

Sticking out like a sore thumb: Employee dissimilarity and deviance at work

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Abstract:

This study examined demographic- and personality-based employee dissimilarities in relation to organizational and interpersonal deviant behaviors. Perceived organizational support (POS), organizational commitment, perceived coworker support, and coworker satisfaction were proposed as mediators. The results revealed that dissimilarities in ethnicity, Agreeableness, and Openness to Experience were significantly related to organizational deviance; dissimilarities in gender, Conscientiousness, and Extraversion were significantly related to interpersonal deviance. In addition, ethnic dissimilarity negatively predicted POS and organizational commitment, age dissimilarity positively predicted perceived coworker support, Extraversion dissimilarity positively predicted coworker satisfaction, Agreeableness dissimilarity negatively predicted POS, and Openness to Experience dissimilarity negatively predicted POS, organizational commitment, perceived coworker support, and coworker satisfaction. Finally, POS partially mediated the relationship between Agreeableness dissimilarity and organizational deviance. Interpretations of results, implications for management, and future research are discussed.

Keywords: perceived organizational support | organizational deviance | agreeableness

Article:

Recent media focus on acts of workplace delinquency, aggression, and violence has rejuvenated interest in the area of deviant work behaviors (Bennett & Robinson, 2000). The prevalence and

costs of employee deviance warrant research effort to understand why, when, and how employees engage in deviance. Extant research on antecedents of deviant behaviors has focused primarily on personal factors such as personality traits, employee attitudes such as justice perceptions, job characteristics such as autonomy, and organizational factors such as control systems (See Sackett & DeVore, 2001, for a review). Few researchers have examined the extent to which an employee's work unit can influence his or her deviant behavior. Exceptions in this regard are Robinson and O'Leary-Kelly (1998) and Glomb and Liao (2003). Both of these studies found a contagious pattern of negative behaviors in work groups, underscoring the importance of examining the influence of work group characteristics on employee deviance. In this study, we draw upon workplace diversity literature and consider an employee's dissimilarity to his or her work group as an additional antecedent of employee deviance.

In the context of an increasingly diverse workforce, organizations are faced with the task of creating a work environment where employees with diverse traits and perspectives can perform effectively and contribute toward organizational goals. Paralleling organizational concerns with managing diversity, research efforts to understand the complex outcomes of diversity in the workplace have spanned several decades (see Williams & O'Reilly, 1998 and Milliken & Martins, 1996 for reviews). In order to examine the relationship between employee dissimilarity and deviance, we draw on the relational demography framework in diversity research. This approach focuses on an individual's demographic attributes relative to the work group to predict a wide array of workplace attitudes and behaviors (see Riordan, 2000 for a review). Employee dissimilarity to the work group in terms of tenure, age, gender, and ethnicity has been found to predict turnover, commitment and integration, relationships with peers, altruism, organization based self-esteem and task performance (e.g., Chattopadhyay, 1999; Jackson, Brett, Sessa, Cooper, Julin, & Peyronnin, 1991; Tsui, Egan, & O'Reilly, 1992).

This study aims to make a threefold contribution to extant research on workplace deviance and workplace diversity. First, we attempt to contribute to research on workplace deviance by examining the impact of an employee's dissimilarity to the work group on deviant behaviors. Our approach to examining the antecedents of deviance is substantively different from past efforts in this area. Traditionally, deviance research has considered individual factors (such as demographics and personality traits) and/or situational factors (such as group characteristics). Our approach incorporates individual traits *relative* to the immediate context (i.e., coworkers in this case). Although the dissimilarity construct is anchored in an individual employee, it captures the differences between the focal individual with other group members, thereby representing the "interaction" or "fit" of the focal individual with the group.

The relationship between employee dissimilarity and deviance has not been articulated in the diversity literature either. Although a few diversity studies have examined the impact of demographic dissimilarity on negative behaviors such as turnover and absenteeism (e.g., Tsui et al., 1992), there have been no attempts to date to link diversity to a broader domain of deviant behaviors. Past efforts in this regard may be viewed as isolated attempts to understand particular types of deviant behaviors. Deviance researchers have called for broadening the criterion domain to include a wide range of behavioral manifestation of the latent deviance construct with common individual and/or situational antecedents (e.g., Bennett & Robinson, 2000; Sackett & DeVore, 2001). Examining the "family" rather than specific behavior of deviance may help us

understand the pattern of interrelationships among different forms of deviance (Sackett & DeVore, 2001). In addition, the opportunity for an individual to engage in a specific deviant behavior is constrained in a workplace setting, resulting in the low base rate for any particular behavior. As a result, the individual may choose within a family of functionally equivalent deviant behaviors the one “that is least constrained, most feasible, or least costly, given the context” (Bennett & Robinson, 2000, p. 349). Therefore, measures summing across a range of deviant behaviors tend to provide more reliable and valid measures of the underlying construct (Rosse & Hulin, 1985). In this study, we adopt the behavioral family approach and examine the impact of employee dissimilarity on two families of deviance: organizational deviance and interpersonal deviance, the definitions of which will be provided in the following section.

Second, we aim to add to the literature by examining the key mechanisms through which dissimilarity relates to deviance. Our efforts parallel past research that has identified different set of antecedents for the two families of deviant behavior (e.g., Bennett & Robinson, 2000; Greenberg & Scott, 1996). Based on social exchange theory (Blau, 1964), we consider organizational deviance as an outcome of an employee's social exchange with the organization, with interpersonal deviance as an outcome of the social exchange with coworkers.

Third, our measurement of dissimilarity incorporates both *surface-level* traits (i.e., gender, ethnicity, and age) and *deep-level* traits (i.e., personality) in relation to employee attitudes and deviance (Harrison, Price, & Bell, 1998; Harrison, Price, Gavin, & Florey, 2002). Recent reviews have suggested that a majority of past research has focused on demographic diversity (Jackson, Joshi, & Erhardt, 2003). The focus on attributes such as gender, ethnicity, and age is rooted in the theme of nondiscrimination and Title VII law that galvanized early organizational efforts to address diversity. These individual attributes are also overt manifestations of attitudes and values relevant to work related behaviors and therefore of interest to researchers (Fiske, 1993). However, a growing body of research is beginning to differentiate the effects of surface aspects of diversity and deep traits such as personality, attitudes, and cognitive styles (e.g., Harrison, et al., 1998; Harrison, et al., 2002; Jehn, Northcraft, & Neale, 1999). These studies have suggested that personality- or attitudes-based diversity in work groups can have a sustained and significant impact on outcomes such as social integration and performance at the team level of analysis (Harrison et al., 2002). We contribute to this literature by examining the impact of personality diversity in addition to demographic diversity on employee attitudes and deviance at the individual level of analysis.

In what follows, we first define deviance and then advance hypotheses regarding the manner in which employees' dissimilarity to their peers can influence their level of deviance.

Deviance Defined

Following Robinson and Bennett (1995), we define deviance as employee “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both” (p. 556). Also following Sackett and DeVore (2001), we treat deviance as a facet of job performance and argue that employees may engage in deviance when they lack personal discipline, motivation, or both to conform to normative expectations of the organization (Campbell, McCloy, Opler, & Sager, 1993).

Bennett and Robinson (2000) suggested categorizing deviant behaviors into two primary families based on the target of the behavior: *organizational deviance* and *interpersonal deviance*. Organizational deviance refers to deviant behaviors directed toward the organization, examples of which include tardiness, wasting organizational resources, and stealing from the organization; interpersonal deviance refers to deviant behaviors that are directed toward other employees in the organization and examples include gossiping, verbal abuse, and stealing from coworkers (Robinson & Bennett, 1995). This target-based, two-family perspective of deviance is consistent with past research of negative organizational behavior (see Bennett & Robinson, 2000 for a review).

If the targets of deviance can differ, it would be logical to presume that the “triggers” should also be distinct. For instance, Lee and Allen (2002) argued that job affect would predict interpersonal deviance and job cognition would predict organizational deviance. Lee, Ashton, and Shin (2001) found that work-oriented traits such as Conscientiousness were more strongly related to organizational deviance and socially oriented traits such as Agreeableness and Extraversion were more strongly related to interpersonal deviance. More relevant to the current study, however, is the recent development in the field of organizational justice, where researchers have begun to apply social exchange theory to distinguish between various sources or foci of justice (e.g., Byrne, 1999; Cropanzano, Prehar, & Chen, 2002; Liao & Rupp, in press; Rupp & Cropanzano, 2002). This research has found that employees make distinct judgments about the justice treatment received from their supervisors and from the organization as a whole. In addition, supervisor-focused justice perceptions predict employee commitment and citizenship behaviors directed toward the supervisor, but organization-focused justice perceptions predict employee commitment and citizenship directed toward the organization. Further, these relationships are partially mediated by the social exchange relationships formed between the employee and each of these entities.

We believe that the workplace deviance literature can also benefit from the application of multifoci social exchange perspectives to clarify the target-based, two-family deviance approach. Specifically, we argue although employee dissimilarity may lead to deviance directed both at the organization (organizational deviance) and at its members (interpersonal deviance), the mechanism through which dissimilarity transforms into a specific family of deviance would depend on the parties involved in the exchange. From a social exchange perspective, interpersonal deviance can be viewed as an outcome of the one-to-one exchanges between individuals and coworkers or peers. On the other hand, organizational deviance can be seen as a manifestation of the nature of exchange between an employee and the organization.

Our research represents a theory-driven effort to assess the distinct mechanisms that lead to the two types of deviance. In addition, we argue that employee demographic dissimilarity and personality dissimilarity will operate differently in influencing employee social exchange relationships at work, which further influence employee deviant behaviors. Figure 1 outlines the conceptual model proposed in this study.

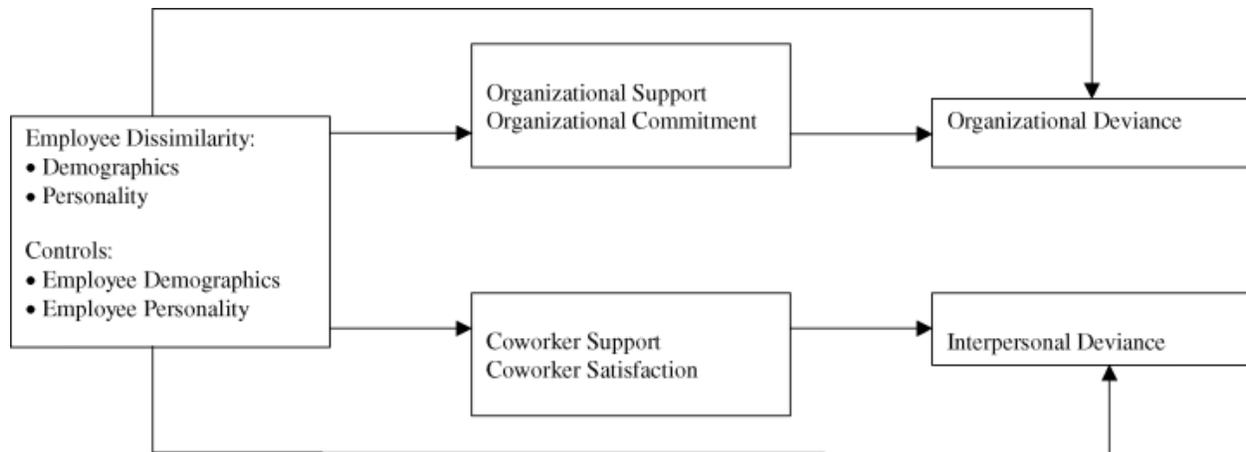


Figure 1. Conceptual Model of Employee Dissimilarity and Deviance.

Demographic Dissimilarity and Deviance

Social identity theory (Tajfel, 1982) and social exchange theory (Blau, 1964) together provide a useful framework for understanding the relationship between demographic dissimilarity and workplace deviance.

Social identity theory has been used extensively in relational demography research. The theory proposes that individuals define themselves in relation to their social environment and identify with others based on perceived similarity (Tajfel, 1982). When employees do not share the predominant traits of the group, they may face negative consequences including exclusion from formal and informal interactions, bias, and discrimination (Brewer, 1996; Kramer, 1991). Consistent with this theory, researchers have found that demographic dissimilarity predicts negative attitudes towards supervisors and peers (e.g., Schaubroeck & Lam, 2002), work groups (e.g., Tsui et al., 1992) as well as the organization (e.g., Chattopadhyay, 1999).

We propose that dissimilar employees may engage in deviant behavior as a result of lower levels of identification with and higher levels of withdrawal from the work group. Prior research has examined employee demographic dissimilarity in relation to outcomes such as satisfaction, commitment, performance, and turnover (see Riordan, 2000; for a review). For instance, Chattopadhyay (1999) found that ethnicity-based dissimilarity was negatively related to self-esteem (an outcome of social identification), which in turn predicted altruistic behaviors toward coworkers. Jackson and colleagues found that dissimilarity in terms of education and industry experience predicted attrition or turnover in top management teams (Jackson et al., 1991). Further, at the work group level, research has found that overall diversity is positively associated with the level of workplace aggression experienced and witnessed by employees (Baron & Neuman, 1998). Based on the social identity theory and the empirical evidence, we propose that demographically dissimilar employees are less likely to identify with others at work and thereby more likely to violate the normative expectations of the organization and to engage in behaviors that are harmful to the organization and its members. Therefore:

Hypothesis 1a: Demographic dissimilarity is positively related to interpersonal and organizational deviance.

The mediated effects of demographic dissimilarity on organizational deviance

Whereas dissimilarity may predict organizational deviance directly, we also propose that this relationship is partially mediated by perceived organizational support (POS) and organizational commitment. POS refers to the extent to which employees perceive that the organization cares about their values, opinions, and needs and that they will receive help when needed (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Organizational commitment refers to the affective attachment felt by an employee toward the organization (Mowday, Steers, & Porter, 1979). It consists of an employee's acceptance of organizational goals and values as well as willingness to exert effort on behalf of the organization (Mowday et al., 1979). Based on the social identity theory discussed above, demographically dissimilar employees are less likely to participate in effective communications and form cooperative relationships with organizational agents such as supervisors and managers (Chatman, Polzer, Barsade, & Neale, 1998; Tsui & O'Reilly, 1989). These employees are often excluded from formal and informal sources of authority and power, and lack support networks required to succeed in organizations (Kirchmeyer, 1995). In addition, employees who are dissimilar perceive a lack of fit with the organization (O'Reilly, Caldwell, & Barnett, 1989) and, as a result, are less committed to the organization (O'Reilly, Chatman, & Caldwell, 1991). Therefore, it is conceivable that demographically dissimilar employees perceive less organizational support and are less committed to the organization.

We further argue that POS and commitment can predict organizational deviance. Research on deviant behaviors in organizations has established that apart from stable individual traits (such as Big Five personality dimensions), variable individual attributes such as attitudes toward the workplace can also influence counterproductive behaviors at work (Sackett & DeVore, 2001). For instance, Aquino, Lewis and Bradfield (1999) found that perceptions of justice were significant predictors of interpersonal as well as organizational deviance. Others have found that feelings of frustrations regarding organizational policies and practices can also precipitate interpersonal aggression, sabotage, and waste of time and materials (Fox & Spector, 1999; Greenberg, 1990; Spector, 1975). We extend this line of inquiry to examine POS and commitment as predictors of organizational deviance.

Our propositions in this regard are based on social exchange theory (Blau, 1964). This theory suggests that when an individual supplies rewarding services, he or she expects that the recipient of this service will be obliged to reciprocate. The recipient, in turn, will treat the individual favorably to unload this obligation (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). Organizations offer several avenues for social transactions and individuals can distinguish between the various partners involved in the exchange (Cropanzano et al., 2002). Individuals will direct their behaviors to various partners based on the specific nature of their social exchange with them (Cropanzano et al., 2002). For instance, specific perceptions regarding procedures and policies in the organization can manifest in attitudes and behaviors directed toward the organization, and perceptions of the supervisor can manifest in attitudes toward the supervisor (Masterson, Lewis, Goldman, & Taylor, 2000). In an organizational setting, when employees perceive that they are supported by the organization (i.e., a favorable exchange) they will respond by directing positive behaviors toward the organization. In support of the social exchange perspective, POS has been shown to correlate with positive affect and organizational

spontaneity (Eisenberger et al., 2001) and desire to remain in the organization (Nye & Witt, 1993).

Conversely, when employees perceive lack of support from the organization, they will become less motivated to refrain from behaviors that harm the organization. Past research has established that unfavorable behaviors such as absenteeism, intentions to leave, and turnover are consequences of perceived lack of organizational support (Guzzo, Noonan, & Elron, 1994; Rhoades & Eisenberger, 2002; Wayne, Shore, & Liden, 1997).

Social exchange theory has also been applied to explain the relationships between organizational commitment and employee positive behaviors such as organizational citizenship behavior (Organ, 1990). It is also plausible that low levels of commitment reflect an employee's disenchantment with his or her exchange relationship with the organization; the employee may be more likely to engage in deviant behaviors directed toward the organization. A vast body of research on organizational commitment has found consistent support for a negative relationship between organizational commitment and work withdrawal, intention to quit, and turnover (Cotton & Tuttle, 1986; Farkas & Tetrick, 1989; Lee & Mowday, 1987; Mathieu & Zajac, 1990; Mobley, Horner, & Hollingsworth, 1978). These findings suggest that when employees are less committed to the organization, they may feel less obliged to abide by organizational norms and more likely to engage in deviant behaviors directed toward the organization.

Taken together, the theories and empirical findings discussed above suggest that although employee dissimilarity can directly predict organizational deviance, this relationship may also be influenced by employees' perceptions of lack of support from the organization as well as lower organizational commitment. Therefore we propose:

Hypothesis 1b: Employee perceived organizational support and organizational commitment partially mediate the relationship between demographic dissimilarity and organizational deviance.

The mediated effects of demographic dissimilarity on interpersonal deviance

Based on the logic discussed above, we also propose that the relationship between demographic dissimilarity and interpersonal deviance may be partially mediated by employee-perceived coworker support and coworker satisfaction. Coworker support refers to the extent to which employees can count on their colleagues to help and support them when needed (Haynes, Wall, Bolden, Stride, & Rick, 1999). Coworker satisfaction reflects an employee's cognitive evaluations and affective responses toward his or her coworkers (Smith, Kendall, & Hulin, 1969). The social identity theory suggests that demographic similarity fosters communication, trust, and reciprocity among peers and results in positive attitudes toward peers (Tajfel, 1982). Consistent with this theory, employees' demographic dissimilarity to the work group has been found to negatively predict social integration and peer support (Tsui & O'Reilly, 1989), and positively predict feelings of tension, animosity, and annoyance toward the group members (Randel, 2002). Based on these findings, we surmise that demographically dissimilar individuals may receive less support from their coworkers and may be less satisfied with their coworkers.

The social exchange theory (Blau, 1964) serves as a basis to understand the relationship between coworker support and coworker satisfaction and interpersonal deviance. Earlier we argued, based on the multifoci social exchange perspective, that individuals differentiate between actors involved in their exchange relationship and direct behaviors toward these actors based on the specific content of their relationship (e.g. Cropanzano, et al., 2002). This logic would also apply to the effects of coworker support and satisfaction on interpersonal deviance. Without personal support from or satisfaction with coworkers, individuals may commit negative acts targeted at team members such as aggression, verbal abuse, and stealing from coworkers. These employees are more inclined to treat their coworkers badly either because they dislike their coworkers or as a way to avenge lack of support from coworkers. Anderson and Pearson (1999) provide a theoretical explanation of the “incivility spiral” in which a tit-for-tat pattern creates an escalatory series of uncivil behaviors. Glomb and Liao's (2003) empirical examination of interpersonal aggressive behaviors within work groups also suggests a pattern of negative social exchange—an employee may “reciprocate” unfair or adverse treatment from workgroup members by engaging in aggression towards coworkers. Thus, it is conceivable that coworker support and satisfaction are important mechanisms through which employee dissimilarity can influence interpersonal deviance. Hence, we propose the following:

Hypothesis 1c: Employee perceived coworker support and satisfaction with coworkers partially mediate the relationship between employee demographic dissimilarity and employee interpersonal deviance.

Personality Dissimilarity and Deviance

In addition to demographics, personality is another key factor in judging perceived similarity (Day & Bedian, 1995). However, to date, research has not examined an individual's personality-based dissimilarity in relation to deviant behaviors. In what follows, drawing on the personality research as well as the framework provided by social identity theory (Tajfel, 1982) and social exchange theory (Blau, 1964), we argue that employees' personality dissimilarity may influence their social exchange relationships in a work group, which further influence their level of deviance. We employ the Big Five personality taxonomy, which has received convincing evidence of validity across different cultures, occupations, rating sources, and measures (e.g., Barrick & Mount, 1991; De Raad & Doddema-Winsemius, 1999).

Although extant empirical testing of the social identity theory has been focused on examining the impact of demographic-based dissimilarity, the theory itself is not limited to demographics; personality can serve as well as any other criterion as a basis for social identification. In general, people who share personality traits use common referents in perceiving, interpreting, and acting on social information (Day & Bedeian, 1995; Schaubroeck & Lam, 2002). Therefore, personality similarity may increase interpersonal attraction (Day & Bedian, 1995) and facilitate communication among employees (Schaubroeck & Lam, 2002). An individual's effective interaction with others at work is crucial to the individuals' accumulation of social capital, integration into the social environment, and organizational advancement (Chatman, 1989; O'Reilly et al, 1989; Schaubroeck & Lam, 2002). Extending this argument, it is conceivable that employees who are dissimilar to their peers, based on personality, will have difficulty communicating effectively with peers, achieving cooperative relationships with them,

and integrating into the organizational environment. As result, they will receive lower levels of task-related resources such as information, economic resources such as money, and socioemotional resources such as caring and respect from the work environment (Aselage & Eisenberger, 2003). Lack of access to these resources can lead to lower POS, organizational commitment, coworker support, and coworker satisfaction (Aselage & Eisenberger, 2003; Eisenberger et al., 1986).

Although the above arguments seem to apply to all dimensions of personality, recent research has shown that the effect of dissimilarity may vary across the different personality dimensions. Specifically, consistent with the theoretical framework we discussed earlier, higher dissimilarity on some dimensions, including Conscientiousness and Agreeableness, can indeed have a deleterious effect on an individual's social integration and social exchange in a work group (e.g., Barrick, Stewart, Neubert, & Mount, 1998; Day & Bedeian, 1995; Neuman, Wagner, & Christiansen, 1999). For example, Barrick et al. (1998) found that larger variance among team members on Conscientiousness was correlated with lower team performance and that larger variance on Agreeableness was correlated with lower social cohesion and more team conflict. In addition, Day and Bedeian (1995) found that an individual's dissimilarity to his or her peers on Agreeableness was negatively related to the individual's performance.

On the other hand, dissimilarity on other personality dimensions, such as Extraversion, has been found to facilitate healthy interactions between an individual and peers (e.g., Aamodt & Kimbrough, 1982; Barrick et al., 1998; Barry & Stewart, 1997; Neuman et al., 1999). For instance, Extraversion is positively related to leadership behavior (Barrick et al., 1998) and can serve to illustrate situations where dissimilarity can have beneficial effects. Consider a team that is homogenous based on Extraversion and all members display high levels of Extraversion. This team has too many extraverts; it is a group full of leaders with no followers to fill complementary roles. This situation may result in conflicts and power struggles among group members and be debilitating for a team's functioning. At the same time, a homogeneous team with too few extraverts may lack the necessary leadership to perform effectively (Barry & Stewart, 1997). Extending this logic further, a group that is heterogeneous in terms of Extraversion may perform effectively because some members can fill leadership roles while other members can contribute as followers (Neuman et al., 1999). Indeed, Barrick et al. found that the variance or dispersion of Extraversion was positively related to social cohesion at the group level and Neuman et al. found team diversity in Extraversion was positively related to team performance.

Based on the above empirical evidence, we propose a logic borne out of the person–environment fit (PE) research to distinguish between *supplementary fit* and *complementary fit* (Muchinsky & Monahan, 1987). Supplementary fit implies that “a person fits into some environmental context because he or she supplements, embellishes, or possesses characteristics which are similar to other individuals in this environment” (p. 269). The supplemental fit model implies that an individual may fit better in a work group if he or she shares similar personality traits as their peers, which is largely consistently with the argument based on social identity theory. On the other hand, complementary fit refers to the situation where the characteristics of an individual serve to complement the characteristics of the environment (Muchinsky & Monahan, 1987). The complementary fit model entails that an individual may fit better in a work group if he or she is

dissimilar to the work group based on certain personality dimensions. The individual's personality dissimilarity may complement those of the peers and contribute unique attributes that are necessary for the group to be successful.

The empirical evidence accumulated so far suggests that Conscientiousness and Agreeableness function in a way more consistent with the supplementary fit model, and Extraversion functions in a way more consistent with the complementary fit model (Aamodt & Kimbrough, 1982; Barrick et al., 1998; Barry & Stewart, 1997; Day & Bedeian, 1995; Neuman et al., 1999). Therefore, we expect that being dissimilar in terms of Conscientiousness and Agreeableness hinders an individual's supplementary fit at work, thereby increasing his or her motivation to violate normative work expectations. On the other hand, we expect that being dissimilar in terms of Extraversion enhances an individual's complementary fit at work thereby decreasing his or her motivation to violate work norms. Thus, we propose the following:

Hypothesis 2a: Employee dissimilarity to the work group in terms of Conscientiousness and Agreeableness is positively related to organizational and interpersonal deviance.

Hypothesis 2b: Employee dissimilarity to the work group in terms of Extraversion is negatively related to interpersonal and organizational deviance.

We examine the impact of the other two Big Five personality dimensions, Neuroticism and Openness to Experience, on deviance in an exploratory fashion, hoping that empirical findings in this study will provide impetus for future theoretical development and empirical investigation of these less-explored dissimilarity dimensions in the diversity literature.

In addition, we believe that the social exchange arguments involving employee perceived support, organizational commitment, coworker satisfaction, and deviant behaviors that were developed in the previous section also apply to personality-based dissimilarity. Therefore, we propose the following hypotheses:

Hypothesis 2c: The relationship between employee personality dissimilarity and organizational deviance is partially mediated by employee POS and organizational commitment.

Hypothesis 2d: The relationship between employee personality dissimilarity and interpersonal deviance is partially mediated by employee perceived coworker support and coworker satisfaction.

Methods

Participants and Procedures

Thirty of the fifty-two franchised stores of a midwest family-style restaurant chain participated in the study. The average number of employees per store is 25. The employees perform interdependent roles in serving customers and often work on flexible shifts, thus having opportunities to interact with all other employees and supervisors in the same store. We therefore

consider the store as the relevant work group for the employees. We provided each store with copies of questionnaires and return envelopes. To ensure complete anonymity, no names or identification numbers were associated with the surveys and we instructed the employees to drop their surveys in sealed envelopes at a central collection box or to send their responses directly to us. We received 351 employee surveys, representing an average response rate of 47% across the 30 stores. Only stores with five or more respondents were retained for analysis. We chose this cut-off because biases in using aggregate or composition scores (such as the dissimilarity measures employed in this study) begin to diminish with groups of five or more employees (Bliese & Halverson, 1998). After listwise deletion of entries with missing data on relevant study variables, we had a final usable sample of 286 employees from 26 stores, with the number of employees per store ranging from 5 to 21 ($M= 11$). Eighty-eight percent of the sample was Caucasian and 67% were women; the average age was 26 years old and the average tenure was 2.51 years.

Measures

Deviance behavior

Interpersonal deviance was assessed via six items of the interpersonal deviance scale developed by Bennett and Robinson (2000). Items include “made fun of someone at work,” “said something hurtful to someone at work,” “cursed someone at work,” “played a mean prank on someone at work,” “acted rudely toward someone at work,” and “publicly embarrassed someone at work.” *Organizational deviance* was assessed via six items deemed relevant for the restaurant setting, adapted from the organizational deviance measure of Bennett and Robinson (2000). Items include “damaged property belonging to your employer,” “stole from the restaurant,” “took frequent or long coffee or lunch breaks,” “did poor quality work,” “used equipment for personal use without permission,” and “was absent from work.” Employees rated how often they engaged in these behaviors during the past 6 months on a 5-point Likert scale with anchors ranging from 1 = *never* 5 = *to once a week or more*.

To examine the factor structure of these deviance items, we conducted a confirmatory factor analysis (CFA) using LISREL 8.54. We followed Bollen's (1989) recommendations and examined multiple indexes of fit, including the chi-square test, the root-mean-square residual (RMSR), normed fit index (NFI), the goodness of fit index (GFI), and the comparative fits index (CFI). Further, we followed Anderson and Gerbing's (1988) recommendation to assess the *convergent validity* of the two-factor model by examining “whether each indicator's estimated pattern coefficient on its posited underlying construct factor is significant” (p. 416), and to assess the *discriminant validity* of the two scales by “constraining the estimated correlation parameter (qb_{ij}) between them to 1.0 and then performing a chi-square difference test on the values obtained for the constrained and unconstrained models” (p. 416). Finally, Anderson and Gerbing recommended a complementary assessment of discriminant validity by examining whether the 95% confidence interval around the correlation coefficient contains 1.

The CFA results using the covariance matrix as input revealed the following: (a) the one-factor model fits the data marginally ($\chi^2_{[df=54]}= 310.26$, RMSR = .082, NFI = .87, CFI = .89, IFI = .89); (b) the two-factor model fits the data reasonably well ($\chi^2_{[df=53]}= 179.10$, RMSR = .06, NFI = .92,

CFI = .94, IFI = .94); (c) the two-factor model is a statistically significant better fit than the one-factor model ($\Delta\chi^2_{[df=1]} = 131.16, p < .001$); (d) the lambdas for each item in the two-factor model are statistically significant—providing convergent validity of each of the two measures; (e) the χ^2 value for the model in which the correlation between organizational and interpersonal deviance is constrained to be 1 is 262.08, and the χ^2 value for the unconstrained model (i.e., correlation is free to be estimated) is 179.10, which is significantly lower than the constrained model ($\Delta\chi^2_{[df=1]} = 82.98, p < .001$), thereby suggesting the imposed constraint is unrealistic; and (f) The 95% confidence interval of the correlation between the organizational deviance and interpersonal deviance is (.53–.73), which does not contain the value of 1, further suggesting that it is highly unlikely for organizational deviance and interpersonal deviance to be correlated at 1.

Based on the above results, we conclude that we have obtained strong evidence for the convergent validity and discriminant validity of the organizational deviance and interpersonal deviance scales, thus providing support for the two-factor structure.

Personality dimensions

The five personality variables were each measured by a 10-item scale from the International Personality Item Pool (IPIP) developed by Goldberg (1999). Respondents were asked to rate how accurately each item describes them as they generally are on a 5-point scale (1 = *very inaccurate* to 5 = *very accurate*).

Dissimilarity variables

To create the demographic- and personality-based dissimilarity variables, we first assessed each individual respondent's demographics regarding gender (1 = *female*, 0 = *male*), ethnicity (1 = *Caucasian*, 2 = *African American*, 3 = *Hispanic*, 4 = *Asian/Pacific Islander*, 5 = *Native American/Alaskan*), age, as well as the individual's personality traits. Individual dissimilarity measures reflect an individual's differences in terms of the aforementioned demographic and personality dimensions relative to his or her coworkers in the work group (Tsui & O'Reilly, 1989). Individual dissimilarity to the group is operationalized as a Euclidean distance measure that is the square root of the average squared distance of an individual relative to all other members of the group (Tsui & Gutek, 1999). For a continuous measure such as Extraversion, if the difference between the Extraversion score of Person A and B in a group was 2, the Extraversion related squared distance between A and B would be 4. Similar squared distances were calculated for Person A relative to all members in the group, summed and then divided by the total number of coworkers in the group. The square root of the resulting number measured an individual's Extraversion-based dissimilarity to the group. For categorical measures such as ethnicity, a squared distance score of "1" indicated that two individuals belonged to two different ethnic groups. A score of "0" indicated that they belonged to the same ethnic group. As in the case of continuous measures, once an individual's distance vis-a-vis all other group members was calculated, it was summed and divided by the number of coworkers in the group. The square root of the resulting number indicated the person's ethnic dissimilarity. We included only stores with five or more respondents to create measures of individual dissimilarity to reduce nonresponse bias.

Perceived organizational support

POS is assessed by Eisenberger, Cummings, Armeli, and Lynch's (1997) 8-item, short version of the Survey of Perceived Organizational Support (SPOS). Respondents indicated the extent to which they agree or disagree with statements such as “your restaurant considers your goals and values” on a 7-point Likert scale (1 =*strongly disagree* and 7 =*strongly agree*).

Organizational commitment

Organizational commitment was measured via Mowday et al.'s (1979) Organizational Commitment Questionnaire (OCQ). The shortened 9-item version of the scale, which has shown higher internal consistency reliability, was selected for this study. Respondents answered their level of agreement on a 7-point scale ranging from strongly disagree to strongly agree with statements such as “I am willing to put in a great deal of effort beyond that normally expected in order to help this restaurant be successful.”

Perceived coworker support

The 4-item scale developed by Haynes, Wall, Bolden, Stride, and Rick (1999) was used to measure employee's perceived coworker support that included items such as the extent to which the respondents can “count on your coworkers to back you up at work.” The response scale ranged from 1 =*not at all* to 5 =*completely*.

Satisfaction with coworkers

Coworker satisfaction was assessed using five items of the Coworker scale from the Job Descriptive Index (JDI; Smith et al., 1969), as revised by Roznowski (1989). The five items was chosen based on recent research using item response theory to find items most representative of the overall construct (Roznowski, 1989). Participants responded Yes, ?, or No to adjectives describing relevant characteristics of their coworkers such as “boring,” “helpful,” and “responsible.”

Control variables

We included the following individual-level control variables so we can be more confident about the unique contribution of dissimilarities on employee attitudes and deviance: gender, ethnic minority status (1 =*ethnic minority*, 0 =*Caucasian*; to preserve statistical power, we collapsed all the non-Caucasian ethnic groups into one category), age, tenure, and individual scores of Conscientiousness, Agreeableness, Neuroticism, Extraversion, and Openness to Experience.

Data Analysis

Because individuals in the same restaurant are exposed to a similar context, the assumption of independent observations that underlies traditional ordinary least square (OLS) regressions may be violated. As a result, traditional OLS regressions will generate biased estimates of the standard errors and invalid test statistics. Therefore, we adopted Hierarchical Linear Modeling

(HLM; Bryk & Raudenbush, 1992), which explicitly takes into consideration the nested nature of the data. In addition, HLM improves precision of estimation by providing (a) Empirical Bayesian estimates of the randomly varying Level-1 coefficients (or random effects) based on all of the information in the ensemble of data, (b) generalized least squares estimates of Level-2 coefficients (or fixed effects) such that stores with more reliable and precise Level-1 estimates receive more weight, (c) robust standard error estimates that are consistent even when HLM assumptions are mistaken, and (d) efficient estimates of the variance–covariance components through interactive computing procedures for unbalanced data (i.e. stores with different number of employees; Bryk & Raudenbush, 1992). In this study, we entered the outcomes and independent variables at Level 1. We do not have any store-level predictors or any cross-level interactions, so no variables were entered at Level 2. We left the random error in the Level-2 intercepts to be freely estimated in order to capture the between-store variance in the outcome variables (Bryk & Raudenbush, 1992). We also computed R-square for each model following the procedure described in Bryk and Raudenbush (1992).

Results

Descriptive statistics, intercorrelations, and scale Cronbach's alphas are presented in Table 1. Table 2 presented the HLM results when predicting the mediators. Table 3 displayed the HLM results when predicting the two forms of deviance.

Hypotheses 1a, 2a, and 2b proposed that dissimilarities in demographic, Conscientiousness, and Agreeableness would be positively related to deviance, and dissimilarities in Extraversion would be negatively related to deviance. As reported in Model 2 and Model 5 of Table 3, after controlling for employee personality as well as demographic variables, gender dissimilarity was positively related to interpersonal deviance ($\hat{\gamma} = .89, p < .01$), Conscientiousness dissimilarity was positively related to interpersonal deviance ($\hat{\gamma} = .37, p < .05$), Agreeableness dissimilarity was positively associated with organizational deviance ($\hat{\gamma} = .29, p < .01$), and Extraversion dissimilarity was negatively related to interpersonal deviance ($\hat{\gamma} = -.29, p < .05$), which were consistent with these hypotheses. However, contrary to our hypotheses, age dissimilarity had no significant relationship with organizational or interpersonal deviance, and ethnic dissimilarity had a negative relationship with organizational deviance ($\hat{\gamma} = -.29, p < .01$). Thus, Hypothesis 1a, 2a, and 2b received partial support.

Table 1. Means, Standard Deviations, Intercorrelations, and Coefficient Alphas ^a

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Organizational deviance	1.50	.59	(.74)																					
2. Interpersonal deviance	1.63	.79	.52	(.83)																				
3. Organizational support	5.00	1.30	.18	.22	(.91)																			
4. Coworker support	3.54	.98	.04	-.06	.35	(.86)																		
5. Organizational commitment	4.86	1.36	-.24	-.34	.64	.28	(.93)																	
6. Coworker satisfaction	2.23	.76	-.23	-.36	.34	.37	.38	(.76)																
7. Female	.67	.47	-.17	-.32	.06	.16	.06	.18	-															
8. Minority	.12	.33	.02	-.04	.03	-.02	.11	.05	-.17	-														
9. Age	26.40	11.65	-.17	-.20	.05	.00	.23	.03	.03	.03	-													
10. Tenure	2.51	4.81	-.09	-.05	.15	.02	.14	-.01	.02	-.01	.44	-												
11. Conscientiousness	3.74	.58	-.38	-.38	.13	.12	.31	.20	.18	-.07	.27	.15	(.79)											
12. Neuroticism	2.68	.67	.20	.17	-.13	-.03	-.19	-.14	-.03	-.04	-.15	-.11	-.34	(.83)										
13. Extraversion	3.45	.69	-.05	.06	.00	.08	.05	.07	.19	.03	-.13	-.11	.23	-.26	(.85)									
14. Agreeableness	3.95	.59	-.30	-.40	.15	.22	.28	.31	.38	-.10	.05	.05	.56	-.19	.30	(.81)								
15. Openness to Experience	3.66	.58	-.12	.02	.06	.01	.06	-.04	-.01	-.06	-.18	-.14	.32	.00	.38	.40	(.77)							
16. Gender dissimilarity	.65	.16	.15	.32	-.11	-.16	-.08	-.16	-.75	.09	-.11	-.08	-.14	.13	-.15	-.26	.06	-						
17. Ethnicity dissimilarity	.37	.30	.03	.02	-.12	-.05	-.04	-.03	-.13	.73	.05	-.01	-.16	.06	.03	-.11	-.06	.16	-					
18. Age dissimilarity	14.48	6.67	-.14	-.11	.08	.10	.20	.07	.09	-.05	.62	.32	.24	-.04	-.10	.11	-.11	-.15	.00	-				
19. Conscientiousness dissimilarity	.78	.29	-.01	.09	-.04	-.02	.02	-.05	.10	-.06	.04	.02	.01	.05	.02	.07	.08	-.09	-.15	.15	-			
20. Neuroticism dissimilarity	.86	.33	-.08	-.06	.07	-.01	.03	-.03	-.01	-.03	-.05	-.01	.04	.11	-.08	.04	.19	.05	-.13	.03	.19	-		
21. Extraversion dissimilarity	.95	.31	-.09	-.12	-.03	.04	-.01	.06	.04	-.10	.04	.05	.10	.03	-.01	.16	.21	-.02	-.13	.09	.18	.21	-	
22. Agreeableness dissimilarity	.80	.27	.13	.13	-.17	-.03	-.10	-.15	-.09	.15	.04	-.04	-.07	.04	.04	-.12	-.03	.13	.25	.07	.33	-.05	.07	-
23. Openness to Experience dissimilarity	.77	.26	-.08	.02	-.09	-.11	-.12	-.15	.01	.03	-.06	-.02	.01	-.02	.07	-.03	.11	-.06	-.08	-.14	.09	.11	.26	.12

Notes. *N*= 286. Coefficient alphas are in parenthesis along the diagonal.

Female was coded so that 1 =female and 0 =male; Minority was coded so that 1 =ethnic minority and 0 =Caucasian.

Correlations (in absolute values) equal or greater than .11 were significant at *p* < .05.

Table 2. Hierarchical Linear Modeling Results Predicting Hypothesized Mediators

	Variable	Organizational support Model 1	Organizational commitment Model 2	Coworker support Model 3	Coworker satisfaction Model 4
<i>Controls</i>	Intercept	5.36**	2.78*	3.08**	2.02**
	Female	.12	.00	.00	.03
	Minority	.99*	1.26**	.25	.41*
	Age	.00	.01	-.01	.00
	Tenure	.02	.00	.00	-.01
	Conscientiousness	-.07	.26	.04	.07
	Neuroticism	-.23	-.15	.04	-.05
	Extraversion	-.14	-.03	.07	.02
	Agreeableness	.20	.47*	.32**	.40**
	Openness to Experience	.27	-.01	-.15	-.26**
<i>Dissimilarities</i>	Gender dissimilarity	.07	.32	-.63	-.20
	Ethnicity dissimilarity	-.93	-.98**	-.29	-.25
	Age dissimilarity	.01	.01	.02*	.00
	Conscientiousness dissimilarity	.10	.10	-.26	-.13
	Neuroticism dissimilarity	-.16	-.09	.01	-.03
	Extraversion dissimilarity	.05	-.08	.18	.27*
	Agreeableness dissimilarity	-.48*	-.32	.14	-.25
	Openness to Experience dissimilarity	-.61**	-.57*	-.46*	-.45**
R^2	.04	.17	.04	.14	

Note. Entries corresponding to the predicting variables are estimations of the fixed effects, γ s, with robust standard errors.

* $p < .05$ ** $p < .01$. Two-tailed tests for the control, Neuroticism dissimilarity, and Openness to Experience dissimilarity variables; one-tailed tests for the directionally hypothesized dissimilarity variables.

Table 3. Hierarchical Linear Modeling Results Predicting Organizational and Interpersonal Deviance

	Variable	Organizational deviance			Interpersonal deviance		
		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Controls</i>	Intercept	2.73**	2.79**	3.07**	3.05**	2.35**	2.74**
	Female	-.13*	-.10	-.10	-.39**	-.18	-.17
	Minority	-.04	.13	.22	-.26	-.20	-.01
	Age	-.00	.00	.00	-.01*	-.01*	-.01
	Tenure	.00	.00	.00	.02**	.02**	.02**
	Conscientiousness	-.26**	-.28**	-.27**	-.31**	-.33**	-.30**
	Neuroticism	.09	.09	.07	.10	.07	.04
	Extraversion	.08	.08	.06	.25**	.23**	.22**
	Agreeableness	-.11	-.10	-.07	-.39**	-.38**	-.30**
	Openness to Experience	-.05	-.01	-.01	.15	.18	.17
<i>Dissimilarities</i>	Gender dissimilarity		.05	.07		.89**	.96**
	Ethnicity dissimilarity		-.29**	-.37**		-.10	-.24
	Age dissimilarity		.00	.00		.01	.01
	Conscientiousness dissimilarity		-.05	-.04		.37*	.37**
	Neuroticism dissimilarity		-.10	-.10		-.18	-.18
	Extraversion dissimilarity		-.03	-.03		-.29**	-.29**
	Agreeableness dissimilarity		.29**	.21*		.11	-.01
	Openness to Experience dissimilarity		-.25	-.28*		.06	-.01
<i>Mediators</i>	Organizational support			-.06*			-.03
	Organizational commitment			-.02			-.09**
	Coworker support			.12**			.13**
	Coworker satisfaction			-.12**			-.17**
	R ²	.15	.16	.21	.30	.33	.40

Note. Entries corresponding to the predicting variables are estimations of the fixed effects, γ s, with robust standard errors.

* $p < .05$ ** $p < .01$. Two-tailed tests for the control, Neuroticism dissimilarity, and Openness to Experience dissimilarity variables; one-tailed tests for the mediators and directionally hypothesized dissimilarity variables.

Hypotheses 1b, 1c, 2c, and 2d proposed that organizational support, organizational commitment, coworker support, and coworker satisfaction acted as mediators of the relationships between employee dissimilarities and deviant behaviors. These hypotheses were tested using Baron and Kenny's (1986) three-part regression procedure, which specified that for a partial mediation effect to exist, (a) the predictor is correlated with the proposed mediator, (b) the predictor is correlated with the outcome variable, and (c) the relationship between the predictor and the outcome variable remains significant but its magnitude decreases when the mediator is also included in the regression equation. The analyses shown in Table 2 and Table 3 indicated no mediation effect except that POS partially mediated the relationship between Agreeableness dissimilarity and organizational deviance. As reported in Model 1 of Table 2 and Models 2 and 3 in Table 3, Agreeableness dissimilarity was negatively related to organizational support ($\gamma = -.48, p < .05$) and was positively related to organizational deviance ($\gamma = .29, p < .01$). After controlling for organizational support, which was also significant ($\gamma = -.06, p < .05$), the effect of Agreeableness dissimilarity on organizational deviance was reduced to .21 ($p < .05$). In sum, Hypothesis 2c received partial support but Hypotheses 1b, 1c, and 2d received no support.

Discussion

Extending extant research on relational demography and workplace deviance, we examined employee dissimilarity in terms of demographics and personalities in relation to organizational and interpersonal deviance. We also examined how employee attitudes including POS, organizational commitment, perceived coworker support, and coworker satisfaction might mediate the relationship between dissimilarity and deviance. In what follows we present a discussion of some notable findings along with suggestions for practice and future research.

Impact of Employee Dissimilarity on Attitudes and Deviance

Based on theories of social identity (Tajfel, 1982) and social exchange (Blau, 1964), we expected employee demographic dissimilarities to be negatively related to employee attitudes and positively related to interpersonal and organizational deviance. The findings suggest that ethnicity dissimilarity negatively predicted POS and organizational commitment, and gender dissimilarity positively predicted interpersonal deviance.

However, we found age dissimilarity *positively* predicted perceived coworker support. Although in general age dissimilarity has a negative relationship with desirable employee outcomes (e.g., Chattopadhyay, 1999), a few past studies found it had no relationship or even a positive relationship with various work outcomes (e.g., Ferris, Judge, Chachere, & Liden, 1991; Jackson et al., 1991; O'Reilly et al., 1989). It must be noted that the average age of our sample is approximately 26 years, which is lower than the samples represented in these earlier studies (e.g., the average age of Chattopadhyay's sample was 33 years). Further, the nature of the tasks performed by our respondents differs from past research in this area. We call for more research on the effects of potential moderators such as task characteristics and workplace demographic composition to better understand the relationship between age dissimilarity and work related attitudes.

In addition, we found that ethnic dissimilarity *negatively* predicted organizational deviance. In other words, when individuals are dissimilar to their work groups in terms of ethnicity, they are *less* likely to engage in organizational deviance. The negative relationship may be explained by the need of demographically dissimilar employees to conform to organizational norms in order to fit in and receive the benefits of other members (Hewlin, 2003; Kanter, 1977). In addition, past research has shown that numerical tokenism based on overt demographic traits such as ethnicity makes the success and failure of dissimilar employees highly visible (Kanter, 1977; Cox, 1993). As a result, ethnically dissimilar employees may feel pressured to conform to organizational norms in order to avoid any negative publicity (Hewlin, 2003). This high behavioral conformity (i.e., lower levels of organizational deviance), coupled with their low levels of POS and commitment, may reflect a dissonance between how these employees really feel and how they have to behave. Although the creation of facades of conformity may lead to higher acceptance by others and better opportunities in the organization (Hewlin, 2003), by doing so, ethnically dissimilar employees may experience psychological and emotional distress as a result of the inconsistency between their public behaviors and their attitudes (Higgins, 1989; Tunnell, 1984). We call for future research to test theories of organizational status and conformity along with traditionally considered social identity theory when examining the ethnic dissimilarity–deviance relationship. We also call for future research to consider employee psychological well-being as another outcome of dissimilarity.

Second, drawing on the team personality composition research and the PE fit literature in addition to the social identity and social exchange theory, we predicted that personality dissimilarity based on Conscientiousness and Agreeableness would be negatively related to employee attitudes and positively related to employee deviance, but dissimilarity in Extraversion would be positively related to employee attitudes and negatively related to deviance. Consistent with our predictions, we found Conscientiousness dissimilarity positively predicted interpersonal deviance, Agreeableness dissimilarity negatively predicted coworker satisfaction and positively predicted organizational deviance, and Extraversion dissimilarity positively predicted coworker satisfaction and negatively predicted interpersonal deviance. We made no specific hypothesis for dissimilarities in Openness to Experience and Neuroticism but found the former negatively predicted all four employee attitudes and organizational deviance.

Therefore, our study provided some support for the supplemental versus complementary models at the individual level of analysis, indicating the importance of going beyond the similarity attraction paradigm suggested by social identity theory and highlighting the importance of considering how heterogeneity or diversity with respect to certain personality dimensions can actually help improve employee attitudes and reduce deviance. We suggest future research continue differentiating between different personality dissimilarity dimensions while predicting employee attitudes and deviance.

Effects of Employee Attitudes on Deviance

Existing research on the impact of employee attitudes on deviance has typically focused on justice perceptions (Sackett & DeVore, 2001). Our study contributes to this literature by examining additional attitudinal variables. Consistent with our expectations based on the multifoci social exchange perspectives (Cropanzano et al., 2002), POS negatively predicted

organizational deviance but not interpersonal deviance. However, we found organizational commitment negatively predicted interpersonal deviance, and coworker satisfaction negatively predicted both organizational and interpersonal deviance. These unexpected cross-foci effects suggest that when it comes to engaging in deviance as reciprocation for unfavorable social exchange, employees may not differentiate clearly the sources of the social exchanges, or they might view coworkers as agents of the organization and the organization as a collection of its members thus inseparable from each other. Future replication of these findings is needed before we can draw firm conclusions.

Another unexpected finding was that greater coworker support was associated with higher levels of organizational and interpersonal deviance. We surmise that when employees perceive higher levels of coworker support, they are more willing to believe that their colleagues will “cover up” for them in the event that they engage in negative behaviors. For instance, in a restaurant setting, it is conceivable that a waitress who needs a break to get a cigarette will ask a coworker to fill in for her and vice-versa. In addition, behaviors that are considered deviant by the organization may not be considered deviant by the employees. The social bonding theory, which has been applied to juvenile delinquent behavior (Edwards, 1996), suggests that a common belief system regarding the permissibility of delinquent behaviors may foster negative behaviors collectively in the work group (Sackett & Devore, 2001). If there is a group behavioral norm shared among employees that tolerates or even encourages deviance, a high level of peer support may engender more deviance. For instance, employees may be more willing to gossip about their colleagues if they believe that the other party will reciprocate with more gossip about the target individual. We recommend future research to examine peer support in conjunction with the discrepancy between organization and group behavioral norms for a deeper understanding of this phenomenon.

Practical Implications

In this study we found that employees who were dissimilar in terms of ethnicity perceived less support from the organization and were less committed to the organization. These results speak to past findings, which suggest that demographically dissimilar individuals are excluded from social interactions in organizations (e.g., Mehra, Kilduff, & Brass, 1998). Being marginalized from social interactions may translate into low perceptions of support from the organization and low organization commitment. This finding suggests that organizations need to incorporate specific policies to create supportive and satisfying environments for demographically dissimilar employees. These policies could include high involvement human resource management practices, informal gatherings, and after-hours social events to encourage employees to perceive their organization as supportive of their personal needs, and mentoring programs as well as caucuses or network groups that can provide access to formal as well as informal channels of communication with and support from supervisors and peers. Ultimately, these policies will help organizations retain talented and hardworking employees of different ethnic backgrounds. In addition, we found that POS and organizational commitment helped reduce deviant behaviors among employees. This finding further underscores the importance for the companies to enhance the commitment and perceived support of all employees to minimize the costs associated with workplace deviance.

While keeping in mind issues related to employee privacy and disparate impact, our findings also suggest that employers could consider personality testing in selecting and staffing work groups. For example, in a restaurant setting, various shifts could be staffed by taking into consideration the complementary and supplementary fit between the personality traits of the wait staff.

Limitations and Future Directions

Our research setting was a single restaurant chain, which allowed us to rule out extraneous factors associated with different occupations and organizations. However, we also acknowledge that this setting imposes limitations on the generalizability of our results. The setting was White-female dominated. The lack of variance across stores with regard to gender and ethnicity may partially account for the insignificant findings of demographic dissimilarity. Although future research may test these relationships in settings with a wider range of ethnic and gender diversity, we also believe that the nature of gender segregation of the U.S. service sector limits such efforts. On average, across a variety of service occupations, women constitute approximately 57% of the workforce; and within occupations that involve food serving and preparation, the percentage of female workers is about 67% (Bureau of Labor Statistics, 2003). Thus, although our sample may not be representative of all workplaces within the U.S., it bears close semblance to establishments in the service sector at least in terms of its gender composition. Evidence of ethnicity-based segregation in the workforce is less unequivocal and the ethnic composition of the workforce is region specific. Overall, within service occupations involving food serving and preparation, 37% employees are African American, Asian or Hispanic (Bureau of Labor Statistics, 2003). Thus, although service occupations are predominantly White, we acknowledge that in some regions of the U.S. the proportion of non-White employees may be somewhat higher than is represented by our sample.

Second, although we had a moderate response rate of 47% across the stores, our measures of dissimilarity were based on the respondents, not the actual population. The imperfect response rate may have further attenuated our results because of range restriction and may have introduced unknown bias to the analyses. To lessen the concern of response bias, we constrained our analyses to stores with at least five individuals who contributed to the calculation of dissimilarity measures, compared and found no significant difference on the gender and ethnicity between individuals with complete information and those with incomplete information, and found essentially the same pattern of results when we included response rate as a control variable. Nonetheless, future research should try to improve the accuracy of dissimilarity measures by constructing these indices based on the entire population.

The third limitation of our study is that employee deviance was measured via self-report. Respondents may “fake good” under the influence of social desirability. However, there has been considerable evidence for the validity of self-report measure of deviance (see Bennett & Robinson, 2000). First, research has shown there are high correlations (ranging from .50 to .69) between admissions and recorded deviant behaviors (e.g., Goldberg & Waldman, 2000; Hackett, Bycio, & Guion, 1989; Harrison & Shaffer, 1994; Jones, 1994; Newsome, 1993; Spector, 1987; Viswesvaran, Ones, & Schmidt, 1992). In addition, meta-analyses have shown that self-reported criteria are even of higher validity than other-reports of deviance (McDaniel & Jones, 1988; Ones, Viswesvaran, & Schmidt, 1993). The reasons might be that many deviant behaviors

are undetected by others (Bennett & Robinson, 2000; Ones et al., 1993; Sackett & DeVore, 2001), thus constraining the validity of other-reports. Therefore, we believe that our self-report measure of deviance is appropriate. Nonetheless, future research should try to employ multiple sources of information on deviance.

Fourth, because all of our measures were collected via the same method (self-report), relationships among variables might be inflated by common method variance. However, the key predictors—dissimilarity variables—were computed from a relational framework in that we used scores that indexed how dissimilar the focal individual was to every other employee sampled in the same store. Therefore, the estimated relationships involving these variables were less susceptible to common method bias.

In our attempt to explain the mechanism through which dissimilarity influences deviant behaviors, we proposed social exchange variables as the mediators. The hypotheses, however, received little support in our data. Future research may investigate how theories outside of social exchange may shed light on the dissimilarity–deviance relationship. For instance, it may be cognitive attributes, such as role ambiguity or low self-esteem (Chattopadhyay, 1999), that serve as the mechanism via which demographically dissimilar employees perform counterproductively. In addition, the strain experienced by dissimilar employees may be a mediator between the dissimilarity and deviance relationships. As noted previously, demographically dissimilar individuals in a work group may be excluded from positive affect based relationships and may face isolation and marginalization (e.g., Ibarra, 1992). Therefore, demographic-based dissimilarity may be regarded as a potential stressor. Lennings (1997) argued that deviant behaviors can be dysfunctional coping mechanisms for an individual in stress. For example, Leiter and Robichaud (1997) found withdrawal behaviors were related to burnout. Therefore, future research may investigate the role of job stress and work group stress in the relationship between demographic dissimilarity and deviance and examine whether different dimensions of personality dissimilarity relate to stress differently.

Last but not least, future research should also focus on disentangling the varied effects of dissimilarity dimensions on employee attitudes and behavior. These research efforts can take three directions. First, more effort is needed to examine the *asymmetric* effects of employee dissimilarity. For example, does ethnic dissimilarity have the same level of impact for a White employee as for a minority employee? As an initial attempt to understand potential asymmetric effects, we conducted supplementary analyses examining the interactions between demographics and demographic dissimilarities, and between personalities and personality dissimilarities. We found that ethnic dissimilarity has a negative impact on both majority and minority employees' attitudes; however, the negative effects were stronger for minority employees with regard to organizational commitment and coworker satisfaction. Riordan and Shore (1997) found that African American and Hispanic employees in all-White or predominantly majority settings displayed more negative attitudes than their counterparts in work groups composed equally of White and minority employees. Our research setting was predominantly White (80%) and none of the work groups we examined were ethnic minority-dominated. Further, African American and Hispanic employees were the two predominant minority ethnic groups represented in our sample. Thus, our findings in this regard corroborate past research that suggests that African American and Hispanic employees may display negative work attitudes when they are dissimilar

to their work groups (Riordan & Shore, 1997). However, our findings contradict Chattopadhyay's (1999) study, which found no significant interaction between ethnicity dissimilarity and being minority in White-dominated work groups when predicting organization-based self-esteem, peer relations, and altruism. Chattopadhyay argues that the higher status and wages minority employees may gain by working in White-dominated groups may offset the negative impact of inferior treatment associated with working in these settings; as a result, the interaction effect may be negligible. In this study, the restaurant jobs performed by all the employees have low-skill requirements and are compensated at a low rate, thus, the advantages of working with White employees are probably not big enough to offset the disadvantages. We call for more research that incorporates the effects of contextual factors (e.g., task complexity, pay level) to better understand the asymmetric effects of ethnic dissimilarity on work-related attitudes and behaviors.

We also found conscientious employees who were dissimilar reported lower coworker support than their coworkers who were less conscientious. Because less conscientious employees are irresponsible, unscrupulous, undependable, and lack self-discipline, they tend to engage in social loafing and free ride other members' effort in the work group (Barrick & Mount, 1991). As a result, when working with less conscientious coworkers, more conscientious employees may see themselves as victims of their coworkers' irresponsibility, thereby perceiving less support from them. Last, we found that more neurotic (i.e., emotional, insecure, depressed, temperamental) employees reported higher coworker support when their coworkers were more dissimilar from them. This is reasonable because a neurotic individual probably will not gain much confidence or assurance from another equally or even more neurotic individual, and thus is better off working with coworkers who are more emotionally stable. Our preliminary findings raise interesting questions regarding the asymmetric effects of demographic and personality dissimilarity. Although we are constrained by our sample size from drawing firm conclusions based on these findings, future research should examine more rigorously the interactions between employee demographics and personality and employee dissimilarity.

Second, our findings suggest that researchers should no longer lump different personality dissimilarity dimensions together (see Schaubroeck & Lam, 2002); our study showed that they functioned quite differently when predicting employee attitudes and behaviors. Finally, although the current study examined the impact of dissimilarity to *coworkers* on an individual employee's deviant behaviors, future studies may examine the differential impact of dissimilarity to *supervisors* (Schaubroeck & Lam, 2002) on these variables. Research efforts along these directions would contribute to a deeper understanding of workplace diversity and deviance.

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