interpersonal issues that arise (Marks et al., 2001). Such behavior should help reduce relationship conflict caused by ASO diversity by establishing time to actively and openly discussing interpersonal frictions and working to resolve them.

Teams low in interpersonal processes should experience higher overall levels of negative emotion and interpersonal tension between members without providing support for each other to reduce this tension (Marks et al., 2001). Individual members will largely be on their own when it comes to managing their frustration, hurt, or irritation, which is already a challenge for state-oriented people who tend to feel more easily overwhelmed by difficulty, failure (Kuhl, 1994a), or perceptions of teammates' anger (Lee et al., 2011). Without the emotional support of other team members, such interpersonal friction is likely to snowball through a cycle of: state-oriented members stopping their work frequently, action-oriented members feeling angry about it, and state-oriented members becoming hostile in response. Once state-oriented members experience heightened hostility, these negative emotions may compound with stress about their work which would cause them to stop working more frequently. Further, given that state-oriented members struggle with inhibitions in their ability to maintain motivation on their work (Kuhl, 1987), a lack of motivational support from team members may leave them struggling to engage in their responsibilities, further exacerbating their teammates' frustration. Overall, when a team high in ASO diversity does not engage in behaviors to help regulate emotion or motivate each other, they are expected to experience higher levels of relationship conflict.

Hypothesis 3: Interpersonal processes will moderate the positive relationship between ASO diversity and relationship conflict, such that this relationship will be less positive when interpersonal processes are high and/or more positive when interpersonal processes are low.

Hypothesis 4: Main Effect of Relationship Conflict on Team Performance
Meta-analytic evidence supports the negative impact of relationship conflict on group performance (de Wit et al, 2012). Therefore, we also expect to find that teams experiencing high levels of anger and interpersonal friction will demonstrate lower group performance.

Hypothesis 4: Relationship conflict will negatively impact team performance.

FIGURE 1
THEORETICAL MODEL
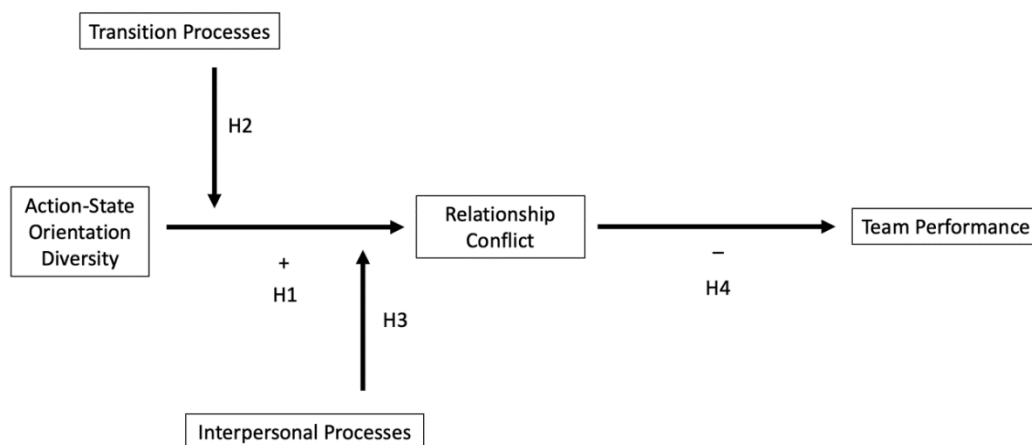
METHODS

Sample
Participants included 229 students enrolled in a capstone undergraduate Hotel, Restaurant, and Institutional Management (HRIM) course at a university in northeastern United States. The mean age of

the students was 22.43 (SD = 2.16), 51.1% were female, and 89.3% were Caucasian. All participants were seniors, and students received extra credit for participating in the study.

Team Task

Each executive team was required to plan and supervise the execution of a themed dinner, serving approximately 100-125 customers per night. Each meal was led by an executive team comprised of one FOH sub-team and one BOH sub-team. The dinners were extensively planned. The executive team was required to determine a theme, develop a menu, create a mission statement, establish team goals, outline positions for their employees, as well as write plans for sales, communication, and motivation. Students also needed to meticulously outline their recipes and prepare a detailed financial plan. Following meal execution, the executive teams were graded on their performance during the meal. Class instructors determined executive team grades by evaluating their performance using a detailed set of criteria, examples of which include table setup, workstation organization, and number of entrees served.

Executive Team Composition and Sub-Team Composition

Students were divided into 27 executive teams at the start of their 15-week course, each executive team comprising 7-9 members. Executive teams were created nearly at random, with some intervention from the course instructors to ensure even distribution of gender. Membership in executive teams remained consistent throughout the semester.

The executive teams of 7-9 were randomly divided into two sub-teams of 3-5 members, one Front of the House (FOH) sub-team and one Back of the House (BOH) sub-team. This resulted in a sample of 54 sub-teams. FOH sub-teams were responsible for greeting, seating, and serving restaurant patrons, and included roles such as general manager, service manager, and servers. BOH sub-teams were responsible for food management and meal preparation, and included roles such as assistant general manager, food production manager, and kitchen manager.

We explored ASO diversity, relationship conflict, transition processes, and interpersonal processes at the *sub-team* level when testing Hypotheses 1-3: the main effect of ASO diversity on relationship conflict, and the moderating effects of both transition and interpersonal processes, respectively. There are several reasons for the decision to run tests at the sub-team level. First, while FOH and BOH sub-teams collaborated with each other to complete their executive team goal, members worked more interdependently within their sub-teams during task planning and execution. On the night of the meal, those working BOH relied on each other to stay on top of food preparation and station sanitation, whereas members in the FOH sub-team largely worked with each other to manage and serve customer needs. Because task demands necessitate higher within-sub-team interdependence than between-sub-team interdependence, survey items for relationship conflict, transition processes, and interpersonal processes used FOH or BOH sub-team as the referent. Second, running the analyses at the sub-team level rather than the executive team level helped to strengthen the tests' statistical power by using a larger sample size.

Hypothesis 4 (relationship conflict will negatively predict team performance) testing was performed using executive team level relationship conflict and performance. This is because there was not enough data on sub-team performance to appropriately test this relationship, with approximately ¾ of the sub-teams missing performance values. However, all executive level performance scores were present in the dataset, allowing for the main effect of relationship conflict to performance to be tested at the executive team level.

Procedure

Near the start of the semester students filled out an initial survey measuring action-state orientation and demographic variables. After the executive team completed their meal, students completed surveys measuring relationship conflict, transition processes, and interpersonal processes. All surveys were administered in person and completed with pen and paper. Course instructors, who were present to observe the meal execution, provided a performance grade for each executive team.

Measures

Action-State Orientation

The Action-Control Scale-90 (ACS-90; Kuhl, 1994a) is a revised version of the original Action Control Scale (ACS; Kuhl, 1994b) measuring ASO. The ACS-90 was used to measure ASO because of its demonstrated improved convergent, discriminant, and predictive validities over the original ACS (Diefendorff et al., 2000).

The ACS-90 is a 22-item forced-choice measure with two dichotomous choices, one measuring action-orientation and the other measuring state-orientation. An example of a preoccupation item is: "When something really gets me down: A. I have trouble doing anything at all B. I find it easy to distract myself by doing other things." An example of a hesitation item is: "When I know I must finish soon: A. I have to push myself to get started B. I find it easy to get it over and done with". An example of a volatility item is: "When I am busy working on an interesting project A. I need to take frequent breaks and work on other projects B. I can keep working on the same project for a long time." Cronbach's alpha was 0.71.

ASO Diversity

ASO diversity constitutes a type of diversity known as "separation" since it measures the dispersion of within-unit (i.e., within sub-team) individuals on a horizontal continuum (Harrison & Klein, 2007). Within-group standard deviation was used to calculate ASO diversity because of its appropriateness with both measures of separation diversity and when predicting strength or interaction effects regarding dispersion (Roberson et al., 2007).

Relationship Conflict

Relationship conflict items were adapted from Jehn and Mannix (2001) and consist of four questions asking participants to rate the amount of interpersonal friction or emotional tension that was experienced in their sub-team using a 5-point Likert scale ranging from 1 (none) to 5 (a great deal). An example of an item measuring relationship conflict is "How much emotional tension was there among members of your FOH/BOH group?" Cronbach's alpha was 0.94.

Transition Processes

At the time these data were collected, there were no established scales for measuring transition processes. Therefore, and for the purposes of this study, transition process items were adapted from Marks and colleagues' (2001) definitions of each of the three dimensions of transition processes. Five questions asked participants to rate the members of their sub-team collectively on their skills in mission analysis, goal specification, and strategy formulation. Items were scored across a 5-point Likert scale ranging from 1 (hardly any skill) to 5 (excellent skill), with an option for 0 (not applicable). An example of an item assessing transition processes is "Our FOH/BOH team assigned roles and knew who was doing what tasks." Cronbach's alpha was 0.71.

Interpersonal Processes

At the time these data were collected there was no established scale for measuring interpersonal processes. Therefore, and for the purposes of this study, interpersonal process items adapted from Marks and colleagues' (2001) definitions of each of the three dimensions of interpersonal processes. Five questions asked participants to rate the members of their sub-team collectively on their skills in motivation and confidence building, affect management, and conflict resolution. Items were scored across a 5-point Likert scale ranging from 1 (hardly any skill) to 5 (excellent skill), with an option for 0 (not applicable). An example of an item measuring interpersonal processes is "Our FOH/BOH team regulated others' emotions by attempting to calm members down and/or provide empathy or comic relief." Cronbach's alpha was 0.83.

Executive Team Performance

Performance was assessed by class instructor as a grade for each executive team. Instructors scored multiple criteria across five categories: opening remarks (5 points total), back of the house (30 points total), front of the house (30 points total), management skills (25 points total), and financial (10 points total, potential for bonus). Executive teams earned 1 point for each entrée served, with an expectation that 100 entrees would be served earning the executive team 10 points. An additional point was given in this category for each additional set of 10 entrees served beyond 100. Performance scores were not available for most of the sub-teams in the sample, so all grade totals assessing performance were assessed at the executive team level.

Control Variables

Group size was examined as a control variable because larger teams have the potential for more heterogeneity (e.g., Jackson et al., 1991), and size may influence group outcomes (e.g., Steiner, 1972). As group average scores on diversity measures can be confounded with within-group standard deviations (Bedeian & Mossholder, 2000), group mean on ASO was included as a control variable. For executive team performance analyses, average group GPA was controlled for as well.

ANALYSES AND RESULTS

Data Screening and Cleaning

Data were cleaned largely using the Tidyverse collection of packages in the statistical program R. In the case of item-level missing data (i.e., missing data for individual scale items; Newman, 2014), scale scores were calculated using the items answered. Further, approximately 39% of the 54 sub-teams contained construct-level missingness (i.e., missing data for all items on a particular construct; Newman, 2014 Sub-teams with construct-level missingness from 50% or more of the team members on relationship conflict, interpersonal processes, or transition processes were removed. This decision was made because these group-level constructs represent shared group properties requiring agreement among the group members (Klein & Kozlowski, 2000), and so cannot be appropriately calculated when such large percentages of the group are missing. As a result, 15 sub-teams were removed from the dataset, resulting in a sub-team *n* of 39.

Confirmatory Factor Analyses

Confirmatory factor analyses (CFAs) were conducted using the cfa function from the lavaan package in R. Results supported the distinctiveness of relationship conflict, transition processes, and interpersonal processes as separate factors, as a three-factor model had superior fit (x^2 = 123.22, [df = 74], $p < 0.005$, CFI = 0.95, TLI = 0.94, RMSEA = 0.07, SRMR = 0.096) compared with both a two-factor model, specifying relationship conflict and a combined transition processes with interpersonal processes (x^2 = 228.50, [df = 76], $p < 0.005$, CFI = 0.85, TLI = 0.819, RMSEA = 0.122, SRMR = 0.138), as well as a one-factor model (x^2 = 520.49, [df = 77], $p < 0.005$, CFI = 0.562, TLI = 0.482, RMSEA = 0.207, SRMR = 0.172).

Aggregation to the Sub-Team Level

To inform whether the nesting of sub-teams within executive teams should be statistically accounted for, intraclass correlations using model 1 (ICC(1)) were calculated. Approximately 78% of the variance in sub-team interpersonal processes was accounted for by executive team-level interpersonal processes (*ICC(1)* = 0.78), while approximately 32% of the variance in sub-team level transition processes was accounted for by executive team level transition processes (*ICC(1)* = 0.32). Further, approximately half of the variance in sub-team-level relationship conflict was accounted for at the executive team level (*(ICC(1)* = 0.53). Given that the ICC(1) scores for interpersonal processes, transition processes, and relationship conflict are all greater than 0.05, the use of multilevel modeling was justified to account for the dependence of sub-team scores on their grouping within executive teams (LeBreton and Senter, 2008).

Estimates of $r_{WG(J)}$ indicate the degree of interrater agreement for multi-item measures (James et al, 1984), and so are useful to determine whether aggregating a construct to the group level is justified. Median $r_{WG(J)}$ was calculated for interpersonal processes ($r_{WG(J)} = 0.87$), transition processes ($r_{WG(J)} = 0.95$), and relationship conflict ($r_{WG(J)} = 0.75$). Because estimates of $r_{WG(J)}$ above 0.70 indicate strong agreement between raters (LeBreton & Senter, 2008), mean aggregation to the sub-team level is justified for interpersonal processes, transition processes, and relationship conflict.

Descriptive Statistics

Means, standard deviations, and correlation coefficients are provided at the sub-team level in Table 1 and the executive team level in Table 2. At the sub-team level, relationship conflict was positively correlated with ASO diversity ($r(37) = 0.36$, $p = 0.03$), and negatively correlated with both transition processes ($r(37) = -0.35$, $p = 0.03$) and interpersonal processes ($r(37) = -0.63$, $p < 0.005$). Sub-team ASO diversity was negatively correlated with transition processes ($r(37) = -0.49$, $p < 0.005$) and interpersonal processes ($r(37) = -0.49$, $p < 0.005$). Additionally, sub-team transition processes and interpersonal processes were correlated with each other ($r(37) = 0.48$, $p < 0.005$).

At the executive team level, relationship conflict was positively correlated with ASO diversity ($r(17) = 0.54$, $p = 0.01$) as well as interpersonal processes ($r(17) = -0.74$, $p < 0.005$). Executive team ASO diversity was also negatively correlated with interpersonal processes ($r(17) = -0.47$, $p = 0.04$). Interpersonal processes at the executive team level were positively correlated with both transition processes ($r(17) = 0.47$, $p = 0.04$) and performance ($r(17) = 0.56$, $p = 0.013$). Additionally, executive team mean GPA was positively correlated with interpersonal processes ($r(17) = 0.46$, $p = 0.0497$) and negatively correlated with relationship conflict ($r(17) = -0.46$, $p = 0.047$).

TABLE 1
DESCRIPTIVE STATISTICS AND CORRELATIONS AMONG ALL SUB-TEAM
LEVEL VARIABLES

Variable	M	SD	1	2	3	4	5
1. Sub-team size	4.08	0.81					
2. Mean ASO	1.61	0.11	.01				
3. Standard deviation of ASO diversity	0.15	0.07	.29	-.24			
4. Mean transition processes	3.86	0.42	-017	.25	-.49**		
5. Mean interpersonal processes	3.76	0.54	.06	.16	-.49**	.48**	
6. Mean relationship conflict	2.37	0.85	-.03	.09	.36*	-.35*	-.63**

Total $N = 19$. M = mean. SD = standard deviation.
* indicates $p < .05$
** indicates $p < .01$

TABLE 2
DESCRIPTIVE STATISTICS AND CORRELATIONS AMONG ALL EXECUTIVE TEAM LEVEL VARIABLES

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Executive team size	8.16	0.76							
2. Mean ASO	1.61	0.08	-16						
3. Standard deviation of ASO diversity	0.17	0.04	.08	.05					
4. Mean transition processes	3.9	0.36	-.15	.19	-.32				
5. Mean interpersonal processes	3.8	0.53	.33	4	-.47*	.47*			
6. Mean relationship conflict	2.31	0.75	-.17	.10	.54*	-.40	-.74**		
7. Mean GPA	3	0.19	-.20	-.45	-.34	.40	.46*	-.46*	
8. Executive Team Performance	89.69	2.14	-.10	-.02	-.37	.56*	.19	.05	0.31

Total $N = 19$. M = mean. SD = standard deviation.
* indicates $p < .05$
** indicates $p < .01$

Analyses

Multilevel hierarchical regression analyses were conducted to test hypotheses 1-3 (the main effect of ASO diversity on relationship conflict, as well as the moderating effects of interpersonal processes and transition processes). Stage 1 tested two control variables: sub-team size and mean-aggregated ASO. Stage 2 added ASO diversity, aggregated by standard deviation. Stage 3 added the moderators, interpersonal processes, and transition processes. Stage 4 added the interactions, ASO diversity x interpersonal processes and ASO diversity x transition processes.

At each stage, three model tests were run: general least squares regression (fixed intercepts and fixed slopes), multilevel regression with random intercepts and fixed slopes, and multilevel regression with random intercepts and random slopes across ASO diversity (in stages 2-4) or mean-aggregated ASO (in stage 1). The AIC values were compared across the three models at each stage (fixed intercepts and slopes vs. random intercepts and fixed slopes vs. random intercepts and random slopes) to determine the model with the best fit, with lower AIC indicating better model fit. The comparison of models at stage 1 indicated that allowing for random intercepts and random slopes produced the best model. In stages 2-4, the best models (those with the lowest AIC) were run with general least squares regression using fixed intercepts and fixed slopes. Table 3 below reports β and p-values for the best-fitting model at each stage.

Tests of Hypotheses

Hypothesis 1 predicted that ASO diversity would positively predict relationship conflict. Controlling for sub-team size and mean-aggregated ASO, ASO diversity positively predicted relationship conflict at stage 2 ($\beta = 5.67$, $p < .01$), supporting Hypothesis 1. Hypothesis 2 predicted that transition processes would moderate the relationship between ASO diversity and relationship conflict. The interaction between ASO diversity and transition processes was not significant ($\beta = 4.85$, p = 0.44), failing to support Hypothesis 2. In contrast, results indicated support for Hypothesis 3, that interpersonal processes would moderate the ASO diversity-relationship conflict link. The marginally significant interaction between ASO diversity and interpersonal processes ($\beta = -6.16$, $p = 0.06$) was probably due to low sample size. The form of the interaction, plotted in Figure 2 below, supports that the ASO diversity-relationship conflict association would be stronger under conditions of low interpersonal processes and weaker under conditions of high interpersonal processes as hypothesized. Simple slopes tests revealed a negative, marginally significant link between ASO diversity and relationship conflict when interpersonal processes were high ($\beta = -5.43$, $p = 0.099$) and a positive, marginally significant relationship when interpersonal processes were low ($\beta = 6.43$, $p = 0.096$). Because of the marginally significant results, floodlight analysis was used to identify

patterns in the results at different standard deviation values. Results revealed p-values to be trending in the direction of significance as interpersonal processes increased/decreased. High levels of interpersonal processes became marginally significant at 1.8 standard deviations above the mean and low levels of interpersonal processes became marginally significant at 2.5 standard deviations below the mean with p-values continuing to drop beyond these values.

Hypothesis 4 predicted that relationship conflict would negatively predict performance. Because approximately ¾ of the sub-teams were missing sub-team level performance data but no executive teams were missing data on executive team performance, Hypothesis 4 was tested at the executive team level. Results from general least squares regression and controlling for executive team level mean GPA indicated a nonsignificant relationship, ($\beta = 0.69$, $p = 0.37$), failing to support Hypothesis 4. These results are summarized in Table 4 below.

TABLE 3
SUB-TEAM MULTILEVEL HIERARCHICAL REGRESSION ANALYSES TESTING THE MODERATING EFFECTS OF TRANSITION AND INTERPERSONAL PROCESSES ON THE RELATIONSHIP BETWEEN ASO DIVERSITY AND RELATIONSHIP CONFLICT

Independent Variables	Stage 1	Stage 2	Stage 3	Stage 4
Control Variables				
Sub-team size	0.07	-0.18	-0.05	-0.08
Mean-aggregated ASO	0.95	1.60	1.80	1.89
ASO diversity		5.67**	1.29	0.81
Moderators				
Transition processes			-0.18	-0.19
Interpersonal processes			0.89**	-0.93**
Interactions				
ASO diversity x transition processes				4.85
ASO diversity x interpersonal processes				-6.16†

Tests of Hypotheses 1, 2, and 3. Stage 1 model used multilevel regression with random intercepts and random slopes. Models for stages 2-4 used general least squares regression with fixed intercepts and fixed slopes. Scores above represent β values from mean-centered relationship conflict, ASO diversity, interpersonal processes, and transition processes; interactions were calculated using mean-centered terms.
† indicates $p < 0.10$
* indicates $p < 0.05$
** indicates $p < 0.01$

TABLE 4
REGRESSION ANALYSES TESTING THE EFFECT OF RELATIONSHIP CONFLICT ON EXECUTIVE TEAM-LEVEL PERFORMANCE

Independent Variable	Estimate	SE	95% CI		p
			LL	UL	
Relationship Conflict	0.69	0.74	-0.76	2.14	0.37

Test of Hypothesis 4. Estimate represents β values. SE = standard error; CI = confidence interval; LL = lower limit; UL = upper limit.
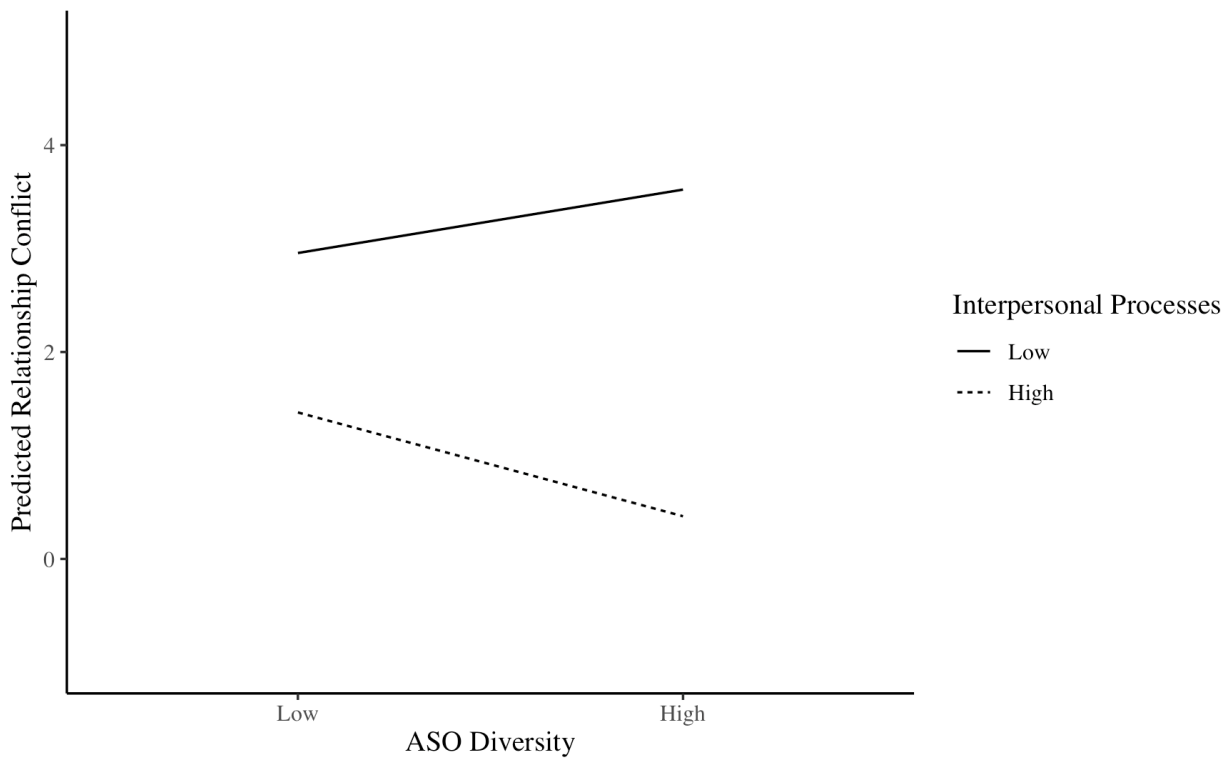
Low levels of interpersonal processes represent 2.5 standard deviations below the mean, high levels represent 1.8 standard deviations above the mean.

Sub-Team Ancillary Analyses

Model Testing Without Control Variables

Becker and colleagues (2016) recommend that models including control variables should also be run without controls to further elucidate the effects of the primary predictor(s) on the dependent variable. Therefore, multilevel hierarchical regressions were also run testing the model without control variables, and results were similar to those with control variables. Specifically, in a model that only included ASO diversity as the predictor of relationship conflict, a model comparison indicated that multilevel regression with random intercepts and fixed slopes (AIC = 96.66) provided a slightly better fit than both the general least squares regression with both fixed intercepts and slopes (AIC = 97.15) and the multilevel regression with random intercepts and random slopes (AIC = 98.66). This contrasts with the Stage 2 model that included controls, given the general least squares regression with fixed intercepts and fixed slopes had the better fit. Given the very small difference in AIC between model with both fixed intercepts and slopes and the model with random intercepts and fixed slopes, both were tested. The model with only ASO diversity as a predictor, fixed intercepts and fixed slopes indicated a significant relationship ($\beta = 4.46$, $p = 0.03$), but the model with slightly better fit (random intercepts and fixed slopes) did not, with $\beta = 2.46$ and $p = 0.20$. In the model with controls, the general least squares with fixed intercepts and slopes had the best fit and had a statistically significant main effect of ASO diversity on relationship conflict (review Table 3 or the Tests of Hypotheses for the values). To further compare results to the best fit model without controls, a model with controls was also tested with random intercepts and fixed slopes, demonstrating a marginally significant main effect of ASO diversity on relationship conflict ($\beta = 4.06$, $p = 0.07$). Of these four discussed models, three demonstrated significant or marginally significant relationships, and there was a

small (0.49) difference in AIC between the two models without controls. Therefore, we interpret these results to also support Hypothesis 1, that ASO diversity negatively predicts relationship conflict.

When moderators and interactions were added to test Hypotheses 2 and 3, there were also no notable differences between models with and without controls. Similar to results including control variables, Hypothesis 2 was also not supported without controls, yielding a nonsignificant interaction between ASO diversity and transition processes ($\beta = 2.91$, $p = 0.61$). Also paralleling tests with control variables, Hypothesis 3 was supported, with a marginally significant interaction between ASO diversity and interpersonal processes ($\beta = -5.60$, $p = 0.09$).

Model Testing Separately for Each Moderator: Transition Processes

High transition processes may make the need for interpersonal processes less salient and vice versa, so interactions were tested one at a time. Testing a model that omitted interpersonal processes and included control variables, ASO diversity, transition processes, and the ASO diversity x transition processes interaction also failed to support Hypothesis 2. Model comparison indicated that using random intercepts and fixed slopes provided the best fit. This differs from the primary analyses at this stage (i.e., in a model that included controls, ASO diversity, both moderators, and both interaction terms) where a model comparison indicated that fixed intercepts and slopes provided the best fit. This model also presented a nonsignificant interaction ($\beta = -1.28$, $p = 0.81$), but results differed from those reported in Table 3 by finding a marginally significant main effect of transition processes on relationship conflict ($\beta = -0.70$, $p = 0.07$). These results do not alter interpretation of initial model tests indicating that Hypothesis 2 was unsupported.

Model Testing Separately for Each Moderator: Interpersonal Processes

Using general least squares regression with fixed intercepts and fixed slopes to test a model that omitted transition processes and included control variables, ASO diversity, interpersonal processes, and the ASO diversity x interpersonal processes interaction indicated a marginally significant interaction effect ($\beta = -4.50$, $p = 0.08$). These results do not change interpretation of initial model tests indicating support for Hypothesis 3. Neither model comparison nor significance testing indicated differences in a model excluding the transition processes interaction compared to a model that included both interpersonal and transition process interactions.

Model Testing: Interpersonal Processes Without Conflict Resolution Items

Three of the five items of our interpersonal processes measure described conflict resolution, while the other two asked about emotion regulation and confidence building / motivation respectively. We were curious whether the conflict resolution items were largely driving the interaction that interpersonal processes had on the main effect of ASO diversity on relationship conflict, so we ran models using a score of interpersonal processes that did not include the conflict resolution items. General least squares regression indicated a significant moderating effect of this reduced measure of interpersonal processes ($\beta = -8.54$, $p = 0.03$). These results bolster support for Hypothesis 3 and indicate that group affect regulation as well as confidence and motivation building play a strong role in helping reduce relationship conflict on teams high in ASO diversity.

Executive Team Ancillary Analyses

Given the ICC(1) results indicating that substantial variance was accounted for by executive team-level for interpersonal processes, transition processes, and relationship conflict, the study model was tested at the executive team-level. These analyses should be interpreted with caution given a sample size of 19 teams. Like the steps reflected for the sub-team analyses, Hypotheses 1-3 were tested at the executive team level using general least squares regression. Results are summarized in Table 5, found in the Appendix.

Tests at the executive team level supported Hypothesis 1. While controlling for executive team size and mean ASO, ASO diversity positively predicted relationship conflict at Stage 2 ($\beta = 10.54$, $p = 0.02$. Hypothesis 2 remained unsupported at the executive team level, with a nonsignificant main effect of

transition processes on relationship conflict ($\beta = 0.05$, $p = 0.92$) as well as a nonsignificant interaction between ASO diversity and transition processes ($\beta = 20.49$, $p = 0.18$). Just as Hypothesis 3 was supported by tests at the sub-team level, it was also supported at the executive team level. Interpersonal processes significantly predicted relationship conflict ($\beta = -0.86$, $p = 0.03$) and there was a marginally significant relationship between ASO diversity and interpersonal processes ($\beta = -14.06$, $p = 0.099$).

In summary, results at the executive team level were consistent with results at the sub-team level. One difference to note is that all the β-values for statistically and marginally significant relationships were higher at the executive team level compared to the sub-team level.

Ancillary analyses increase confidence in study findings due to the stability in results across the sub-team and executive team levels, with and without control variables, and in combined moderator versus single moderator regressions.

DISCUSSION

Our study demonstrates that teams with high levels of ASO diversity are more likely to experience higher levels of relationship conflict than teams more homogenous in ASO. That is, teams with a mixture of action- and state-oriented members tend to experience more anger, emotional tension, and interpersonal friction than teams composed of individuals who are more similar in their action-state orientations. Further, interpersonal processes at more extreme values moderate the link between ASO diversity and relationship conflict. The positive relationship between ASO diversity and relationship conflict is stronger under conditions of low interpersonal processes and weaker under conditions of high interpersonal processes. These findings indicate that teams composed of both action- and state-oriented members experience less relationship conflict if members help regulate each other's emotions, provide motivational support, and settle disagreements.

Theoretical Implications

While ASO has been well researched at the individual level, we have filled a gap in the ASO literature by exploring the effect of this motivational individual difference at the group level. ASO is especially relevant for work teams because differences in starting and stopping during group goal striving may cause members to conflict with each other. Differences in ASO are likely to manifest in teams when members must work together interdependently. When teammates must rely on each other to accomplish team goals, frustrations over unfair work distributions or perceptions of low teammate integrity are likely to bolster the salience of ASO diversity. Indeed, our study demonstrated that diversity of action-state orientation has clear implications for how team members get along.

Expanding the team diversity literature, we explored ASO as a novel form of self-regulatory motivational difference, and results from our study indicate that composition matters when it comes to action- and state-oriented individuals working on the same team. ASO diversity was a statistically significant predictor of relationship conflict while controlling for mean levels of ASO, which did not predict relationship conflict. This suggests that teams composed of either mostly action-oriented members or state-oriented members are not likely to experience the same degree of personality conflict and emotional tension that teams with a combination of both action- and state-oriented members do. Our results add to the growing list of antecedents of relationship conflict, which has been shown to negatively impact numerous team outcomes (de Wit et al., 2012).

This study responds to a common call in the team diversity literature to explore moderators (e.g., Guillaume et al., 2017, Van Knippenberg & Schippers, 2007) by elucidating the role that interpersonal processes play in mitigating relationship conflict on teams with high ASO diversity. Teams that had a combination of action- and state-oriented members experienced less relationship conflict with high levels of interpersonal processes compared with low levels of interpersonal processes. These findings indicate the impact that members helping to regulate each other's emotions, motivate each other, and resolve disagreements can have in reducing tension and anger on teams with some action- and some state-oriented members.

Non-Supported Hypotheses

Although transition processes were hypothesized to reduce the interpersonal friction that arises when a mixture of action-oriented and state-oriented people work together on the same team, this moderated effect was not supported. There are some potential reasons to explain why our results indicated a nonsignificant interaction between ASO diversity and transition processes. First, while the measure of interpersonal processes assessed whether teams took the time to analyze their goals, specify their mission, and formulate strategies, it did not determine whether the strategies had buy-in from all members. It is possible that some plans suited action-oriented members but not state-oriented members, who then could have felt overwhelmed by their work. Or perhaps plans were drawn to give state-oriented members easier or less time-consuming work, which might have exacerbated action-oriented members' perceptions of unfair work distribution. Second, the measure for transition processes assessed whether plans were created but not *how effective* those plans were. Ineffective strategies may not have provided state-oriented members with the scaffolding they would need to remain calm and better stick to their work, but this was not measured.

Although hypothesized, higher relationship conflict did not lower executive team performance. We see multiple potential reasons to explain why relationship conflict did not statistically predict performance in our sample. First, the low sample size (executive team $n = 19$) may not provide sufficient power to detect effects. Additionally, this advanced course is challenging but also extremely valuable to students planning to make a career in the hotel and restaurant management industry given it provides practical experience planning and executing a meal for real patrons. Therefore, enrolled students may have been particularly dedicated to performing well despite experiencing high levels of relationship conflict in their teams. Participants may have been highly motivated to exert the effort needed to prevent relationship conflict from damaging their meal performance. Students may also have viewed the classroom context as a learning environment where they give others the benefit of the doubt and can be more forgiving toward errors so as not to harm individual (or collective) grades. Such a perspective could reduce the tendency for relationship conflict to measure team performance as measured by task grade.

Recent work indicates that team conflict tends to exist largely at the dyadic level (Humphrey et al., 2017; Shah et al., 2021). Our conflict measures used the sub-team as the referent, so may not have been nuanced enough to explore whether the conflict largely existed between two members. Further, in a qualitative study on emergency room teams, where team composition changes every few months, members expressed that it was easier to work with difficult people knowing that it was only a temporary experience (Klein et al., 2006). Given that our sample's student teams understood that they would only have to work together for a semester, it may have been easier for them to power through despite any conflict between members. Finally, given kitchen culture in restaurant settings (Murray-Gibbons, 2007), conflict may have been more salient in BOH than FOH teams and combining both may have washed out significant findings. However, such sub-team differences could not be distinguished in our study since the conflict-team performance main effect could only be tested at the executive team level.

Practical Implications

Mangers must be aware of how motivational differences in team members' starting work, continuing through challenge, and returning to work after setback or failure can create dysfunctional conflict on their teams. Though ASO is not a personality trait that team members often discuss with each other, our research shows that it impacts a key team process variable: relationship conflict. Practitioners and team facilitators should encourage open discussion about members' action-state orientations to help bring more insight to their thoughts and behaviors.

While teams may not always have a choice regarding their composition, we have identified one means of reducing the detrimental effects that ASO diversity can have on teams. For teams with high ASO diversity that are also experiencing personality conflicts between members, members can improve team dynamics by thoughtfully developing and employing strategies to regulate each other's emotions, motivate each other, and manage disagreements. Such interpersonal processes should help teams begin their work faster and stay engaged longer. For example, adopting communal coping strategies may lay the groundwork

for members to help each other manage their emotions. Lyons et al. (1998) describes communal coping as a means of managing stressful situations in interpersonal group contexts. These scholars outline three key elements: 1) that at least one person on the team believe in the benefits of joining together to deal with an issue, 2) communicating what happened and how it affects the team members, and 3) collaborating to determine how to reduce the impact of the stressor on the team members (Lyons et al., 1998). In these discussions, framing the stressor in terms of problems with "processes" and "tasks" rather than problems with "people" can help the tension feel less personal and direct efforts toward actions to manage the problem (Tannenbaum & Salas, 2020). Further, relationship conflict resulting from violations of fairness is theorized to be helped by team members identifying where the fairness violation is coming from, collectively brainstorming how they can address the root of the issue, and then implementing their proposed change (Ren & Gray, 2009). This strategy may be especially helpful when relationship conflict arises on teams diverse in ASO, as it allows action-oriented members to address issues of low workload sharing so that the team can better support both action- and state-oriented members in establishing fair work distributions.

Limitations and Future Directions

Future studies should replicate our work and address several limitations. First, our analyses had low power due to low sample sizes at both the sub-team ($n = 39$) and executive team levels ($n = 19$). While significant and marginally significant findings under low power may indicate substantive relationships, they also dictate caution in interpretation. Nevertheless, the stability in ancillary results across the sub-team and executive team levels, with and without control variables, and in combined moderator versus single moderator regressions increases confidence in study findings.

Second, at the time these data were collected, there were no validated measures for interpersonal or transition processes, so items were adapted from Marks and colleagues' (2001) conceptual definitions. Future research should employ the use of Mathieu et al.'s (2020) validated scales for these processes. Third, while our results demonstrate that teams composed of action- and state-oriented members have higher emotional friction, they do not test the mechanisms by which ASO diversity negatively impacts relationship conflict. Our rationale relied on workload sharing and integrity to connect ASO diversity to relationship conflict, but neither was measured. Existing research supports the moderating role that low workload sharing can have on relationship conflict (Alipour et al., 2017), and future research should explore workload sharing as a potential mediator between ASO diversity and relationship conflict.

Our study tended to focus on the negative aspects of state-orientation as represented in most of the literature. However, some theorizing and empirical work (e.g., Diefendorff, 2000; Hall et al., 2001; Kuhl, 1994a) suggests that the increased time and thought taken by state-oriented people can be beneficial to individual performance. Given this thinking, when and how state-orientation can be a benefit to team functioning is worth exploring.

While relationship conflict was the main mediator examined in our study, future work should explore additional mediators to explain the ASO diversity-team performance relationship. For example, team coordination may also explain how differences in members' starting and persisting on work can impede team performance. If members are starting their work their work at different times or distributing their attention differently across multiple tasks, it may be more difficult to coordinate tasks that require high interdependence or sequencing. Additionally, team cohesion is worth exploring as a mediator due to the potential for differences in members' action-state orientations to negatively impact team bonding and interpersonal attraction.

Future work should also continue exploring other factors that may impact means of reducing relationship conflict in teams high in ASO diversity. For example, personality strength, which measures the degree that one is likely to change their behavior based on the context (Dalal et al., 2015), is worth investigating. It may be that state-oriented individuals who also have weak personalities (i.e., low personality strength) may benefit more from effective and well-structured plans or teammates' motivational support given their ability to change their behavior more readily in response to contextual cues.

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APPENDIX

TABLE 5
EXECUTIVE TEAM HIERARCHICAL REGRESSION ANALYSES TESTING THE MODERATING EFFECTS OF TRANSITION AND INTERPERSONAL PROCESSES ON THE RELATIONSHIP BETWEEN ASO DIVERSITY AND RELATIONSHIP CONFLICT

Independent Variables	Stage 1	Stage 2	Stage 3	Stage 4
Control Variables				
Executive team size	-0.18	-0.23	-0.02	-0.11
Mean-aggregated ASO	1.22	1.01	1.22	2.32
ASO diversity		10.54*	4.32	4.25
Moderators				
Transition processes			-0.15	0.02
Interpersonal processes			-0.86*	-0.83*
Interactions				
ASO diversity x transition processes				20.49
ASO diversity x interpersonal processes				-14.06[†]

Scores above represent β values from mean-centered relationship conflict, ASO diversity, interpersonal processes, and transition processes; interactions were calculated using mean-centered terms.

[†] indicates $p < 0.10$
* indicates $p < 0.05$
** indicates $p < 0.01$