ORIGINAL PAPER



Helping Misfits to Commit: How Justice Climate Attenuates the Effects of Personality Dissimilarity on Organizational Commitment

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Published online: 31 July 2018 © The Author(s) 2018

Abstract

In the present study, we examined whether greater personality dissimilarity would indirectly lead to lower organizational commitment as a result of heightened emotional exhaustion. We also proposed and tested the notion that the experience of being dissimilar to one's workgroup members in the traits of (a) agreeableness, (b) conscientiousness, or (c) emotional stability would have the strongest positive effect on emotional exhaustion in workgroups with low justice climates. The data from 8196 members of the U.S. Armed Services confirmed the predicted negative indirect effect for agreeableness dissimilarity, but showed that conscientiousness dissimilarity resulted in a positive indirect effect on commitment. Contrary to expectations, emotional stability dissimilarity did not demonstrate a significant relationship. Multilevel moderated mediation analyses revealed that the presence of a strong workgroup justice climate attenuated the significant mediated relationships. Finally, we report supplementary polynomial regression analyses and discuss their implications for workgroup composition and individual career development.

Keywords Personality dissimilarity · Justice climate · Emotional exhaustion · Commitment

Authors in the academic and popular press alike have frequently made the case that coworkers can have a significant impact on employees. Meta-analytic evidence has shown that coworkers influence a wide array of outcomes including employee attitudes, effort, and behaviors (Chiaburu & Harrison, 2008) and that fitting in with one's workgroup can increase commitment, satisfaction, and performance (Kristof-Brown,

Zimmerman, & Johnson, 2005a). In the absence of harmonious relationships, Crowley and Elster's (2006) bestseller, *Working with You is Killing Me*, helps readers cope with antagonistic peers. Although it is clear that one's colleagues affect the nature of work experiences, it is not well understood if and how personality dissimilarity with coworkers may take an emotional toll on employees.

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The relational demography literature has noted that being dissimilar from coworkers can affect how employees feel about their job and employer. These differences can exist on the surface (e.g., ethnicity; King, Dawson, Jensen, & Jones, 2017) or on a deeper level (e.g., values; Williams & O'Reilly, 1998). Though misfit on both dimensions is important, recent research suggests that dissimilarity in the latter tends to exert a stronger and more consistent negative impact on organizational outcomes of interest like integration, turnover, performance, and creativity (Guillaume, Brodbeck, & Riketta, 2012; Huang, Hsieh, & He, 2014).

Despite the importance of deep-level dissimilarity, the existing research on personality dissimilarity with one's workgroup has been rather mixed. In some cases, researchers have noted that complementary fit (i.e., dissimilarity) can lead to positive outcomes (e.g., Kristof-Brown, Barrick, & Kay Stevens, 2005b; Perry, Dubin, & Witt, 2010), whereas others have found objective similarity in personality can sometimes be beneficial (Liao, Joshi, & Chuang, 2004) or have null effects (Liao, Chuang, & Joshi, 2008). This body of research frequently adopts a person-group (PG) fit perspective, noting that similarity can be beneficial for social cohesion whereas complementarity is useful for transactive memory (e.g., Seong, Kristof-Brown, Park, Hong, & Shin, 2015). With the present study, we aim to contribute to this stream of research by adding a third potential pathway through which employeeworkgroup personality dissimilarity exerts its effects: through an employee's internal strain (i.e., emotional exhaustion).

Emotional exhaustion, a facet of job burnout, refers to a lack of energy and feeling unable to apply one's full capabilities to work (Maslach, Schaufeli, & Leiter, 2001). We propose that being dissimilar in personality from one's coworkers may result in heightened strain and emotional discomfort, manifesting in employees as emotional exhaustion. Support for this notion would show that in addition to its effects on social attraction, shared norms, and information elaboration (Seong et al., 2015), feeling at odds with one's group can also have deeper psychological well-being implications. We hypothesized that these misfits would, in turn, react to this burnout by decreasing their commitment to their employer. However, we also predicted that by creating an atmosphere wherein fair treatment is the norm, workgroup justice climate may act as a boundary condition buffering this potentially debilitating process. In particular, we propose that when workgroups report high levels of justice, the differences between members will become less important and, therefore, have a weaker impact on employee exhaustion and commitment. In other words, a strong workgroup justice climate may help employees mentally reframe personality differences as valuable new perspectives rather than as a source of anxiety and conflict.

This study contributes to the relational demography literature by answering scholarly calls to move from surface-level attributes to deep-level characteristics (Harrison, Price, Gavin, & Florey, 2002; Van Knippenberg & Schippers, 2007) as well as an appeal to consider group factors while examining relational demography outcomes (Joshi, Liao, & Roh, 2011). In the present study, we used a sample of U.S. Armed Services soldiers. Given that quitting is relatively difficult in this context, we chose to examine organizational commitment as our outcome given that it can relate to a range of other (potentially deadly) performance consequences in these populations (e.g., Allen, 2003). Maintaining a workforce of highly committed employees is also crucial in light of meta-analytic evidence showing that commitment relates positively to in-role and extra-role performance as well as negatively to turnover (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Riketta, 2002). Finally, we are among the first we are aware of to propose that fostering a strong justice climate may serve as a potential solution to temper the negative effects of personality dissimilarity (see Fig. 1 for the full model summary).

Personality dissimilarity

Big five traits

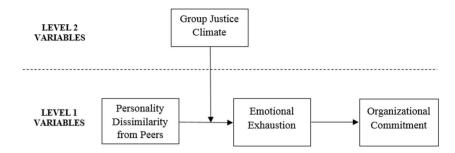
The Big Five Model of personality is arguably the most widely accepted of the personality frameworks and has garnered considerable psychometric support (Costa & McCrae, 1988; Digman, 1990). This model describes people in terms of the degree of each of the following traits they express: openness to experience (i.e., imaginative and curious), conscientiousness (i.e., motivated and responsible), extraversion (i.e., outgoing and active), agreeableness (i.e., cooperative and caring), and emotional stability (i.e., anxious and erratic; Costa & McCrae, 1988). As our focus is on interactions within the workgroup, in the present study, we examined dissimilarity in the three traits (i.e., conscientiousness, emotional stability, and agreeableness) most relevant to conforming with group norms (DeYoung, Peterson, & Higgins, 2001).

Prior research has shown that personality not only affects internal motivations and impulses, but can actually influence perceivable behaviors in social interactions (Cuperman & Ickes, 2009; Funder & Sneed, 1993). For example, low-agreeableness workers are less likely to express warmth, behave in a cheerful manner, and smile when interacting with others. Those high in agreeableness, in contrast, are described as good-natured and caring. Employees high in conscientiousness appear more interested in their conversational partners and engage in constant eye contact, whereas those low in this trait appear disorganized. Finally, emotionally stable workers appear unfazed by stressful events and are able to retain their composure during conflicts, whereas those low in emotional stability are likely to show physical signs of anxiety and have an awkward interpersonal style (Cuperman & Ickes, 2009;



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Fig. 1 Theoretical model



Funder & Sneed, 1993). Given these observable behavioral tendencies, we posit that employees will be aware when their coworkers are dissimilar in these traits and will respond accordingly.

Previous meta-analytic research has determined that employees with certain personalities are inherently more susceptible to emotional exhaustion (Swider & Zimmerman, 2010). Those high in conscientiousness are expected to be protected from burnout given the feelings of personal accomplishment that stem from frequent goal achievement. Low levels of emotional stability, in turn, have been most consistently linked to emotional exhaustion because such individuals experience higher levels of negative emotions including anxiety, depression, and self-doubt. Finally, agreeable individuals nurture strong interpersonal relationships that help to buffer them from emotional exhaustion (Swider & Zimmerman, 2010).

Despite these individual predispositions, in the present study, we focused on how being dissimilar in these traits from one's workgroup members can impact emotional exhaustion over and above one's individual level of a given trait (which serve as control variables). We elaborate more on our hypotheses related to personality dissimilarity below.

Personality dissimilarity and emotional exhaustion

Relational demography scholars that have examined personality dissimilarity with one's workgroup have shown that both similarity and dissimilarity can each be good for different reasons. Whereas sharing similar personality traits with coworkers can help to forge strong bonds and grease the wheels of social interactions, personality dissimilarity can sometimes provide a diverse array of task advantages for groups (e.g., Seong et al., 2015). Fewer scholars, however, have put these behavioral, leadership, and team concerns aside to explicitly consider the internal well-being and attitudinal implications of being dissimilar in personality from one's peers. With the present study, we aim to contribute to this stream of research by showing that personality dissimilarity may decrease work commitment as a result of an increase in emotional exhaustion.

We examine the relationship between personality dissimilarity with one's workgroup using a relational demography lens, which approaches group diversity from an individual perspective. Namely, it attempts to describe the degree of similarity between an individual characteristic (e.g., personality) and the average distribution of this trait in the workgroup (Riordan, 2000; Tsui & Gutek, 1999). Based on the degree of one's similarity or dissimilarity with the workgroup, individuals may have different perceptual experiences as well as unique behavioral and attitudinal outcomes (Chattopadhyay, George, & Ng, 2011). These effects are hypothesized to occur primarily due to the similarity-attraction paradigm (Byrne, 1971), which posits that individuals are more attracted to people who are similar to themselves. As noted by Guillaume et al. (2012, p. 85) "people feel more attracted to others who have similar psychological characteristics, because similarity in personality, attitudes, and values eases interpersonal interactions, facilitates communication and friendship, and leads to the verification and reinforcement of people's own attitudes, beliefs and personality." Employees who differ in personality, however, may find social interactions difficult or they may be excluded from behavioral integration altogether (Guillaume et al., 2012; Liao et al., 2008).

We propose that working with others who differ in personality can be stressful for three reasons: (a) preemptively worrying about upcoming interactions with dissimilar others, (b) the stress of the ineffective interactions themselves, and (c) the lack of social support afforded them. First, anticipating work difficulties related to conscientiousness, emotional stability, or agreeableness dissimilarity serves to ignite the burnout process. As an example, a highly conscientious person may become distressed at the thought of working with sloppy and unreliable lowconscientious peers. Someone low in conscientiousness, in turn, may become equally flustered when ruminating about an upcoming project where they must work with people who are uptight and sticklers for the rules (i.e., highconscientious coworkers). In describing how perceived deep-level dissimilarity might impede new employee adjustment, Kammeyer-Mueller, Livingston, and Liao (2011, p. 226) noted that "whether one seeks out information or builds relationships will likely be facilitated by how comfortable one feels with one's coworkers." It is this discomfort of being dissimilar that will cumulatively wear on the employee, ultimately resulting in emotional exhaustion.

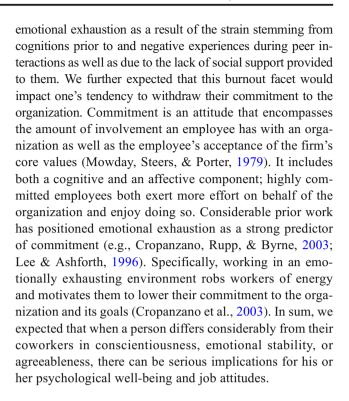


Second, exhaustion may be exacerbated by the interaction itself. Employees who differ in conscientiousness, agreeableness, and emotional stability are likely to demonstrate markedly different behavioral patterns (Cuperman & Ickes, 2009; Funder & Sneed, 1993), leading to stressful encounters. As noted by Schaubroeck and Lam (2002, p. 1121), "people who share certain traits...are more inclined to interact with one another effectively because they use common referents in perceiving, interpreting, and acting on social information." Dissimilar individuals, in contrast, may experience decreased satisfaction, lower cooperation, and increased conflict with workgroup members as a result of their differing behavioral styles (Gevers & Peeters, 2009; Pelled, Xin, & Weiss, 2001; Schaubrock & Lam, 2002). Indeed, combining all types of deep-level dissimilarity together (e.g., personality, values, attitudes, and beliefs), Guillaume et al. (2012) reported metaanalytic evidence that being dissimilar from one's workgroup resulted in lower quality social integration.

Finally, we expect that the comparatively low levels of social support received by dissimilar employees will further exacerbate the negative effects of standing out on emotional exhaustion. Prior research has shown that people have less empathy, positive affect, and social support for dissimilar members of their workgroup (Liao et al., 2004; Williams, Parker, & Turner, 2007). As such, it is likely that the dissimilar employee may not be helped or supported by those around them even when they begin to show signs of distress, leading to further deterioration and exhaustion. Supporting this idea, Kammeyer-Mueller et al. (2011) found that employees perceiving a higher level of dissimilarity with their workgroup members tend to engage in less proactive socializing in an effort to build relationships. Together, we expect that the internal difficulties arising from anticipating and engaging in repeated social interactions as well as the lack of social support may eventually culminate in strained collegial relations that leave employees feeling drained and depleted (i.e., emotionally exhausted; Dijkstra, Beersma, & Evers, 2011; Giebels & Janssen, 2005).

In the greater relational demography literature, only a handful of studies have shown that dissimilarity with others in the workplace results in emotional exhaustion. As an example of these, Wesolowski and Mossholder (1997) found that greater race dissimilarity in supervisor-subordinate dyads was positively related to subordinate burnout, whereas age dissimilarity was not. There has only been a single study that we are aware of linking actual personality dissimilarity with coworkers to emotional exhaustion (Perry et al., 2010). Perry et al. (2010) found that extraverted individuals were more prone to exhaustion when working with a group of peers who are low in extraversion. Low-extraversion individuals, in contrast, were generally unfazed by dissimilarity.

In sum, we expected that employees dissimilar in personality from their peers would be more likely to experience



H1: Emotional exhaustion mediates the indirect negative effect of employee dissimilarity to workgroup members in (a) conscientiousness, (b) emotional stability, and (c) agreeableness on organizational commitment.

The moderating effects of group justice climate

Although we expected general effects for personality dissimilarity, it is also critical to consider the context when assessing the impact of being different (Shemla & Meyer, 2012). Accordingly, in the present study, we aimed to understand how group climates may help to mitigate or exacerbate the hypothesized impact of personality dissimilarity. Given that scholars have recently highlighted that a key facet of inclusiveness is the extent to which managers apply consistent norms of fair treatment (Dwertmann, Nishii, & van Knippenberg, 2016), we focused on the effects of shared workgroup justice climate. These perceptions reflect the degree to which the workgroup agrees that the decision-making processes, rewards, interpersonal treatment, and information distribution and are conducted in a fair way (Li & Cropanzano, 2009). The justice literature repeatedly has confirmed that perceptions of unfairness can lead to a multitude of undesirable individual and organizational outcomes (see Colquitt et al., 2013 for a review).

Although the distinction between justice facets can be meaningful (Colquitt, Conlon, Wesson, Porter, & Ng, 2001),



recent scholars also advocated examining global justice constructs under certain circumstances (e.g., Barclay & Kiefer, 2014). We join others (Ambrose & Schminke, 2009; Shapiro, 2001) in arguing that overall fairness may be most appropriate when assessing climate perceptions given that employees often integrate all sources of justice information when forming attitudes and choosing how to react. Coworkers also play a role in the formation of justice perceptions (Li & Cropanzano, 2009; Naumann & Bennett, 2000). Over the course of their daily interactions, it is likely that workgroup members may exchange stories of unfair treatment and may witness their coworkers serve as targets of unfair behavior. As a result, there is a tendency for coworker attitudes to converge as a result of a process that Degoey (2000) called justice contagion. Shared group justice climate perceptions, in turn, have been linked to employee attitudes including job satisfaction (Mossholder, Bennett, & Martin, 1998) and commitment (Naumann & Bennett, 2000).

Workgroup justice climate and employee dissimilarity on emotional exhaustion

The organizational context can shape the effects of employee dissimilarity by influencing the salience of employee differences and, consequently, how employees perceive and react to one another (Schaubrock & Lam, 2002). The relational demography literature is clear that the organizational environment is an important predictor of whether employees will feel accepted or not. Comparatively few researchers, however, have examined how justice climate in particular can impact the effects of deep-level differences (or even relational demography more generally).

In one exception, Buengeler and Den Hartog (2015) examined the moderating effect of interactional justice climate on the relationship between nationality dissimilarity and group performance. They found that this relationship was positive only when workgroup members agreed that their supervisor demonstrated high levels of interactional justice towards them. These findings imply that when everyone in the group perceives that they are being treated fairly, the differences between them are no longer seen as negative. Applied to the present study, we suggest that high aggregated workgroup perceptions of global justice likely result in more individual integration for dissimilar individuals and lowered social anxiety. Specifically, individuals who differ in personality and are working in a workgroup where everyone's voice is acknowledged equally are likely to feel more comfortable than those working in an environment marked by inequality. Because people use fairness perceptions as an indicator of their status and self-worth within the group (Roberson & Stevens, 2006), strong workgroup justice climates signal that each member of the group is equally valued and that being different is seen as a source of learning (Buengeler & Den Hartog, 2015) rather than a trigger of exhaustion. We expected that being dissimilar in personality from one's peers would be less emotionally exhausting when he or she does not expect to be treated unfairly based on this unique factor (i.e., working in groups with a high justice climate).

In support of this idea, Oberfield (2016) found that employees perceiving high levels of procedural justice were more likely than those perceiving injustice to report that the organization was committed to promoting and leveraging diversity. Fair organizations have a tendency to make all employees feel secure and valued as dignified organizational members, regardless of their surface- or deep-level differences (Maranto & Griffin, 2011). This suggests that when workgroups feel that they are being treated fairly and equitably, they may be more inclusive, likely to see the value in individual differences, and work harder to leverage these to the group's advantage. As a result of this, employees with a dissimilar personality profile who work in a just group likely face less exclusion and may even take pride in their unique perspective (Van Prooijen, Van Den Bos, & Wilke, 2004).

In contrast, dissimilar employees working in groups that do not promote universally fair treatment of employees may have a very different experience. Unjust group climates induce a host of negative emotions including hostility, anger, shame, and guilt (Barclay, Skarlicki, & Pugh, 2005; Lin, 2015) and can affect the extent to which employees become emotionally exhausted over time (Qin, DiRenzo, Xu, & Duan, 2014). These effects may be particularly detrimental for a dissimilar worker who, as a numerical minority and part of the outgroup, may be most likely to be targeted with unfairness and social rejection (Cortina, 2008). As an example, coworkers may feel freer to label a lone disagreeable workgroup member as "cold" and an odd non-conscientious coworker as "lazy" in a workgroup characterized by norms of differential treatment and status hierarchies (i.e., low justice climates). The discomfort and wariness experienced by the dissimilar individual, in turn, may deplete emotional resources over time, resulting in high levels of emotional exhaustion.

H2: Overall justice climate moderates the relationship between employee dissimilarity to workgroup members in (a) conscientiousness, (b) emotional stability, and (c) agreeableness and emotional exhaustion, such that the relationship is weaker when groups perceive high levels of justice climate than when groups perceive low levels of justice climate.

Cumulatively, H1 and H2 suggest that the mediating role of emotional exhaustion in the negative link between employee personality dissimilarity and affective commitment is dependent on the level of workgroup justice climate. As such, in our



final hypothesis, we propose a case of first stage moderated mediation (Edwards & Lambert, 2007). Specifically, we expect that the extent to which the employee dissimilarity from workgroup members in personality indirectly affects affective commitment is contingent on the level of workgroup justice climate. Thus, we predict that:

H3: The indirect negative relationship between employee dissimilarity to workgroup members in (a) conscientiousness, (b) emotional stability, and (c) agreeableness and affective commitment via emotional exhaustion is moderated by overall justice climate, such that the indirect association is weaker when groups perceive high levels of justice climate than when groups perceive low levels of justice climate.

Method

Participants and procedure

The Defense Equal Opportunity Management Institute (DEOMI) collected the data on members of the U.S. Armed Services. Participants were solicited to participate in the study after they completed the DEOMI Organizational Climate Survey (DEOCS). A total of 8906 active duty members completed the survey; the DEOCS response rate during the data collection period was 53%. Because we sought to analyze climate at the workgroup level, we only retained data from supervisors with at least 4 respondents (Mean group size = 15.01), thereby reducing the usable sample size to 8196. Of these individuals, 17% were female. In addition, 15.9% of the sample were age 18–21, 46.9% were 22–30, 24.3% were 31– 40, 10.8% were 41-50, and 2.1% were 51 or older. The participants hailed from a wide range of the Armed Services, including 2.2% Air Force, 61.7% Army, 1.4% Coast Guard, 14.3% Marines, 20.3% Navy, and 1% in a joint command. In terms of rank, 29.1% were junior enlisted, 59.4% were midlevel enlisted, 10.5% were senior enlisted, and 1% were executive enlisted (E-9) or officers.

Measures Unless otherwise noted, all measures used Likert-type responses ranging from $1 = strongly \ disagree$ to $5 = strongly \ agree$.

Organizational commitment We assessed organizational commitment using five items from the organizational commitment questionnaire (Porter, Steers, Mowday, & Boulian, 1974; sample: "I am proud to tell others that I am part of this organization"; $\alpha = .84$).

Emotional exhaustion We assessed emotional exhaustion using the 5-item scale from the Maslach Burnout Inventory

(Schaufeli, Leiter, Maslach, & Jackson, 1996; sample: "I feel emotionally drained from my work"; $\alpha = .92$).

Personality dissimilarity We assessed conscientiousness, agreeableness, and emotional stability with the Big Five Factor Markers of the International Personality Item Pool (Goldberg, 1999). Each was assessed using the average of 2–3 items: (samples: "I am almost always prepared at work" (conscientiousness, $\alpha = .82$), "I am relaxed most of the time" (emotional stability, $\alpha = .63$), and "I feel little concern for others at work" (agreeableness, $\alpha = .70$). Like prior researchers (e.g., Liao et al., 2004), we used Euclidean distance to compute each individual's dissimilarity from others in their work workgroup.

Workgroup justice climate To capture global justice climate perceptions, we developed a measure that included four items ("At my workplace, all employees are kept well informed about issues and decisions that affect them"; "At my workplace, a person's job opportunities and promotions are based only on work-related characteristics", "I trust my supervisor to deal fairly with issues of equal treatment at my workplace", and "My supervisor helps everyone in my workgroup feel included"; $\alpha = .86$). Prior to aggregating justice climate scores, we examined within group agreement (e.g., r_{wg}) and intraclass correlations 1 and 2 [ICC(1) and ICC(2)] to determine if the mean r_{wg} is statistically significant, ICC(1) is statistically significant, and ICC(2) is greater than the commonly accepted.7 threshold. The mean $r_{\rm wg}$ (.74) exceeded the critical threshold of significance (Dunlap, Burke, & Smith-Crowe, 2003). Moreover, the ICC(1) value was statistically significant for justice climate (ICC(1) = .07, F(545, 7650) = 2.24, p<.001) and the ICC(2) value was .55. Though this reliability is somewhat low, it is quite commonplace in the organizational sciences (Bliese, 2000) and makes it more difficult to detect significant effects for higher level constructs.

We conducted a post hoc validation with two established justice climate scales (Ambrose & Schminke, 2009; Colquitt, 2001) to demonstrate our scale's validity. This involved measuring justice perceptions on all three scales and comparing their means, internal consistencies, and correlations (Payne, Finch, & Tremble, 2003). Scales may be considered roughly equivalent if (a) the items appear similar to subject matter experts, (b) the mean differences are small, and (c) the correlations between the new scale and existing scales approaches the level of internal consistency of the existing scales. We used Amazon's MTurk to recruit an employed American sample (80.5% full-time). Of the 169 participants (58% male), the average age was 33.65 years (SD = 9.80), 45.6% were White, 7.1% were Black, 40.8% were Asian, 5.3% were Hispanic, and the remaining 1.2% were Native Americans. Participants responded to randomly placed items from the three justice measures.



There is conceptual similarity between our scale and both Ambrose and Schminke's (2009) measure and Colquitt's (2001) four subscales. Our scale demonstrated adequate reliability (α = .83) in the validation sample and the mean differences observed were small between this scale and that of the established scales (Ambrose & Schminke, d = .13; Colquitt, d = .23). Moreover, scores on the new scale correlated significantly with both of the existing measure's scores, and these correlations approached the internal consistency estimates (Ambrose & Schminke, α = .85, r = .69; Colquitt, α = .93, r = .84). Thus, we believe it is reasonable to view this scale as an indicator of workgroup justice climate perceptions.

Controls Prior studies have linked personality with emotional exhaustion (Swider & Zimmerman, 2010) and commitment (Kell & Motowidlo, 2012). Following the precedent of prior research (e.g., Liao et al., 2004), we controlled for personality to parse out the effects of individual personality from personality dissimilarity.

Results

Means, standard deviations, and correlations are found in Table 1. Given that emotional exhaustion (ICC = .15; F(545, 7650) = 3.08, p < .001) and organizational commitment (ICC = .18; F(545, 7650) = 4.41, p < .001) demonstrated significant cluster effects, we used multilevel modeling to test our hypotheses (see Table 2). We used the Monte Carlo method with 40,000 repetitions to create confidence intervals for both the indirect effects and the differences between the conditional indirect effects. This method (a) accounts for the random and fixed components of multilevel indirect effects, (b) performs similarly to other established methods of testing indirect effects (e.g., nonparametric bootstrapping, delta method), and (c) is simpler to implement on multilevel data than bootstrapping (Preacher & Selig, 2012).

To account for the simple effects of personality in the analyses, we controlled for conscientiousness, emotional stability, and agreeableness in our multilevel analyses. The results indicated significant effects of conscientiousness (b = -.18, t = -5.45, p < .01) and agreeableness (b = .16, t = 5.78, p < .01), but not emotional stability dissimilarity (b = .01, t = .44, p = .66) on emotional exhaustion, which in turn predicted commitment (b = -.28, t =-22.86, p < .01). In a multilevel model where the independent (IV), mediator (M), and dependent (DV) variables are all at level 1 and involve random effects, the indirect effect is more than simply the product of the stage 1 (IV-M) and stage 2 (M-DV) simple effects, as you must also add the covariance between the stage 1 and stage 2 random effects (Bauer, Preacher, & Gil, 2006). Using the Monte Carlo method, this corresponded in significant random indirect effects for both agreeableness dissimilarity (indirect effect = -.048, 95% CI [-.067, -.030]) and conscientiousness dissimilarity (indirect effect = .045, 95% CI [.022, .068]), with greater agreeableness (conscientiousness) dissimilarity relating to higher (lower) levels of exhaustion and, in turn, lower (higher) commitment. Thus, H1a and H1c were supported whereas H1b was not.

Hypothesis 2 predicted that the effects of dissimilarity in the three traits on emotional exhaustion would each be moderated by the level of justice climate within the workgroup. The cross-level two-way interactions revealed that although workgroup justice climate significantly moderated the effects of conscientiousness dissimilarity (γ = .22, t = 2.77, p < .01) and agree-ableness dissimilarity (γ = -.15, t = 2.08, p < .05), it failed to moderate the relationship between emotional stability dissimilarity and emotional exhaustion (γ = -.01, t = -.08, p = .94). As seen in Fig. 2, however, the relationship between conscientiousness dissimilarity and emotional exhaustion was in the opposite direction as predicted. Accordingly, whereas H2c was fully supported, H2a and H2b were not.

Finally, H3 anticipated that the effects of dissimilarity on emotional exhaustion (i.e., Stage 1) would be heightened

Table 1 Means, standard deviations, and correlations

Variable	M	SD	1	2	3	4	5	6	7	8
(1) Conscientiousness	4.01	0.80	_							
(2) Emotional stability	3.06	0.88	0.22	_						
(3) Agreeableness	2.47	1.06	-0.28	-0.36	_					
(4) Conscientiousness dissimilarity	1.00	0.35	-0.30	-0.03	0.09	_				
(5) Stability dissimilarity	1.08	0.40	0.24	-0.03	-0.08	0.07	_			
(6) Agreeableness dissimilarity	1.33	0.45	0.20	-0.07	0.14	0.18	0.26	_		
(7) Workgroup justice climate	3.86	0.43	0.21	0.20	-0.21	-0.19	0.02	-0.03	_	
(8) Emotional exhaustion	3.20	1.11	-0.06	-0.66	0.39	-0.02	0.06	0.16	-0.22	_
(9) Organizational commitment	3.37	1.00	0.29	0.42	-0.38	-0.13	-0.03	-0.05	0.37	-0.48

N = 8196 (level 1); N = 546 (level 2). Justice climate is at the workgroup level of analysis. Correlations > .02 (.03) are significant at the .05 (.01) level



Table 2 Summary of multilevel modeling analyses

Variable	Model 1	Model 2
Level 1		
Intercept—emotional exhaustion (EE)	3.19** (.01)	3.19** (.02)
Intercept—organizational commitment (OC)	3.38** (.01)	3.39** (.01)
Conscientiousness (C) → EE	.15** (.01)	.15** (.01)
Stability (S) \rightarrow EE	73** (.01)	73** (.01)
Agreeableness (A) \rightarrow EE	.19** (.01)	.19** (.01)
Conscientiousness dissimilarity (CD) → EE	18** (.03)	17** (.03)
Stability dissimilarity (SD) → EE	.01 (.03)	.01 (.03)
Agreeableness dissimilarity (AD) → EE	.16** (.03)	.15** (.03)
$C \rightarrow OC$.23** (.01)	.24** (.01)
$S \rightarrow OC$.09** (.01)	.09** (.01)
$A \rightarrow OC$	13** (.01)	13** (.01)
CD → OC	05 (.03)	05 (.03)
$SD \rightarrow OC$.16** (.03)	15** (.03)
AD → OC	.05* (.02)	.06* (.02)
EE → OC	28** (.01)	28** (.01)
Level 2		
Workgroup justice climate (UJC) → EE	26** (.04)	26** (.04)
UJC → OC	.55** (.04)	.58** (.04)
Cross-level interactions		
CD×UJC → EE		.22** (.08)
$SD \times UJC \rightarrow EE$		01 (.08)
AD×UJC → EE		15* (.07)
CD×UJC → OC		.04 (.08)
$SD \times UJC \rightarrow OC$.06 (.08)
$AD \times UJC \rightarrow OC$.14* (.06)
$EE \times UJC$.06* (.03)

N = 8196 (level 1); N = 546 (level 2). *p < .05, **p < .01

when justice climates were less supportive. To test these conditional indirect effects, we followed the suggestions of previous authors (Bauer et al., 2006; Edwards & Lambert, 2007) and conducted moderated path analyses where we considered the impact of the moderators on both stages of the proposed indirect effects by estimating the two stages simultaneously and employing the Monte Carlo method to determine whether the indirect effects of personality dissimilarity on commitment through emotional exhaustion were significantly different at one standard deviation below and above the mean justice climate.

The indirect effect of conscientiousness dissimilarity was moderated by justice climate, as indicated by the significant difference in the conditional indirect effects (difference = .066, 95% CI [.030, .104]). Likewise, the indirect effect of agreeableness dissimilarity was moderated by justice climate (difference = .047, 95% CI [.015, .082]). Both sets of interactions indicate that the random indirect effects of dissimilarity (negative for agreeableness and positive for conscientiousness) are stronger when organizational climates are less fair

(see Figs. 2 and 3). In short, the indirect effects of both agreeableness dissimilarity (indirect = -.070, 95% CI [-.098, -.044]) and conscientiousness dissimilarity (indirect = .086, 95% CI [.060, .114]) were significant when the justice climate was low, but both were considerably smaller when justice

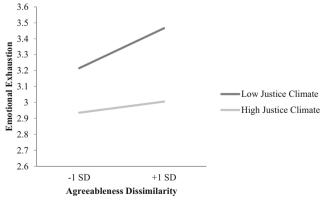


Fig. 2 The moderating effect of justice climate on the agreeableness dissimilarity-emotional exhaustion relationship



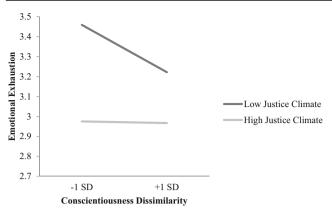


Fig. 3 The moderating effect of justice climate on the conscientiousness dissimilarity-emotional exhaustion relationship

climate was high (indirect = -.020, 95% CI [-.005, .045] and -.023, 95% CI [-.042, -.003], respectively). Neither of the interactions involving emotional stability was statistically significant (see Table 3). Thus, the third hypothesis received partial support.

Supplemental analyses

Some readers may wonder whether the effects of personality dissimilarity on emotional exhaustion are consistent across levels of personality. Though one way to test this is to examine interactions between the Euclidean distance measure of personality dissimilarity and employee personality, this approach is less comprehensive than polynomial regression and response surface methodology. Consequently, we examined the effects of personality dissimilarity using this methodology in multilevel regression.

Essentially, polynomial regression involves adding quadratic terms for the components of our cross-level interactions to our analyses. After doing so, we see that the interactions for all of the personality dimensions—conscientiousness $(\gamma = -.14, p = .01)$, emotional stability $(\gamma = -.14, p < .01)$,

Table 3 Summary of multilevel tests of moderated mediation

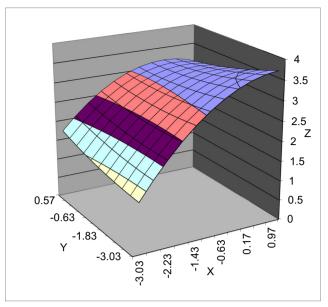
IV: conscientiousness dissimilarity	Stage 1	Stage 2	Indirect
- 1 SD justice climate	27** (.04)	32** (.02)	.086*
+ 1 SD justice climate	08 (.05)	25** (.01)	.020
Difference	.19**	.07**	.066*
IV: emotional stability dissimilarity	Stage 1	Stage 2	Indirect
- 1 SD justice climate	.01 (.04)	32** (.02)	003
+ 1 SD justice climate	.01 (.04)	25** (.01)	003
Difference	.00	.07**	.000
IV: agreeableness dissimilarity	Stage 1	Stage 2	Indirect
−1 SD justice climate	.22** (.04)	32** (.02)	070*
+ 1 SD justice climate	.09* (.04)	25** (.01)	023*
Difference	.13*	.07**	.047*

N = 8196 (level 1); N = 546 (level 2). Numbers in parentheses are standard errors *p < .05, **p < .01

Table 4 Summary of surface slopes for polynomial regressions examining personality dissimilarity

Effect	Coefficient	SE	t
(1) Con	scientiousness		
a1	0.06	0.05	1.29
a2	-0.19**	0.06	-3.24
a3	0.18**	0.06	3.16
a4	0.09	0.13	0.72
(2) Agre	eeableness		
a1	0.24**	0.04	6.84
a2	0.06	0.04	1.52
a3	0.10*	0.04	2.35
a4	0.22**	0.07	3.03
(3) Emo	tional stability		
a1	-0.92**	0.04	-23.56
a2	0.05	0.05	1.03
a3	-0.53**	0.05	-11.24
a4	0.33**	0.10	3.24

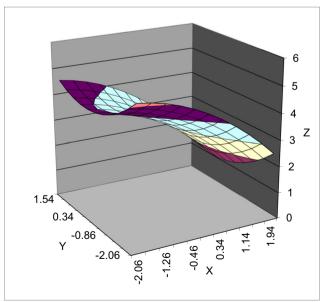
and agreeableness ($\gamma = -.08$, p < .01)—were statistically significant. Consequently, we computed the surface slopes (see Table 4) and created graphic surface plots (see Figs. 4, 5, and 6). For conscientiousness, we see that two of the four slopes (A2 and A3) are statistically significant. Emotional exhaustion (a) decreases more sharply as both individual and workgroup conscientiousness decrease and (b) is higher when the discrepancy in ratings is such that individual conscientiousness is higher than workgroup conscientiousness. For emotional stability, three of the surface slopes were significant (A1, A3, and A4). Emotional exhaustion (a) decreases as individual and workgroup emotional stability increase, (b) is higher when the discrepancy in ratings is such that workgroup emotional stability is higher than individual, and (c) increases as the degree of discrepancy in ratings increases. Finally, for agreeableness, three slopes were significant (A1, A3, and A4). Emotional



Conscientiousness

Fig. 4 The response surface plot of employee and workgroup-level conscientiousness on emotional exhaustion

exhaustion (a) increases individual and workgroup agreeableness increase, (b) is higher when the discrepancy in ratings is such that individual agreeableness is higher than workgroup agreeableness, and (c) increases as the degree of discrepancy in ratings increases. These analyses indicate that dissimilarity in all three forms of personality impact emotional exhaustion, but in more complex ways than our primary analyses suggested.



Emotional Stability

Fig. 5 The response surface plot of employee and workgroup-level emotional stability on emotional exhaustion



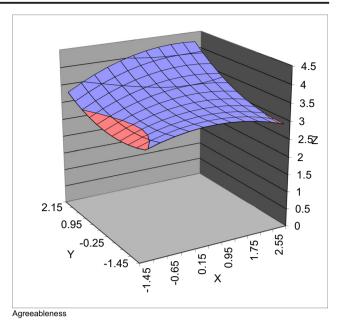


Fig. 6 The response surface plot of employee and workgroup-level agreeableness on emotional exhaustion

Discussion

We examined the indirect impact of deep level dissimilarity on organizational commitment through emotional exhaustion. We expected that individuals who differed from others in their workgroup in agreeableness, conscientiousness, or emotional stability would experience lower commitment through the mediating mechanism of heightened emotional exhaustion. In addition, we proposed that the presence of a strong justice climate would attenuate this relationship. Our predictions were partially supported by the results.

As expected, agreeableness dissimilarity related positively to emotional exhaustion and negatively (indirectly) to organizational commitment. People who differed more from their workgroup members in displaying cooperative tendencies generally tended to be more emotionally drained and detached from their organizations. The supplemental analyses revealed that this was especially the case in situations where a focal soldier was much more agreeable than their workgroup members. Encouragingly, however, our results also showed that a strong justice climate can help to mitigate this negative trend. Individuals in workgroups perceiving a strong justice climate reported universally low levels of emotional exhaustion regardless of the degree of agreeableness dissimilarity. This suggests that organizational leaders can help protect employees from negative mental states and attitudes by emphasizing through word and action that all people should be treated equitably.

Although conscientiousness dissimilarity was also significantly (and indirectly) linked to organizational commitment, the relationship was in the opposite direction as predicted.

Specifically, individuals who were dissimilar from their workgroup in conscientiousness were actually less likely to be emotionally exhausted and displayed a positive indirect relationship with commitment. A post hoc examination of the descriptive statistics provided a clue as to why this may have occurred. The mean conscientiousness score in our sample was rather high (M=4.01). Although the polynomial regression analyses showed high-conscientiousness workers working in a workgroup of low-conscientiousness members were most likely to experience emotional exhaustion, this configuration was likely quite rare in our sample. In addition, the U.S. Armed Forces have traditionally fostered cultures that stress attention to detail and punctuality. If conscientiousness dissimilarity did occur, therefore, it was more likely one lowconscientiousness worker among many responsible and hardworking workgroup members. A person generally unconcerned with deadlines and accountability is likely to be quite comfortable in such a situation, especially if the workgroup is picking up the slack. Gevers and Peeters (2009) encountered a similar conscientiousness distribution, and noted that "working with highly conscientious teammates may also mean getting better results than one would normally have anticipated, which may actually be quite satisfying" (p. 394). We encourage future researchers to explore different civilian industries and populations with greater conscientiousness diversity.

Finally, we failed to find support for our hypotheses involving emotional stability dissimilarity. Although we encourage replication given that our low reliability may have been to blame (Nunnally, 1978), null findings with this type of deeplevel dissimilarity are not without precedent (e.g., Liao et al., 2004). Perhaps more importantly, the significant polynomial regression results suggest that the relationship between emotional stability dissimilarity and emotional exhaustion is perhaps more complex than dissimilarity in conscientiousness or agreeableness. Specifically, we note that the effects of emotional stability dissimilarity appear to be curvilinear, with discrepancies having more of an impact at higher levels. Further, we see that exhaustion is highest when employees are lower than their colleagues in emotional stability. In other words, it is more taxing to be the lone unstable individual among calm colleagues than to be the only stable worker among many unstable coworkers. This may be due, in part, to the strong relationship between one's own level of emotional stability and emotional exhaustion (Swider & Zimmerman, 2010). As noted by the supplementary analyses, the employee's own level of emotional stability seemed to be a large driver of the effects. Such results may also have occurred because of the heightened emotional labor of being the lone low-stability individual trying to fit into such a levelheaded workgroup. Specifically, emotionally unstable workers may be so worried about negative social appraisals that they work extra hard to avoid living up to this reputation (Bendersky & Shah, 2013) or else make attempts to fake being calm in order to downplay these differences (Ormiston, 2016). As such, one valuable conclusion of our study is that personality dissimilarity alone may not be to blame, but that certain types of dissimilarity are more harmful to employee attitudes and well-being than others.

Theoretical implications

Our multilevel moderated mediation results using a large applied dataset have important implications for the relational demography literature. Similar to others who have moved relational demography research from a self-enhancement to an uncertainty reduction viewpoint (e.g., Guillaume, Van Knippenberg, & Brodbeck, 2014), we theorized that individuals who had markedly different personalities from their workgroup members would report being emotionally exhausted more frequently and, in turn, display lowered organizational commitment as a result of the anxiety produced by interacting with dissimilar others. Though there were caveats, the data provided some support for this process. A key contribution of the present study is to note that this internal angst occurs not only when interacting with others who look different (i.e., surface-level dissimilarity), but also those who differ in agreeableness from their workgroup members (i.e., deeplevel dissimilarity).

Much of the previous relational demography research has relied on social identity theoretical frameworks based on the similarity-attraction paradigm (Byrne, 1971). This approach suggests that being similar to others in one's workgroup facilitates attraction, resulting in more coordination, shared norms, and positive attitudes (Chatman & Flynn, 2001; Harrison et al., 2002). Employees who are different from the majority of their workgroup members, in contrast, would not share in these benefits. Although these theories have resulted in a fruitful line of research (see Guillaume et al., 2012 for a review), we further extend this line of work by illuminating effects on employee well-being.

Specifically, while interpersonal cooperation and shared mental models may be crucial for accomplishing performance-based group goals, we previously knew very little about how being different might internally impact both one's mental wellness and, distally, private attitudes about the organization. Although behavioral misalignment and communication misunderstandings may contribute to poor understanding and coordination during the actual interchange, our results suggest that dissimilarity can also result in internal strain that manifests as emotional exhaustion. When working with dissimilar workgroup members, employees likely experience anxiety related to both real and imagined differences as a result of both anxiously anticipating the interaction as well as the misunderstandings and conflict occurring during the actual interaction



(Mallett, Wilson, & Gilbert, 2008). Accordingly, we expand similarity-attraction theory to show that not only are task coordination and attitudes affected, but employees may also suffer from decreased well-being as a result of their unique personality traits. Similar to others who have explored internal mediators (e.g., Guillaume et al., 2014), we suggest that strain and well-being constructs should have a more prominent presence in future research on deep-level dissimilarity.

Practical implications

In addition to highlighting potential downsides of personality dissimilarity at work, we also identified a contextual factor that affected the strength of these effects. Our results suggest that in order to avoid negative effects of agreeableness dissimilarity, organizations should strive to create climates wherein fair policies and respectful interpersonal treatment are commonplace. Harvey (2015) noted that the simple existence of deep-level dissimilarity does not automatically result in greater information and knowledge sharing in workgroups. Instead, she found that in order for positive effects on decision making and creativity to occur, "group members must be able to both recognize that those deep-level differences exist, so they can adjust their communication accordingly, and they must be able to comprehend and appreciate why they exist, so that they are motivated to engage with the other group members' ideas" (p. 53). The relational demography literature echoes the sentiment that objective dissimilarity is not enough to bring about constructive outcomes for organizations (Kochan et al., 2003) and that often diversity initiates fail to have a positive impact (Gonzalez, 2010). In short, climate matters.

Our findings imply that fostering a strong justice climate can create an environment allowing all employees to feel comfortable and included, regardless of how different they are from their workgroup. Workgroup perceptions of justice signal to employees that each member is equally worthy and respected (Roberson & Stevens, 2006). Individuals who are dissimilar in agreeableness and conscientiousness may be particularly sensitive to these perceptions. Because just workgroups encourage norms of learning from and valuing dissimilar others (Buengeler & Den Hartog, 2015; Oberfield, 2016), employees in the numerical minority of their workgroup may feel more at ease and less threatened by their status when working in such environments (Maranto & Griffin, 2011). This is practically important, particularly when combined with the findings of Guillaume et al. (2012), who noted that deep-level personality dissimilarity can also yield positive workplace effects once the negative effects are mitigated.

Finally, our supplementary polynomial analyses allow us to offer some preliminary advice regarding optimal workgroup composition. Given that exhaustion was highest for those individuals who were high in conscientiousness, high in agreeableness, and low in emotional stability and working with others dissimilar in these dimensions, we recommend that employers should avoid creating workgroups where one person differs in one of these specific ways, particularly if burnout and commitment are particular areas of concern. Although our study showed that there may be detrimental effects in terms of focal employee well-being, we encourage future research that may uncover potential positive outcomes of having a distinct personality from one's coworkers. There may be important career development implications, for example, if one person is much more agreeable than the others in their workgroup. If taken on as a developmental challenge, the highly agreeable person may learn from his or her peers how to be more assertive and decisive, which may prove helpful in future negotiations. Similarly, a low-conscientiousness person working in a group of high-conscientiousness individuals may learn valuable organizational techniques and may adopt punctuality norms that can help better his or her overall performance and promotability.

Limitations and opportunities for future research

Regarding limitations, survey space constraints forced us to make choices among the personality factors we measured, leading us to only focus on dissimilarity in conscientiousness, emotional stability, and agreeableness. To ameliorate this concern, we note that examining dissimilarity in only a subset of the most relevant traits has precedent (e.g., Erez, Schilpzand, Leavitt, Woolum, & Judge, 2015; Gevers & Peeters, 2009) and that extraversion dissimilarity has already been examined as a predictor of emotional exhaustion (Perry et al., 2010). Further, openness to experience was meta-analytically unrelated to emotional exhaustion (Alarcon, Eschleman, & Bowling, 2009). Still, we encourage more studies to examine dissimilarity in openness to experience. We also encourage future researchers to expand the range of deep-level dissimilarity they examine to include factors such as dissimilarity in task expertise (e.g., Huang et al., 2014) or personality subfacets (Judge, Rodell, Klinger, Simon, & Crawford, 2013) when predicting emotional exhaustion and commitment. Taking agreeableness facets as an example, it may be that dissimilarity from workgroup members in terms of the warmth facet may have stronger effects on employee exhaustion than differences in modesty. Further, we encourage future research that confirms whether our findings related to the relationship between personality dissimilarity and emotional exhaustion are replicated when examining supervisor-subordinate differences.



¹ We thank an anonymous reviewer for this insightful suggestion.

Second, we only collected data at a single time point from a rather from a unique population (i.e., U.S. Armed Services personnel). The cross-sectional nature of the study may have inflated common-method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), and we therefore caution against overreliance on the findings in the absence of further studies that corroborate our results. In addition, previous researchers have demonstrated that military settings may have unique effects on relational demography outcomes (e.g., Vecchio & Brazil, 2007). Given the high level of structure and clear chains of authority inherent in the armed forces, it is conceivable that our findings may be different from tests in other industries, and we encourage replication. We also focused on individual well-being and attitudinal outcomes rather than withdrawal or performance. Although previous research has linked commitment with organizational citizenship behavior, task performance, and turnover (Meyer et al., 2002), we encourage future researchers to assess the joint impact agreeableness dissimilarity and workgroup justice climate on other outcomes that may also be of interest to organizations.

Finally, it may be that there are more proximal moderators relating to the group composition (e.g., tenure; Sung, Choi, & Kim-Jo, 2014) or structure (e.g., interdependence; Guillaume et al., 2012) that may also affect the degree to which personality dissimilarity impacts both employee emotional exhaustion and commitment. Our goal in examining these climate perceptions was a practical one: we wanted to understand how a malleable factor could be used to mitigate any negative effects of dissimilarity. Although group composition and task type may also play a role, these are often more difficult to manipulate by the supervisor, particularly after groups are already formed. Still, as we only examined a single moderating factor, we encourage future researchers to continue to build on this study by identifying other boundary conditions for these effects.

Conclusion

Our examination of the indirect effects of personality dissimilarity from workgroup members on employee commitment through emotional exhaustion yielded differential findings that extended both the deep-level dissimilarity and justice literatures. The negative effects of agreeableness dissimilarity were diminished and the positive effects of conscientiousness dissimilarity were insignificant only when workgroup perceptions of justice climate were high. The findings suggest that a strong justice climate has the ability to both reduce anxiety and tension about being dissimilar while simultaneously promoting the utilization of employees' diverse attributes. Organizations should consider the importance of promoting workgroup justice perceptions as part of their diversity management strategy.

Acknowledgements We would like to thank Tae-Yeol Kim and Ching-Yuan Meng for their helpful comments on an earlier draft and Daniel McDonald for his help with the data collection.

Compliance with Ethical Standards

Conflict of Interest The author declares that he/she has no conflict of interest.

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