Personality Similarity in Negotiations: Testing the Dyadic Effects of Similarity in Interpersonal Traits and the Use of Emotional Displays on Negotiation Outcomes

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We build on the small but growing literature documenting personality influences on negotiation by examining how the joint disposition of both negotiators with respect to the interpersonal traits of agreeableness and extraversion influences important negotiation processes and outcomes. Building on similarity-attraction theory, we articulate and demonstrate how being similarly high or similarly low on agreeableness and extraversion leads dyad members to express more positive emotional displays during negotiation. Moreover, because of increased positive emotional displays, we show that dyads with such compositions also tend to reach agreements faster, perceive less relationship conflict, and have more positive impressions of their negotiation partner. Interestingly, these results hold regardless of whether negotiating dyads are similar in normatively positive (i.e., similarly agreeable and similarly extraverted) or normatively negative (i.e., similarly disagreeable and similarly introverted) ways. Overall, these findings demonstrate the importance of considering the dyad’s personality configuration when attempting to understand the affective experience as well as the downstream outcomes of a negotiation.

Keywords: agreeableness, extraversion, personality similarity, emotional display, negotiation

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Scholars for many years characterized personality as having little to no impact on negotiation behavior and outcomes (e.g., Bazerman, Curhan, Moore, & Valley, 2000; Rubin & Brown, 1975; Thompson, 1990). More recently, however, researchers found evidence for a different story and have begun specifying a range of new and interesting ways that personality impacts negotiations (e.g., Barry & Friedman, 1998; Barry, Fulmer, & Van Kleef, 2004; DeRue, Conlon, Moon, & Willaby, 2009; Dimotakis, Conlon, & Ilies, 2012). This should not be surprising, as personality has been shown to matter for a variety of other organizationally related constructs, such as motivation and job performance (e.g., Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001). In fact, in a recent meta-analysis, Sharma, Bottom, and Elfenbein (2013) found support for a variety of relationships concerning individual difference measures (e.g., Big Five personality constructs, emotional intelligence, cognitive ability) and negotiation outcomes of both an economic and psychological nature. Sharma et al. (2013, p. 322) concluded their review by stating, “It is time to recognize the potentially far-reaching role of individual differences in predicting negotiation outcomes.”

Although a small but growing literature highlights the relevance of personality to negotiation, this work usually shares a common shortcoming: although negotiation is inherently an interpersonal activity, the consideration of personality in this interpersonal activity has been at the individual level. In other words, prior research does not consider how the configuration of personality among negotiating parties influences negotiation processes and outcomes. In fact, the misalignment inherent in considering the relevance of individual-level characteristics to dyadic-level phenomena may explain why the literature was slow to recognize the importance of personality for negotiation. Indeed, Krasikova and
LeBreton (2012, p. 741) recently noted that, when studying dyadic phenomena (e.g., dyadic negotiations), using data from only one member of a dyad and analyzing that data at the individual level is “theoretically deficient.”

The present work represents an initial attempt to rectify this shortcoming by simultaneously considering how the similarity of two negotiators’ individual differences impacts the dyadic process and outcomes of negotiation. Given our emphasis on the interpersonal nature of negotiation, the present theoretical foundation is rooted in the similarity-attraction paradigm. This theory suggests that individuals’ perceived similarity with respect to various attitudes and preferences influences their attraction and ultimate affective reactions to interpersonal exchanges (e.g., a negotiation exchange; Byrne, 1971). In particular, we argue that dyadic similarity on the interpersonal personality dimensions of agreeableness and extraversion will influence both the affective nature of the negotiation as well as important downstream outcomes.

We specifically focus on the two Big Five personality traits that comprise the “interpersonal plane” (i.e., agreeableness and extraversion; Hofstee, de Raad, & Goldberg, 1992; McCrae & Costa, 1989) because this is consistent with similarity-attraction theory’s caution against studying personality similarity in general. In fact, Byrne (1971) instead advocates for “an interest in specific personality characteristics” and notes that personality characteristics linked to “behavior in an interpersonal situation (are) crucial” when studying the similarity-attraction relationship (p. 167).

Using similarity-attraction theory, which explores the implications of similarity and attraction for interpersonal interactions, we first contribute to the negotiation literature by considering the dynamic interplay of negotiators’ individual differences. In other words, we diverge from research concerned with individual-level personality and examine the configuration of both negotiators’ interpersonal traits and how similarity and dissimilarity across levels of agreeableness and extraversion influence the emotional displays evident in electronic negotiation. In doing so, we add to an emerging literature highlighting the affective nature of negotiation (Druckman & Olekalns, 2008; Kopelman, Rosette, & Thompson, 2006) by focusing on emotional displays, a particularly critical social and emotional component of the negotiation process (Morris & Keltner, 2000). We also contribute to the negotiation literature by examining the negotiating dyad’s use of emotional language (i.e., objective assessments of positive emotional displays), as opposed to individual, subjective reports of emotion. Such research allows us to begin to understand situations in which even disagreeable or introverted negotiators may engage in positive emotional expressions (specifically, when they negotiate with similarly disagreeable or introverted individuals) and how personality similarity ultimately influences more common negotiation outcomes (e.g., negotiation time and relationship conflict).

Additionally, we offer a contribution in terms of our comprehensive and sophisticated analysis of the personality configurations evident in negotiating dyads. By utilizing polynomial regression and response surface methodology, we do not restrict an inherently three-dimensional relationship (various personality configurations of two negotiators with an outcome) to two dimensions (Edwards, 2002), allowing us to theorize and empirically examine similarity at high levels of agreeableness and extraversion as well as similarity at low levels of agreeableness and extraversion. Moreover, this approach allows us to overcome the empirical limitations of studying similarity using difference scores (i.e., low reliability, discarded information, ambiguous interpretation, confounded results, and unrealistically restrictive and often untested constraints; Edwards, 1994, 2001). Overall, the present research enhances our understanding of how the interpersonal personalities of both negotiators impact the nature of negotiation interactions and key negotiation outcomes.

Theoretical Background and Hypotheses

Interpersonal Personality Similarity

Little attention has been paid to how the personality configuration of a negotiating dyad might influence the way that the negotiation unfolds. Specifically, in a two-party negotiation context, personality similarity is determined by simultaneously considering the levels each negotiator possesses on a specific Big Five personality trait such as agreeableness or extraversion (Costa & McCrae, 1992). Consistent with past definitions of personality similarity (e.g., Griffitt, 1969), we define agreeableness similarity as the degree of correspondence between each party’s level of agreeableness. We also apply the same definition to extraversion similarity.\(^1\)

Given that negotiation involves multiple parties and joint decision making processes, we suggest that it is important to uncover the consequences of dyadic or group-level interpersonal personality similarity in such a context. For instance, there is work that notes the potential value of similarity for increasing the “ease and quality” of interactions (Bauer & Green, 1996, p. 1546). In addition, Schaubroeck and Lam (2002, p. 1121) noted that “people who share certain traits, even if they are not conscious of those traits, are more inclined to interact with one another effectively,” which implies novel implications may exist for negotiations and the dyads involved in negotiation.

We focus on similarity with respect to the traits of agreeableness and extraversion for two reasons. First, as highlighted previously, opposed to some factors that are self-focused (e.g., conscientiousness), agreeableness and extraversion represent the only two interpersonal dimensions of the Big Five (Hofstee et al., 1992; McCrae & Costa, 1989). Applying the descriptions provided by Costa and McCrae (1992), a negotiator who is high in agreeableness tends to be “altruistic, sympathetic to others, eager to help and be helped in return” whereas a negotiator low in agreeableness tends to be “ego-centric, skeptical of others’ intentions, and competitive rather than cooperative” (p. 15). Additionally, individuals high in extraversion are described as “liking people and working in groups” whereas introverts are “reserved and independent” and “tend to dislike and avoid social stimulation” (Costa & McCrae, 1992, p. 15). Given their interpersonal nature and the social context of negotiation, extraversion and agreeableness are expected to influence the nature of the interactions that occur between people (Costa & McCrae, 1992; DeYoung, Quilty, & Peterson, 2007). In turn, such interactions allow both parties to gain insight into the other’s attitudes and preferences regarding the nature of appropri-

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\(^1\) In the present research, we use the term personality similarity to denote similarity along either dimension of the interpersonal personality space (agreeableness similarity, extraversion similarity).
ate interpersonal interactions, and the extent to which these attitudes align (or misalign) is a critical concern in similarity-attraction theory.

Second, our investigation of personality similarity can also be thought of in the context of research on interpersonal diversity. A common categorization of diversity proposed by Harrison, Price, and Bell (1998) distinguishes between surface-level diversity in terms of outwardly observable physical characteristics (e.g., age, gender, race), and deep-level diversity in terms of underlying beliefs, attitudes, and personality traits (Bell, 2007). In the present study, because dyad members only interacted virtually, surface-level diversity characteristics were not observable. This provides individuals with the opportunity to more quickly recognize similarities and differences in deep-level personality traits, which are likely to have long-lasting impact on team functioning (Bell, 2007; Harrison, Price, Gavin, & Florey, 2002; Hollenbeck, DeRue, & Guzzo, 2004). In terms of which personality traits are most critical for determining perceived deep-level diversity, Liao, Chuang, and Joshi (2008) found that extraversion and agreeableness (negatively) predicted deep-level dissimilarity, whereas neuroticism did not significantly influence deep-level dissimilarity. As such, this past empirical research on personality and deep-level dissimilarity—in addition to our reliance on similarity-attraction theory—led us to focus our theorizing on extraversion and agreeableness similarity.

Similarity and Positive Emotional Displays

Similarity-attraction theory suggests that positive affect is often a mechanism by which similarity influences responses. “According to the model, an affective response (e.g. interpersonal attraction) mediates the relationship between the conditioned stimulus (e.g. similarity) and the evaluative response (e.g. performance rating)” (Strauss, Barrick, & Connerley, 2001, pp. 638–639). More importantly for the current research, the positive affect that results from similarity is often then “directed toward the rewarding person” (Byrne, 1962, p. 164).

Hence, consistent with our theoretical framework as well as the present focus on interpersonal traits (e.g., extraversion is associated with positive affect; McCrae & Costa, 1989), we examine the positive affective displays expressed to one’s negotiating partner. That is, we focus on positive emotional displays, defined as the outward expression of positively valenced emotions (Diefendorff & Greguras, 2009) because such displays are expected to reflect the similarity induced positive affective reactions experienced by the dyad members. This is consistent with research suggesting that “a pattern of emotional arousal and temperament may be disclosed, in part, by the written expression of language” (Danner, Snowdon & Friesen, 2001, p. 805). Moreover, Bono and Ilies (2006, p. 320) equated positive emotionality with both “the experience and expression of positive emotions.” Thus, although negotiators may experience emotions they do not express, theory, and past research indicates that the emotions that are displayed provide valuable insights regarding each partner’s experienced affect during the negotiation. Subsequently, we develop and outline our specific hypotheses and summarize the proposed relationships in Figure 1.

Research shows that across diverse attitudes and different kinds of similarity, individuals have rewarding interactions with individuals who are similar to themselves (Byrne, 1997). As discussed previously, these rewarding interactions result in positive affective reactions or responses. Building on research investigating other types of individual difference similarity (e.g., demographic characteristics: Li & Hambrick, 2005) and applying similarity-attraction theory, we expect that members of dyads characterized by high levels of personality similarity in terms of interpersonal traits (i.e., where both negotiators are either high or low on agreeableness or extraversion) will exhibit more positive emotional displays during the negotiation as a result of increased interpersonal attraction. For instance, Byrne (1971, p. 187) reviews one study that concludes “extraverts showed the usual similarity effect.” Following similarity-attraction theory, our hypothesis argues for greater levels of positive emotional displays as a result of personality similarity.

![Figure 1. Conceptual model.](image-url)
Moreover, dyadic personality similarity is also important to examine given that the effects of similarity may exist even when individuals are similar with respect to undesirable characteristics. Prior research on similarity-attraction theory suggests that people tend to have more positive social interactions with those who are similar to them in some meaningful ways than they do with those who are not similar to them (Engle & Lord, 1997; Li & Hambrick, 2005). Notably for the present study, the positive effects of similarity are expected to occur even if people are similar in normatively negative ways (Byrne, 1962). Specifically, we propose that this relationship exists not only when both negotiators are high in agreeableness or extraversion but also when both negotiators are low in either trait. Similarity-attraction theory proposes that the degree of similarity, typically reflected in the proportion of attitudes on which there is alignment, is the critical quantity driving the experience of positive emotions (Byrne, 1971, 1997). As a result, even if negotiators are disagreeable or introverted (which may be viewed unfavorably in certain situations), as long as both negotiators are similarly low on the interpersonal traits of agreeableness and extraversion, the effect of similarity on attraction and subsequent positive emotional reactions is expected to exist.

Further explanation for this notion can be found within social identity theory. Similarity drives identification with others or psychological groups and even negatively valued distinctions have been associated with identification. Negatively regarded groups often use such defense mechanisms as recasting a negative distinction into a positive one . . . [or] minimizing or bolstering a negative distinction (we’re not popular because we avoid playing politics). (Ashforth & Mael, 1989, p. 24)

In other words, identification occurs across a spectrum of both positive and negative characteristics. In addition, identity is associated with various group outcomes, thus, if two disagreeable or two introverted individuals identify with each other based on their similarity with respect to these traits, this identification may lead to cooperation and positive evaluations of each other (Ashforth & Mael, 1989). Bauer and Green (1996, p. 1544) noted that “personality similarities are proposed to increase affect and attraction,” which provides further support for the proposed relationships for positive emotional displays within dyads high and dyads low on agreeableness and extraversion.2

In terms of similarity at the midpoint of a trait, when both negotiators are neither high nor low on agreeableness or extraversion, we expect that the similarity-attraction effect will be lower for several reasons. First, at the midpoint (e.g., when individuals see the trait as neither accurate nor inaccurate of their typical behavior), the activation of the trait should not be as expressive. For instance, individuals neither high nor low on agreeableness are less likely to express the trait at all and as a result, there will be fewer displays of positive emotions as a result of perceived agreeableness similarity. Relatedly, because personality traits only describe “broad individual differences . . . of what individuals ‘are like on the whole’” (Mischel, 2004, p. 8), compared with situations when an individual is either high or low on a particular trait, patterns of behavior for those characterized by neither high nor low levels of the trait are apt to be more varied. Related to similarity-attraction theory, we expect perceived similarity between negotiation partners with neither high nor low levels of a personality trait to be reduced due to this variation in behavior.

Following from the preceding similarity prediction, when individuals interact with others who exhibit lower levels of personality similarity or dissimilarity (e.g., one person high in extraversion interacts with another who is low on this trait), similarity-attraction theory predicts that a low degree of perceived similarity will elicit few positive feelings. As such, we posit that dyads with low interpersonal personality similarity will exhibit fewer positive emotional displays during the negotiation.

Taken altogether, the first two hypotheses predict the following:

**Hypothesis 1:** Among dyads similar in (a) agreeableness and (b) extraversion, there is a curvilinear (U-shaped) relationship between personality similarity and positive emotional displays, such that positive emotional displays will be higher for dyads with similar-and-low or similar-and-high levels of the personality trait, and lower for dyads where both partners are neither high or low on the personality trait.

**Hypothesis 2:** Positive emotional displays are minimized when negotiators’ levels of (a) agreeableness and (b) extraversion are dissimilar.

Considering the importance of establishing appropriate theoretical boundaries (Leavitt, Mitchell, & Peterson, 2010), we also develop boundary conditions to our theory and associated relationships. Specifically, we do not expect the hypothesized similarity effects for agreeableness and extraversion to generalize to the other personality dimensions of the Big Five, namely, neuroticism, openness to experiences, and conscientiousness. Individuals high on neuroticism are described as insecure, self-conscious, and temperamentally those high on openness to experience are original, imaginative, and intellectually curious (McCrae & Costa, 1987). Finally, conscientiousness is “a dimension that contrasts scrupulous, well-organized, and diligent people with lax, disorganized, and lackadasical individuals” (Costa & McCrae, 1992b, p. 6). Following our earlier arguments, these three dimensions of personality are not “intrinsically interpersonal” and can occur “regardless of the presence or absence of other people” (McCrae & Costa, 1989, p. 586).

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2 Per the astute observation of our review team, it is important to note that we do not intend to suggest that disagreeable or introverted individuals do not display their genuine (or trait consistent) reactions. That is, we still expect such genuine reactions and displays to occur during the negotiations in addition to the effects we expect for similarity and positive emotional displays. Indeed, it is these trait consistent displays that will enable negotiators to recognize their personality similarity. To illustrate this and ensure that our participants were indeed displaying trait-consistent behavior, we tested whether the overall level of agreeableness (disagreeableness) and extraversion (introversion) in the dyad was directly associated with displays typical of agreeableness (disagreeableness) and extraversion (introversion) respectively. We found the following: (a) consistent with the warm (coldness) nature of agreeableness (disagreeableness), agreeableness (disagreeableness) was negatively (positively) associated with the use of swear words (e.g., damn, piss, etc.); (b) consistent with the cooperative nature of agreeableness, agreeableness was positively associated with insight words (e.g., think, know, consider); (c) consistent with the sociable nature of extraversion, extraversion was positively associated with hearing words (e.g., listen, hearing) and the use of the second person (e.g., you, your); and (d) consistent with the assertive nature of extraversion, extraversion was negatively associated with quantifier words (e.g., few, many, much).
As discussed previously, our specific focus on interpersonal traits in a negotiation context is aligned with similarity-attraction theory’s consideration of attitude relevance in regards to interpersonal interaction (Byrne, 1971). Indeed, similarity-attraction theory (Byrne, 1971, p. 167) cautions against studying personality similarity in general and highlights that personality characteristics linked to “behavior in an interpersonal situation (are) crucial” when studying the similarity-attraction relationship. In this sense, Byrne (1971) implies that the interpersonal relevancy of the personality characteristic will be an important boundary condition of the similarity-attraction relationship. As such, we do not expect our predictions to be relevant for the intrapersonal Big Five traits of neuroticism, openness to experience, or conscientiousness. With this prediction, we build on Liao et al.’s (2008) conclusion that some of the Big Five including Conscientiousness and Openness to Experience, do not have direct implications regarding an individual’s general behavioral preferences of viewing and interacting with others ... [and] these characteristics offer no clear predictions of how they will influence an individual’s dissimilarity perceptions. (p. 109)

Negotiation Outcomes

Previous research concludes that similarity enhances behavioral predictability and simplifies interactions (Bauer & Green, 1996). Byrne (1971, p. 165) explains this notion as follows: behavioral similarity “provides evidence that one is functioning in a logical and meaningful manner; similarity makes one’s interpersonal environment more predictable and understandable.” We next consider four negotiation outcomes (i.e., temporal consequences, outcome disparities, relationship conflict, and postnegotiation perceptions of one’s counterpart) that we believe will be impacted by the heightened behavioral predictability and ease of coordination afforded by similarity and positive emotional displays.

Regarding temporal consequences, time spent negotiating has long been considered an important aspect of the negotiation process. For example, Pruitt (1981) argued for the importance of being stubborn (along with having a problem solving orientation) in negotiations, implying that more prolonged encounters might be beneficial. On the other hand, efficiency is an important characteristic of outcomes, and in light of the increasingly dynamic nature of workplaces (Pearlman & Barney, 2000; Pulakos, Arad, Donovan, & Plamondon, 2000), rapid decisions are desirable. As such, conflict and negotiation researchers have argued that faster resolutions may often be valuable (cf., Conlon & Fasolo, 1990; Ury, Brett, & Goldberg, 1988). Thus, given the different views on time spent in negotiations and the potential opportunity costs associated with time spent negotiating when employees could be engaged in other tasks, we consider how personality similarity and positive emotional displays are related to negotiation time.3

On the basis of similarity-attraction theory, dyad members who are both high in agreeableness (extraversion) or who are both low in agreeableness (extraversion) will recognize these commonalities, which should foster positive affect and facilitate positive emotional displays. In turn, reciprocated positive affect may provide important cues that, along with more predictable behavioral responses and ease of coordination, will facilitate rapid dispute resolution. For example, positive affect generally signals that the situation is acceptable and nonthreatening (Forgas, 1995; Fredrickson, 2001). In addition, it is also associated with positive evaluations of objective outcomes (Sinclair, 1988) as well as perceived progress on ambiguous tasks (Seo, Barrett, & Bartunek, 2004; Tsai, Chen, & Liu, 2007). Interpersonally, positive emotional displays in a negotiation context generally signal a desire to work together to reach a resolution (Anderson & Thompson, 2004). Thus, we expect that whether negotiators are similarly high or similarly low in interpersonal traits, the relatively high number of positive emotional displays will create a swift resolution to the negotiation.

Conversely, we expect negotiations to be comparatively long in duration for dyads with neither high nor low levels of agreeableness or extraversion and for dyads with dissimilar levels of these traits. In these dyads, negotiators who have neither high nor low levels of agreeableness or extraversion are likely to express fewer positive emotional displays because their interactions with their counterpart are more inconsistent, leading to less behavioral predictability, more cooperation challenges, and longer negotiations. That is, in dyads with dissimilar levels of agreeableness or extraversion, differences between the negotiators are evident and will reduce the number of positive emotional displays leading to more prolonged negotiations. This is consistent with research arguing that employees who have “personalities that are different from their peers’ may struggle to communicate effectively with those peers” (Schaubroeck & Lam, 2002, p. 1121), which is likely to delay the negotiation.

Hypothesis 3: Positive emotional displays will mediate the negative relationships between (a) agreeableness similarity and (b) extraversion similarity and negotiation time.

The next negotiation outcome we examine is outcome disparity (also known as relative profit; cf., Thompson, Peterson, & Brodt, 1996), the degree to which the negotiators achieve roughly equivalent (low disparity) or markedly different (high disparity) economic outcomes from the negotiation. Although negotiators typically strive to do as well as they can in negotiations, most also recognize that it is important that the other party’s needs are met as well. This helps ensure that agreements reached are not later broken and that the expected benefits from the agreement accrue as the details of an agreement are implemented (Mislin, Campagna, & Bottom, 2011). As noted previously, similarity is associated with rewarding, predictable, and cooperative interactions, which would include positive affective responses. Indeed, positive emotions help overcome competitive processes and cue problem-focused strategies as well as cooperation (Carnevale & Isen, 1986). Further, these effects tend to be stronger when the other party to the negotiation is likewise experiencing positive affect (Forgas, 1998).

The recognition of personality similarity and the positive affect and cooperation that subsequently occurs should foster settlements for negotiators where their individual outcomes are more equivalent to each other, because equality norms are likely to be salient (Deutsch, 1975; Kabanoff, 1991). Deutsch (1975) notes that equality rules should be used when the goal is harmony or positive relationships, and Conlon, Porter, and McLean Parks (2004) noted that allocations based on equality are more common in situations...
characterized by friendly relationships. Thus, with greater personality similarity producing greater levels of positive emotional displays, negotiators are likely to arrive at resource allocations that have as an implicit goal a relatively similar level of value distribution. When negotiators are less similar, positive affective displays will be reduced, resulting in less cooperation and less of an emphasis or concern that outcomes reached are mutually acceptable. In addition, the relative lack of reciprocated positive affect in such situations will not cue considerations of equality norms, resulting in more variance in the outcomes achieved by the negotiators. This suggests the following hypothesis.

**Hypothesis 4:** Positive emotional displays will mediate the negative relationships between (a) agreeableness similarity and (b) extraversion similarity and outcome disparity.

Third, we also expect the effects of personality similarity and positive emotional displays to influence perceptions of relationship conflict during the negotiation. Relationship conflicts are disagreements that stem from personal, nonwork issues such as differences in personalities, political views, or lifestyles (Jehn, 1997; Rispens, 2014). In examining dyadic relationship conflict, we take into consideration both negotiators’ perceptions of the tension or conflict experienced in the relationship and how such conflict can be harmful for functioning in groups (Jehn, 1995). For instance, relationship conflict has been found to be particularly detrimental to group outcomes (De Dreu & Weingart, 2003), highlighting its importance in negotiation contexts. We also focus on relationship conflict in particular because of the conceptual fit with our theoretical framework. Specifically, relationship conflict is interpersonally focused and the same attitudinal similarities and differences that are key drivers of attraction (or a lack thereof), likely play an important role in predicting the extent to which relationship conflict manifests during the course of the negotiation.

We expect relationship conflict to surface as a result of perceived differences between dyad members in their approach to interpersonal interaction. When negotiators share similar interpersonal traits (at high or low levels), there should be less potential for relationship conflict as differences in personality are by definition minimized, and as previously discussed, each dyad member is likely to have a more positive view of the other. In contrast, dyads with dissimilar levels of agreeableness or extraversion, or who have neither high nor low levels of these traits are more likely to experience a mismatch between their desired and the realized nature of the interaction, diminishing their affiliation for the other negotiator, and increasing the potential for relationship conflict to occur (de Wit, Greer, & Jehn, 2012). Moreover, these effects are likely to transmit through positive emotional displays. As described in Hypothesis 1, we expect more frequent positive emotional displays when interpersonal traits are similarly high or low across dyad members. Importantly, positive affect “smoothes over conflict behavior” and has been identified as a potentially important means of maintaining and possibly enhancing “goodwill” during conflict events (Jehn & Bendersky, 2003, p. 221).

**Hypothesis 5:** Positive emotional displays will mediate the negative relationships between (a) agreeableness similarity and (b) extraversion similarity and relationship conflict perceptions.

Finally, positive postnegotiation perceptions of one’s counterpart can be a particularly important outcome from negotiation, especially in contexts where there is an expectation of future interaction, or when delicate or complex issues remain regarding how a negotiated agreement will be formally implemented (Mislin et al., 2011). If one can leave a negotiation feeling good about one’s partner, this likely means that the counterpart is trusted and is someone the focal negotiator is willing to do business with again in the future, facilitating the creation of lasting business relationships (Lewicki, Barry, & Saunders, 2010). Although relationship conflict typically has negative connotations, considering this attitudinal outcome provides more direct evidence regarding the dyad’s overall assessment of their relationship going forward.

Specifically, we propose that dyads with high or low and similar levels of agreeableness or extraversion will have more favorable overall perceptions of each other after the negotiation concludes compared to dyads characterized by neither high nor low or by disparate levels of agreeableness or extraversion. For instance, personality dissimilarity has been linked to marital dissolution (Kurdek, 1993), whereas personality similarity is associated with higher quality dyadic relationships (Bauer & Green, 1996). We expect that the degree of personality similarity will be related to overall perceived similarity with and in turn affinity toward the other person. Specifically, we expect that increased interpersonal similarity perceptions will be associated with increased positive emotional displays and that these displays will foster overall favorable evaluations for each dyad member. This argument is consistent with the idea that “positive emotion directed toward another gives face and in so doing should cue norms of reciprocal respect” (Brett et al., 2007, p. 88). Thus, we propose the following:

**Hypothesis 6:** Positive emotional displays will mediate the positive relationships between (a) agreeableness similarity and (b) extraversion similarity and perceptions of one’s negotiation partner.

**Method**

**Sample and Procedures**

Our sample consisted of 202 junior and senior-level undergraduates enrolled in a management course at a public U.S. university. Students voluntarily participated in the study to fulfill a research requirement for their class. Upon arrival, participants completed an initial questionnaire that included an assessment of the Big Five dimensions of personality. These personality items were randomized across the Big Five traits. Participants were then randomly assigned to one of two groups based on their role in the negotiation. Participants were to negotiate the “Mountain-Pinnacle” negotiation, a variation of the “new recruit” negotiation used in prior research (e.g., Conlon, Moon, & Ng, 2002). Half of the participants represented a company called Mountain, and the other half represented a company called Pinnacle during a merger or acquisition scenario. The negotiators needed to arrive at a settlement on seven issues related to human resource management and compensation decisions (i.e., vacation time, signing bonuses, starting salary, moving expenses reimbursement, start date for new hires, health insurance benefit level, and training center location).
These human resources (HR) issues are relevant for merger and acquisition situations following previous literature that connects “administrative procedures” to differences in corporate culture (Chatterjee, Lubatkin, Schweiger, & Weber, 1992, p. 320). Specifically, “pay scales and travel expenses” have been noted as “important” aspects of organizational cultural compatibility (Weber & Camerer, 2003, p. 401). In turn, these (and other) aspects of organizational culture often have a substantial impact on post-merger/acquisition performance (e.g., Chatterjee et al., 1992; Weber & Camerer, 2003). In addition to culture considerations, at some point in the merger/acquisition process, HR policy integration must take place. These HR policy integrations may be secondary to the more strategic or organizational structure considerations, but it is quite likely that, at some point in the integration process, the HR issues we included in the task (e.g., pay, vacation) will be discussed and negotiated. Importantly, in debriefs with our study participants after finishing the task, none of our study participants asked questions about the realism of the issues, suggesting that to the participants the issues seemed relevant to the context.

Overall, the negotiation task and manipulations were identical to those used in a prior study by DeRue et al. (2009) and included a 2 (dyadic integrative potential: low or high) × 2 (dyadic power level: equal or unequal) factorial design. However, given the theoretical model proposed, both integrative potential and dyadic power level were controlled for in the analyses. Additional information about the manipulations and how the relationships generalize across these two conditions is available in the online Supplemental Materials.

To ensure participants would be motivated to negotiate, all parties were told of their chance to earn $25 in the negotiation. More specifically, they were told that we would select the top 50% of dyads in the study according to the joint value created, and then from these dyads, we would reward the top 20% of negotiators on the basis of their individual scores. Thus, 20 negotiators in our study ultimately received $25 each. Participants were allowed 30 to 40 min to review written case materials and prepare for the negotiation. They then answered several brief questions to verify that they understood the case and their point schedules for the negotiation. They achieved by each member of the negotiating dyad.

Measures

Big Five personality traits. The 10 item scales from Goldberg (1999) were used to assess individual differences in agreeableness, extraversion, neuroticism, openness to experience, and conscientiousness. The items were all measured on a 7-point scale (1 = very inaccurate, 4 = neither inaccurate nor accurate, 7 = very accurate). Example agreeableness items included, “I sympathize with others’ feelings” (“α = .80). Example extraversion items included, “I am the life of the party” and “I feel comfortable around people” (“α = .90). Example neuroticism items included, “I get stressed out easily” and “I have frequent mood swings” (“α = .82). Example openness to experience items included, “I have a vivid imagination” and “I am quick to understand things” (“α = .76). Example conscientiousness items included, “I am always prepared” and “I pay attention to details” (“α = .79).

Positive emotional displays. After the data collection was completed, the negotiation transcripts were content analyzed using a computer text analysis program, the Linguistic Inquiry and Word Count (LIWC) program (Pennebaker, Chung, Ireland, Gonzales, & Booth, 2007), which allowed for an objective assessment of the positive emotional displays in each negotiation. Transcripts were content analyzed using the positive emotions dictionary of the LIWC program. This LIWC dictionary includes 406 word entries for positive emotional displays, and past research has demonstrated that LIWC ratings of positive emotion words correspond with human ratings of writing excerpts (Alpers et al., 2005). Following Brett et al. (2007), the positive emotional displays occurring in a negotiation were operationalized as the percentage of positive emotion words identified by LIWC (e.g., agree, enjoy, great, nice, perfect, thanks) within each negotiation transcript.4

Negotiation time. Time stamps were applied by the instant messaging system as each communication was sent by one party to another. Negotiation time was determined by calculating the difference between timestamps for the first and last messages sent by each dyad.

Outcome disparity. For each issue, a specific number of points was achieved based on the final settlement that was reached by the two negotiating parties. Dyadic outcome disparity was operationalized as the absolute difference between the point values achieved by each member of the negotiating dyad.

Relationship conflict. Relationship conflict was assessed using the Jehn (1995) scale, adapted for negotiations. Example items included, “Was there emotional conflict in your negotiation?” and “Was there relationship tension in your negotiation?” These items were measured on a 7-point scale (1 = not at all, 7 = to a very large extent). The internal consistency of this scale was α = .87. To determine the appropriateness of aggregating the survey data for this measure, we calculated the intraclass correlation coefficient. Researchers typically use ICC (1) to justify aggregation if the F test for these values is significant (Klein & Kozlowski, 2000). The ICC (1) for relationship conflict was .39 (F = 2.26, p < .01).

Perceptions of one’s negotiation partner. Participants completed four items comprising their “feelings about your relationship with the other person” from the subjective value inventory (Curhan, Elfenbein, & Xu, 2006). These items were measured on a 7-point scale. Example items included “What kind of ‘overall’ impression did your counterpart make on you?” (1 = extremely negative, 7 = extremely positive) and “How satisfied are you with your relationship with your counterpart as a result of this negotiation?” (1 = not at all, 7 = perfectly). The internal consistency of this scale was α = .89, and the ICC (1) for this scale was .30 (F = 1.86, p < .01).
Analysis

We tested Hypothesis 1 using the procedures for polynomial regression and response surface methodology described in Edwards (2002). We specifically estimated the following regression equations which capture the relationships between the agreeableness of both negotiators and the extraversion of both negotiators and positive emotional displays (controlling for the effect of integrative potential and dyadic power level):

\[ M = b_0 + b_1A_m + b_2A_p + b_3A_m^2 + b_4A_pA_m + b_5A_p^2 + b_7J + b_7P + e_E \]  
(1)

\[ M = b_0 + b_1E_m + b_2E_p + b_3E_m^2 + b_4E_pE_m + b_5E_p^2 + b_7J + b_7P + e_E \]  
(2)

where \( M \) represents the mediator (i.e., positive emotional displays), \( A_m \) and \( A_p \) represent the agreeableness of the individuals assigned to the Mountain and Pinnacle roles respectively, \( E_m \) and \( E_p \) represent the extraversion of the individuals assigned to the Mountain and Pinnacle roles respectively, \( I \) represents the integrative potential of the negotiation (i.e., low integrative potential or high integrative potential), \( P \) represents whether the negotiation was characterized by equal power (i.e., the merger condition) or unequal power (i.e., the takeover condition), and \( e_E \) represents measurement error. The inclusion of the \( b_1, b_2, \) and \( b_3 \) coefficients (along with the \( b_4 \) and \( b_5 \) coefficients) allows for a more robust characterization of the effects of personality similarity (including potential curvilinear effects) compared with a difference score approach (Edwards, 1994, 2002; Edwards & Parry, 1993). As is typical for this type of analysis, we generated a three-dimensional response surface with perpendicular horizontal axes corresponding to each negotiator’s personality scores for either agreeableness or extraversion (\( A_m \) and \( A_p \) or \( E_m \) and \( E_p \)) and a vertical axis representing the positive emotional displays (\( M \)) to aid in characterizing the nature of the relationship (Edwards & Parry, 1993).

Hypothesis 1 is tested by examining the relationship between positive emotional displays and the negotiation outcomes. The polynomial regression analysis results corresponding to Equation 1 and Equation 2 are reported in Table 2. Hypothesis 1 predicted that, among dyads, the second principal axis of the response surface has a slope (\( p_{21} \)) of -1 and an intercept (\( p_{20} \)) of 0. Empirically assessing the validity of Hypothesis 2 involves evaluating the significance of a nonlinear combination of regression coefficients. Therefore, we generated 10,000 bootstrapped samples to estimate 95% bias-corrected confidence intervals (CIs) for \( p_{21} \) and \( p_{20} \) (Edwards, 2002; Edwards & Parry, 1993).

To evaluate Hypotheses 3 through 6, we tested the indirect effects of personality similarity through positive emotional displays on the negotiation time, outcome disparity, relationship conflict, and perceptions of one’s negotiation partner respectively. Specifically, we used the block variable approach recommended by Edwards and Cable (2009). In this context, the relationship between the personality polynomial terms and positive emotional displays (i.e., the “a” path in a mediation model), is estimated by creating a “block variable” for each dyad by multiplying the estimated polynomial regression coefficients from Equation 1 pertaining to personality similarity (i.e., \( b_1 \) through \( b_3 \)) with each dyad’s raw data to obtain a series of weighted linear composite values. When positive emotional displays are regressed on this personality block variable, the resulting regression coefficient represents the path estimate of the relationship between the personality polynomial terms and positive emotional displays because the variance in positive emotional displays explained by the block variable is exactly equal to the total variance explained by the original equation using the individual polynomial terms (Edwards & Cable, 2009; see also Lambert, Tepper, Carr, Holt, & Barelka, 2012; Matta et al., 2015; Zhang, Wang, & Shi, 2012).

After estimating the path between the personality polynomial terms and positive emotional displays, we then estimated the relationship between positive emotional displays and the negotiation outcomes after controlling for the effects of personality similarity (i.e., the “b” path in the mediation models). Once this parameter was estimated for each outcome, the significance of each proposed mediated effect was tested by bootstrapping the indirect effect using the methods and materials provided by Edwards and Lambert (2007).
similar in agreeableness and extraversion, there is a curvilinear (U-shaped) relationship between personality similarity and positive emotional displays, such that positive emotional displays will be higher for dyads with similar-and-low or similar-and-high levels of the personality trait, and lower for dyads where both partners are neither high nor low on the personality trait. For agreeableness, as shown in Table 2, the coefficients associated with the three second-order polynomial terms (i.e., $A_m^2$, $A_p^3$, and $E_p^2$) were jointly significant in predicting positive emotional displays ($F = 4.51, p < .01$), and the surface along the congruence line exhibits significant upward curvature (curvature = 1.51, $p < .01$), collectively supporting Hypothesis 1a. To illustrate how the agreeableness of both negotiators relates to positive emotional displays, Figure 2A plots the response surface. Consistent with the results just presented, the curvature of the surface along the congruence line follows the expected u-shape pattern (i.e., positive emotional displays are higher for dyads with similar-and-low or similar-and-high levels of agreeableness and lower for dyads where both partners are neither high nor low on agreeableness).

For extraversion, as shown in Table 2, the coefficients associated with the three second-order polynomial terms (i.e., $E_m^2$, $E_pE_m$, and $E_p^2$) were jointly significant in predicting positive emotional displays ($F = 3.93, p < .05$), and the surface along the congruence line (i.e., the extraversion similarity line) exhibited significant upward curvature (curvature = 0.73, $p < .01$), collectively supporting Hypothesis 1b. To illustrate how the extraversion of both negotiators relates to positive emotional displays, Figure 2B plots

### Table 1

**Descriptive Statistics and Correlations**

<table>
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<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<td>.50</td>
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<tr>
<td>(Low = 0 High = 1)</td>
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<td>2. Power (Merger = 0)</td>
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<td>.50</td>
<td>-.05</td>
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<td>Takeover = 1)</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Agreeableness of Mountain</td>
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<td>.82</td>
<td>-.05</td>
<td>-.17</td>
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<td></td>
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<tr>
<td>4. Agreeableness of Pinnacle</td>
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<td>1.09</td>
<td>.09</td>
<td>.03</td>
<td>.28*</td>
<td>.06</td>
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<td>5. Extraversion of Mountain</td>
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<td>1.06</td>
<td>-.09</td>
<td>-.13</td>
<td>.26**</td>
<td>.06</td>
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<tr>
<td>6. Extraversion of Pinnacle</td>
<td>4.97</td>
<td>1.09</td>
<td>.09</td>
<td>.03</td>
<td>.28**</td>
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<td>7. Positive emotional displays</td>
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<td>.12</td>
<td>-.10</td>
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<td>8. Negotiation time</td>
<td>46.45</td>
<td>15.26</td>
<td>-.22*</td>
<td>-.08</td>
<td>.11</td>
<td>.06</td>
<td>-.27**</td>
<td>.12</td>
<td>-.38**</td>
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<tr>
<td>9. Outcome disparity</td>
<td>2,829.90</td>
<td>2,458.59</td>
<td>.24*</td>
<td>.21*</td>
<td>.17</td>
<td>.01</td>
<td>-.16</td>
<td>.29**</td>
<td>-.07</td>
<td>-.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Relationship conflict</td>
<td>3.03</td>
<td>1.23</td>
<td>-.13</td>
<td>.02</td>
<td>-.12</td>
<td>.14</td>
<td>-.16</td>
<td>.11</td>
<td>-.36**</td>
<td>.43**</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Perceptions of one’s negotiation partner</td>
<td>4.51</td>
<td>1.05</td>
<td>.05</td>
<td>.06</td>
<td>.08</td>
<td>-.06</td>
<td>.11</td>
<td>-.11</td>
<td>.28**</td>
<td>-.17</td>
<td>-.09</td>
<td>-.67**</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 101 dyads. With the exception of Variables 3 through 6, all variables are dyadic in nature. Integrative potential is coded such that 0 = low, and 1 = high integrative potential. Power is coded such that 0 = equal (merger), and 1 = unequal (takeover) power.

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

### Table 2

**Polynomial Regression Results for Personality Similarity and Positive Emotional Displays**

<table>
<thead>
<tr>
<th>Parameter description</th>
<th>Parameter</th>
<th>Agreeableness similarity</th>
<th>Extraversion similarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>$b_0$</td>
<td>5.20**</td>
<td>4.93**</td>
</tr>
<tr>
<td>Estimated polynomial regression parameter</td>
<td>$b_1A_m$ or $b_1E_m$</td>
<td>-.38</td>
<td>.24</td>
</tr>
<tr>
<td></td>
<td>$b_2A_m$ or $b_2E_m$</td>
<td>-.46</td>
<td>-.12</td>
</tr>
<tr>
<td></td>
<td>$b_3A_m^2$ or $b_3E_m^2$</td>
<td>.25</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>$b_4A_pA_m$ or $b_4E_pE_m$</td>
<td>1.03**</td>
<td>.38**</td>
</tr>
<tr>
<td></td>
<td>$b_5A_p^2$ or $b_5E_p^2$</td>
<td>.23</td>
<td>.16</td>
</tr>
<tr>
<td>Contextual parameters</td>
<td>$b_1^1$</td>
<td>.10</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td>$b_1^p$</td>
<td>-.02</td>
<td>.28</td>
</tr>
<tr>
<td>Variance explained</td>
<td>$R^2$</td>
<td>.17</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>$\Delta R^2$</td>
<td>.17**</td>
<td>.15*</td>
</tr>
<tr>
<td>Congruence line</td>
<td>Slope ($b_1 + b_2$)</td>
<td>-.84*</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>Curvature ($b_1 + b_4 + b_5$)</td>
<td>1.51**</td>
<td>.73**</td>
</tr>
<tr>
<td>Incongruence line</td>
<td>Slope ($b_1 - b_2$)</td>
<td>.09</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td>Curvature ($b_1 - b_4 + b_5$)</td>
<td>-.56</td>
<td>-.04</td>
</tr>
<tr>
<td>$F$</td>
<td>3 quadratic terms</td>
<td>4.51**</td>
<td>3.93*</td>
</tr>
</tbody>
</table>

*Note. N = 101 dyads. DV = dependent variable.

*p < .05. **p < .01.
the response surface. Consistent with the results just presented, the
curvature of the surface along the congruence line follows the
expected u-shape pattern (i.e., positive emotional displays are
higher for dyads with similar-and-low or similar-and-high levels of
extraversion and lower for dyads where both partners are neither
high nor low on extraversion).

Hypothesis 2 predicted that positive emotional displays would
be minimized when negotiators’ levels of a) agreeableness and b)
extraversion are dissimilar, which implies that the second principal
axis should lie along the incongruence line (i.e., the agreeableness
and extraversion dissimilarity line). For agreeableness, our results
indicate that the second principal axis had a slope ($p_{2A}$) that was
not significantly different from −1.0 as the 95% bias-corrected
bootstrap confidence interval included −1.0 (−5.596, 1.674) and
an intercept ($p_{20}$) that was not significantly different from zero as
the 95% bias-corrected bootstrap confidence interval included zero
(−0.345, 13.782). These results support Hypothesis 2a, suggesting
that positive emotional displays were minimized when both nego-
tiators’ individual differences in agreeableness were perfectly dis-
similar. This effect is depicted graphically in Figure 2A by the
trough of the inverted-U shaped curvature running along the in-
congruence line of the response surface. For extraversion, our
results indicate that the second principal axis had a slope ($p_{2B}$) that
was not significantly different from −1.0 as the 95% bias-corrected
bootstrap confidence interval included −1.0 (−10.850, 10.595) and
an intercept ($p_{20}$) that was not significantly different from zero as
the 95% bias-corrected bootstrap confidence interval included zero
(−30.396, 8.119). These results support Hypothesis 2b, suggesting
that positive emotional displays were minimized when both negotiators’ individual differences in extraversion were
perfectly dissimilar. This effect is depicted graphically in Figure
2B by the trough of the inverted-U shaped curvature running along
the incongruence line of the response surface.

Before reporting the results for our next set of hypotheses, we
present the results of three supplemental analyses that are relevant
to Hypotheses 1 and 2. First, in order to test whether Hypotheses
1 and 2 would generalize beyond the interpersonal personality
traits of agreeableness and extraversion, we conducted supplemen-
tal analyses exploring the hypothesized personality similarity re-
lationships using neuroticism, openness to experience, and con-
sciousness. The results of testing models equivalent to those
presented in Equation 1 for neuroticism, openness to experience,
and conscientiousness resulted in no statistically significant rela-
tionships (detailed results are available upon request from the first
author). As such, we found support for our contention that the
hypothesized similarity effects would not generalize to the person-
ality dimensions of the Big Five outside of the “interpersonal
plane.”

Second, we tested a key theoretical assumption of Hypotheses 1
and 2. That is, even though our hypotheses focus on dyad-level
emotional displays, reciprocated positive affect is an important
assumption inherent in our arguments. As a result, we conducted
a supplemental analysis to test whether positive emotional displays
were reciprocated within dyads. Specifically, we analyzed the
bivariate correlation between the mountain and pinnacle negotia-
tors’ positive emotional displays. The result of this analysis re-
vealed that the correlation among negotiating dyad members in
positive emotional displays was 0.37 ($p < .01$), suggesting that
positive emotional displays were being reciprocated within negoti-
ating dyads.

Third, although the hypothesized curvilinear (U-shaped) rela-
tionship between personality similarity and positive emotional
displays was found, an anonymous reviewer noted that differences
could exist between high-high scores on agreeableness/extraver-
sion (i.e., a 7 and a 7 on a 7-point scale) and equivalently low-low
scores on agreeableness/extraversion (i.e., a 1 and a 1 on a 7-point

![Figure 2. Panel A: Response surface plot of agreeableness similarity and positive emotional displays. Panel B: Response surface plot of extraversion similarity and positive emotional displays. X-axis is centered Mountain negotiator agreeableness. Y-axis is centered Pinnacle negotiator agreeableness. Z-axis is dyadic positive emotional displays.](image-url)
As such, we conducted supplemental analyses to investigate whether such differences might exist. Specifically, because we were interested in equivalently extreme dyads, we tested whether the slope along the congruence line, which in this context is the personality similarity line, varied. The slope along the congruence line is characterized by the subset of estimated coefficients from Equation 1 corresponding to linear effects (i.e., \( b_1 \) and \( b_2 \)). To assess the statistical significance of the slope along the congruence line (i.e., personality similarity line), we calculated standard errors using ordinary rules for the variances of linear combinations of random variables (DeGroot, 1975; see also Edwards, 2002; Matta et al., 2015).

For agreeableness, as shown in Table 2, the slope along the congruence line (i.e., the agreeableness similarity line) was negative (slope = -.84, \( p < .05 \)). This suggests that two disagreeable negotiators are likely to engage in more positive emotional displays than two correspondingly agreeable negotiators (a point we return to in the Discussion). For extraversion, as shown in Table 2, the slope along the congruence line (i.e., the extraversion similarity line) was positive but not statistically significant (slope = .13, ns). This suggests no statistically significant difference between two introverted negotiators and two correspondingly extraverted negotiators in terms of exhibited positive emotional displays.

Hypotheses 3 through 6 predicted that positive emotional displays mediate the effects of personality similarity/dissimilarity onto key negotiation outcomes. As described in the analysis section, to test the significance of the indirect effect we utilized the block variable approach recommended by Edwards and Cable (2009). Table 3 summarizes the results of regressing each of our four outcome variables (i.e., negotiation time, outcome disparity, relationship conflict, and perceptions of one’s negotiation partner) on positive emotional displays, controlling for agreeableness and extraversion similarity.

Results for evaluating the mediated effect on negotiation time, outcome disparity, relationship conflict, and perceptions of one’s negotiation partner (Hypotheses 3 through 6) are shown in Table 4. As shown in Table 4, the indirect effect of agreeableness similarity on negotiation time through positive emotional displays was negative (−3.24) and the 95% bias-corrected bootstrap confidence interval excluded zero (−7.187, −0.601), providing support for Hypothesis 3a. As shown in Table 4, providing support for Hypothesis 3b, the indirect effect of extraversion similarity on negotiation time through positive emotional displays was negative (−3.46) and the 95% bias-corrected bootstrap confidence interval excluded zero (−7.426, −0.725).

In regard to Hypothesis 4, the indirect effect of agreeableness similarity on outcome disparity was not supported as there was no significant association between positive emotional displays and this measure (\( B = -107.03, \text{ ns} \)) and the 95% bias-corrected bootstrap confidence interval for the indirect effect of agreeableness similarity on outcome disparity through positive emotional displays included zero (−466.981, 26.358). Similarly, the indirect effect of extraversion similarity on outcome disparity was not supported as there was no significant association between positive emotional displays and outcome disparity (\( B = -158.06, \text{ ns} \)) and the 95% bias-corrected bootstrap confidence interval for the indirect effect of extraversion similarity on outcome disparity through positive emotional displays included zero (−592.18, 30.686). Turning to Hypothesis 5, the indirect effect of agreeableness similarity on relationship conflict through positive emotional displays was negative (−0.28) and the 95% bias-corrected bootstrap confidence interval excluded zero (−0.523, −0.029), providing support for Hypothesis 5a. Similarly, providing support for Hypothesis 5b, the indirect effect of extraversion similarity on relationship conflict through positive emotional displays was negative (−0.24) and the 95% bias-corrected bootstrap confidence interval excluded zero (−0.501, −0.067).

Finally, in regard to Hypothesis 6, the indirect effect of agreeableness similarity on the perceptions of one’s negotiation partner through positive emotional displays was positive (0.17) and the 95% bias-corrected bootstrap confidence interval excluded zero (0.021, 0.326), providing support for Hypothesis 6a. Similarly, providing support for Hypothesis 6b, the indirect effect of extraversion similarity on the perceptions of one’s negotiation partner through positive emotional displays was positive (0.14) and the 95% bias-corrected bootstrap confidence interval excluded zero (0.017, 0.297).

Discussion

Although the role of personality in negotiations has historically been marginalized, a small but growing body of research has shown the important role that personality can play on negotiation processes and outcomes. In this manuscript, we extend this body of work by investigating the role of the personality of both negotiators on negotiation processes and outcomes. In doing so, we hope to broaden the ways in which we theorize about and empirically examine personality in dyadic negotiations. The results of our study demonstrated that although the agreeableness and extraversion of each party had no significant zero-order relationships with positive emotional displays, the configuration of both negotiators’ agreeableness and extraversion did impact positive emotional displays. Specifically, when negotiators were similarly high or similarly low on agreeableness or extraversion, positive emotional displays were maximized (in comparison to when negotiators were dissimilar or neither high nor low on these traits). Moreover, the effects of agreeableness similarity and extraversion similarity on positive emotional displays ultimately impacted important negotiation outcomes. In other words, being similarly high or similarly low on agreeableness or extraversion ultimately led to shorter negotiations, less relationship conflict, and more positive evaluations of the other negotiator (via positive emotional displays).

The present research and findings advance our understanding of personality and negotiations in several ways. First, instead of...
Table 3
Polynomial Regressions for Personality Similarity and Negotiation Outcomes as Mediated by Positive Emotional Displays

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DV = Negotiation time</th>
<th>DV = Outcome disparity</th>
<th>DV = Relationship conflict</th>
<th>DV = Perceptions of negotiation partner</th>
<th>DV = Negotiation time</th>
<th>DV = Outcome disparity</th>
<th>DV = Relationship conflict</th>
<th>DV = Perceptions of negotiation partner</th>
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<td>Agreement</td>
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<tr>
<td>Constant</td>
<td>$b_0$</td>
<td>52.14**</td>
<td>69.00**</td>
<td>1650.02**</td>
<td>2206.94**</td>
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<td>4.64**</td>
<td>4.44**</td>
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<td>-310.11</td>
<td>-.14</td>
<td>-.24</td>
<td>.08</td>
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<td>.69</td>
<td>141.04</td>
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<td>-.31</td>
<td>.18</td>
<td>-.15</td>
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<tr>
<td></td>
<td>$b_1A_m$ or $b_1E_m$</td>
<td>-5.27</td>
<td>-1.93</td>
<td>-683.30</td>
<td>-752.77</td>
<td>-.39</td>
<td>-.10</td>
<td>.40**</td>
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<td>$b_2A_m$ or $b_2E_m$</td>
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<td>-2.31</td>
<td>113.08</td>
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<td>.01</td>
<td>.07</td>
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<td>$b_3A_m$ or $b_3E_m$</td>
<td>-7.52**</td>
<td>7.21**</td>
<td>1151.24**</td>
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<td>-.37</td>
<td>.17**</td>
</tr>
<tr>
<td>Contextual parameters</td>
<td>$b_4A_m$ or $b_4E_m$</td>
<td>-1.95</td>
<td>-1.03</td>
<td>1178.12**</td>
<td>1175.51**</td>
<td>.12</td>
<td>.11</td>
<td>.04</td>
</tr>
<tr>
<td>Mediator</td>
<td>$b_5M$</td>
<td>-3.24**</td>
<td>107.03</td>
<td>-107.03</td>
<td>-28**</td>
<td>.17**</td>
<td>-3.46**</td>
<td>-.15**</td>
</tr>
<tr>
<td>Variance explained</td>
<td>$R^2$</td>
<td>.11</td>
<td>.21</td>
<td>.15</td>
<td>.15</td>
<td>.08</td>
<td>.20</td>
<td>.07</td>
</tr>
<tr>
<td>Congruence line</td>
<td>Slope ($b_1 + b_2$)</td>
<td>4.55</td>
<td>-128.66</td>
<td>.17</td>
<td>.09</td>
<td>.11**</td>
<td>.06**</td>
<td>.12**</td>
</tr>
<tr>
<td>Incongruence line</td>
<td>Slope ($b_1 + b_2$)</td>
<td>-9.21**</td>
<td>-98.60</td>
<td>-.46</td>
<td>.37</td>
<td>.02</td>
<td>.548.46</td>
<td>-.01</td>
</tr>
<tr>
<td>F</td>
<td>3 quadratic terms</td>
<td>1.48</td>
<td>.90</td>
<td>1.00</td>
<td>1.61</td>
<td>.20</td>
<td>1.28</td>
<td>3.96**</td>
</tr>
</tbody>
</table>

Note. $N = 101$ dyads. Model 1 (3) tests the effects of agreeableness (extraversion) similarity on each dependent variable. Model 2 (4) tests the effects of the mediator (i.e., positive emotional displays) on each dependent variable after controlling for the effects of agreeableness (extraversion) similarity. DV = dependent variable.

*p < .05. **p < .01.
focusing on individual-level personality like previous research, this study investigates the negotiation dyad’s personality configuration, including the dyad’s agreeableness and extraversion similarity. This is important considering our observation regarding the lack of relationships found when only examining individual-level agreeableness or extraversion for either negotiator (in Table 1). Moreover, many previous reviews (e.g., Bazerman et al., 2000; Rubin & Brown, 1975; Thompson, 1990) characterize the relationships between a negotiator’s personality and negotiation outcomes as unimportant, but our work suggests it is critical to consider the personality configuration of both negotiators. It is also important to reiterate that we do not expect analogous similarity effects to generalize to interpersonal personality traits. Specifically, our results show that similarity in neuroticism, openness to experience, agreeableness or extraversion for either negotiator (in Table 1).

Table 4
Results of Indirect Effects of Agreeableness Polynomial and Extraversion Polynomial With Negotiation Outcomes Via Positive Emotional Displays

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>DV = Negotiation time</th>
<th>DV = Outcome disparity</th>
<th>DV = Relationship conflict</th>
<th>DV = Perceptions of negotiation partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness polynomial block variable</td>
<td>Indirect effect: (\beta = -3.24, (95% \text{ CI}: -7.187, -0.601))</td>
<td>Indirect effect: (\beta = -107.03, (95% \text{ CI}: -466.981, 26.358))</td>
<td>Indirect effect: (\beta = -.28, (95% \text{ CI}: -.523, -.029))</td>
<td>Indirect effect: (\beta = .17, (95% \text{ CI}: .021, .326))</td>
</tr>
<tr>
<td>Extraversion polynomial block variable</td>
<td>Indirect effect: (\beta = -3.46, (95% \text{ CI}: -7.426, -.725))</td>
<td>Indirect effect: (\beta = -158.06, (95% \text{ CI}: -592.18, 30.686))</td>
<td>Indirect effect: (\beta = -.24, (95% \text{ CI}: -.501, -.067))</td>
<td>Indirect effect: (\beta = .14, (95% \text{ CI}: .017, .297))</td>
</tr>
</tbody>
</table>

*Note. DV = dependent variable.*

The present research suggests that organizations and managers should consider the personality configuration of the negotiation dyad whenever possible to predict the success of a negotiation in terms of time and relationship-oriented outcomes. For instance, strategically choosing negotiators that are either both high or both low on agreeableness or extraversion should result in faster negotiations, less relationship conflict, and more favorable reactions to negotiation partners. Following our main theoretical foundation, doing so will increase the attraction and positive emotions within the dyad and decrease rejection, which should make this interpersonal “process more beneficial to those concerned” (Byrne, 1971, pp. 376–377). Such advice may be easier to implement, however, when negotiations are between parties who work at the same company, as evidence of agreeableness or extraversion might be more easily sourced. On the other hand, if employees negotiate with external parties, it may be more challenging to predict the personality of the potential negotiating partner. Thus, at least an understanding of the personality traits (and chiefly, the similarity or dissimilarity of traits) of employees who engage in negotiating for the organization may be a first step in creating awareness and expectations regarding future negotiation experiences and outcomes.
Additionally, organizations may consider training employees to utilize positive emotional displays when negotiating as this was also related to faster negotiations, less relationship conflict and favorable evaluations. This may be even more critical in electronic negotiations such as the one negotiators performed in this study. Compared with face-to-face negotiations, negotiations via e-mail or smartphone “texting” present several challenges to successful negotiations, as the richness of information communicated is reduced because one loses both visual and auditory channels of communicating as one moves from face-to-face to audio (e.g., phone, skype) to email (cf. Daft & Lengel, 1986).

Limitations and Future Research

Although the present research involves numerous strengths, such as objective assessments of emotional displays during negotiation and dyadic assessments of personality, it is not without limitations. One limitation is that we did not measure perceived emotional displays. Even though we can say that objectively, positive emotional displays occurred within the negotiation transcripts, we do not know to what extent the negotiators paid attention to these written cues during the negotiation. Thus, future research should investigate whether personality similarity is related to perceived positive emotional displays, as well as the resulting outcomes of such perceptions. Second, the present research focuses on electronic negotiations and the findings may not generalize to face-to-face or other negotiation contexts. Therefore, future research should test the present relationships in other negotiation settings (e.g., telephone and face-to-face).

Additional recommendations for future research include examining other dyadic configurations that may be important for negotiations such as the emotional intelligence or social value orientation of the negotiating dyad. For example, low emotional intelligence may lead to negative emotional displays, which would be an interesting addition to the present model. Social value orientation may be a particularly interesting configuration to study over time because, although some scholars have positioned social value orientation as a trait (e.g., Kuhlman & Marshello, 1975; Olekalns & Smith, 1999), a number of other scholars have shown that social value orientation can operate as a state and change within-person over time, across situations (e.g., Messick & McClinstock, 1968), including in negotiation contexts (e.g., Weingart, Bennett, & Brett, 1993). As such, social value orientation may behave differently than more stable traits (e.g., agreeableness and extraversion) because early moves in a negotiation that signal one social value orientation versus another might prompt the counterpart to adopt a similar social value orientation, thus trending negotiations to more similarity than difference in terms of social value orientation (even though the negotiators’ levels of agreeableness and extraversion similarity would remain relatively constant).

Future research could also examine whether the emotional displays expressed in the negotiation are genuine and how emotional authenticity may impact the negotiation process. In other words, are the relationships presently examined stronger when the positive emotional displays are genuine compared to when they are insincere? In addition, as noted previously, research argues that the benefits of shared traits can occur consciously or subconsciously (Schaubroeck & Lam, 2002), however the present research cannot address this issue. Hence, future research should examine how emotional displays operate in a negotiation when individuals are consciously aware, compared with unaware, of their personality similarity. In addition, future research should model the implementation process following negotiations to directly test the downstream impact of each of our negotiations outcomes (i.e., negotiation time, outcome disparity, relationship conflict, and perceptions of one’s negotiation partner). For example, it could be that relationship conflict and perceptions of one’s negotiation partner may ultimately play a larger role in the downstream success of a deal than negotiation time and outcome disparity because of the important role that these outcomes play on actual implementation success, which ultimately determines the economic consequences of the deal (e.g., see Mislin et al., 2011). Finally, similarity-attraction theory was originally based on research using dyads and later expanded to include small groups (e.g., 5 to 7 participants; Byrne, 1971). Thus, we suggest future research should examine small group personality configurations within different negotiation contexts in order to investigate whether the present relationships would extend to small groups.

Conclusion

Overall, by examining the negotiating dyad’s similarity on multiple dimensions of personality and its effects on objective emotional displays and various negotiation outcomes, the present research contributes to the negotiation literature in several ways. We find that dyads with similar-and-high as well as similar-and-low levels of both agreeableness and extraversion communicate more positive emotional displays while negotiating, which in turn reduce time spent negotiating and relationship conflict, and improve perceptions of one’s negotiating partner. This research opens the door for numerous avenues of future research concerning additional dyadic personality configurations, specifically those concerning interpersonal traits such as emotional intelligence and attachment styles, numerous types of negotiator emotional displays (e.g., negative, genuine and faked), as well as further downstream negotiation outcomes related to the success of the negotiation.

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