

**How do i-deals influence client satisfaction? The role of exhaustion, collective commitment,
and age diversity**

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ABSTRACT

This paper introduces a multi-level perspective on the relationships of idiosyncratic deals (i-deals) with organizational outcomes (i.e., client satisfaction) and investigates how and under which conditions these relationships manifest. Based on contagion theory, we proposed that the positive effects of i-deals will spill over within organizational units (indicated by reduced emotional exhaustion and enhanced collective commitment), which leads to increased customer satisfaction. Moreover, it was postulated that the effects of i-deals would be more prominent in units with high age diversity, as i-deals are more important in units where people's work-related needs are more heterogeneous due to the higher diversity in employee age. A study among 19,780 employees and 17,500 clients of a German public service organization showed support for the contagion model and showed that i-deals were negatively related to individual emotional exhaustion and subsequently positively to collective commitment within units and client satisfaction measured six months later. Emotional exhaustion and collective commitment mediated the relationships between i-deals and client satisfaction. Finally, we found that the relationships between i-deals and emotional exhaustion and client satisfaction were more strongly negative in units with high age diversity rather than in units with low age diversity, indicating the benefits of i-deals within units with high age diversity to reduce emotional exhaustion and enhance client satisfaction.

Keywords: Idiosyncratic deals; i-deals, client satisfaction; multi-level; emotional exhaustion; age diversity; contagion

HOW DO I-DEALS INFLUENCE CLIENT SATISFACTION? THE ROLE OF EMOTIONAL EXHAUSTION, COLLECTIVE COMMITMENT, AND AGE DIVERSITY

In an increasingly diverse workplace, organizations realize that a one-size-fits-all approach to management of employees does not suffice and that more employees try to negotiate individual arrangements with their employer (Broschak & Davis-Blake, 2006). In response, research on individualization of work arrangements, and in particular idiosyncratic deals (or i-deals for short), has flourished over the last years (Hornung, Rousseau, & Glaser, 2008; Rosen, Slater, Chang, & Johnson, 2013; Rousseau, 2005; Rousseau, Hornung, & Kim, 2009). I-deals are individually bargained employment arrangements that benefit both the employee and his or her organization. They have been considered crucial in the current times of aging working populations (Bal, De Jong, Jansen, & Bakker, 2012) and increasing workplace diversity (Anand, Vidyarthi, Liden, & Rousseau, 2010; Lee, Bachrach, & Rousseau, 2015), as i-deals facilitate employers to better respond to the diverse needs of their employees. Previous research has shown that i-deals may indeed be beneficial for recipients, as they are related to higher employee commitment (Hornung et al., 2008; Liao, Wayne, & Rousseau, 2016), citizenship behaviors (Anand et al., 2010), and work motivation (Bal et al., 2012).

However, it is yet unclear whether organizations actually experience any benefits from granting i-deals to employees as prior research has concentrated on the individual-level of analysis and ignored potential group- and organizational-level effects of i-deals (Anand & Vidyarthi, 2015; Kroon, Freese, & Schalk, 2015). This is a serious gap in the literature as i-deals are embedded in the social and organizational context of teams and companies, impacting not only outcomes at the individual level but also at the collective level (Rousseau, 2005). Further, as Conway and Coyle-Shapiro (2015) point out, existent i-deals research is “characterized by cross-sectional, self-report, single-source designs”, making it premature “to prescribe i-deals to

organizations” (p. 62). In fact, i-deals are costly to organizations and take time and effort to negotiate; consequently, many organizations refrain from implementing i-deals (Kroon et al., 2015). Moreover, managers are rarely educated about and lack experience negotiating, allowing, and managing special arrangements with individual employees (Greenberg, Roberge, Ho, & Rousseau, 2004). Therefore, the primary aim of this paper is to assess whether i-deals relate to positive organizational outcomes and to investigate the theoretical mechanisms underlying these yet unexplored relationships (Anand & Vidyarathi, 2015; Conway & Coyle-Shapiro, 2015). In this study, we will focus on the relationships of i-deals with a key organizational outcome, client satisfaction. Customer and client satisfaction surveys have become an important and valuable form of feedback for both organizations and employees (Hekman et al., 2010). Organizations are increasingly dependent on clients’ satisfaction with their services (Fountain, 2001). Especially, i-deals are presumed to motivate employees to perform their jobs well; thus, they should contribute to the improvement of the services offered to clients of the company. Moreover, client satisfaction is a key indicator of organizational performance and a strong predictor of financial performance (Hekman et al., 2010; Pham, Goukens, Lehmann, & Stuart, 2010).

Moreover, establishing a link between i-deals and client satisfaction requires understanding of the underlying theoretical processes, a second important research gap that has not been investigated to date. These questions require a multi-level perspective on the effects of i-deals, and in particular a micro-macro relationship in which *individual-level* constructs contribute to *organizational-level* outcomes (Croon & Van Veldhoven, 2007). To do so, we introduce contagion theory (Barsade, 2002; Westman & Bakker, 2008) to explain the ways in which the positive effects that employees experience after obtaining i-deals translate into higher satisfaction among organizational clients. In general, contagion theory explains how emotions and behavior within groups are transferred from one person to another (Barsade, 2002), and as such, it explains

why and how negotiated i-deals may transfer positive effects across organizational members and ultimately to clients (Dasborough, Ashkanasy, Tee, & Tse, 2009). Through integrating contagion theory with the i-deals and diversity literatures, we show that i-deals may have benefits for the internal and external environment, through showing how i-deals reduce exhaustion, and thereby contribute to collective commitment and customer satisfaction. Thus, contagion theory is important to show that i-deals do not just serve individualistic purposes but also may have more widespread positive effects for others in the workplace.

More specifically, we will argue that i-deals trigger a twofold contagion process within and across organizational boundaries. First, drawing from work adjustment theory (Dawis & Lofquist, 1984), i-deals are expected to reduce recipients' emotional exhaustion by enabling a better correspondence between employees' particular needs and their respective work environment. The increase in positive emotions among i-deal recipients is likely to be contagious within units, leading to increased collective commitment at the unit level (Bakker, Demerouti, & Sanz-Vergel, 2014; Dasborough et al., 2009). Second, a collectively committed workforce is likely to invest more effort in their work and to show OCBs (Chun, Shin, Choi, & Kim, 2013) that enhance client satisfaction.

Finally, the effects of i-deals are likely to be dependent upon the context. In particular, the age composition and diversity of the workforce may be important in explaining the relationships between i-deals and client satisfaction (Bal et al., 2012). It has been shown that diversity has profound effects on both customer satisfaction and organizational performance (McKay, Avery, Liao, & Morris, 2011). As more age diverse units will have more varying work-related needs (Bal & Jansen, 2015), it is likely that i-deals will be especially useful in more diverse units as they facilitate a more individualized approach towards fitting a person with the job, thereby reducing the likelihood of exhaustion. Therefore, the relationships of i-deals with client satisfaction are

likely to depend on age diversity within organizational units, as they indicate the relevance of i-deals within the context of the unit (Bal et al., 2012; Lee et al., 2015).

Taken together, this study contributes to the literature on i-deals and employment relationships in three important ways. First, we investigate whether i-deals relate to client satisfaction and thus whether they contribute to organizational performance (Fountain, 2001), thereby advancing our understanding of the effects of i-deals for organizations. Second, we increase knowledge of i-deals by drawing from contagion theory to develop a framework that explains why and how the effects of i-deals spread across organizational boundaries. Finally, we integrate the i-deals and diversity literatures by exploring the moderating role of age diversity. We show when i-deals are more beneficial, and hence provide not only a theoretical framework of how i-deals influence organizational outcomes, but also investigate a practically relevant boundary condition for organizations that negotiate individualized agreements with employees.

To achieve these goals, we introduce a multi-level framework to understand the effects of i-deals, particularly an upwards spiral of i-deals leading to collective commitment and client satisfaction through decreased emotional exhaustion. While extensive previous research has shown trickle-down effects from higher level to lower-level constructs (e.g., Bordia, Restubog, Bordia, & Tang, 2010; Liden, Wayne, Liao, & Meuser, 2014), we contribute by investigating how individuals can influence organizational units, emphasizing the benefits of bottom-up approaches that can improve the effectiveness of organizations (Croon & Van Veldhoven, 2007; Grant, Gino, & Hofmann, 2011).

THEORETICAL BACKGROUND

I-deals are individualized arrangements between individual employees and their organizations that should benefit both parties (Rousseau, Ho, & Greenberg, 2006). Usually, employees who feel the need or entitlement to a certain special arrangement with the employer

initiate i-deal negotiation (Liu, Lee, Hui, Kwan, & Wu, 2013). I-deals can vary in scope, ranging from specific single agreements to idiosyncratically arranged jobs. I-deals are heterogeneous and can differ from employee to employee, although previous research has shown that i-deals tend to be negotiated in relation to workplace flexibility and development (Hornung et al., 2008; Rosen et al., 2013). Flexibility i-deals enable employees to arrange their tasks and working times more flexibly while development i-deals include personalized agreements regarding employees' training opportunities and the targets they set at work.

Previous research has shown that employees who negotiate i-deals become more attached to the organization (Hornung et al., 2008), have a more favorable relationship with the organization (Rousseau et al., 2009), and contribute to organizational goals to a higher degree (Anand et al., 2010; Hornung et al., 2008). Yet, research on i-deals and organizational outcomes is very scarce. A study by Hornung et al. (2009) showed that managers who granted i-deals to their subordinates were more likely to hold higher performance standards for these employees. However, direct evidence for a relation between i-deals and organizational performance, such as client satisfaction, is still lacking (Conway & Coyle-Shapiro, 2015; Kroon et al., 2015). Moreover, understanding of the theoretical process through which individualized deals lead to organizational outcomes is also not yet developed.

Up until now, the i-deals literature has primarily focused on the individual benefits for i-deal recipients (Liao et al., 2016), with some work on potential negative effects of i-deals for others (Lai et al., 2009). More fundamentally, i-deals research is particularly driven by notions of individualism, and as such represents an individualistic perspective on i-deals in the workplace (Bal & Lub, 2015). For instance, Guerrero et al. (2014) investigated how high performers obtain i-deals, Liu et al. (2015) investigated how i-deals may benefit workers high on individualism, and Ng and Lucianetti (2016) found that workers high on achievement and status striving were more

likely to obtain i-deals. Hence, the literature tends to focus particularly on how i-deals are important for individual, high-performing, employees, thereby neglecting the social role that i-deals play at work (Lai et al., 2009). It is important to assess how i-deals affect not only recipients but also coworkers and customers, as the legitimacy of i-deals in the workplace depends on whether i-deals also contribute to collective commitment and performance, and not just benefit individuals. To advance understanding of the wider implications of i-deals, a new theoretical lens is needed to investigate how i-deals have benefits beyond the individual employee. To address this theoretical gap, we utilize contagion theory (Barsade, 2002) to explain the ways in which i-deals negotiated by employees are transmitted to coworkers and ultimately to organizational clients.

We postulate that reduced emotional exhaustion and increased collective commitment play an essential role in this process, as exhaustion and commitment are assumed to be important outcomes of i-deals (Bal et al., 2012; Hornung et al., 2008). Contagion theory (Hatfield, Cacioppo, & Rapson, 1992) explains how persons within a group influence others through conscious and unconscious processes, including emotions and behavioral attitudes. Wide evidence suggests that people influence each other's moods (Barsade, 2002; Menges & Kilduff, 2015), and recently, a number of studies have focused on how leaders' moods may be contagious across work groups (e.g., Bono & Ilies, 2006; Dasborough et al., 2009; Johnson, 2008, 2009). For instance, Johnson (2009) found that leaders' moods might be contagious and influence followers' moods and ultimately team performance. This may apply to both positive and negative moods. However, contagion processes do not only occur top-down from leaders to their followers, but also bottom-up, from individual team members to whole units and organizations. For instance, the study of Wood et al. (2012) showed how employee job satisfaction positively contributed to financial performance of the firm, and Vermeeren (2014) showed how individual HRM

perceptions related to unit-level performance, showing that individual activities may enhance / outcomes.

Related to perceptions of emotional exhaustion, a comparably well-developed body of literature explains how exhaustion can be contagious across employees. For instance, Bakker and Schaufeli (2000) showed that emotional exhaustion could be transferred from one person to another via contagion processes under two risk conditions, i.e., colleagues' susceptibility to emotional contagion as well as the frequency of exposure to emotionally exhausted colleagues. Similarly, Westman and Bakker (2008) argued that high burnout in units may influence individuals' burnout directly and indirectly through higher perceptions of workload and reduced autonomy. Hence, when individuals within teams suffer from emotional exhaustion, it may be contagious to other team members and create a 'burnout virus' (Westman & Bakker, 2008).

In contrast, such contagion mechanisms in the context of i-deals function primarily in transmitting positive emotions to others, including coworkers and organizational clients (Carlson, Ferguson, Kacmar, Grzywacz, & Whitten, 2011). This effect will occur through an initial process of i-deals leading to reduced emotional exhaustion and increased collective commitment *within* units, and thus effects of i-deals are contagious to colleagues first before they spill over to clients. The review of Menges and Kilduff (2015) supports this claim by showing that in general shared positive emotions lead to positive work outcomes, and thus the positive emotions elicited by i-deals are likely to be shared within units, and subsequently positively affecting clients.

The literature on customer and client satisfaction supports this view, as research has shown that client satisfaction is not purely the result of objective performance, but also of the attributions clients and customers make of the services that they receive from the organization (Pham et al., 2010; Tsiros, Mittal, & Ross, 2004). Clients will be more satisfied when they have positive social interactions with the organizational representatives. Hence, positive spillover to

client satisfaction is likely to take place when employees are committed to delivering optimal services (Tsiros et al., 2004). In the following, we will explain how i-deals will crossover to clients through reducing individual emotional exhaustion and crossing over to commitment of the units responsible for delivery of client services. The conceptual model is shown in Figure 1.

Insert Figure 1 about here

The Relationships between I-deals and Emotional Exhaustion

In the first step of the contagion model, we expect that when employees negotiate i-deals, employees' emotional exhaustion will be reduced. According to Maslach, Schaufeli, and Leiter (2001: 402), emotional exhaustion is the "central quality of burnout and the most obvious manifestation of this complex syndrome." People with emotional exhaustion suffer from being worn out, and they are no longer able to successfully complete their work. In line with work adjustment theory (Baltes, Briggs, Huff, Wright, & Neuman, 1999; Dawis & Lofquist, 1984), i-deals may prevent emotional exhaustion, as they facilitate a greater correspondence between the requirements of the job and the individual needs and abilities of the employee. Through the opportunity to individually arrange working schedules and tasks and to individualize developmental opportunities, employees are better able to fit their job within their personal lives and resources, which enhances their work-life balance and avoids long-term exhaustion from conducting their job (Bakker et al., 2014; Hornung et al., 2008). Consequently, we postulate that when employees are able to obtain i-deals, they will have more positive experiences in their work, including more positive emotions, such as feelings of accomplishment (Liao et al., 2016; Rosen et al., 2013). As they are able to have more flexibility in their work and more opportunities to develop themselves, they will perceive a better fit with their jobs and thus reduce their

emotional exhaustion, have broader action repertoires, become more outwards focused, and offer more support to others (Hornung et al., 2008; Liu et al., 2013; Ng & Feldman, 2015).

In addition, a Job-Demands Resources perspective (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) helps explain how i-deals contribute to reduced emotional exhaustion. I-deals constitute additional resources for employees, which help them grow in their work and cope successfully with the demands of the job (Bakker et al., 2014). I-deals provide employees with important individualized job resources, such as autonomy, flexibility, development and role clarity (Rousseau, 2005). These help workers to better cope with job demands and to retain work-life balance (Bakker et al., 2014). I-deals enable employees to reduce conflict, role stress, workload, and work pressure (Hornung et al., 2008), all of which have been associated with higher emotional exhaustion (Bakker et al., 2014). All of these lead to greater work adjustment of the employee and hence a greater person-job fit, which reduces exhaustion. In sum, we expect i-deals to be negatively related to employees' emotional exhaustion.

Hypothesis 1: I-deals are negatively related to employees' emotional exhaustion.

The Relationship between Emotional Exhaustion and Collective Commitment

We further expect individual emotional exhaustion to be contagious within units and to crossover to units' collective commitment (i.e., crossover from individual employees to coworkers; Bakker & Schaufeli, 2000; Westman & Bakker, 2008). Hence, we expect an upward spiral from reduced individual-levels of emotional exhaustion to increased perceptions of collective organizational commitment through the process of emotional contagion among workers in the same unit (Bakker, Van Emmerik, & Euwema, 2006). Collective commitment is defined as a shared mindset and psychological state of a collective of individuals (i.e., employees within a unit) regarding their loyalty and desire to invest energy into achieving the goals of the

organization (Gardner, Wright, & Moynihan, 2011). We focus here on collective perceptions of commitment within units in a large organization.

In the contemporary workplace, many employees do not work in isolation but perform their jobs in units where team cooperation is the necessary condition for successfully achieving goals set by the organization (Bakker et al., 2006). Hence, contagion is likely when employees work in teams (Westman, 2001). When employees are able to negotiate i-deals, and therefore reduce their emotional exhaustion, they show more positive emotions in their work, are more inclined to help others, and they may signal to others that they may also obtain i-deals to facilitate a greater work fit (Bal et al., 2012; Lai, Rousseau, & Chang, 2009). Hence, reduced emotional exhaustion resulting from i-deals may be contagious within units, which creates a positive team climate, as indicated by a team spirit and sense of collective commitment to the organization (Bakker et al., 2006). Conversely, when employees are exhausted, coworkers will have to take over their work, as affected employees are less proficient in fulfilling their regular job tasks. In addition, coworkers will also be affected because of a lack of experienced positive emotions among exhausted colleagues (Consiglio, Borgogni, Alessandri, & Schaufeli, 2013). Two processes may explain this relationship. On the one hand, repeated interactions among coworkers may transmit positive attitudes due to reduced emotional exhaustion; therefore, they might create perceptions of high engagement and commitment. On the other hand, improved well-being due to low emotional exhaustion may create group norms that reflect positive attitudes and commitment to the organization (Gardner et al., 2011). When employees have the opportunity to reduce their emotional exhaustion using i-deals, it will indicate a healthy working environment and hence create collective perceptions of commitment and a shared recognition that the organization is providing an optimal working environment (Bakker et al., 2006). Hence, we expect emotional exhaustion to be negatively related to collective perceptions of commitment to the organization.

Hypothesis 2: Individual-level emotional exhaustion is negatively related to unit-level collective commitment.

The Relationship between Collective Commitment and Client Satisfaction

Furthermore, we expect a subsequent spillover process from collective commitment to external clients. We argue that collective commitment enhances client satisfaction at the unit-level. When units have high organizational commitment, employees feel a shared experience of pride in the organization and dedication to the goals of the organization (Klein, Molloy, & Brinsfield, 2012). As explained above, two processes emerge around collective commitment (Gardner et al., 2011). Collective commitment is contagious and transmits feelings of commitment over to others, enhancing the commitment of less dedicated employees to organizational goals and thus greater engagement in delivering optimal services. Moreover, high collective commitment may create group norms about appropriate behavior; thus, highly committed units may create norms that support high-quality client services (Liden et al., 2014).

This view is consistent with findings from the marketing literature, which found that affective commitment to the organization positively influences the service quality delivered by employees (Boshoff & Mels, 1995; Malhotra & Mukherjee, 2004). More specifically, a high service quality can be achieved only if employees are willing to display discretionary effort during the service encounter, i.e., effort that goes well beyond the minimum level required to keep one's job (Zeithaml, Parasuraman, & Berry, 1990). Due to such pronounced collective effort, employees will be able and willing to provide better, faster, and more reliable services, which will in turn increase client satisfaction. The necessary level of high dedication, however, will be exhibited only if employees fully accept and support organizational goals and strive to contribute to the organization's lasting success (Boshoff & Tait, 1996). In contrast, if employees collectively lack the necessary commitment to their organization, they are unlikely to function as

effective ambassadors of the organization who provide optimal services to clients (Boshoff & Mels, 1995; Boshoff & Tait, 1996; Unzicker, Clow, & Babakus, 2000). Taken together, clients will be more likely to have positive experiences and make positive attributions regarding the services they receive when employees in units share collective commitment (Tsiros et al., 2004).

Hypothesis 3: Collective commitment is positively related to client satisfaction.

Combining the set of hypotheses reflects a process that moves from i-deals at the individual level to unit-level client satisfaction via emotional exhaustion and collective commitment. Hence, we argue that i-deals are ultimately beneficial for organizations (Rousseau, 2005; Rousseau et al., 2006). In line with contagion theory (Westman, 2001; Westman & Bakker, 2008; Westman, Shadach, & Keinan, 2013), the positive effects of i-deals on employees (i.e., reduced emotional exhaustion) are likely to be transmitted to clients via a process of collective commitment in units. Since i-deals facilitate greater work adjustment (Baltes et al., 1999; Liu et al., 2013), employees have more flexibility in managing their work and more resources to invest in conducting their job. Therefore, emotional exhaustion should be reduced, which subsequently creates a positive working atmosphere that will ultimately increase client satisfaction. The positive effects elicited by i-deals are first expected to be contagious and cross over to coworkers, creating a collective sense of organizational commitment. Moreover, with improved service quality, positive effects of i-deals via reduced emotional exhaustion and collective commitment may spill over to clients (Malhotra & Mukherjee, 2004). In sum, we expect an indirect effect of i-deals on client satisfaction via emotional exhaustion and collective commitment.

Hypothesis 4: I-deals have an indirect positive relationship with unit-level client satisfaction via individual-level emotional exhaustion and unit-level collective commitment.

The Role of Age Diversity in the Relationships of I-deals with Emotional Exhaustion

Finally, we expect age diversity within units to moderate the relationships between i-deals and emotional exhaustion. Given the aging populations across the world (Kulik, Ryan, Harper, & George, 2014), organizations are trying to motivate employees of a wide range of ages at work. Age diversity is relevant in the context of our study, as previously it has been argued that i-deals are especially important in diverse organizations (Lee et al., 2015). Age diversity at the unit-level reflects the spread of age ranges of the employees within a particular unit (Kunze, Boehm, & Bruch, 2013). Low age diversity indicates that employees within a unit are similar in age while high age diversity refers to a wider spread of employee ages.

Theoretically, i-deals align with the notion of ‘aged heterogeneity’ (Nelson & Dannefer, 1992). The theory of increased age heterogeneity entails the idea that when people become older, they become more heterogeneous from each other. There are two main reasons why older people become increasingly different from their age-related peers (Dannefer, 2003; Nelson & Dannefer, 1992). First, a biological explanation is that behavior results from personality and environment, and with aging, the effect of environment is reinforced as one seeks out and is influenced by environments inside and outside of work that fit one’s preferences. As others select different social environments, their abilities and needs will accordingly develop differently over time (Light, Grigsby, & Bligh, 1996). Second, a sociological explanation is that people are born and raised in social classes, and that over time, the social class that people live in, strengthens their personalities such that they increasingly differ from coworkers from other social classes (Light et al., 1996). For instance, Charles (2005) showed that older people experience more complex, varied, emotions than younger people.

In the context of the workplace, the model of Kooij and colleagues (2008) argues that it is not age that explains differences in motivations among older workers, but a range of factors which can substantially differ among older workers. This model assumes older workers to be

more different from each other than more generally from younger workers. With increasing age, interindividual changes in personality, preferences, inclinations, and work-related needs become larger (Bal et al., 2012; Van Lieshout, 2006). While younger workers are more similar to each other in terms of what they expect from their employer, such as rewards, development opportunities, and fringe benefits (Bal & Jansen, 2015), older employees become more heterogeneous in what they expect from their work.

In the context of our study, age diversity is especially important, as this reflects the variation in ages of workers within a unit. Hence, i-deals are not just important for younger or older workers, but in contexts where people differ from each other (Lee et al., 2015). Building on this, we argue that i-deals will contribute especially to lower emotional exhaustion in units with high age diversity (Lee et al., 2015). I-deals fulfill individual's needs while at the same time, they play an important social role (Lai et al., 2009). As i-deals allow for unequal treatment within groups and organizations, employees must consider the social context (Guerrero, Bentein, & Lapalme, 2014; Lai et al., 2009), as i-deals may lead to perceptions of favoritism (Lai et al., 2009; Rousseau et al., 2006). When employees perceive that there is a justification for i-deals (such as age diversity), they may feel better able to use their i-deal and transfer the benefits of a negotiated i-deal fully into their daily working lives (Bal et al., 2012). High age diversity within a unit is clearly observable; thus, employees can easily identify the rough ages of their coworkers. When age diversity is high, individuals may actually perceive that i-deals are more appropriate, as their age-diverse coworkers will have varying work-related needs.

In more age-diverse units, workers observe greater dissimilarities among themselves and their coworkers; thus, the likelihood of social comparison is lower, as people are inclined to compare themselves to others who are relatively similar (Vidyardhi et al., 2016). When units are more age similar, workers will be more likely to feel grudge when others receive i-deals, and as

such, they might start negotiating i-deals themselves as a result of envy, status striving, and entitlement (Bal & Lub, 2015; Ng & Lucianetti, 2016). In addition, potential envy due to provision of i-deals within age-similar units might produce new forms of stress and thereby diminish the effectiveness of i-deals in reducing emotional exhaustion. Conversely, in high age-diverse units, people will be less likely to compare themselves to others, as others are more different (Kooij et al., 2008). This may result in more i-deal acceptance and negotiation towards improvement of person-job fit, and reduced emotional exhaustion as a result. Support for this notion has been found in a number of recent studies, including Vidyarthi et al. (2016), who found that i-deals were less strongly related to outcomes, such as job performance, when the coworkers were more similar (e.g., more team-oriented). Moreover, Lee et al. (2015) found that in groups that are heterogeneous in terms of skill and function, i-deal requests were higher, as the perceived need for individualized treatment increased due to less efficient standard organizational policies and downplaying of equal treatment norms. Hence, we expect that i-deals to be particularly beneficial in relation to emotional exhaustion in age-diverse units.

Hypothesis 5: Age diversity moderates the relationship of i-deals with emotional exhaustion such that the relation is more strongly negative in high age-diverse units.

METHODS

Procedures and Participants

The study was conducted in an independent German public service organization that provides essential governmental services. We chose this particular organization because its management was keen to understand the ways to successfully manage an aging and more age-diverse workforce. Moreover, concerns about a healthy work environment and employee well-being, and the delivery of high-quality client services are intensively discussed at all organizational levels. High-quality client service is a key performance indicator for this

organization, as it provides labor market services to companies and individual job seekers. The organization devoted a significant amount of energy and money to collect client satisfaction data, as an important indicator of the effective functioning of the organization and all of its units.

In total, 19,780 employees responded to the questionnaire (response rate of 36%). Overall, 68% of the participants were female, 15% of the participants were under 30 years of age, 23% were between the age of 30-40, 30% were between 41-50, and 32% were older than 50. On average, 91% of employees worked full time, and they had an organizational tenure of 17.64 years on average. The employees worked in 175 units within the organization across Germany. The units represent different local branches of the organization providing labor market services at local level. The range of employees within a unit may vary, as larger cities have larger units. Each unit has its own local management team, works together in one location, and interacts frequently, allowing the possibility for creation of a sense of collective commitment. On average, there were 113 respondents per unit (range 22-483 respondents). Since this study utilized a multi-level framework, we obtained measures both at the individual level (e.g., i-deals) as well as at the unit-level (client satisfaction). This way of analyzing the relationships allows us to study individual and group-level relationships jointly and to test the relationships of i-deals with client satisfaction (Preacher, Zyphur, & Zhang, 2010; Vermeeren, 2014).

Measures

Idiosyncratic Deals were measured using the scales developed by Hornung et al. (2008). Where no German translations were available, we worked with professional translators and used a classical double-blind back translation procedure to ensure the correct meaning of the items (Schaffer & Riordan, 2003). I-deals were measured using the four items assessing the ‘extent to which they had asked for and successfully negotiated individual arrangements that were different from their peers’ in terms of flexibility and development (1 = not at all; 6 = to a high degree). The

items included ‘flexibility in starting and ending the workday’, ‘flexibility in work schedules’, ‘training and qualification opportunities’, and ‘adequate work and performance targets’ ($\alpha = .83$). Even though previous research has indicated that there may be multiple i-deals dimensions (Rosen et al., 2013), we found a correlation of .63 between the two flexibility items with the two development items. Moreover, an exploratory factor analysis of the four items produced a single factor with item loadings between .77 and .87. Hence, it was deemed appropriate to combine the items into one overall i-deals measure.

Emotional Exhaustion ($\alpha = .87$) was measured using the 8-item OLBI-scale (Demerouti & Bakker, 2008) measured on a 6-point scale (1 = fully disagree; 6 = fully agree). A sample item was, ‘There are days that I feel already tired before I go to work.’

Collective Commitment ($\alpha = .87$) was measured using two items of the scale by Mowday, Steers, and Porter (1979). All employees responded to the items. The items were, ‘I am proud to tell others I am part of this organization’ and ‘I talk about this organization to my friends as a great organization to work for’ (1 = fully disagree; 6 = fully agree). These two items capture the attitudinal aspects of commitment (Mathieu & Zajac, 1990; Mowday et al., 1979), indicating the feelings one has about one’s organization.¹ As collective commitment is assumed to be a construct shared by members in a unit, we assessed the criteria for aggregating the measures. Between-unit variance was significant ($F(19695, 174) = 4.76, p < .001$) and ICC1 was .03 while ICC2 was .62. Average R_{wg} was .97, which was high yet can be explained on the basis of the large number of respondents per unit. While ICC1 was somewhat low, this is not inconsistent with other studies (Bal et al., 2012; Vermeeren, 2014), and should not influence the results negatively. As the other statistics fulfilled their criteria (LeBreton & Senter, 2008), it was deemed appropriate to aggregate the scores to the unit-level.

Client Satisfaction was measured at the unit level, and it indicated the satisfaction of the client with the employees (1 = worst rating; 6 = best rating). Client satisfaction was assessed six months after our employee survey. To measure client satisfaction, the organization under the investigation teamed up with a professional market research company that conducted computer assisted telephone interviews with persons who were registered as clients of the organization during the last 11 weeks. For each of the 175 geographical units in our study, 100 representative customer interviews were conducted (equaling 17,500 client interviews). In each of these interviews, clients had to rate their satisfaction with five indicators of client satisfaction on a 1 to 6 scale. These dimensions included their satisfaction with the consulting/counseling services, with the benefits obtained, with the information provided, with the employees with whom they had contact, as well as with the general conditions they had encountered. Out of these five values, and based on the scores of 100 representative clients per unit, a global measure of client satisfaction was calculated for each of the 175 units.

Age Diversity was measured according to previous research (Kunze et al., 2013) by taking the standard deviation of age *within* a unit. In line with arguments of Harrison and Klein (2007), we conceptualized age diversity as separation due to social categorization. This procedure is the most commonly used assessment of age diversity (Backes-Gellner & Veen, 2013). Age was measured using four categories, indicating whether people were younger than 30, between 30-40, between 41-50, and older than 50. While this categorical measurement approach reduced the variance in values that we could obtain, it was likely to enhance the response rate, as anonymity was more likely to be assured using age categories rather than specific ages.

Control Variables

In our analyses, we controlled for a range of variables that could potentially influence the outcomes. We measured the effect of gender, working time (i.e., the percentage of full-time

working hours employees worked contractually), team support, and unit size (i.e., the number of respondents within a unit). Team support ($\alpha = .92$) was measured using four items from Bhawe, Kramer, and Glomb (2010), indicating the extent to which employees perceived their team members to be helpful towards them and valued their opinions. The responses were measured on a 6-point scale (1 = fully disagree; 6 = fully agree). Finally, we included mean age within units to test whether the outcomes would be more prominent in units with many younger or older workers (Kunze et al., 2013). Prior studies have shown that gender, age, working time (part-time vs. fulltime), support, and organizational size are related to i-deal negotiation (Bal et al., 2012; Hornung et al., 2008; Lee et al., 2015; Liao et al., 2016; Rosen et al., 2013); thus, by controlling for these factors, we rule out the possibility that i-deals are related to the outcomes resulting from differences between workers in these variables. Previous research has also shown that working fulltime is related to higher burnout (Alarcon, 2011) and higher commitment (Conway & Briner, 2002; Lee & Johnson, 1991), that gender (i.e., being female) is related to higher emotional exhaustion (Purvanova & Muras, 2010) and lower commitment (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002), that team support is related to lower burnout (Halbesleben, 2006), and higher commitment (Bishop et al., 2000), that age is related to lower emotional exhaustion (Brewer & Shapard, 2004), and higher commitment (Meyer et al., 2002). The evidence also indicates that unit size affects burnout (Bakker et al., 2006) and commitment (Pearce & Berbik, 2004). In sum, the control variables have been shown to relate to the outcomes, and as such, they were accounted for in the analyses.

Common Method Variance Checks

We used a particular multi-source, time-lagged study design and conducted multiple analyses to avoid and test for common method variance (CMV; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First and foremost, we collected the data from different sources, including

employees and clients of the organization, and separated these measurements over time.

Moreover, we performed a multilevel confirmatory factor analysis (CFA) to test the validity of the factor structure. All multi-item measures were included (i.e., i-deals, emotional exhaustion, team support, and collective commitment). The multilevel CFA (with the collective commitment items loading on a level 2 factor) yielded a reasonable fit ($\chi^2 = 15075.06$; $p < .001$; $df = 100$; RMSEA = .09; CFI = .89; SRMR = .05), with all items loading significantly on the factors with no indication of cross-loading items. Next, we compared this model to a model in which the individual level variables loaded on one factor, in line with previous recommendations to test for CMV (Podsakoff et al., 2003). This model produced poor fit and showed significantly worse fit indices than the hypothesized factor structure ($\chi^2 = 76219.49$; $p < .001$; $df = 103$; RMSEA = .19; CFI = .43; SRMR = .18; $\Delta\chi^2 = 61144.43$, $\Delta df = 3$, $p < .001$). Moreover, a model in which i-deals and team support were constrained to load on one factor also fitted significantly worse compared to the proposed structure ($\chi^2 = 39161.46$; $p < .001$; $df = 102$; RMSEA = .14; CFI = .71; SRMR = .14; $\Delta\chi^2 = 24086.40$, $\Delta df = 2$, $p < .001$). Hence, it can be concluded that the factor structure was valid, as all items loaded significantly on their factors, reducing the concern for CMV.

In addition, we also used the marker variable approach to test whether CMV affected the correlations of the study variables (Lindell & Whitney, 2001). We used disability status of the employee (0 = no disability, 1 = disability) as a marker variable, as this construct was irrelevant to the hypotheses². We found small correlations between disability status and the individual-level variables under study (ranging between -.07 and .08). No significant correlations emerged between disability status and unit-level variables (ranging between -.01 and .01). Hence, there was no concern with empirical overlap between disability status and the study variables. Furthermore, we calculated correlations among the study variables while controlling for disability status (Lindell & Whitney, 2001), which produced very similar correlations, with no differences

in significance of correlations. Hence, these analyses further showed that CMV was not affecting the results of our study.

Finally, we tested for CMV by calculating the Average Variance Extracted to test for the proportion of variance that is explained due to random error (Fornell & Larcker, 1981), which is another test for the validity of the measures. The AVE-scores should be higher than .50, and Table 1 shows that for our multi-item measures, all AVE-scores were beyond .56, supporting the convergent validity and reliability of the measures. In sum, our analyses show that the variables represent significantly different constructs and that CMV is unlikely to affect the results.

Analyses

Our theoretical model describes the relationships between individual level variables (e.g., i-deals, emotional exhaustion) and unit-level outcomes (i.e., collective commitment and client satisfaction). Hence, a multilevel analytical framework is appropriate; specifically, the model describes a multilevel 1-1-2-2 framework (Vermeeren, 2014). Moreover, we tested cross-level interactions (i.e., between age diversity and i-deals). In some studies where the outcome variables are estimated at a higher level compared to the independent variables, aggregation of variables would have been the analytical method. However, aggregation to group means is appropriate only when the group mean score is an accurate estimate of a parameter (Croon & Van Veldhoven, 2007). However, i-deals are assumed to be an individual construct; therefore, aggregation to group means is inappropriate. Recent research has shown that doing this leads to biased estimates (Croon & Van Veldhoven, 2007; Vermeeren, 2014; Wood et al., 2012). Aggregating individual level scores to unit-level means neglects the fact that the variances and covariances of aggregated variables reflect both between-group and within-group variability (Wood et al., 2012). Aggregation thus confounds the two sources of variation. Through multilevel analyses, the estimates produced from individual-level variables to group-level outcomes (such as from

individual emotional exhaustion to collective commitment) reflect more accurate estimates, taking into account both between-group variability and within-group variation in variance and covariances (Croon & Van Veldhoven, 2007; Wright & Boswell, 2002).

We conducted multi-level path analyses in MPlus 7.4 (Muthén & Muthén, 2015), which allowed us to test all the relationships in the model simultaneously. To test the indirect effects, we performed 20,000 bootstraps with the Monte Carlo Method based on Bayesian statistics (Preacher et al., 2010) to estimate confidence intervals. We estimated direct effects as well as indirect effects to examine whether emotional exhaustion and collective commitment mediate the relationships between i-deals and client satisfaction. Scores were group-mean centered, and we used these centered scores to calculate the cross-level interaction terms. For significant interactions, we estimated slopes for one standard deviation below and above the mean of the moderator (Preacher et al., 2010). Table 1 shows the correlations among the variables.

Insert Table 1 about here

RESULTS

We first tested a model including direct effects of i-deals on all endogenous variables to assess whether i-deals relate to the outcomes. This direct-effects model (including control variables) showed that i-deals were significantly negatively related to emotional exhaustion (unstandardized coefficient $b = -.239$, $p < .001$) and significantly positively related to collective commitment ($b = .754$, $p < .001$), but they were not significantly related to client satisfaction ($b = .036$, ns). Hence, there were no direct effects of i-deals on client satisfaction, and thus it was necessary to estimate indirect effects.

Subsequently, we tested multi-level path analyses for the hypothesized model (as shown in Figure 1). In addition to i-deals, we included gender, working time, team support as well as the level 2 variable mean age in the unit. This model had an acceptable fit ($\chi^2 = 39.47$, $df = 12$, $p < .001$; RMSEA = .011; CFI = .986; SRMR = .001 [within], .097 [between]). Hence, we proceeded with the analyses and bootstrapped this model to estimate robust estimates and confidence intervals for the direct and indirect effects. Figure 2 shows the standardized direct effects, and Table 2 presents both unstandardized and standardized direct effects as well as indirect effects and 95% confidence intervals. Regarding the outcome variables, it was estimated that 10% of the Level 1 variance in emotional exhaustion was explained by the predictors and 17% of the variance at Level 2, while 31% was explained in collective commitment (at Level 2), and 3% in the variance of client satisfaction.

In support of hypothesis 1, i-deals were negatively related to emotional exhaustion ($b = -.234$, $p < .001$). Given that team support was also negatively related to emotional exhaustion ($b = -.158$, $p < .001$), i-deals additively predicted variance in emotional exhaustion. Hypothesis 2 predicted that emotional exhaustion was negatively related to collective commitment. Figure 2 shows that emotional exhaustion was indeed negatively related to collective commitment ($b = -.544$, $p < .001$); hence, hypothesis 2 was supported. Hypothesis 3 stated that collective commitment was positively related to client satisfaction. Figure 2 shows that this was indeed the case ($b = .161$, $p < .05$); thus, hypothesis 3 was also supported. Hypothesis 4 predicted indirect relationships between i-deals and client satisfaction via emotional exhaustion and collective commitment. Table 2 shows a significant indirect effect from i-deals to collective commitment via emotional exhaustion ($b = .25$, $p < .001$) and a significant indirect effect of emotional exhaustion on client satisfaction via collective commitment ($b = -.07$, $p < .05$). Finally, we found that the indirect effect from i-deals to client satisfaction was also significant ($b = .01$, $p < .05$).

Hence, i-deals were negatively related to emotional exhaustion, which was negatively associated with collective commitment, which then positively related to client satisfaction. Hypothesis 4 was supported, with a significant indirect effect of i-deals on client satisfaction.

Hypothesis 5 predicted a moderating effect of age diversity on the relationship between i-deals and emotional exhaustion. Figure 2 shows that the interaction between i-deals and age diversity was significantly related to emotional exhaustion ($b = -.212, p < .01$). Figure 3 shows the interaction pattern. The slope for units with a low age diversity was negative ($b = -.137, p < .01$) while the relationship was more strongly negative for units with high age diversity ($b = -.370, p < .001$). Hence, i-deals related negatively to emotional exhaustion, especially in units with high age diversity, which supports hypothesis 5. In units with low age diversity, i-deals had a weak negative association with emotional exhaustion. Table 2 also shows the conditional indirect effects of i-deals on client satisfaction, and shows that the effect is positive for age diversity at 1SD above the mean ($b = .04, p < .05$), while nonsignificant for age diversity 1SD below the mean ($b = -.01, ns$). This further shows that i-deals especially relate to higher client satisfaction in units with high age diversity. To test how much individual variance was explained by the interaction term, we tested a model excluding the interaction term while including all other variables. This main-effects only model showed that 9% of the Level 1 variance in emotional exhaustion was explained by the predictors, while 3% of the variance at Level 2 was explained. Hence, we can conclude that the cross-level interaction term explained an additional 1% of the variance in exhaustion at Level 1 and 14% at Level 2. Hence, differences in i-deals and age diversity interactions across units could explain 14% of the variance in emotional exhaustion.

Insert Figures 2-3 and Table 2 about here

Supplemental Analyses

We conducted a number of additional analyses to ascertain the validity of our results. First, we tested a model excluding control variables to assess whether this model would produce identical hypothesized effects. This model obtained acceptable fit ($\chi^2 = 11.97$, $df = 3$, $p < .01$; RMSEA = .012; CFI = .986; SRMR = .015 [within], .143 [between]). The hypothesized relationships were in the expected direction, all being significantly related to the outcomes. Hence, we concluded that the inclusion of control variables did not affect the significance of the hypothesized relationships in our model.

Second, we also tested two subsequent models for the two types of i-deals included in our study. We measured both flexibility and development i-deals (Bal et al., 2012; Hornung et al., 2008), as these different types of i-deals have different relationships with the outcomes. A model including two items measuring flexibility i-deals fitted the data well ($\chi^2 = 38.44$, $df = 12$, $p < .001$; RMSEA = .011; CFI = .983; SRMR = .000 [within], .096 [between]). The results showed similar relationships, with negative relations of flexibility i-deals with emotional exhaustion ($b = -.175$, $p < .001$) and a significant interaction of flexibility i-deals with age diversity in relation to emotional exhaustion ($b = -.181$, $p < .01$). The indirect effect of flexibility i-deals on client satisfaction via emotional exhaustion and collective commitment was significant ($b = .009$, $p < .05$). A model with two items for development i-deals also showed a good fit ($\chi^2 = 40.88$, $df = 12$, $p < .001$; RMSEA = .011; CFI = .987; SRMR = .000 [within], .098 [between]). Development i-deals were negatively related to emotional exhaustion ($b = -.250$, $p < .001$), and the interaction between development i-deals and age diversity was negatively related to emotional exhaustion ($b = -.141$, $p < .05$). The indirect effect of development i-deals on client satisfaction via emotional exhaustion and collective commitment was also significant ($b = .014$, $p < .05$).

DISCUSSION

Our study is the first to show that i-deals are related to organizational outcomes, and in particular to client satisfaction. In addition to studies that have shown that i-deals are beneficial to individual employees (Liao et al., 2016), we showed that i-deals are beneficial for organizations as well. Moreover, based on contagion theory (Hatfield et al., 1992), we investigated how i-deals may be related to organizational success. Following work adjustment theory (Baltes et al., 1999), we showed that i-deals relate to reduced emotional exhaustion among employees, which contributes to stronger perceptions of collective commitment within units (i.e., contagion from employees to coworkers), which is subsequently related to higher client satisfaction (i.e., contagion effects from unit members to clients). Thus, we provide the first evidence that i-deals are related to relevant organizational outcomes via enhanced well-being and collective commitment in the workplace.

Moreover, the study also showed that i-deals are more likely to be beneficial in high age-diverse units. As the benefits of i-deals will increase in units where people are more different from each other (Lee et al., 2015), we showed that the relations of i-deals with emotional exhaustion were more pronounced in high age-diverse units, with the interaction effect explaining considerable variation across units. Due to aging workforces worldwide, workplaces will include employees of a wide variety of ages with heterogeneous work and career needs (Bal et al., 2012; Kooij et al., 2008). I-deals may facilitate and satisfy more heterogeneous needs resulting from greater age diversity in the workplace. Our study showed that individuals might benefit more from i-deals within a context in which individual treatment is more appropriate, such as a high age-diverse unit, which may ultimately result in more client satisfaction, as our study shows. Hence, this study contributes to greater understanding of the interplay between employee age and i-deals (Bal et al., 2012; Bal & Jansen, 2015), but also to the social aspects of i-deals (Rousseau, 2005), as they are negotiated and granted in a social environment where employees justify their

own i-deals in comparison to the situation around them, such as the need for individual deals within a unit (Lai et al., 2009).

Theoretical Implications

The study has a number of implications for theory and research on i-deals, psychological well-being, and client satisfaction. First, i-deals have been conceptualized to be beneficial for both the employee and the organization (Rousseau, 2005; Rousseau et al., 2006). This study is the first to show that i-deals may contribute to client satisfaction, which is regarded as one of the key indicators of organizational success in both public and private organizations (Fountain, 2001). This contradicts recent research that argued that i-deals are “inherent to informal organizations and new start-ups” (Lee et al., 2015, p. 806). The current study shows that i-deals are negotiated within a large public organization in Germany, and that within organizational units, the extent to which employees negotiate i-deals varies. Moreover, i-deals have benefits for large organizations, as they provide employees with the opportunity to obtain arrangements that can motivate and accommodate their unique situation (Bal & Rousseau, 2015). In sum, while i-deals may be costly and difficult to manage (Bal & Rousseau, 2015; Lee et al., 2015), they may also constitute the less visible glue that keeps employees motivated and enables them to find an optimal balance between themselves and their work, enabling them to satisfy organizational clients.

A second theoretical implication of the study is the focus on contagion effects of i-deals as a central theoretical lens through which i-deals can be investigated. Previous research has used primarily social exchange theory to explain the effects of i-deals (Liao et al., 2016). While this may reduce the use of i-deals to a tit-for-tat exchange agreement, where employees promise to commit themselves and to put more effort into their job in exchange for an i-deal, contagion theory offers an alternative perspective on the role of i-deals in organizations and teams. We theorized and showed not only internal contagion processes from employees to coworkers, but

also external contagion processes from employees to clients. Hence, i-deals may not only serve an individualistic purpose for employees (Bal & Lub, 2015), but employees who have successfully obtained i-deals may also be more outwards focused (Bakker, Demerouti, & Dollard, 2008) and put more effort in their interactions with colleagues and customers. In this way, this study also bridges the OB and marketing literatures, as it shows that i-deals might be a promising strategy to increase internal well-being and commitment, which would then be transmitted to customers as their service experience improves (Boshoff & Mels, 1995; Malhotra & Mukherjee, 2004). Therefore, a contagion perspective on i-deals offers new theoretical insights and challenges for i-deals research (Rousseau et al., 2006). Contagion theory may help understand how i-deals benefits are transmitted to others, and thus how i-deal benefit not stay within the recipient, but may also be shared among coworkers and customers.

An important contingency factor in the relations of i-deals with outcomes refers to age diversity. Therefore, the last theoretical implication of this study relates to when and how i-deals should be used in organizations. While an individualized approach to management of employees and employee motivation has its attractiveness, several authors have pointed out the costs of i-deals compared to more universalistic HR approaches (Kroon et al., 2015; Lee et al., 2015). This study shows that i-deals are especially functional in heterogeneous workplaces, particularly those where age diversity is high. Age-diverse workplaces include employees with more heterogeneous work-related needs (Bal et al., 2012) and i-deals seem to be more beneficial in such workplaces. Therefore, in theorizing about the effects of i-deals, the context should be taken into account, and in particular why people negotiate i-deals as well as for which groups i-deals have more utility. As much of the research on i-deals has looked at the effects of i-deal negotiation (Liao et al., 2016) or which employees are more likely to obtain them (Hornung et al., 2008; Ng & Lucianetti, 2015), there is still little known about why employees start negotiating. These motives may be

important determinants of how people respond to obtaining i-deals, as the results concerning age diversity show. Future research on i-deals could therefore benefit from greater integration of the literature on workplace diversity (McKay et al., 2011) while also considering social comparison as a mechanism to explain how people respond to i-deals being negotiated within their teams (Vidyarthi et al., 2016).

Strengths, Limitations, and Suggestions for Further Research

This study has a number of strengths, such as the multilevel design, large number of responses, inclusion of client satisfaction data, and time-lagged design. Using a large organization with 175 units, we were able to test the hypotheses in a single organization with different subcultures due to its geographical spread across the country. However, the study also has some limitations. First, a part of the model was based on employee surveys, which were collected at a single point in time. It was therefore not possible to rule out alternative causal pathways. For instance, emotional exhaustion could be positively related to i-deals, as employees in better health may be more likely to start negotiating, as they may perceive themselves to be more valuable for the firm (Rousseau, 2005). Moreover, while client satisfaction data were collected six months after the employee surveys, this time lag design does not completely rule out reversed causality (Kroon et al., 2015). It is therefore important to further investigate the causality of the relationships under study.

Second, the study focused on the effect of age diversity in relation to i-deals (Boehm, Kunze, & Bruch, 2014; Kunze et al., 2013). The measure of age was categorical, due to privacy concerns in the organization to reveal someone's age. However, a continuous measure of age would have been more accurate and yield more power in the analyses (MacCullum, Zhang, Preacher, & Rucker, 2002). The effects of age diversity may be small and may also interact with other types of diversity. For instance, there may be a threshold for age diversity to have a

substantial impact, with stronger effects in units with very high diversity compared to units with average levels of diversity. Furthermore, this study did not consider other types of diversity, such as racial or educational diversity (McKay et al., 2011). Moreover, there may be other important conceptualizations of diversity, including separation, disparity, and variety (Carton & Cummings, 2012). Hence, i-deals may be integrated with the wider diversity literature. Subsequent research may show how i-deals function under conditions of gender or racial diversity as well as under the different conceptualizations of diversity. An interesting avenue is to ascertain how an individualized approach to working arrangements may be effective in managing the different forms of diversity.

Furthermore, another limitation pertained to the inability to assess outcomes at the individual, employee, level. Clients rated their satisfaction with the complete agency, as clients interact with multiple employees when receiving services. As the outcomes were estimated at a higher level than the predictors, aggregation of individual level variables occurs within a multilevel framework when estimating the dependent variables, and as such dictates the dependency of individuals within a unit in relation to the outcomes. Thus, without a single best solution to aggregation and using multilevel models, different approaches might have led to different understanding of the mechanisms (Vermeeren, 2014). Further theoretical and empirical work may therefore advance understanding of the specific issues that arise when individual level phenomena are related to higher level outcomes (Croon & Van Veldhoven, 2007).

Finally, this study focused primarily on the benefits of i-deals; thereby, it did not take a critical perspective on i-deals in the workplace (Bal & Lub, 2015). I-deals have been associated with benefits for those who are successful in obtaining them, but at the same time, the authors have pointed out the potential Matthew-Effect created through i-deals, where proactive and successful employees are able to obtain special deals while those who are not proactive are

unable to obtain i-deals (Anand et al., 2010; Bal & Lub, 2015). I-deals may actually accentuate the existing inequalities in the workplace by favoring those who already thrive at work. Furthermore, i-deals may not only contribute to social cohesion in the workplace, but also create separation and distinction (Bal & Rousseau, 2015). Our results regarding age diversity as a boundary condition provide some support for this notion, as employees in age-diverse contexts seem to profit more (i.e., show a stronger decrease in emotional exhaustion) from i-deals, potentially because they regard their granted i-deals as more appropriate and feel less embarrassed for being preferred. Future research should therefore also focus on the dark side of i-deals in organizations and the potential negative aspects of i-deals on coworkers.

Managerial Implications

The study has also implications for organizations, managers, and employees. We have shown that i-deals can benefit both employees and organizations. I-deals are negatively related to employees' emotional exhaustion; therefore, employees may create a healthier correspondence between their work and their personal lives because of getting i-deals. This employee benefit also translates into organizational benefits. First, health statistics from many developed economies indicate that employees' psychological health is particularly jeopardized. In Germany, the data from large health insurers indicate that the number of missed workdays attributed to the burnout syndrome grew by a factor of 19 between 2004 and 2011 (BKK, 2012). Overall, psychologically-induced sick days account for 15% of all sick-days in the German working population (Kliner, Rennert, & Richter, 2015), costing organizations 8.3 billion Euro annually due to production and service downtimes (Dämon, 2016). Additionally, in the U.S., mental illnesses constitute a serious problem. The National Institute of Mental Health (2017) reports that in 2015, there were an estimated 43.4 million adults aged 18 or older with a mental illness, representing 17.9% of all U.S. adults. Consequently, for employees, organizations, and social security systems alike, it is

very important to foster psychological well-being in the workplace. I-deals may constitute such an intervention opportunity, given their potential to reduce emotional exhaustion.

Second, as i-deals sequentially relate to higher collective commitment and client satisfaction, they provide additional value to the firm. Collective commitment is important for organizations, as a common spirit and engagement in organizational goals are imperative for organizational functioning. Moreover, i-deals also relate to client satisfaction; thus, an ‘objective’ argument can be made for organizations to invest in i-deals, which may translate to higher organizational performance. While i-deals may initially be negotiated by high performers (Guerrero et al., 2014), managers may benefit when they agree with their employees how i-deals are implemented in the daily practice of organizational life, and how employees return i-deal granting with more effort put into the organization and teamwork. It may also be important for managers to explain to their employees in teams and units why and how i-deals are being used to prevent perceptions of favoritism (Dasborough et al., 2009), enhancing the positive effects of i-deals on employees within units.

Finally, our study also provides organizations and managers with direct indications regarding when and how i-deals should be used. Specifically, our study shows that when workplaces become more age diverse, i-deals may provide the flexibility to create incentives for individual employees to sustain their well-being and perform optimally in their jobs. Employees may perceive a greater need for individualized treatment when workplaces become more diverse. Hence, more positive effects may be sustained when combining diversity with an individualized treatment of workers, giving each individual the opportunity to obtain valuable resources that improve person-job fit and well-being.

Conclusion

The main aim of this study conducted in a large public organization was to show contagion processes from i-deals to organizational outcomes. We have shown that i-deals may improve employees' well-being through decreased emotional exhaustion, which may be contagious and enhance collective commitment among groups of employees, which ultimately pays off in higher client satisfaction. Finally, the study showed that i-deals become especially important in contexts with high age diversity in which i-deals were more strongly related to reduced emotional exhaustion, and ultimately higher client satisfaction.

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FOOTNOTES

1: Other aspects are also present in organizational commitment, such as behavioral and continuance commitment (Gardner et al., 2011; Mathieu & Zajac, 1990). Meta-analytic work has shown that correlations between the various aspects of commitment and well-being-related measures (e.g., burnout, stress, and exhaustion) tend to be very similar (Lee & Ashforth, 1996; Mathieu & Zajac, 1990). In the current study, the correlation between emotional exhaustion and commitment (measured at the individual level) was $-.36$, $p < .01$. This correlation is similar to those found in earlier meta-analyses: the Meyer et al. (2002) meta-analysis reported a $-.21$ correlation (Credibility Interval: $-.46$, $-.05$) between stress and affective commitment, the Lee and Ashforth (1996) meta-analysis reported a $-.43$ correlation (Confidence Interval: $-.54$, $-.33$) between emotional exhaustion and commitment, and the Mathieu and Zajac (1990) meta-analysis reported a $-.33$ correlation between stress and commitment. Hence, our individual level measure of commitment obtained similar correlations with emotional exhaustion as found in previous meta-analyses using the full scale of organizational commitment.

We also empirically validated our commitment measure. To do so, we used an independent data set collected in the same German public service organization. This data set was collected in the same year but only in one regional branch of the organization, and excluded respondents who already took part in the current study. As this survey was distributed to a much smaller population (number of responses $N = 1277$), more items for collective commitment were used (i.e., four items from the same Mowday et al. 1979 scale).

In this study, the same commitment items were measured as in the current study, as well as two additional items from the Mowday et al. (1979) scale: “I am extremely glad that I chose this organization to work for over others I was considering at the time I joined” and “I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful”. We conducted an exploratory factor analysis on the four items, producing one factor, explaining 73% of the variance, with the four items obtaining factor loadings between $.74$ and $.90$, indicating first evidence that the two items loaded well with other existing commitment items on a single factor. Moreover, we calculated and compared correlations of three commitment measures: one consisting of the two items used in our study, one consisting of the two other items, and one consisting of the four items together. In the validation study, equivalent measures were used for i-deals, emotional exhaustion and team support which also allow for comparisons to be made with the current study.

The correlations among the three different commitment measures are very high (between $.77$ and $.95$), indicating their shared variance within the overall commitment construct, and their correlations with i-deals, emotional exhaustion and team support are very similar. The correlations between emotional exhaustion and commitment are very similar across the three different measure of commitment (r 's ranging between $-.37$ and $-.41$), and are also similar to the correlation observed in the current study ($r = -.36$ between our measure of commitment at Level 1 and exhaustion). Moreover, the correlations of commitment with i-deals are similar as in our study (validation study: r 's ranging from $.29$ to $.31$; $r = .29$, $p < .01$ between i-deals and individual-level measure of commitment in the current study), as well as the correlation between team support and commitment at Level 1 (r 's ranging from $.22$ to $.23$; $r = .18$, $p < .01$ in the current study). Hence, these results show that the commitment measure reflects the wider nomological network of commitment, and yields very similar results as other commitment measures, as evidenced in our validity study as well as findings from earlier meta-analyses (Lee & Ashforth, 1996; Mathieu & Zajac, 1990).

2: Disability was theoretically irrelevant to the hypotheses and could therefore be used as Marker Variable. It could, however, be that people who have a disability request more flexibility i-deals. While there was no evidence of this in our dataset (the correlation between disability status and the flexibility i-deals measure was also nonsignificant), a theoretical relationship could have existed between disability status and i-deals.

Table 1

Means, standard deviations, reliabilities and correlations of the study variables

Variable	Level	M	SD	AVE	1	2	3	4	5	6	7	8	9	10
1 Gender	1	1.68	--		--									
2 Working Time	1	90.87	17.69		-.29	--								
3 I-deals	1	3.71	1.33	.56	.06	-.11	.83							
4 Team Support	1	4.90	1.01	.73	.07	-.03	.18	.92						
5 Emotional Exhaustion	1	3.73	1.04	.56	-.02	.08	-.27	-.20	.87					
6 Unit Size	2	159.70	99.62							--				
7 Mean Age Unit	2	2.78	.16							-.24	--			
8 Age Diversity	2	1.04	.07							.17	-.63	--		
9 Collective Commitment	2	3.57	.29	.82						.08	-.27	.13	.87	
10 Client Satisfaction	2	4.69	.09							-.12	-.07	.15	.21	--

Note. Reliabilities are reported along the diagonal. $N_{level 1} = 19,870$. $N_{level 2} = 175$. All correlations are significant at $p < .01$. AVE =

Average Variance Extracted.

Table 2
 Bootstrapping Tests for Indirect Effects

	Bootstrapping			
	Unstandardized Estimate	95% Confidence Interval	Standardized Estimate	95% Confidence Interval
<i>Direct Effects</i>				
I-deals → Emotional Exhaustion	-.18***	[-.19, -.17]	-.23***	[-.25, -.22]
Age Diversity → Emotional Exhaustion	.30***	[-.14, .78]	.20***	[-.09, .48]
I-deals * Age Diversity → Emotional Exhaustion	-.06**	[-.09, -.03]	-.21**	[-.33, -.10]
Emotional Exhaustion → Collective Commitment	-1.40***	[-1.99, -.87]	-.54***	[-.69, -.36]
Collective Commitment → Client Satisfaction	.05*	[.00, .10]	.16*	[.01, .31]
<i>Indirect Effects</i>				
I-deals → Emotional Exhaustion → Collective Commitment	.25***	[.16, .36]		
Emotional Exhaustion → Collective Commitment → Client Satisfaction	-.07*	[-.15, -.00]		
I-deals → Emotional Exhaustion → Collective Commitment → Client Satisfaction	.01*	[.00, .03]		
<i>Conditional Indirect Effects</i>				
I-deals → Emotional Exhaustion → Collective Commitment → Client Satisfaction for Age Diversity 1 SD below the mean	-.01	[-.03, .01]		
I-deals → Emotional Exhaustion → Collective Commitment → Client Satisfaction for Age Diversity 1 SD above the mean	.04*	[.02, .05]		

$N_{level 1} = 19,870$. $N_{level 2} = 175$.

* $p < .05$

** $p < .01$

*** $p < .001$

Figure 1

Crossover model of i-deals to client satisfaction via emotional exhaustion and collective commitment

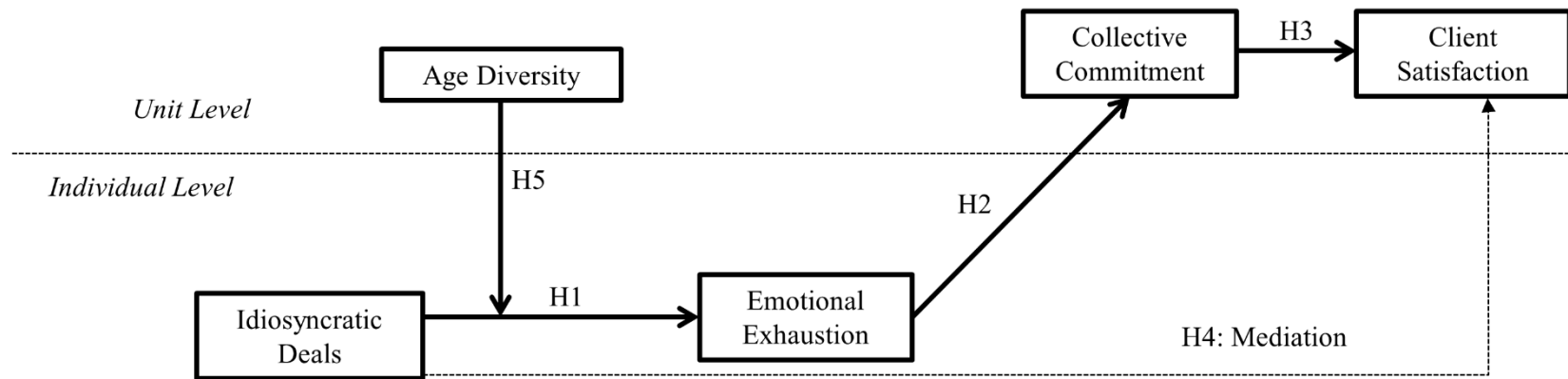
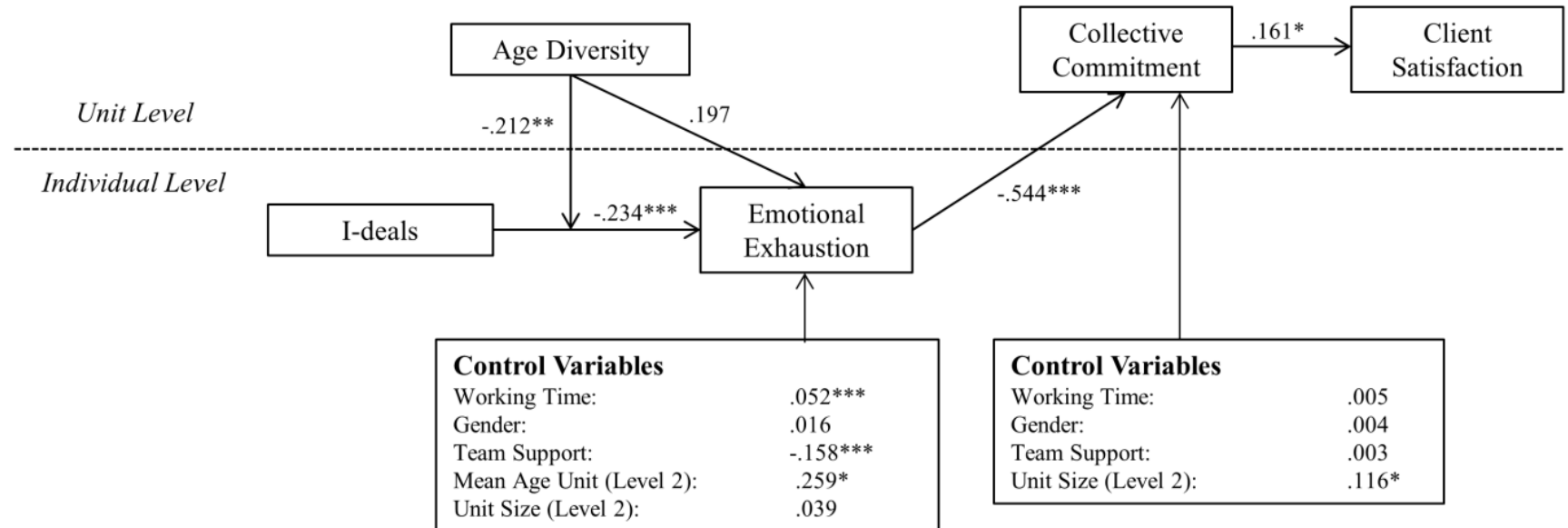


Figure 2

Results for multilevel path analyses of i-deals in relation to emotional exhaustion, collective commitment and client satisfaction



Note: * $p < .05$; *** $p < .001$. Standardized coefficients are reported.

Figure 3

The interaction effect between i-deals and age diversity in relation to emotional exhaustion

