

Personality Dissimilarity and Work-Related Outcomes: Asymmetric Effects and Moderating Role of Group Tenure

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We propose that the effects of dissimilarity in the Big Five personality factors are asymmetric for members with different levels of the given factor, and that such effects of personality dissimilarity exhibit time-dependent patterns in groups with differing duration of interaction. Our analysis of data collected from 283 individuals from 116 work groups in U.S. companies revealed the asymmetric effects of personality dissimilarity, such that dissimilarity was a positive predictor of members' organizational citizenship behavior (OCB) and task performance only for those with relatively higher levels of extraversion and conscientiousness, as well as a lower level of neuroticism, than others. Results also supported the following moderating roles of group tenure in long-tenure groups: (a) the initially positive effect of extraversion dissimilarity on OCB became neutral, (b) neuroticism dissimilarity became negative for job satisfaction, and neutral for task performance, and (c) the initially somewhat negative effects of dissimilarities in agreeableness and conscientiousness became positive. The present findings highlight the asymmetric and temporal dynamics involving personality dissimilarity over time.

Keywords: Big Five personality, personality dissimilarity, group tenure, OCB, task performance

Researchers have acknowledged the growing importance of employee diversity in organizations, considering the increasingly diverse workforce joining contemporary organizations (Choi, 2007; Mannix & Neale, 2005; Van der Vegt, 2002). Although the issue of diversity has been mostly investigated at the group level, scholars have also conceptualized and examined this phenomenon at the individual level. Relational demography, which refers to the demographic dissimilarity or similarity of a person with respect to others, has been found to be

a significant predictor of work-related attitudes and interpersonal behavior of individuals in a group setting (Riordan, 2000; Hobman & Bordia, 2006). Departing from prior studies of relational demography that focus mostly on surface-level demographic variables, such as dissimilarities in gender, age, nationality, and race (e.g., Chattopadhyay, 1999; Godthelp & Glunk, 2003), the present study examines the effects of members' dissimilarities in deep-level characteristics (i.e., personality) on their attitudes, behavior, and performance in organizational teams.

To explore the implications of personality dissimilarity, we focus on the Big Five personality factors: extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience. The Big Five personality taxonomy has been accepted as the most valid and widely used conceptualization of personality structure based on substantial research support across different cultures, occupations, and measures (Barrick, Stewart, Neubert, & Mount, 1998; Kichuk & Wiesner, 1997). Unfortunately, empir-

This article was published Online First September 9, 2013.

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ical investigation comparing dissimilarity in the Big Five personality factors among members is rare and fragmented (see Peeters, Rutte, van Tuijl, & Reymen, 2006, for an exception). Given that each personality dimension has distinct implications on the interpersonal behavior and performance of members (Judge, Heller, & Mount, 2002; Liao, Joshi, & Chuang, 2004), we expect differential implications of personality dissimilarity in the Big Five dimensions.

Therefore, dissimilarity in certain personality factors may positively affect individual outcomes, whereas dissimilarity in other factors may result in the opposite. In this respect, the distinction between the supplementary versus complementary fit advanced in the person–environment (P–E) fit literature offers important insights (Muchinsky & Monahan, 1987). *Supplementary fit* implies that a person fits into the environment because he or she supplements, embellishes, or possesses characteristics that are similar to the environment or other people (Muchinsky & Monahan, 1987). *Complementary fit* describes a situation where the characteristics of an individual serve to complement the characteristics that are lacking in the environment or other people (Neuman, Wagner, & Christiansen, 1999). Thus, depending on whether the given personality trait takes the supplementary or complementary fit model, similarity or dissimilarity can generate opportunities for trait expression and interpersonal as well as situational rewards for such expression, as suggested by trait activation theory (Tett & Christiansen, 2007; Tett & Guterman, 2000). To further expand the theoretical horizon, in this study, we hypothesize that the positive or negative effects of dissimilarity in the Big Five personality factors may not be the same for individuals characterized by high and low levels of these personality characteristics. We propose and test potential asymmetric effects involving members with the same dissimilarity score but occupying different relative positions in the personality dimension.

The present study also investigates the role of time in shaping the dynamics involving personality dissimilarity. Diversity literature suggests that the effect of surface-level diversity diminishes with increasing interactions among members, whereas the effect of deep-level diversity becomes more salient over time (Harrison, Price, & Bell, 1998; Harrison, Price, Gavin, &

Florey, 2002). Unlike readily detectable surface-level differences, the effects of deep-level dissimilarities may develop over a longer period of time as individuals learn about, and become aware of, the psychological characteristics of others (Bell, 2007; Van der Vegt, 2002). Empirical studies based on students indicate a slightly mixed support for the slow developmental process of deep-level diversity assessed at the group level (Hobman & Bordia, 2006). Nevertheless, potentially similar temporal dynamics based on group tenure has not been theorized or examined in relation to personality dissimilarity in organizational teams. We elaborate that dissimilarity involving each of the Big Five factors initiates distinct developmental patterns over time.

In summary, the present study offers several meaningful contributions to the group literature. First, departing from the prevailing focus on surface-level differences in the relational demography literature, we examine the implications of dissimilarity in the Big Five personality dimensions for individual outcomes. To investigate various criteria for members in a group setting, the present study examines diverse outcomes, including individual attitude (job satisfaction), interpersonal behavior (organizational citizenship behavior, or OCB), and performance (task performance). Second, moving beyond the investigation of overall or summary effects, we investigate the potential asymmetric effects of personality dissimilarity for members with relatively high or low levels of a given personality factor. Third, in an effort to identify a boundary condition, we focus on group tenure as a moderator that may change the relationships between personality dissimilarity and individual outcomes. Our theoretical model is empirically validated using multisource data collected from 283 members of 116 work teams in a number of U.S. organizations representing various industries.

Conceptual Framework and Hypotheses

Traditional interpersonal approaches to personality (Leary, 1957; Sullivan, 1953) and circumplex models (Carson, 1969; Wiggins, 1979) consider trait expression as the most fundamental feature of human nature. For this reason, people prefer situations that allow them to be themselves (Tett & Christiansen, 2007). Ac-

cordingly, the personality trait-based interactionist model, or trait activation theory, suggests that *personality compatibility* arises (a) when one person's trait expression offers opportunities for the other's trait expression, and (b) when such a trait expression is appreciated or rewarded by the person or the situation (Tett & Guterman, 2000). Similarly, the person–environment (P–E) fit theory holds that the compatibility between a person's characteristics and his or her environment in the corresponding dimension affects various individual outcomes (Kristof-Brown, Barrick, & Stevens, 2005). As previously mentioned, such compatibility can occur in supplementary or complementary form (Muchinsky & Monahan, 1987). Thus, dissimilarity among members in certain personality traits can be beneficial to a member when the dissimilarity presents a complementary situation that allows the member to express his or her own trait, such that this expression is appreciated by others. By contrast, dissimilarity in other traits based on supplementary fit can reduce the opportunities and rewards for acting on such traits, thereby inducing negative reactions from members. To clarify these distinct effects of personality dissimilarity on individual out-

comes, we introduce a conceptual model, depicted in Figure 1. We also provide a more detailed explanation of each relationship proposed in the research framework.

Dissimilarities in the Big Five Factors and Individual Outcomes

Drawing on the supplementary and complementary models of P–E fit (Muchinsky & Monahan, 1987), we propose that dissimilarity in the Big Five factors can be sometimes beneficial, and sometimes detrimental, to individual outcomes. In this respect, the fit-oriented personality theory suggests that the two fundamental contexts for personality expression are affiliation and dominance (Tett & Burnett, 2003). In this view, similarity is meaningful for affiliation (e.g., friendly friendly), whereas complementarity becomes critical for dominance (e.g., dominant-submissive).

Employing the Big Five personality taxonomy, we identify extraversion and neuroticism as dimensions that follow the pattern of complementary fit. Thus, a member's dissimilarity in extraversion and neuroticism from others may engender favorable individual outcomes

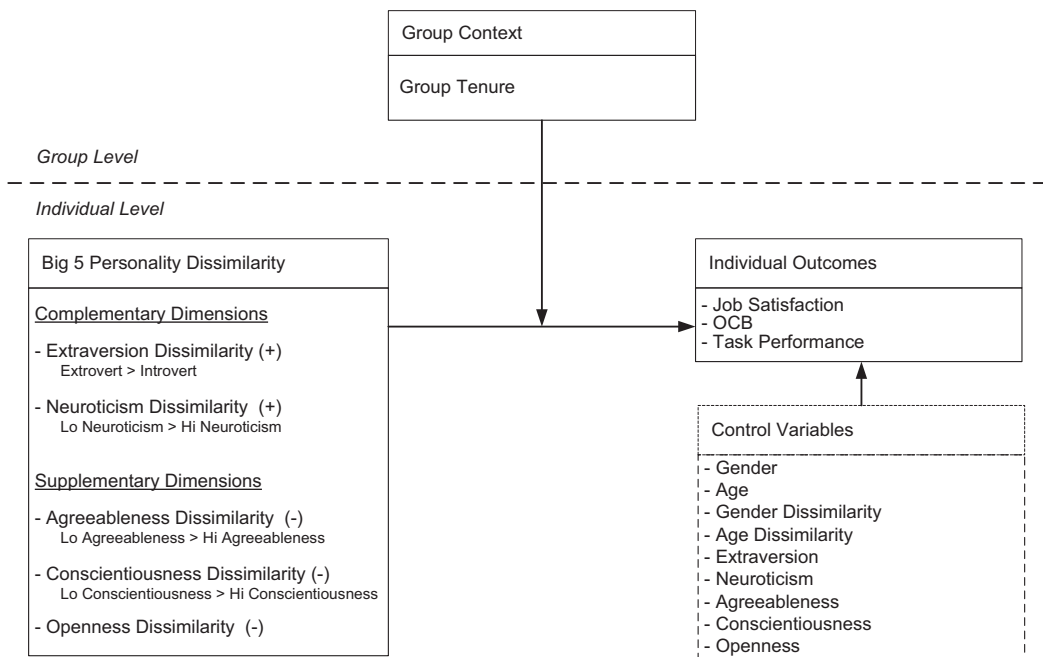


Figure 1. Theoretical framework predicting individual outcomes.

for him/her. Group-level diversity studies indicate that too many extraverts create role conflict and power struggles among members (Barry & Stewart, 1997), whereas having too few extraverts leads to a lack of the leadership necessary to perform effectively (Neuman et al., 1999). Hence, dissimilarity in extraversion facilitates healthy interactions between a person and his or her peers, resulting in improved work-related outcomes (Liao et al., 2004). In addition, with regard to extraversion, members are more attracted to their group when other members are different from themselves (Kristof-Brown et al., 2005). Extraverts may prefer working with introverts who offer opportunities to express the dominance of the former (Tett & Murphy, 2002). Similarly, introverts may also appreciate the presence of extraverted coworkers who take the burden of taking initiative and allow the former to remain calm and peaceful.

Although overlooked in prior studies, neuroticism can be another complementary dimension. Emotionally stable individuals with self-confidence and pride may find the presence of less stable coworkers an opportunity to express the trait of the former so that they can take the leading, active, and poised role within the group. Likewise, neurotic members may feel more comfortable when they can rely on confident coworkers and feel secure within the given situation (Neuman et al., 1999). Neurotic members can avoid tension or anxiety given the presence of stable members who can take advantage of the situation by expressing their confidence. Thus, neuroticism dissimilarity may be another trait-activation cue that presents opportunities for trait expression and receiving appreciation from others responding to such expression (Tett & Christiansen, 2007). For this reason, dissimilarity in neuroticism is more consistent with the complementary fit model, which generates interpersonal harmony and a balanced situation among members by placing them in distinct roles, which in turn should lead to favorable attitudinal, interpersonal, and performance outcomes for the members (Muchinsky & Mo-nahan, 1987). We therefore hypothesize the following relationship:

Hypothesis 1: Dissimilarities in (a) extraversion and (b) neuroticism are positively related with job satisfaction, OCB, and task performance of individual members.

We propose that other personality dimensions, including agreeableness, conscientiousness, and openness, follow the supplementary fit model. These dimensions are more associated with interpersonal affiliation than with dominance. Thus, dissimilarity in these dimensions may exert deleterious effects on a member's interpersonal interactions, resulting in negative work-related attitudes and behavior (Peeters et al., 2006).

First, highly agreeable people tend to strive to maintain the quality of social interactions by being friendly and personable, whereas less agreeable people do not value such harmonious relations (Tett & Murphy, 2002; Varela, Burke, & Landis, 2008). Agreeable members feel that less agreeable peers are rude and unnecessarily disrupt group harmony. By contrast, less agreeable members may perceive their more agreeable counterparts as timid and conformist (Barrick et al., 1998; Bell, 2007). Thus, agreeable members see the presence of other agreeable members as the cue for expressing their trait and for the potential appreciation of such trait expression by others (Tett & Burnett, 2003).

Second, given that conscientious individuals are self-motivated and achievement-oriented (Barrick & Mount, 1991), they are likely to feel frustrated with their less conscientious peers (Bell, 2007). In comparison with conscientious members who perform well in multiple roles requiring the exertion of substantial effort, less conscientious members are more relaxed and exert less effort toward the goal (Kichuk & Wiesner, 1997). Highly conscientious individuals may regard their less conscientious peers as free riders, whereas less conscientious members may regard their more conscientious counterparts as rate-busters (Peeters et al., 2006). With these different levels of task-related aspiration and motivation, conscientious members become less willing to express their trait because such efforts are exploited by less conscientious members instead of being appreciated and returned with reciprocal favors (Tett & Burnett, 2003).

Finally, we hypothesize a supplementary fit function for dissimilarity in openness to experience because members with different levels of openness may find it difficult to work together. Highly open members are apt to be frustrated with their less open peers for their rigid and conventional thinking, whereas the latter may feel that the former are idealistic or extremely

risk-prone (Sung & Choi, 2009). Thus, dissimilar levels of openness among members may reduce the activation of openness as well as the expectation of rewards or appreciation from others following the expression of the openness trait (Tett & Burnett, 2003). In general, we propose the following hypothesis:

Hypothesis 2: Dissimilarities in (a) agreeableness, (b) conscientiousness, and (c) openness are negatively related with job satisfaction, OCB, and task performance of individual members.

Asymmetric Effects of Personality Dissimilarity on Individual Outcomes

Scholars have suggested the possibility that the effects of dissimilarity on different individuals are asymmetric rather than symmetric (Bacharach & Bamberger, 2004; Peeters et al., 2006). Such asymmetric effects have been observed in surface-level demographic dissimilarity, such as gender, age, and race, in the relational demography literature (Chattopadhyay, 1999; Tsui, Egan, & O'Reilly, 1992). Extending this idea to the domain of deep-level attributes, we propose that members occupying relatively higher positions in the continuum of a given personality dimension may exhibit different reactions from, and achieve different outcomes than, members in lower positions.

In the case of extraversion dissimilarity, the proposed benefit resulting from complementary fit is likely to be stronger among extraverts than among introverts. Individuals with greater extraversion are often characterized as being ambitious, initiating task interactions, actively suggesting ideas, and commanding high levels of popularity (Barrick, Stewart, & Piotrowski, 2002; Liao, Chuang, & Joshi, 2008). For the extraverts, introverted coworkers who are reserved, passive, and quiet (Sung & Choi, 2009) enable the former to express their own trait more often (i.e., to continue speaking and exhibiting assertive behavior), which should lead to a more positive appraisal of the situation, improved OCB, and enhanced task performance. By contrast, even when introverts are characterized by the same level of dissimilarity, they may not benefit from their extraverted counterparts much because the presence of extraverts can in fact be distracting and introverts

may stay calm or passive regardless of the other members' behavior.

Similarly, dissimilarity of neuroticism may offer a unilateral benefit to members with low neuroticism. For emotionally stable members, the coexistence of neurotic members may present an advantageous situation in which they can express their confidence and conviction about the future. Being with neurotic members, stable members naturally take extra load and maintain group morale by pacifying their anxious peers. In doing so, stable members can occupy a dominant status in the group and entertain the prestige, leading to more positive work attitude and behavior. These stable members may likewise obtain favorable performance evaluations more than what they deserve due to the favorable contrast against their depressed and anxious coworkers. In sum, the benefit of dissimilarity in extraversion and neuroticism proposed in Hypothesis 1 is likely to be asymmetric and more strongly applicable to extraverts and stable members than to their introverted and neurotic coworkers.

Hypothesis 3: The positive effects of dissimilarities in extraversion and neuroticism are stronger (a) among extraverts than among introverts, and (b) among stable members than among neurotic members.

The negative effects of dissimilarities in agreeableness and conscientiousness are more likely to be observed among those with relatively low agreeableness and low conscientiousness. Members who are more agreeable and conscientious have more positive inclinations toward others and their tasks, and thus, are more likely to be satisfied and volunteer to make extra contributions (Fox, Spector, Goh, Bruursema, & Kessler, 2012; Williams & Karau, 1991). Moreover, they are in a situation where they need to put extra efforts and are forced to help others because their peers are unwilling to fulfill their task demands and to collaborate to achieve collective goals. Such efforts of the agreeable and conscientious members to address the interpersonal challenges and performance problems caused by members with low agreeableness and low conscientiousness are recognized and appreciated by the group and the leader. Hence, the negative effects of personality dissimilarity in the supplementary fit dimensions

may be asymmetric and more pronounced in members with low agreeableness and low conscientiousness than in the agreeable and conscientious members. In the case of openness dissimilarity, we do not propose any asymmetric hypothesis given its somewhat ambiguous implications for attitudes and performance (Judge et al., 2002).

Hypothesis 4: The negative effects of dissimilarities in (a) agreeableness and (b) conscientiousness are stronger among members who are less agreeable and less conscientious.

Moderating Effects of Group Tenure on Dissimilarity-Outcome Relationships

We identify group tenure as a significant contingency that changes the effects of personality dissimilarity on individual outcomes over an extended period of time. Prior studies on group-level diversity indicate that members become cognizant of the deep-level, psychological properties of other members within several months even in student groups characterized by rather sporadic interactions (Hobman & Bordia, 2006). In intact organizational teams with intensive daily interactions, members can become aware of each other's personality and be affected by personality dissimilarity in days or weeks. Thus, we suppose that the effects of personality dissimilarity proposed in Hypotheses 1 through 4 may emerge relatively quickly in organizational teams. However, assuming that such effects remain the same for years is unreasonable.

Members with dissimilarities in extraversion and neuroticism may take very different roles at the beginning of their interaction. However, they may find the appropriate midpoint to make equal contributions within a group in the long run. Extraverts may become more considerate of introverted peers and restrain their domineering behaviors, whereas introverts may turn themselves into more active participants with increasing familiarity with others. In a similar vein, by lessening their active role and helping behavior, stable members may try to provide more opportunities for neurotic members to participate in team task processes. By contrast, with the accumulated experience of social learning and the psychological comfort provided by the situation, neurotic members pull their share

over time and depend less on stable members. In both cases, extraverts and stable members may want to share the responsibilities of task and interpersonal processes with others to avoid the chronic burden of pulling the larger share than others. In the short run, such greater contributions or responsibilities expected from extraverts and stable members can be a source of prestige and social status that can be entertained. However, in the long run, these additional burdens can be regarded as unfair division of labor and exploitation within the group. Given this pressure toward equitable contributions to group processes and task performance as well as increasing familiarity and comfort among members, the unbalanced roles and task burdens based on complementarity between extraverts and introverts, and between stable members and neurotic members, attenuate with increasing group tenure.

Hypothesis 5: Group tenure moderates the relationship between dissimilarities in (a) extraversion and (b) neuroticism and individual outcomes, such that the positive relationship is weaker when group tenure is long than when it is short.

With regard to the other personality traits that follow the supplementary fit model, we propose that members with dissimilarities in agreeableness, conscientiousness, and openness are more likely to become insensitive to, and no longer care about or be seriously affected by, the differences over time. First, with increasing understanding of the personality of others, members may withdraw prejudice and become more tolerant toward others. When members stay and work together for several years in organizational teams, they may have numerous opportunities to observe and exchange personal inclinations and get to know one another thoroughly (Bell, 2007; Harrison et al., 1998, 2002). The socialization and mutual adjustment processes following the extensive exposure (often forced) of each other's values and personality may increase cohesion and social integration among members even when they are different from each other (Van der Vegt, 2002). Second, with long group tenure, members feel comfortable with each other and develop ways to work with each other. For instance, conscientious individuals may find ways to coordinate and share

workloads with less conscientious coworkers. Finally, when group members work together for years, members who hold highly negative feelings toward personality dissimilarity and experience negative consequences may just leave the group to avoid further personal and professional damages (Liao et al., 2008). Therefore, we hypothesize that the negative effects of dissimilarity in agreeableness, conscientiousness, and openness diminish as group tenure increases.

Hypothesis 6: Group tenure moderates the relationship between dissimilarities in (a) agreeableness, (b) conscientiousness, and (c) openness and individual outcomes, such that the negative relationship is weaker when group tenure is long than when it is short.

Method

Sample and Data Collection Procedures

Participants were recruited from companies located in a large metropolitan area in the western region of the United States. These companies represented diverse industries: professional services (21.4%), sales (19.2%), education (14.5%), retail (12.8%), financial services (11.9%), food services (7.7%), health care (7.3%), engineering/technology (3.8%), real estate (3.2%), nonprofit (1.8%), and others (6.4%). The final sample included 283 members from 116 work groups (response rate = 64.4%). The average number of members per group was 2.44 ($SD = .66$). A total of 43.7% of the participants were males with an average age of 30.8 years ($SD = 11.50$) and an average organizational tenure of 4.9 years ($SD = 6.08$). The sample was ethnically diverse, consisting of Latinos (41.6%), Asians (19.2%), Whites (18.9%), African Americans (9.3%), and others (11.0%). Employees' education levels included non-high school (3.2%), high school graduate (19.1%), some college-level courses (30.6%), associate degree (14.7%), bachelor's degree (24.1%), graduate degree (6.9%), and professional degree (1.4%). The sample also included 116 supervisors, 57.7% of whom were males with an average age of 37.7 years ($SD = 12.52$) and an average organizational tenure of 9.2 years ($SD = 8.53$).

Measures

We empirically tested the hypotheses using data from two different sources, namely, group members and their supervisors. Group members reported on demographic information, personality, job satisfaction, and OCB. Supervisors rated employee task performance.

Big Five personality dimensions. We assessed the most prototypical traits associated with each of the Big Five personality dimensions using a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*) by adopting 44 items from the existing measure (Benet-Martínez & John, 1998; John, Naumann, & Soto, 2008). We evaluated extraversion using eight items ($\alpha = .77$), such as "I see myself as someone who is talkative," as well as measured neuroticism using eight items ($\alpha = .75$; e.g., "I see myself as someone who is depressed and blue"). To assess agreeableness, we used a 9-item scale ($\alpha = .78$; e.g., "I see myself as someone who is helpful and unselfish with others"). We measured conscientiousness using nine items ($\alpha = .79$), such as "I see myself as someone who does a thorough job." Finally, to assess openness, we used 10 items ($\alpha = .75$), such as "I see myself as someone who is original, comes up with new ideas."

Big Five personality dissimilarity. Dissimilarity represents the extent to which a focal individual differs from other members in the same work unit. As a common method of creating relational demography scores, a Euclidean distance (D) that calculates the relative distance between an individual and all the others in the work unit has been widely adopted in prior studies (Bacharach & Bamberger, 2004; Chattopadhyay, 1999; Choi, 2007; Tsui et al., 1992). Using the D formula, we compared the focal participant with the other members of the same work group, which is given by:

$$D = [1/n \sum (S_i - S_j)^2]^{1/2}$$

where S_i is a focal individual's value on a personality variable, S_j is the value on the same variable for the other members of the same group, and n is the total number of respondents in the group. For example, given two groups with four members reporting extraversion scores of (4, 5, 5, 5) and (3, 3, 4, 5), the extraversion dissimilarity of the three members with 5 in the first

group becomes $\{1/4 [(5-4)^2 + (5-5)^2 + (5-5)^2]\}^{1/2} = 0.5$; whereas the same score of 5 in the second group results in the extraversion dissimilarity of $\{1/4 [(5-3)^2 + (5-3)^2 + (5-4)^2]\}^{1/2} = 1.5$. Thus, the current dissimilarity measure based on Euclidean distance is highly sensitive to the distribution of scores of the other members relative to a focal person's score, effectively offering a measure that is specific to the membership composition of the group.

Job satisfaction. We adopted items from the Michigan Quality of Employment Survey (Quinn & Shepard, 1974) to assess job satisfaction. This scale included the following four items ($\alpha = .83$): (a) "I am very satisfied with my current job," (b) "In general, my job measures up to the sort of job I wanted when I took it," (c) "If a good friend of mine told me that he or she was interested in working in a job like mine, I would strongly recommend it," and (d) "Knowing what I know now, if I had to decide all over again whether to take my job, I would." The items were measured using a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*).

OCB. Drawing items from prior studies (Cardona, Lawrence, & Bentler, 2004), we used a 4-item scale ($\alpha = .77$) to assess OCB, which included the following items: (a) "When the workload is most intense, I work extra hours by shortening the usual breaks or staying at work later than usual," (b) "I frequently suggest new ideas to improve my work unit," (c) "I only have to do the job I am paid to do" (reverse coded), and (d) "Even when it is not required, I try to guide the new members of my work unit." The response format was a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*).

Task performance. Formal leaders of each work group rated the level of performance of each member using a 10-point Likert-scale (1 = *strongly disagree*, 10 = *strongly agree*). Task performance was assessed using the following three items ($\alpha = .83$) adopted from Heilman, Block, and Lucas (1992): (a) "This employee gets his or her work done very effectively," (b) "This employee is very competent in carrying out the task," and (c) "This employee has performed his or her job well."

Group tenure. Group tenure was reported in years by team members. The tenure of all

members was averaged within the same work group.

Control variables. Considering that personality dissimilarity variables were computed based on raw personality scores, our analysis also included the raw scores of the Big Five dimensions (Liao et al., 2004). In addition, given the implications of demographic variables for employee behavior and performance, we controlled for the effects of gender (0 = male, 1 = female) and age (in years) in our analysis. Moreover, we controlled gender dissimilarity and age dissimilarity in all equations for the hypothesis testing. We also included the interaction terms between gender and age dissimilarity and group tenure when we tested the interaction effects of personality dissimilarity and group tenure. The inclusion of demographic dissimilarity variables was important because we expand the relational demography literature that has mostly focused on the individual-level dissimilarity in terms of surface-level demographic characteristics by examining deep-level characteristics. Considering the prevailing focus on demographic dissimilarities in prior studies (Bacharach & Bamberger, 2004; Tsui et al., 1992), demonstrating the incremental predictive validity of deep-level dissimilarity variables beyond surface-level variables is important.

Results

Before we create variables from the current data, we examined the underlying factor structure by conducting a confirmatory factor analysis (CFA) of the 52 items used to assess the Big Five factors, job satisfaction, and OCB. The CFA produced a good fit to the data ($\chi^2(df = 1095) = 1259.01$, $p = .000$; CFI = .97; RMSEA = .023). In addition, this hypothesized seven-factor model exhibited a better fit than any of the alternative six- or five-factor models (chi-square difference tests, all $p < .001$). The descriptive statistics and correlations among all study variables are reported in Table 1. Considering the multilevel data structure and hypotheses, we conducted multivariate hierarchical linear modeling (HLM) that enables an adequate test of multilevel processes, such as cross-level moderating effects (Bryk & Raudenbush, 1992). We conducted HLM analyses in a stepwise manner, where several clusters of independent variables

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Table 1
Means, Standard Deviations, and Correlations Among Study Variables

| Variables | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|--|-------|-------|-------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|----|
| 1. Gender | .56 | .50 | — | | | | | | | | | | | | | | | | | |
| 2. Age | 30.77 | 11.50 | .02 | — | | | | | | | | | | | | | | | | |
| 3. Gender dissimilarity | .41 | .33 | .07 | .01 | — | | | | | | | | | | | | | | | |
| 4. Age dissimilarity | 8.06 | 6.19 | .17** | .16** | -.04 | — | | | | | | | | | | | | | | |
| 5. Extraversion | 3.43 | .67 | -.04 | -.09 | .05 | -.12* | — | | | | | | | | | | | | | |
| 6. Neuroticism | 2.62 | .68 | .14* | -.07 | .06 | -.02 | -.29** | — | | | | | | | | | | | | |
| 7. Agreeableness | 3.84 | .65 | .17** | .04 | -.06 | -.05 | .31** | -.43** | — | | | | | | | | | | | |
| 8. Conscientiousness | 3.78 | .66 | .10 | .20** | -.16** | .04 | .30** | -.42** | .53** | — | | | | | | | | | | |
| 9. Openness | 3.52 | .58 | -.04 | -.10 | .02 | -.08 | .40** | -.10 | .31** | .34** | — | | | | | | | | | |
| 10. Extraversion dissimilarity | .73 | .39 | .12* | -.07 | -.25** | .01 | -.12* | .05 | .13* | .14* | .06 | — | | | | | | | | |
| 11. Neuroticism dissimilarity | .74 | .37 | .07 | .03 | -.06 | .05 | -.05 | .09 | .01 | .12* | .03 | .20** | — | | | | | | | |
| 12. Agreeableness dissimilarity | .62 | .33 | .01 | .07 | -.14* | .16** | -.11 | .08 | -.13* | .11 | -.07 | .18** | .28** | — | | | | | | |
| 13. Conscientiousness dissimilarity | .63 | .35 | .07 | -.05 | .04 | .09 | -.02 | .10 | .01 | -.10 | -.05 | .11 | .20** | .16** | — | | | | | |
| 14. Openness dissimilarity | .58 | .32 | .10 | -.04 | .01 | -.03 | .05 | -.02 | .03 | .07 | -.03 | .24** | .09 | .07 | .17** | — | | | | |
| 15. Group tenure | 4.83 | 5.57 | -.05 | .63** | -.15* | .13* | -.01 | -.06 | -.02 | .16* | -.01 | -.08 | -.05 | .15* | -.07 | -.04 | — | | | |
| 16. Job satisfaction | 5.44 | 1.25 | .08 | .19** | -.08 | .03 | .13* | -.13* | .31** | .32** | .16** | .12* | .01 | .03 | .02 | -.01 | .08 | — | | |
| 17. OCB | 4.90 | 1.25 | .03 | .18** | -.11 | .07 | .27** | -.12* | .34** | .30** | .22 | .13* | .14* | .05 | .04 | -.05 | .15* | .33** | — | |
| 18. Task performance | 4.98 | 1.53 | .20** | .05 | -.13* | .14* | .08 | -.05 | .27** | .19 | .05 | .17** | .18** | .02 | .03 | .04 | .01 | .26** | .28** | — |

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

were entered sequentially into a multilevel equation predicting individual outcomes. Table 2 presents the results of our stepwise HLM analyses conducted at two levels of analysis. For each HLM model, individual- and group-level variances were also reported. These variances were then used to calculate the amount of explained variance (equivalent to R^2) with additional predictors introduced to the model.

Main Effects of the Big Five Dissimilarities

Hypothesis 1 suggests that dissimilarities in extraversion and neuroticism follow the complementary fit model and are positively related to individual outcomes. After controlling for the effects of demographic variables, demographic dissimilarities, and raw scores of the Big Five dimensions, extraversion dissimilarity was determined as a significant positive predictor of task performance ($\beta = .51, p < .05$), as reported in Model 8 in Table 2. Neuroticism dissimilarity exerted positive effects on OCB and task performance ($\beta = .43$ and $.59$, respectively, both $p < .05$) (see Models 5 and 8 in Table 2). By contrast, Hypothesis 2 regarding the supplementary fit relations for the other Big Five dimensions was not supported by any of the three individual outcomes.

Asymmetric Effects of the Big Five Dissimilarities

In Hypothesis 3, we proposed that the effects of dissimilarities in extraversion and neuroticism on individual outcomes are asymmetric and more positive for extraverts and stable members. To examine these asymmetric effects, we conducted a series of subgroup analyses by dividing the entire sample into two subgroups: (a) members with a higher personality score than the average of the group and (b) members with a lower personality score than the average of the group. Results are reported in Table 3. The first set of subgroup analyses supports Hypothesis 3a in that the benefit of extraversion dissimilarity is exhibited by extraverts but not by introverts. For those with relatively higher extraversion scores than their coworkers, extraversion dissimilarity was positively related to all three individual outcomes: job satisfaction, OCB, and task performance ($\beta = .15, p < .10$, $\beta = .23, p < .01$, and $\beta = .23, p < .01$,

respectively). By contrast, extraversion dissimilarity did not benefit any of those outcomes for introverts ($\beta = .10, .05$, and $.13$, respectively, all *ns.*). Our analysis also revealed that neuroticism dissimilarity has positive effects on OCB and task performance ($\beta = .18$ and $.21$, respectively, both, $p < .05$) only for less neurotic members. Neuroticism dissimilarity was not beneficial for any of individual outcomes for more neurotic members ($\beta = -.07, .08$, and $.14$, respectively, all *ns.*), thus supporting Hypothesis 3b. Results clearly demonstrate the asymmetric effects of dissimilarity on attitudinal and behavioral reactions.

Hypothesis 4 suggests that the detrimental effects of personality dissimilarity are weaker for members who are more agreeable and conscientious. The results for the latter two personality dimensions support Hypothesis 4. Conscientiousness dissimilarity was a positive predictor of OCB for highly conscientious members ($\beta = .18, p < .05$) but not for less conscientious members ($\beta = -.05, ns.$). This pattern supports Hypothesis 4b and indicates that even in a dimension that may follow the supplementary fit model, personality dissimilarity may engender positive individual outcomes for members who hold more positive personality characteristics, such as conscientiousness, relative to their coworkers.

Moderating Effects of Group Tenure

In Hypotheses 5 and 6, we propose that group tenure moderates the relationship between personality dissimilarity and individual outcomes. These moderating hypotheses were tested by entering the interaction terms between dissimilarity variables and group tenure in predicting the three individual outcomes (see Models 3, 6, and 9 in Table 2). Group tenure itself was not significantly related to individual outcomes. The interaction between age dissimilarity and group tenure ($\gamma = -.01, p < .05$) indicated that member satisfaction in long-tenure groups is more negatively affected by age dissimilarity than in short-tenure groups. This aggravating pattern of an increasingly negative effect of age dissimilarity on member satisfaction somewhat differs from prior studies on surface-level diversity using student groups (Hobman & Bordia, 2006).

Table 2
Hierarchical Linear Models Predicting Individual Outcomes

| Variables | Job satisfaction | | | | OCB | | | | Task performance | | | |
|--|------------------|---------|---------|------------------|------------|---------|---------|---------|------------------|---------|---------|---------|
| | Null model | Model 1 | Model 2 | Model 3 | Null model | Model 4 | Model 5 | Model 6 | Null model | Model 7 | Model 8 | Model 9 |
| Gender | | .01 | .01 | .03 | | -.04 | -.07 | -.03 | | .35** | .29* | .30* |
| Age | | .02** | .02** | .02* | | .02** | .02** | .02* | | .01 | .01 | .01 |
| Gender dissimilarity (GenderDissimil) | | | .01 | -.01 | | | -.19 | -.16 | | | -.44 | -.43 |
| Age dissimilarity (AgeDissimil) | | | -.06 | .01 | | | .01 | .01 | | | .03* | .03* |
| Extraversion | | .03 | .07 | .07 | | .36** | .43*** | .42*** | | .17 | .24* | .21* |
| Neuroticism | | .11 | .09 | .08 | | .21* | .16 | .17 | | .06 | .05 | .08 |
| Agreeableness | | .45** | .43** | .38** | | .50*** | .50** | .53** | | .45** | .46** | .47** |
| Conscientiousness | | .31* | .30* | .27* | | .14 | .08 | .08 | | -.08 | -.14 | -.18 |
| Openness | | .09 | .09 | .14 | | .12 | .10 | .10 | | -.07 | -.09 | -.04 |
| Extraversion dissimilarity (ExtraDissimil) | | | .27 | .32 | | | .32 | .33* | | | .51* | .55** |
| Neuroticism dissimilarity (NeuroDissimil) | | | -.14 | -.20 | | | .43* | .46* | | | .59* | .39 |
| Agreeableness dissimilarity (AgreeDissimil) | | | .09 | .09 | | | .05 | .06 | | | -.09 | .01 |
| Conscientiousness dissimilarity (ConsDissimil) | | | .14 | .36 | | | .13 | .12 | | | -.17 | .11 |
| Openness dissimilarity (OpenDissimil) | | | -.12 | -.10 | | | -.37 | -.40 | | | .01 | .04 |
| Group tenure (GT) | | | | -.02 | | | | .01 | | | | .01 |
| GenderDissimil * GT | | | | .03 | | | | -.02 | | | | .01 |
| AgeDissimil * GT | | | | -.01* | | | | .01 | | | | .01 |
| ExtraDissimil * GT | | | | -.02 | | | | -.07* | | | | .08 |
| NeuroDissimil * GT | | | | -.09* | | | | -.05 | | | | -.12* |
| AgreeDissimil * GT | | | | .10 ⁺ | | | | .02 | | | | -.05 |
| ConsDissimil * GT | | | | .09 | | | | .01 | | | | .21** |
| OpenDissimil * GT | | | | .07 | | | | .01 | | | | .01 |
| Individual-level variance (δ^2) | 1.2485 | 1.2016 | 1.2181 | 1.1248 | 1.1696 | 0.9324 | 0.9114 | 0.9213 | 0.9967 | 0.9603 | 0.9488 | 0.9472 |
| Change in variance ($\Delta\delta^2$) | | 0.0469 | n.a. | n.a. | | 0.2372 | 0.0210 | n.a. | | 0.0364 | 0.0115 | 0.0016 |
| Proportion of explained variance | | 3.8% | n.a. | n.a. | | 20.3% | 2.3% | n.a. | | 3.7% | 1.2% | 0.2% |
| Group-level variance (τ) | 0.3035 | 0.1241 | 0.1273 | 0.1015 | 0.3731 | 0.3433 | 0.3338 | 0.3375 | 1.2321 | 1.1055 | 1.0291 | 0.9825 |
| Change in variance ($\Delta\tau$) | | 0.1794 | n.a. | 0.0258 | | 0.0298 | 0.0095 | n.a. | | 0.1266 | 0.0764 | 0.0466 |
| Proportion of explained variance | | 59.1% | n.a. | 20.3% | | 7.9% | 2.8% | n.a. | | 10.3% | 6.9% | 4.5% |

⁺ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3
Subgroup Regression Analyses for Asymmetric Effects of Personality Dissimilarity on Individual Outcomes

| | Personality mean score | Job satisfaction | OCB | Task performance |
|----------------------------------|------------------------|------------------|-------|------------------|
| Extraversion dissimilarity | | | | |
| Whole sample ($n = 283$) | 3.43 | .11 | .18 | .51* |
| High extraversion ($n = 138$) | 3.83 | .15+ | .23** | .23** |
| Low extraversion ($n = 145$) | 3.06 | .10 | .05 | .13 |
| Neuroticism dissimilarity | | | | |
| Whole sample ($n = 283$) | 2.62 | -.13 | .45* | .59* |
| High neuroticism ($n = 136$) | 3.03 | -.07 | .08 | .14 |
| Low neuroticism ($n = 147$) | 2.24 | .08 | .18* | .21* |
| Agreeableness dissimilarity | | | | |
| Whole sample ($n = 283$) | 3.84 | .05 | .04 | -.09 |
| High agreeableness ($n = 134$) | 4.20 | .07 | .12 | -.02 |
| Low agreeableness ($n = 149$) | 3.51 | .01 | -.02 | .05 |
| Conscientiousness dissimilarity | | | | |
| Whole sample ($n = 283$) | 3.78 | .15 | .17 | -.17 |
| High conscientious ($n = 132$) | 4.15 | .10 | .18* | .05 |
| Low conscientious ($n = 151$) | 3.45 | -.03 | -.05 | .03 |
| Openness dissimilarity | | | | |
| Whole sample ($n = 283$) | 3.52 | -.11 | -.08 | .01 |
| High openness ($n = 134$) | 3.86 | .09 | .03 | .08 |
| Low openness ($n = 149$) | 3.21 | -.09 | -.12 | .01 |

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

Hypothesis 5 posits that the initially positive effect of dissimilarities in extraversion and neuroticism on individual outcomes will diminish over time. The significant negative interaction between extraversion dissimilarity and group tenure in predicting OCB ($\gamma = -.07, p < .05$) supports Hypothesis 5a. To interpret this significant interaction further, we conducted separate regression analyses for two subgroups with either high (1 *SD* above the mean) or low (1 *SD* below the mean) levels of group tenure (Aiken & West, 1991). The two regression lines shown in Figure 2 confirm that extraversion dissimilarity was a significant positive predictor of OCB in groups with a short interaction history ($\beta = .87, p < .01$), but this positive effect was not observed in long-tenure groups ($\beta = -.04, ns$). The interaction between neuroticism dissimilarity and group tenure was significant and negative in predicting job satisfaction and task performance ($\gamma = -.09$ and $-.12$, respectively, both $ps < .05$), which confirms Hypothesis 5b. As depicted in Plot A of Figure 3, the effect of neuroticism dissimilarity on job satisfaction changed from a very weak positive one ($\beta = .32, ns$) to a strong negative one with increasing tenure ($\beta = -.79, p < .01$).

Plot B of Figure 3 reveals that neuroticism dissimilarity contributes to task performance in short-tenure groups ($\beta = 1.08, p < .01$), but not in long-tenure groups ($\beta = -.31, ns$).

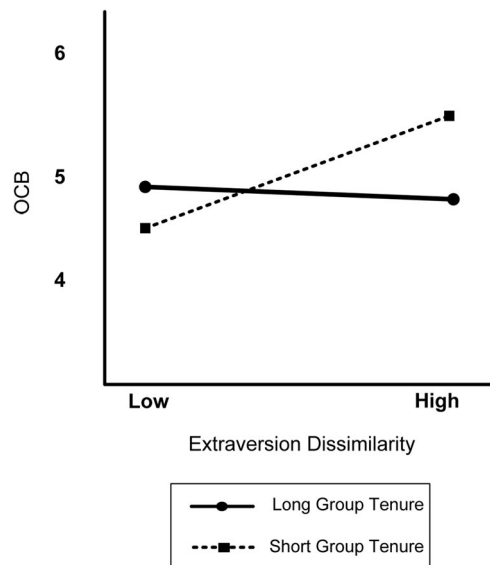


Figure 2. Interaction between extraversion dissimilarity and group tenure in predicting OCB.

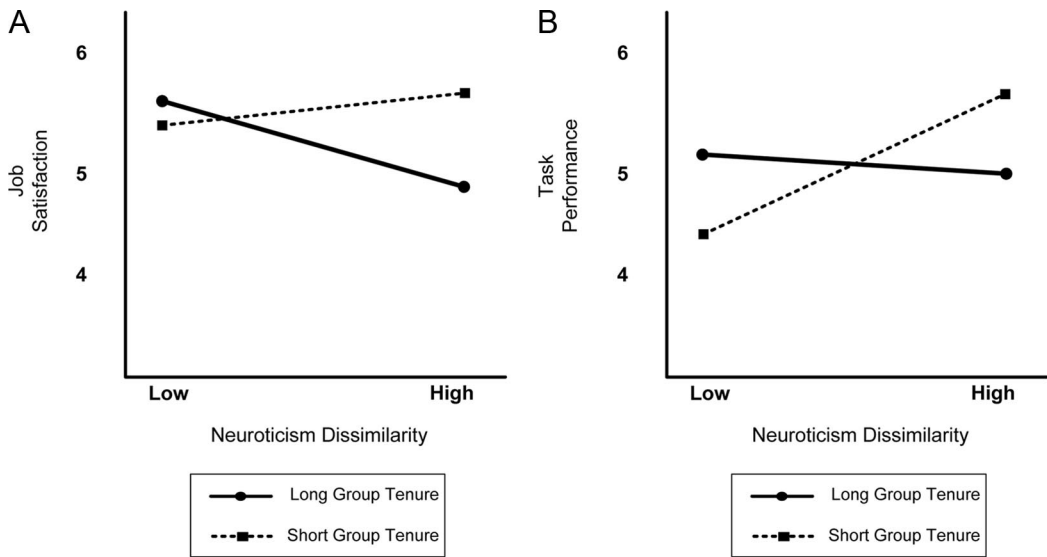


Figure 3. Interaction between neuroticism dissimilarity and group tenure in predicting job satisfaction and task performance.

Hypothesis 6 suggests that the negative effects of dissimilarities in agreeableness, conscientiousness, and openness diminish over time with increasing intermember interactions. The significant positive interaction between agreeableness dissimilarity and group tenure for job satisfaction ($\gamma = .10, p < .10$) supports such decreasing negative effects of agreeableness dissimilarity on member attitudes. Figure 4 shows that agreeableness dissimilarity has somewhat negative implications on job satisfaction in short-tenure groups ($\beta = -.52, ns$) but exhibits a positive effect on job satisfaction in long-tenure groups ($\beta = .71, p < .10$). A similar but more dramatic temporal shift was observed in the significant interaction between conscientiousness dissimilarity and group tenure ($\gamma = .21, p < .01$). In short-tenure groups, conscientiousness dissimilarity was negatively related to the task performance of individual members ($\beta = -.97, p < .01$), but with increasing group tenure, conscientiousness dissimilarity became a positive predictor of task performance ($\beta = 1.35, p < .05$) (see Figure 5).

Post Hoc Analyses

In the current analysis, we employed Euclidean distance as the measure of dissimilarity of a member from all other members. Although this

operationalization prevails in the relational demography literature (Chattopadhyay, 1999; Choi, 2007; Tsui et al., 1992), this approach has two potential problems. First, Euclidean distance can be computed based on the assumption that scale points are equally spaced. In a strict

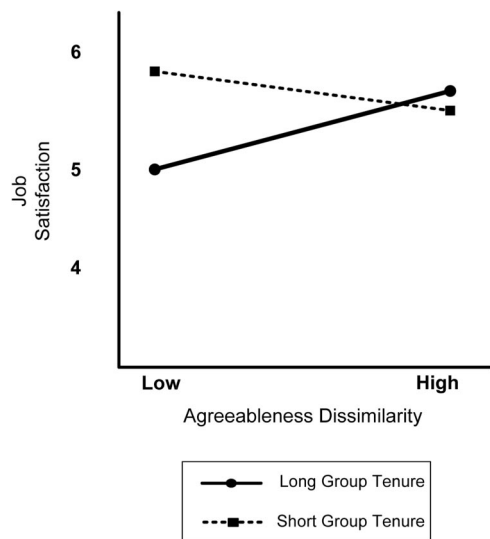


Figure 4. Interaction between agreeableness dissimilarity and group tenure in predicting job satisfaction.

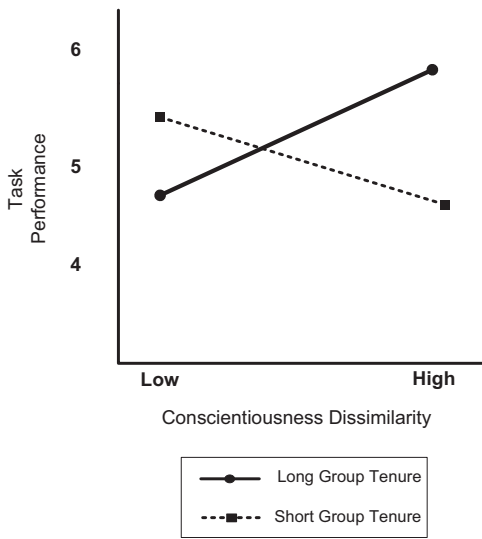


Figure 5. Interaction between conscientiousness dissimilarity and group tenure in predicting task performance.

sense, we cannot assume that Big Five personality scores are interval scales, although existing studies have employed such an assumption and treated personality scores as such in statistical analyses. Nonetheless, the fact that in a strict sense, personality scores may not be interval scales should not be neglected. Thus, Euclidian distance could bias the results. Therefore, we replicated our analysis in a non-Euclidean space using Minkowski's r -metrics where first power and first root respectively replace squaring and square root (Kruskal, 1964). When we performed our analysis using this non-Euclidean approach to compute dissimilarity, the results were almost identical to our original results. This similarity indicates the robustness of the current findings.

Second, given that the Euclidean distance is computed by averaging the square rooted value of the summed squared differences of a person from all other members within the same group, the resultant dissimilarity index could be greater for those with extreme (low or high) scores in the given dimension than for those with medium scores. This finding suggests the possibility that the dissimilarity-related dynamics shown in the present analyses can, in fact, reflect the U-shaped curvilinear effects of personality characteristics on individual outcomes that can be investigated more straightforwardly by

testing their linear and quadratic effects. To verify this possibility, we replicated our entire analysis using the quadratic terms of the Big Five personality factors instead of the dissimilarity scores based on Euclidean distance. When we verified the curvilinear effects of the Big Five personality factors on the three targeted individual outcomes and their interactions with group tenure, only the quadratic term of agreeableness exerted a significant negative effect on job satisfaction ($p < .05$). Thus, the overall results involving curvilinear effects were not significant, which indicates that the present results are different from the curvilinear effects of the Big Five factors on individual outcomes.

Discussion

The present study meaningfully expands the group composition literature by offering new theoretical propositions and empirical evidence related to dissimilarity among members in terms of deep-level characteristics focusing on the Big Five personality dimensions. Our empirical analysis of 283 members from 116 organizational teams reveals intriguing patterns involving dissimilarities in the Big Five factors in terms of main effects, asymmetric outcomes of members in different positions in the personality dimension, and unfolding and shifting implications of these dissimilarity variables over time. The important findings of the study and their implications are highlighted below, along with the limitations and directions for future research.

Main Effects of Personality Dissimilarity on Individual Outcomes

Our data reveal that both complementary personality dissimilarities exerted significant effects on OCB and task performance. Consistent with existing theoretical and empirical support for the positive complementary effect of extraversion dissimilarity (Liao et al., 2004), our analysis shows a significant positive effect of extraversion dissimilarity on task performance. Indeed, extraverts and introverts have complementary communication styles (i.e., talking vs. listening) and occupy distinct roles in performing group tasks (i.e., initiators vs. followers), thus resulting in favorable interpersonal consequences (Barry & Stewart, 1997; Liao et al.,

2004; Neuman et al., 1999). Results also revealed that neuroticism dissimilarity is positively related to OCB and task performance. The existence of neurotic members with more anxiety and fear may invite the trait expression of less neurotic members, who are self-confident and relaxed, filling up the active and dominant role in the group processes. Meanwhile, the presence of emotionally stable co-workers may enable neurotic members to feel secure by relying more on their peers who exhibit confidence. Thus, neuroticism dissimilarity within a group may instigate balanced and mutually beneficial situations that activate the expression of the trait as well as appreciation when such expressions occur (Neuman et al., 1999).

Asymmetric Effects of Personality Dissimilarity

Expanding prior studies in the domain of relational demography, we have proposed and empirically tested the potential asymmetric effects of personality dissimilarity. Confirming our expectation, results demonstrate that extraverts are the main beneficiaries of dissimilarity in extraversion. Unlike the typical image of a harmonious and balanced state of equally satisfying and fair exchange relationships between extraverts and introverts based on their complementarity (Barry & Stewart, 1997; Liao et al., 2004; Neuman et al., 1999), our subgroup analyses reveal the possibility of a lopsided, unfair exploitation of the situation by extraverts and emotionally stable members who evidently seem to claim greater interpersonal power, more opportunities to contribute, and more resources, such as leader recognition and positive appraisal, compared with their introverted and neurotic counterparts. Further research is needed to identify conditions where both extraverts and introverts, as well as members who are less neurotic and more neurotic, are satisfied and share the resources during task-related interactions.

Our data also demonstrate that conscientiousness dissimilarity is positively associated with OCB for highly conscientious members. Recent OCB literature suggests the possibility of members performing extrarole behavior such as OCB owing to the necessity of the situation rather than voluntary efforts based on goodwill

(cf. compulsory OCB, Fox et al., 2012). Highly conscientious people are high in achievement motivation and are strongly concerned about the success of the tasks being performed (Barrick et al., 1998, 2002; Neuman et al., 1999). Therefore, even when they are frustrated with less conscientious members, they may still feel compelled to conduct OCB to compensate for their underperforming peers to remain productive and achieve the group goal (Bell, 2007).

Time-Dependent Effects of Personality Dissimilarity

We postulate that deep-level dissimilarity affects interpersonal interactions within days or weeks. Therefore, the prevailing argument of deep-level composition effects intensifying over time (Harrison et al., 1998, 2002; Hobman & Bordia, 2006) may be true only during the very early stage of group development, perhaps for the first several weeks. These effects of personality dissimilarity may disappear in the long run (perhaps over years of group interaction) or take new forms because of socialization or familiarization, mutual adaptation, and the development of strategies for harmonious and complementary relationships.

Extraversion dissimilarity, based on its complementarity in shaping interpersonal dynamics, is a positive predictor of OCB for short-tenure groups. This positive effect of extraversion dissimilarity is not observed in long-tenure groups (see Figure 2). With increasing social integration over time, extraverts may restrain from performing arbitrary and domineering behavior, whereas introverts may raise their voice with increasing comfort and familiarity within the given social context. With this shifting interpersonal dynamics, introverts and extraverts may become equal contributors to team processes, which makes the effect of extraversion dissimilarity on OCB insignificant with increasing group tenure.

The role of neuroticism over time exhibits different patterns for job satisfaction and task performance. In short-tenure groups, neuroticism dissimilarity is not related to job satisfaction but is positively related to task performance (see Figure 3). By contrast, neuroticism dissimilarity in long-tenure groups is a negative predictor of job satisfaction but is not related to task performance. Our further subgroup analy-

sis indicates that the negative effect of neuroticism on job satisfaction in long-tenure groups is attributed to members with relatively high neuroticism who might feel increasingly frustrated and depressed when they compare themselves with their more confident, emotionally stable coworkers. In the case of task performance, given that performance gain occurs asymmetrically in less neurotic members (see Table 3), the nonsignificant performance implications of neuroticism in long-tenure groups may suggest that the relative performance advantage of less neurotic members diminishes over time. This condition is perhaps attributable to the increasing frustration and stress among those members and subsequent negative work behavior after exerting efforts to adjust and work together with neurotic coworkers. Such frustration and stress may result in the turnover of members who experience serious negative consequences of personality dissimilarity (Liao et al., 2008), which could give rise to a greater homogeneity of personality among members in long-tenure groups (cf. attraction-selection-attrition theory, Schneider, 1987). To verify this possibility, we conducted a follow-up analysis to compare the magnitude of dissimilarities in extraversion and neuroticism in short- versus long-tenure groups. Results did not show a significant difference between these two groups ($p > .50$).

These time-dependent patterns are also evident in dissimilarities in agreeableness and conscientiousness, which follow the supplementary fit model. The initial negative effect of agreeableness dissimilarity on job satisfaction disappears over time and becomes slightly positive in long-tenure groups (see Figure 4). The effects of conscientiousness dissimilarity on task performance are completely reversed between short- and long-tenure groups, which implies a fundamental shift of intermember dynamics over time (see Figure 5). As individuals spend more time with other members, the salient in-group category becomes the work group itself, rather than demographic or trait-based subgroups (Harrison et al., 1998, 2002). In addition to the broadened in-group categorization and increased empathic concerns regarding dissimilar members (Harrison et al., 1998; Hobman & Bordia, 2006), members in long-tenure groups may drop any unrealistic expectations regarding their coworkers over time. Thus, they become insensitive and even indifferent to the dissimi-

larity, which may also decrease emotional conflict among members, resulting in the favorable attitudes and performance of dissimilar members. The strong opposite effects of conscientiousness dissimilarity on member performance in short- versus long-tenure groups particularly indicate the possibility that members with different levels of conscientiousness attempt to overcome the initially frustrating relationship over time and thus establish ways to share workloads by creating complementary contributions. For example, highly conscientious members can perform time management functions and reliably execute task-related routines, whereas less conscientious members can provide assistance to such efforts and deal with nonroutine problems (Kichuk & Wiesner, 1997).

Study Limitations and Future Research Directions

The present findings should be interpreted with caution, considering several limitations. First, the current results related to the moderating effects of group tenure represent a cross-sectional picture of what is essentially a longitudinal phenomenon: the changing effect of personality dissimilarity on individual outcomes as a function of shared membership for an extended period. Future studies should validate the present findings using a longitudinal design or process analysis of unfolding processes with an identical set of groups over time. Second, although task performance was assessed by supervisors, job satisfaction and OCB were self-reported. For this reason, our results regarding job satisfaction and OCB are not free from concerns of same-source bias. Although the correlations involving these outcomes were not evidently larger than those of task performance, validating the present findings using multisource data in additional empirical investigations is necessary.

Despite these limitations, our conceptual propositions and empirical findings reveal intriguing dynamics involving personality dissimilarity, such as the asymmetric effects and temporal shifts of such effects in organizational teams. First, to extend the present study further, researchers need to identify potential mediating mechanisms between personality dissimilarity and individual outcomes, including role ambi-

guity, emotional conflict, and behavioral integration, that reveal the underlying mechanisms of the phenomena observed in this study (Day & Bedeian, 1995; Varela et al., 2008). Second, the present study examined various individual outcomes (i.e., job satisfaction, OCB, and task performance) that were treated as different aspects of an individual's favorable or unfavorable reactions to the dissimilarity situation instead of specifying distinct dynamics for each. Considering that attitudes, behavior, and performance can be driven by different antecedent conditions, future studies may attend to idiosyncratic dynamics involving these outcomes as well as additional plausible outcomes such as proactive behavior, counterproductive work behavior, workplace deviance, and turnover (Liao et al., 2004, 2008). Third, we examined time as a core moderator that may attenuate the implications of personality dissimilarity for individual outcomes over time. However, alternative unfolding processes are also possible considering that as people spend more time with one another, those with different personalities may realize their fundamental difference and thus the impossibility of finding a compromising point to get along. Such time-dependent dynamics may also develop differently for different individual outcomes (e.g., increasing dissatisfaction but better task coordination over time) and may also depend on team performance, task types (Tett & Murphy, 2002), and the cultural context (individualism vs. collectivism) (Schaubroeck & Lam, 2002). Finally, we encourage further examinations of potential cross-trait interactions, such that complementarity is achieved by highly neurotic members working with highly agreeable coworkers or by introverts working with conscientious coworkers. This potential cross-trait-based complementarity or supplementarity will further enrich our understanding of personality-driven interpersonal interactions within work groups.

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Received September 2, 2012

Revision received July 23, 2013

Accepted July 30, 2013 ■

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