Age differences in affective responses to inclusion experience: A daily diary study

Yixuan Li1 | Catherine E. Kleshinski2 | Kelly Schwind Wilson3 | Kaili Zhang4

1 Warrington College of Business, University of Florida, Gainesville, Florida, USA
2 Kelley School of Business, Indiana University, Bloomington, Indiana, USA
3 Krannert School of Management, Purdue University, West Lafayette, Indiana, USA
4 School of Business, East China University of Science and Technology, Shanghai, China

Abstract
The global trend of increasing age diversity in workforces has called for research on understanding and managing age differences to better integrate employees across the lifespan into organizations. Integrating aging and lifespan development research and inclusion work, we conduct a daily diary study to investigate age differences in employees’ responses to inclusion experience on a daily basis. In light of socioemotional selectivity theory, we argue that older workers exhibit stronger affective shifts (i.e., increase or upshift in positive affect and decrease or downshift in negative affect) in response to inclusion experience because they are likely to put higher value on social relationships, such that the daily effects of inclusion experience on changes in positive and negative affect are stronger for older (vs. younger) workers through the mediating mechanism of relationship value. We tested our hypotheses by surveying 128 employees from a manufacturing company for 10 consecutive workdays (N = 1248). We found that the daily effects of inclusion experience on affective changes were stronger for older workers through the mediation of higher relationship value. Changes in positive and negative affect, in turn, related to employees’ work engagement over the course of a workday. Our study serves as an important initial step that examines age differences in affective responses to daily inclusion and
sheds light on the importance of promoting workplace inclusion for older workers in particular.

KEYWORDS
affect, age differences, daily diary, inclusion experience, relationship value

1 | INTRODUCTION

With the global trend of workforce aging and growing age diversity, how to effectively integrate employees of different ages into organizations through workplace inclusion has become a vibrant research topic in recent years (Boehm & Dwertmann, 2015; Boehm & Kunze, 2015; Kunze et al., 2011; 2013; Pytlovany & Truxillo, 2017; Truxillo et al., 2015; Zacher et al., 2018). In this respect, prior studies found that age-inclusive organizations were more capable of leveraging age-diverse employees to achieve superior organizational performance (Boehm et al., 2014; Li et al., 2021). A key premise of this research stream is that inclusion experience (defined as employees’ psychological experience concerning being an important or valued part of the organization; Ferdman, 2017; Mor Barak, 2000, 2015; Mor Barak & Cherin, 1998) matters for age-diverse members. Nevertheless, our knowledge about age differences in employees’ responses to inclusion experience is scarce. Such an investigation is pivotal because it serves as a foundation to better understand, support, and mobilize employees across the lifespan through workplace inclusion (Kunze & Boehm, 2015; Wang & Wanberg, 2017).

In this research, we conduct a daily diary study to investigate whether and why older (vs. younger) workers are more affectively responsive to inclusion experience on a daily basis. Drawing upon socioemotional selectivity theory (Carstensen, 1992, 1998), we propose that daily inclusion experience triggers stronger affective shifts (i.e., upshift in positive affect and downshift in negative affect) for older (vs. younger) workers due to their higher relationship value (i.e., the extent to which individuals value social relationships at work; Cable & Edwards, 2004). Further, integrating the affect theory of social exchange (Lawler, 2001; Lawler & Thye, 1999, 2006) with socioemotional selectivity theory, we propose that age differences in affective shifts in response to inclusion experience serve as central mechanisms that explain employee work engagement throughout the workday (Bledow et al., 2011).

Importantly, we adopt a daily diary method to study age differences in employees’ affective responses to inclusion experience. Such a research paradigm is particularly useful in our research context because it allows us to directly test whether and why employees of different ages respond differently when they experience similar levels of inclusion at work on a given day. Notably, prior studies have exclusively adopted between-subject designs, holding the premise that employees who are more included (vs. excluded) by the workplace exhibit stronger positive (vs. negative) outcomes and that such inclusion (vs. exclusion) is stable (e.g., Adams et al., 2020; Chen & Tang, 2018; Cho & Mor Barak, 2008; Thompson et al., 2020). Such a focus overlooks the possibility that individuals’ inclusion experience and its consequences could be dynamic in nature and fluctuate over time due to idiosyncratic work and social experiences on a daily basis. As noted by McCormick et al. (2020, p. 322), employees have fluctuations in their experiences and behaviors over the course of a workday, and static research paradigms fail to capture such changes, which may “… inhibit research results, misrepresent reality, and limit the development of a comprehensive body of management knowledge.”

Furthermore, our daily diary approach allows us to investigate employees’ affective shifts as mediating mechanisms connecting their inclusion experience to work activities toward the organization (i.e., work engagement) on a daily basis. As suggested by the affect theory of social exchange (Lawler, 2001), a temporal focus is critical to account for affective shifts (or changes in employee affect) following social exchanges between employees and their organization. Specifically, the inclusive treatments that employees receive from the organization (e.g., supervisors and colleagues)
Fluctuations in inclusion experience, in turn, are expected to trigger affective shifts from the beginning to the end of work, which have important implications for employees at work. In this respect, utilizing a within-subject design can augment knowledge about affective shifts linking daily inclusion experience to work engagement, which cannot be well extrapolated with between-subject designs. We summarize our research model in Figure 1.

Our research offers several important contributions. First, drawing upon the affect theory of social exchange, we reveal the affective mechanisms linking employees’ inclusion experience to work engagement at the daily level. Although several recent studies found inclusion experience to be associated with positive outcomes (e.g., higher job performance and organizational commitment and lower absenteeism and burnout; Adams et al., 2020; Chen & Tang, 2018; Cho & Mor Barak, 2008; Jansen et al., 2017; Valcke et al., 2019), the pathways explaining why inclusion influences these outcomes remain unclear. In particular, researchers have long argued that inclusion reflects employees’ positive experience and psychological satisfaction with the current organization (Chen & Tang, 2018; Mor Barak & Cherin, 1998; Shore et al., 2011), suggesting affective processes transmit effects of inclusion on work outcomes. Yet, as this theoretical speculation has not been empirically investigated, knowledge regarding the specific affective mechanisms underlying inclusion is incomplete. In this respect, studying how inclusion experience drives shifts in positive and negative affect over the course of a workday reveals a novel daily process through which inclusion influences a critical work outcome. Relatedly, although previous studies have examined the association between exclusion or similar constructs (e.g., ostracism and interpersonal rejection) and affective states (Beekman et al., 2016; Blackhart et al., 2009; Thompson et al., 2020), their between-subject designs make it impossible to articulate how within-person variation in exclusion relates to affective shifts over time. In addition, inclusion is not simply the opposite of exclusion. While the psychological experience of exclusion usually reflects the omission of socially appropriate behaviors (e.g., one’s greetings have gone unanswered at work; Ferris et al., 2008; Robinson et al., 2013), inclusion involves organizations’ deliberate efforts in engaging employees (e.g., actively seeking employees’ input; Nishii, 2013). Indeed, we provide empirical evidence that, at the daily level, inclusion is a distinct construct from exclusion and daily inclusion experience impacts work results above and beyond daily exclusion experience. From a practical standpoint, this suggests that efforts focused on fostering inclusion (rather than simply avoiding exclusion) have important implications for energizing employees at work.

In addition, integrating socioemotional selectivity theory and the affect theory of social exchange, our study reveals why older workers are more sensitive to inclusion experience in terms of affective shifts and subsequently work engagement. Indeed, the appeal of inclusion lies in its positive focus on accepting and valuing individual differences regardless of diversity attributes (Chung et al., 2020). Yet, to date, what has been missing is research on the contingency of specific diversity attributes—that is, who exactly is most likely to benefit from workplace inclusion. To elaborate, prior research has shown that members from minority groups commonly report less inclusion at work, which
has a negative impact on their attitudes and behaviors (Andrews & Ashworth, 2015; Chen & Tang, 2018; Findler et al., 2007). Yet, it remains unclear whether these findings are due to membership-based differences in the psychological experience of inclusion or the responses to inclusion. Our study focuses on the latter by examining older workers as a group of employees who may react more strongly to inclusion experience and identifying relationship value as an important mechanism explaining such effects.

Importantly, in aging and lifespan development research, socioemotional selectivity theory has been widely used to explain age-based differences in terms of emotional competence, social networking, knowledge transfer, coworker support, and feedback reactions (e.g., Beitler et al., 2018; Burmeister et al., 2020; Davis et al., 2009; Fasbender et al., 2020; Fung et al., 2001; McDonald & Mair, 2010; Wang et al., 2015). Our study adds to this research stream by integrating socioemotional selectivity theory with inclusion work to study age differences in employees’ responses to inclusion experience through the mediating mechanism of relationship value. As noted by Bohlmann et al. (2018), it is important to examine age-related mediators instead of only testing simple age effects. This is because age is not a causal variable; rather, age-related individual characteristics impact work outcomes (Bohlmann et al., 2018). In this respect, we contribute to aging and lifespan development research by pinpointing relationship value as a central mechanism that explains age-based differences in employees’ affective shifts in response to inclusion experience on a daily basis.

2 | Theoretical development

2.1 | Inclusion experience at work

In the last decade, the focus of diversity research has shifted from diversity management to inclusion (Nishii, 2013). While diversity management refers to policies and practices that aim to improve the experiences of minority employees (Kossek & Zonia, 1993; Mor Barak et al., 2016), inclusion reflects the fundamental belief that individuals of all backgrounds should be accepted and valued by the workplace (Ely & Thomas, 2001; A.M. Ryan & Kossek, 2008; Shore et al., 2011). Importantly, inclusion is different from a focus on increasing diverse representation, which expects employees from minority groups to assimilate to dominant norms (Davidson & Ferdman, 2001). Rather, inclusion entails the simultaneous satisfaction of two distinct yet complementary employee needs: belongingness (i.e., being an accepted member of the organization) and uniqueness (i.e., being a distinctive self; Jansen et al., 2014). Simply put, if an organization fosters a sense of belongingness at the expense of giving up uniqueness, employees do not experience true inclusion at work (Mor Barak, 2015). When an employee experiences inclusion with their organization, they feel they belong as an insider and that the unique contributions and differences that they bring to the table are acknowledged and celebrated, rather than downplayed by others (Shore et al., 2011).

It is worth noting that early work on optimal distinctiveness theory considered belongingness and uniqueness as two competing components and argues that individuals attempt an optimal balance between the two (Brewer, 1991, 2007; Leonardelli et al., 2010). However, recent development of inclusion work has theoretically suggested and empirically demonstrated that an increased sense of belongingness is not necessarily accompanied by a diminished sense of uniqueness (Jansen et al., 2014; Shore et al., 2011). Indeed, it is feasible for organizations to facilitate employees’ belongingness and uniqueness at the same time (Bettencourt et al., 2006)².

Additionally, it is important to note that previous conceptualizations of inclusion hint at its relevance for employees’ day-to-day experiences. For instance, Shore et al.’s (2011, p. 1265) inclusion definition includes employee perceptions of their membership status based on “experiencing treatment that satisfies … (their) belongingness and uniqueness.” To satisfy belongingness, employees “need to have frequent and affectively pleasant interactions” in an organization, whereas uniqueness may be satisfied by “downplaying one’s commonalities with others” (Jansen et al., 2014, p. 371). Others provide similar examples of inclusion involving group dialogue that solicits and uses multiple perspectives, treating others as they would like to be treated (Ferdman, 2017), giving employees access to information and decision-making channels, as well as lunch or other informal interactions (e.g., at the “water cooler”) where
information and decisions unfold informally (Mor Barak et al., 2016). Each of these examples may vary from day to day. Given the rich empirical evidence showing that individuals’ work and social experiences fluctuate on a daily basis (e.g., De Gieter et al., 2018; Devloo et al., 2015; Foulk et al., 2019; N. P. Podsakoff et al., 2019), we focus on daily inclusion experience, which allows us to examine the dynamics of inclusion at work at the daily level.

2.2  Affective mechanisms underlying daily inclusion experience

According to the affect theory of social exchange (Lawler, 2001; Lawler & Thye, 1999, 2006), individuals’ affective shifts, including shifts in both positive affect (general feelings of pleasure/satisfaction) and negative affect (general feelings of displeasure/dissatisfaction), as a result of exchanges in their social context, could influence future exchanges in that context. As Lawler (2001, p. 322) explained, “When exchanges occur successfully, actors experience an emotional uplift...” and when exchanges do not occur successfully, they experience emotional ‘downs.’” In this respect, inclusion experience at work can be conceptualized as a positive social exchange from the organization, which should foster enhanced psychological satisfaction with the organization (i.e., upshift in positive affect and downshift in negative affect at the daily level; Lanaj et al., 2016; Reis et al., 2000). Although the daily associations between inclusion experience and affective shifts have not been empirically studied, recent theoretical development in inclusion research has posited that workplace inclusion can enhance employee well-being (Kossek et al., 2017; Shore et al., 2011). As positive and negative affect are two important constructs that reflect momentary well-being that fluctuates, employees’ daily inclusion experience should relate to changes in both of them (Diener et al., 1999; Mojza et al., 2011; R. M. Ryan & Deci, 2001). Thus, we expect that when employees experience greater inclusion at work on a given day (i.e., more positive social exchanges such as an employee being involved in an important organizational decision or invited to a group social event), their positive affect is likely to increase and their negative affect is likely to decrease.

Changes in positive and negative affect, in turn, are expected to influence employees’ work engagement. Individuals’ affective states serve as feedback that guides their ongoing activities (Clore et al., 2001; Van Kleef, 2009). An increase in positive affect signals enhanced satisfaction with organizational treatments, which is associated with more approach behaviors, broadens people’s momentary thought-action repertoires, and accrues new personal resources, thus allowing individuals to be more vigorous, dedicated, and absorbed in work activities to meet organizational demands (Bledow et al., 2011; Fredrickson, 2013; Isen, 2008). In other words, positive affect upshift enables a positive mindset that facilitates work engagement. Supporting this argument, Bledow et al. (2011) found that an increase in positive mood was associated with higher work engagement.

By contrast, an increase in negative affect signals growing dissatisfaction with organizational treatments, which discourages employees from dedicated work. Increased negative affect may also trigger action tendencies of avoidance, narrow individuals’ focus, and distract them from performing work tasks (Cacioppo et al., 1996; Elfenbein, 2007; Friedman & Förster, 2010). In addition, as individuals are motivated to regulate their affect to maintain a positive self-concept, dealing with increased negative affect may consume considerable self-regulatory resources, which leads to tightening of mental processes and disruption of ongoing actions (Gross & Thompson, 2007; Koopmann et al., 2019; Totterdell, 2000) that thwarts work engagement. Consistent with our argument, Parke et al. (2018) found that negative affect was negatively related to work engagement. In a similar vein, Scott and Barnes (2011) found that negative affect was positively related to work withdrawal, which ties to lack of work engagement (Bakker et al., 2014).

To summarize, as a result of being included by the organization (i.e., having a favorable social exchange from the organization), employees are likely to experience an upshift in positive affect and a downshift in negative affect, which drive them to engage in work activities toward the organization (i.e., work engagement) in return (Boehm et al., 2014; Chen & Tang, 2018). Relatedly, taking a social exchange lens, Chen and Tang (2018) found that inclusion experience promoted employees’ organizational commitment, which in turn was associated with improved job performance. In addition, Boehm et al. (2014) found that an inclusive climate promoted collective social exchange, and thereby increased firm performance. We add to this research stream by highlighting the connection between daily inclusion...
experience and the affective component in social exchanges (Lyons & Scott, 2012). Taken together, we hypothesize that daily inclusion experience has an indirect effect on work engagement via affective shifts.

**Hypothesis 1.** At the daily level, inclusion experience is associated with (a) an increase in positive affect and (b) a decrease in negative affect over the course of a workday.

**Hypothesis 2.** At the daily level, inclusion experience has an indirect effect on work engagement through the mediation of changes in (a) positive affect and (b) negative affect.

### 2.3 Age differences in affective responses to daily inclusion experience

Drawing upon socioemotional selectivity theory (Carstensen, 1992, 1998), we theorize age differences in employees’ relationship value and thereby their affective shifts in response to daily inclusion experience. Broadly, work values refer to individuals’ general beliefs about desirable end states or behaviors in work settings (Edwards & Cable, 2009; Schwartz, 1992). Prior studies have primarily identified three types of work values: intrinsic values, extrinsic values, and social values (Ros et al., 1999; Taris & Feij, 2001). Among these, relationship value is a critical component of social value, capturing the extent to which individuals value social relationships at work (Cable & Edwards, 2004). Individuals with high relationship value “are highly motivated to achieve meaningful contact and to get along with others” and therefore generally attach greater significance or meaning to social characteristics of the work environment (Barrick et al., 2013, p. 136), such as positive social interactions each day.

Aging and lifespan development research has long argued that cognitive, affective, and behavioral differences exist among age-diverse employees (Beier & Kanfer, 2013; Kanfer & Ackerman, 2004; T. Salthouse, 2012; T. A. Salthouse, 2019; Truxillo et al., 2015). Socioemotional selectivity theory (Carstensen, 1992, 1998) is particularly relevant in articulating age differences in relationship value. According to this theory, social goals can be categorized as either acquiring knowledge or maximizing positive socioemotional experiences (Carstensen et al., 1999). Younger workers tend to see the future as expansive and limitless, and thus place greater value on knowledge acquisition (Carstensen et al., 2003). By contrast, older workers tend to see the future as limited, and therefore put more value on positive socioemotional experiences (Carstensen, 1995; Kanfer & Ackerman, 2004). As Carstensen et al. (1999, pp. 166) noted, older workers have stronger socioemotional motives, which encompass “... the desire to find meaning in life, gain emotional intimacy, and establish feelings of social embeddedness” as well as enhancing positive affect and reducing negative affect “... via contact with others.”

Although younger workers may consider social relationships as potentially valuable sources for acquiring knowledge, older workers are more likely to obtain personal value directly from experiencing positive social interactions. In addition, for younger workers, “Because knowledge strivings are so important from late adolescence to middle adulthood, they are pursued relentlessly even at the cost of emotional satisfaction” (Carstensen et al., 1999, p. 168). Therefore, compared to younger workers, older workers may attach greater importance to social relationships in the organization (e.g., being accepted and valued as a key organizational member; Wöhrmann et al., 2016). Supporting this argument, a meta-analysis by Okun and Schultz (2003) showed that older people were more motivated to make friends and sustain positive social relationships.

**Hypothesis 3.** At the individual level, employee age is positively related to relationship value.

In light of socioemotional selectivity theory (Carstensen, 1992, 1998), we further propose that relationship value is the underlying pathway explaining age differences in employees’ affective shifts in response to inclusion experience each day at work. As explained earlier, older workers generally have higher relationship value, and thus are more likely to “zero in on” the day-to-day positive social interactions that comprise workplace inclusion. When their relationship
value is facilitated by inclusion, older workers are more likely to experience psychological satisfaction (Carstensen, 1992, 1998; Carstensen et al., 1999), which manifests as an upshift in positive affect and a downshift in negative affect on a daily basis. Simply put, for older workers who attach greater importance to social relationships at work, being frequently treated as an accepted and valued organizational member throughout the workday is critical in facilitating their socioemotional motives, thereby upshifting positive affect and downshifting negative affect (Cable & DeRue, 2002; Cable & Edwards, 2004; Locke, 1976). Overall, older workers with higher relationship value should therefore be more attuned to daily fluctuations in being treated as a valued and accepted member of the organization. In contrast, younger workers generally have lower relationship value, and thus may be less concerned about experiencing positive social interactions related to inclusion (Burmeister et al., 2020). Consequently, younger workers’ daily inclusion experience may have a weaker impact on their affective shifts, and thereby work engagement. Taken together, we expect that compared to younger workers, older workers should be more affectively responsive to day-to-day inclusion experience due to higher relationship value.

**Hypothesis 4.** Age, through relationship value, has indirect moderation effects on the relationships between inclusion experience and (a) increase in positive affect and (b) decrease in negative affect, such that these relationships are stronger for (older) employees with higher relationship value than (younger) employees with lower relationship value.

**Hypothesis 5.** The indirect moderation effects of age via relationship value transmit to work engagement through the mediation of changes in (a) positive affect and (b) negative affect.

3 | METHOD

3.1 | Sample and procedure

This study was reviewed and approved as exempt by Purdue University’s Institutional Review Board (IRB), “Inclusion Study” #IRB-2020-402. All frontline employees (170 employees in total) from a manufacturing company located in East China were invited to participate in this study. Among the invited employees, 128 of them agreed to participate with a response rate of 75.3%. The study announcement, along with a letter assuring confidentiality and voluntary participation, was distributed to participants by the human resource department. As financial incentives of participating in our study, employees who completed each day’s surveys were offered 40 RMB, equal to 5.8 USD (employees who completed all 10-day surveys were offered 400 RMB, equal to 57.7 USD).

Data was collected in two phases around August 2019. In the first phase, participants completed an initial survey, which measured their age and relationship value. A week later, participants completed surveys each weekday for two consecutive workweeks (10 days in total). Specifically, the morning survey was distributed at the beginning of work and measured positive and negative affect baselines. A noon survey was distributed during participants’ lunch break and measured participants’ inclusion and exclusion experiences. An end-of-work survey was distributed at the end of work around 6:00 pm, and measured participants’ positive affect, negative affect, and work engagement.

The final sample was comprised of 128 participants. Their average age was 34.53 years old (SD = 6.74), ranging from 22 to 53 years old. Specifically, about 22% of the participants were below 30 years old, 48% of the participants were between 30 and 40 years old, and 20% of the participants were above 40 years old. Among the participants, 48% of them were female. We received a total of 1248 daily surveys out of a possible 1280 daily surveys (128 participants × 10 days), indicating a compliance rate of 97.5%, consistent with other studies using similar designs (i.e., multiple daily measurements; e.g., Bono et al., 2013; Wang et al., 2013). Notably, in the main analysis, we used listwise deletion and excluded 32 observations with missing values on the study variables (modeling missing values with full information maximum likelihood estimation rendered similar results).
3.2 Measures

Measures used in this study were translated from English to Chinese following Brislin’s (1980) translation-back translation procedure. Unless indicated otherwise, participants responded to all measures using a 5-point Likert-type response scale with the scale anchors 1 = “strongly disagree” and 5 = “strongly agree.”

Inclusion experience. According to Shore et al. (2011), inclusion can be captured with two dimensions: belongingness and uniqueness. Thus, we measured inclusion experience with three items adapted from Stamper and Masterson (2002) assessing belongingness and three items adapted from Brown and Leigh (1996) assessing uniqueness. The belongingness items included “So far today, my organization makes me believe that I am included in it,” “So far today, my organization makes me feel very much a part of it”, and “So far today, my organization makes me feel I am an insider.” The uniqueness items included “So far today, my organization makes me feel very useful in my job,” “So far today, my organization makes me feel that I am a distinct member,” and “So far today, my organization makes me feel that the work I do is very valuable.” The Cronbach’s alpha for this scale at the daily level was .90.

Change in positive affect. We measured employees’ positive affect both at the beginning of work and at the end of work to capture shift in positive affect over the course of a workday. Positive affect was assessed with items from Larsen and Diener (1992) and Watson et al. (1998; Positive and Negative Affect Schedule, PANAS), using the subset of eight items from Mohr et al. (2005). Participants were asked to report their feelings “right now.” Example items were “cheerful” and “happy.” At the daily level, the Cronbach’s alpha was .96 for the measure at the beginning of work and .95 for the measure at the end of work.

Change in negative affect. We measured employees’ negative affect both at the beginning of work and at the end of work to capture shift in negative affect over the course of a workday. Negative affect was measured with items from Larsen and Diener (1992) and Watson et al. (1998; PANAS), using the subset of eight items from Mohr et al. (2005). Participants were asked to report their feelings “right now.” Example items included “distressed” and “dejected.” At the daily level, the Cronbach’s alpha was .96 for the measure at the beginning of work and .96 for the measure at the end of work.

Work engagement. We measured work engagement using the nine-item scale from Schaufeli et al. (2006). An example item was “Today, I felt bursting with energy while working.” The Cronbach’s alpha for this scale at the daily level was .95.

Age. Following prior aging research (e.g., Fasbender et al., 2020; Gielnik et al., 2018), employees’ age was measured with their chronological age in years. Consistent with previous studies (e.g., Fasbender et al., 2020; Gielnik et al., 2018), we rescaled this age variable by a factor of 10 to produce more precise estimates and aid in interpreting and comparing the unstandardized coefficients for age and the other unstandardized coefficients in our results.

Relationship value. Relationship value was measured using the three-item scale adapted from Cable and Edwards (2004). Participants rated the extent to which they consider relationships with others at work to be important to them using scale anchors 1 = “Not important at all” and 5 = “Very important.” An example item was “Developing close ties with others at work.” The Cronbach’s alpha for this scale was .77.

Control variable. In the analysis, we controlled for employees’ daily exclusion experience to examine whether daily inclusion experience can predict the research model above and beyond daily exclusion experience. Specifically, exclusion experience was measured with three items adapted from Stamper and Masterson (2002). The items were “So far today, my organization makes me feel left-out,” “So far today, my organization makes me feel like I am an outsider,” and “So far today, my organization makes me feel excluded at work.” The Cronbach’s alpha for this scale at the daily level was .94.

3.3 Analytic approach

Given that the daily surveys were nested within individuals, we used multilevel modeling with Mplus Version 8 (Muthén & Muthén, 1998–2017) to test our hypothesized model. We specified a two-level model. At the within-person
level, we specified the random effects of inclusion experience on end-of-work positive and negative affect. Other within-person effects were specified as fixed ones. At the between-person level, we specified the effect of age on relationship value. We also specified the between-level effects of age and relationship value on outcome variables. When testing the cross-level moderations, we specified the cross-level moderating effects of age and relationship value on the random slopes of inclusion experience on end-of-work positive and negative affect.

As we were interested in examining daily changes in positive and negative affect as mediating mechanisms, we followed previous studies by controlling for positive and negative affect baselines at the beginning of work. Specifically, when end-of-work positive and negative affect were entered as dependent variables in the model (i.e., the first paths of the mediation model), accounting for affect baselines at the beginning of work allowed us to examine how other predictors (e.g., inclusion experience) related to affective shifts over the course of a workday (e.g., Gabriel et al., 2011; Glomb et al., 2011; Lanaj et al., 2016). In addition, when end-of-work positive and negative affect were entered as independent variables in the model (i.e., second paths of the mediation model), the effects of affective changes were assessed using residual change scores by entering end-of-work affect as predictors while simultaneously controlling for beginning-of-work affect (e.g., Bledow et al., 2013; Yang et al., 2016). To clarify, when controlling for affect baselines values, end-of-work affect values can be interpreted as deviations of end-of-work affect values from those values that would be anticipated given the baseline values (Yang et al., 2016). Examining affective changes using this approach is considered to be preferred over measuring raw score changes (see Bledow et al., 2013 for a detailed explanation).

We group-mean centered affect baselines, exclusion experience, and inclusion experience in order to attain unbiased estimates for the within-person effects as well as effects of the cross-level interactions, following Hofmann and Gavin’s (1998) recommendation. In addition, to facilitate explanation of the main effects as well as cross-level moderating effects, we grand-mean centered age and relationship value. To ensure that the mediation paths of our Level 1 (within-person level) model strictly reflect daily effects, we manually group-mean centered positive and negative affect and added their cluster means back to the Level 2 (between-person level) portion of the model.

The indirect effects were tested using Monte Carlo method with 20,000 repetitions in R (using the utility found at http://quantpsy.org; see Selig & Preacher, 2008), which simulates the sampling distribution from the model estimates and their asymptotic variances and covariances instead of assuming a normal distribution (Y. Liu et al., 2015; Matta et al., 2020; Preacher et al., 2010). Specifically, to test the mediated moderation effects of age described in Hypotheses 4a and 4b, we estimated the indirect effects in terms of a Type II Mediated Moderation, where the moderating effects of the original moderator (i.e., age) on the relationship between inclusion experience and affective changes were transmitted through the mediator (i.e., relationship value). Specifically, we calculated the mediated moderation indices by multiplying the between-person coefficient of age on relationship value with the cross-level interaction coefficients of relationship value. To examine whether the indirect moderation effect of age via relationship value can transmit to work engagement through the mediation of affective changes, as predicted by Hypotheses 5a and 5b, we computed the moderated mediation indices (i.e., the between-person coefficient of age on relationship value × the cross-level interaction coefficients of relationship value × the within-person coefficients of affective changes on work engagement).

4 RESULTS

4.1 Preliminary analyses

To demonstrate the discriminant validity of the study variables (inclusion experience, exclusion experience, positive affect, and negative affect at the beginning and end of the workday, work engagement, and relationship value), we conducted a multilevel confirmatory factor analysis (MCFA). To achieve an optimal ratio of the sample size to the number of estimated parameters, we followed previous research (e.g., Chin, 1998; Little et al., 2002; Sass & Smith, 2006; Zhang et al., 2012) and randomly combined scale items into three parcels for positive affect, negative affect,
and work engagement. The hypothesized model was tested by loading items or parcels on their respective latent variables at both within-person and between-person levels (for relationship value, the three items were only loaded at the between-person level). As inclusion was comprised of two dimensions (i.e., uniqueness and belongingness), a secondary factor was specified for the two latent constructs to capture overall inclusion experience. Parcels for beginning- and end-of-workday positive and negative affect were comprised of identical items and the residuals of the same parcels were allowed to correlate. Results showed that our model with distinct but correlated factors fit well to the data: $\chi^2 (511, N = 1248) = 950.19, p < .001$, comparative fit index (CFI) = .98, Tucker-Lewis index (TLI) = .97, root mean square error of approximation (RMSEA) = .03, and standardized root mean square residual (SRMR) within = .02 and SRMR between = .05. In addition, this model fit the data significantly better than the comparison model in which inclusion and exclusion items were loaded onto one factor at both levels, $\Delta \chi^2 (\Delta df = 13) = 858.90, p < .001$, and the comparison models where parcels for two end-of-workday factors (positive affect and work engagement; negative affect and work engagement) were loaded onto one factor at both levels, $\Delta \chi^2 s (\Delta df = 13) \leq 885.44, p < .001$ (the model failed to converge when parcels for positive and negative affect were loaded on one factor at both levels due to model misspecification).

To examine variance components, we tested a null model (i.e., intercept-only baseline model) for the focal daily measures. The null models revealed the proportions of within- and between-person variances as follows: inclusion experience (41% within-person and 59% between-person), positive affect (35% within-person and 65% between-person), negative affect (37% within-person and 63% between-person), and work engagement (35% within-person and 65% between-person). These results indicate that employees' inclusion experience did fluctuate across workdays. Moreover, the endogenous variables demonstrated sufficient variance at the within-person and between-person levels to justify a multilevel modeling approach. In addition, results of one-way random factor analysis of variance revealed that between-person variance was significant for inclusion experience, ICC(1) = .59, $F (127,1120) = 15.12, p < .001$; positive affect, ICC(1) = .65, $F (127,1120) = 19.55, p < .001$; negative affect, ICC(1) = .64, $F (127,1120) = 17.99, p < .001$; and work engagement, ICC(1) = .65, $F (127,1120) = 19.59, p < .001$.

4.2 Hypotheses testing

In Table 1, we present the means, standard deviations, and correlations of the variables. In Table 2, we present the unstandardized multilevel path modeling estimates for the hypothesized model. To compute pseudo-R$^2$s, we used the formula provided by Kreft and de Leeuw (1998) and Singer (1998). The predictors in our model accounted for 12.2% of the total variance in positive affect, 6.4% of the total variance in negative affect, and 18.6% of the total variance in work engagement, which indicates that our model accounted for a substantial amount of variance in the endogenous variables.

According to Table 2, at the daily level, the effect of inclusion experience on positive affect change was positive and marginally significant ($y = .45, se = .25, p = .071$). The effect of inclusion experience on negative affect change was not significant ($y = -.13, se = .30, p = .662$). Thus, we did not find support for Hypotheses 1a and 1b. As we expected, at the daily level, positive affect change was positively related to work engagement ($y = .19, se = .05, p < .001$), and negative affect change was negatively related to work engagement ($y = -.20, se = .06, p < .001$). As the main effects of inclusion experience on affective changes were not significant, the indirect effects of inclusion experience on work engagement (for the mediation of positive affect change, 95% CI = [−.007, .204]; and for the mediation of negative affect change, 95% CI = [−.095, .159]) were not significant. Therefore, we did not find support for Hypotheses 2a or 2b.

Hypothesis 3 predicted that age was positively related to relationship value. As Table 2 shows, the relationship between age and relationship value was positive and significant ($y = .19, se = .07, p = .012$). Therefore, we found support for Hypothesis 3. Hypotheses 4a and 4b predicted the indirect moderation effects of age via relationship value on the relationships between inclusion experience and changes in positive and negative affect. According to our results, the cross-level moderating effect of relationship value on the within-person relationship between
**Table 1** Means, standard deviations, and correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>Within-level SD</th>
<th>Between-level SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual (between-person) level</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>1. Age</td>
<td>3.45</td>
<td>-</td>
<td>0.67</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Relationship value</td>
<td>4.09</td>
<td>-</td>
<td>0.59</td>
<td>.21</td>
<td>(.76)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily (within-person) level</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>3. Inclusion experience</td>
<td>3.92</td>
<td>0.32</td>
<td>0.39</td>
<td>.18</td>
<td>.35</td>
<td>(.90)</td>
<td>.09</td>
<td>-0.08</td>
<td>.07</td>
<td>.12</td>
<td>-0.10</td>
<td>-0.08</td>
</tr>
<tr>
<td>4. Positive affect</td>
<td>3.69</td>
<td>0.40</td>
<td>0.56</td>
<td>.12</td>
<td>.38</td>
<td>.51</td>
<td>(-95)</td>
<td>-0.31</td>
<td>.28</td>
<td>.19</td>
<td>-0.11</td>
<td>-0.03</td>
</tr>
<tr>
<td>5. Negative affect</td>
<td>1.82</td>
<td>0.36</td>
<td>0.48</td>
<td>-.01</td>
<td>-.13</td>
<td>-.37</td>
<td>-.46</td>
<td>(.96)</td>
<td>-0.26</td>
<td>-0.10</td>
<td>.27</td>
<td>.09</td>
</tr>
<tr>
<td>6. Work engagement</td>
<td>3.70</td>
<td>0.37</td>
<td>0.51</td>
<td>.35</td>
<td>.40</td>
<td>.61</td>
<td>.83</td>
<td>-0.27</td>
<td>(95)</td>
<td>.11</td>
<td>-0.06</td>
<td>-0.04</td>
</tr>
<tr>
<td>7. Positive affect baseline</td>
<td>3.70</td>
<td>0.49</td>
<td>0.56</td>
<td>.20</td>
<td>.40</td>
<td>.57</td>
<td>.95</td>
<td>-0.41</td>
<td>.86</td>
<td>(.96)</td>
<td>-0.34</td>
<td>-0.07</td>
</tr>
<tr>
<td>8. Negative affect baseline</td>
<td>1.84</td>
<td>0.42</td>
<td>0.44</td>
<td>-.07</td>
<td>-.15</td>
<td>-.38</td>
<td>-.44</td>
<td>.96</td>
<td>-.28</td>
<td>-.45</td>
<td>(.96)</td>
<td>.11</td>
</tr>
<tr>
<td>9. Exclusion experience</td>
<td>1.86</td>
<td>0.48</td>
<td>0.45</td>
<td>-.20</td>
<td>-.42</td>
<td>-.68</td>
<td>-.41</td>
<td>.67</td>
<td>-.45</td>
<td>-.42</td>
<td>.63</td>
<td>(94)</td>
</tr>
</tbody>
</table>

Note. Level 2 N = 128. Level 1 N = 1248. Within-person correlations are presented above the diagonal and between-person correlations are presented below the diagonal. Coefficients for Cronbach’s alpha are presented in parentheses along the diagonal.

*a Age was rescaled by a factor of 10.

*p < .05.

**p < .01.
### TABLE 2  Unstandardized multilevel path modeling results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Change in positive affect</th>
<th>Change in negative affect</th>
<th>Work engagement</th>
<th>Relationship value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate (SE)</td>
<td>Estimate (SE)</td>
<td>Estimate (SE)</td>
<td>Estimate (SE)</td>
</tr>
<tr>
<td><strong>Intercept</strong></td>
<td>3.56** (.22)</td>
<td>1.77** (.28)</td>
<td>2.97** (.18)</td>
<td>-.64* (.27)</td>
</tr>
<tr>
<td><strong>Within-person effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive affect baseline</td>
<td>.13** (.03)</td>
<td>-.00 (.03)</td>
<td>.04 (.03)</td>
<td>.03 (.03)</td>
</tr>
<tr>
<td>Negative affect baseline</td>
<td>-.05 (.03)</td>
<td>.20** (.05)</td>
<td>.03 (.03)</td>
<td>.03 (.03)</td>
</tr>
<tr>
<td>Exclusion experience</td>
<td>.01 (.03)</td>
<td>.04 (.04)</td>
<td>-.01 (.04)</td>
<td>.03 (.03)</td>
</tr>
<tr>
<td>Inclusion experience</td>
<td>.45 (.25)</td>
<td>-.13 (.30)</td>
<td>.04 (.04)</td>
<td>.03 (.03)</td>
</tr>
<tr>
<td>Change in positive affect</td>
<td>.19** (.05)</td>
<td>-.20** (.06)</td>
<td>.12** (.02)</td>
<td>.03 (.03)</td>
</tr>
<tr>
<td>Change in negative affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual variance</td>
<td>.13** (.02)</td>
<td>.10** (.01)</td>
<td>.12** (.02)</td>
<td>.03 (.03)</td>
</tr>
<tr>
<td><strong>Between-person effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.04 (.06)</td>
<td>.01 (.08)</td>
<td>.21* (.05)</td>
<td>.19* (.07)</td>
</tr>
<tr>
<td>Relationship value</td>
<td>.35** (.07)</td>
<td>-.11 (.08)</td>
<td>.29** (.07)</td>
<td></td>
</tr>
<tr>
<td>Residual variance</td>
<td>.28** (.04)</td>
<td>.24** (.03)</td>
<td>.20** (.03)</td>
<td>.34** (.04)</td>
</tr>
<tr>
<td>Cross-level interactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship value × Inclusion experience</td>
<td>.36** (.11)</td>
<td>-.34** (.11)</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Age × Inclusion experience</td>
<td>-.11 (.07)</td>
<td>.03 (.08)</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td>Residual variance of random slopes</td>
<td>.07 (.04)</td>
<td>.12 (.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pseudo-R²</strong></td>
<td>12.2%</td>
<td>6.4%</td>
<td>18.6%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Note. Level 2 N = 128. Level 1 N = 1,248. Changes in positive and negative affect were modeled by controlling for positive and negative affect baselines.

* *p < .05.

** *p < .01.
inclusion experience and positive affect change was significant ($\gamma = .36, se = .11, p = .001$). We plotted this cross-level interaction in Figure 2. As shown in this figure, the positive effect of daily inclusion experience on positive affect change was stronger when relationship value was higher. In addition, the mediated moderation index for the indirect moderation effect of age on the relationship between inclusion and positive affect change via relationship value was positive and significant (compound effect = .067, 95% CI = [.011, .146]). Thus, Hypothesis 4a was supported.

In addition, the cross-level moderating effect of relationship value on the within-person relationship between inclusion experience and change in negative affect was significant ($\gamma = -.34, se = .11, p = .001$). We plotted this cross-level interaction in Figure 3. As shown in the figure, the negative effect of daily inclusion experience on negative affect change was stronger when relationship value was higher. In support of Hypothesis 4b, the mediated moderation index for the indirect moderation effect of age on the relationship between inclusion experience and negative affect change via relationship value was negative and significant (compound effect = -.063, 95% CI = [-.135, -.010]).

Finally, we examined whether the indirect moderation effects of age via relationship value transmitted to work engagement through the mediation of changes in positive and negative affect. The indices were significant for both paths (for the positive affect change path, compound effect = .013, 95% CI = [.002, .031]; and for the negative affect change path, compound effect = .013, 95% CI = [.002, .031]. Therefore, we found support for Hypotheses 5a and 5b.

4.3 | Supplemental analyses

As a supplemental analysis, we decomposed inclusion experience into its constituent parts (belongingness and uniqueness) (see Tables 3 and 4). The result patterns for both dimensions are similar to those for overall inclusion experience presented in the main analysis. As a robustness check, we reran the analysis without including exclusion experience as a control variable. Our results are similar to the ones reported in the main analysis and are available in the Online.
<table>
<thead>
<tr>
<th>Variable</th>
<th><strong>Change in positive affect</strong></th>
<th><strong>Change in negative affect</strong></th>
<th><strong>Work engagement</strong></th>
<th><strong>Relationship value</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>SE</td>
<td>Estimate</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>3.56**</td>
<td>.22</td>
<td>1.77**</td>
<td>.28</td>
</tr>
<tr>
<td><strong>Within-person effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive affect baseline</td>
<td>.13**</td>
<td>.03</td>
<td>-.01</td>
<td>.03</td>
</tr>
<tr>
<td>Negative affect baseline</td>
<td>-.04</td>
<td>.03</td>
<td>.21**</td>
<td>.05</td>
</tr>
<tr>
<td>Exclusion experience</td>
<td>-.00</td>
<td>.03</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Belongingness</td>
<td>.40</td>
<td>.21</td>
<td>-.26</td>
<td>.25</td>
</tr>
<tr>
<td>Change in positive affect</td>
<td>.19**</td>
<td>.05</td>
<td>.10**</td>
<td>.01</td>
</tr>
<tr>
<td>Change in negative affect</td>
<td>-.20**</td>
<td>.06</td>
<td>.10**</td>
<td>.01</td>
</tr>
<tr>
<td>Residual variance</td>
<td>.14**</td>
<td>.02</td>
<td>.10**</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Between-person effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.04</td>
<td>.06</td>
<td>.01</td>
<td>.08</td>
</tr>
<tr>
<td>Relationship value</td>
<td>.35**</td>
<td>.07</td>
<td>-.11</td>
<td>.08</td>
</tr>
<tr>
<td>Residual variance</td>
<td>.28**</td>
<td>.04</td>
<td>.24**</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Cross-level interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship value × Belongingness</td>
<td>.28**</td>
<td>.10</td>
<td>-.27**</td>
<td>.08</td>
</tr>
<tr>
<td>Age × Belongingness</td>
<td>-.09</td>
<td>.05</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>Residual variance of random slopes</td>
<td>.02</td>
<td>.03</td>
<td>.02</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Pseudo-R²</strong></td>
<td>11.4%</td>
<td>4.7%</td>
<td>18.6%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Note. Level 2 N = 128. Level 1 N = 1,248. Changes in positive and negative affect were modeled by controlling for positive and negative affect baselines.

*p < .05.

**p < .01.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Change in positive affect</th>
<th>Change in negative affect</th>
<th>Work engagement</th>
<th>Relationship value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>SE</td>
<td>Estimate</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>3.56**</td>
<td>.22</td>
<td>1.77**</td>
<td>.28</td>
</tr>
<tr>
<td><strong>Within-person effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive affect baseline</td>
<td>.13**</td>
<td>.03</td>
<td>-.00</td>
<td>.03</td>
</tr>
<tr>
<td>Negative affect baseline</td>
<td>-.05</td>
<td>.03</td>
<td>.19**</td>
<td>.05</td>
</tr>
<tr>
<td>Exclusion experience</td>
<td>.00</td>
<td>.03</td>
<td>.04</td>
<td>.03</td>
</tr>
<tr>
<td>Uniqueness</td>
<td>.46</td>
<td>.25</td>
<td>.13</td>
<td>.30</td>
</tr>
<tr>
<td>Change in positive affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in negative affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual variance</td>
<td>.13**</td>
<td>.02</td>
<td>.10**</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Between-person effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.04</td>
<td>.06</td>
<td>.01</td>
<td>.08</td>
</tr>
<tr>
<td>Relationship value</td>
<td>.35**</td>
<td>.07</td>
<td>-.11</td>
<td>.08</td>
</tr>
<tr>
<td>Residual variance</td>
<td>.28**</td>
<td>.04</td>
<td>.24**</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Cross-level interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship value x Uniqueness</td>
<td>.31**</td>
<td>.11</td>
<td>-.27*</td>
<td>.12</td>
</tr>
<tr>
<td>Age x Uniqueness</td>
<td>-.13</td>
<td>.07</td>
<td>-.06</td>
<td>.09</td>
</tr>
<tr>
<td>Residual variance of random slopes</td>
<td>.06</td>
<td>.03</td>
<td>.14</td>
<td>.08</td>
</tr>
<tr>
<td>Pseudo-R^2</td>
<td>12.2%</td>
<td></td>
<td>7.3%</td>
<td></td>
</tr>
</tbody>
</table>

Note. Level 2 N = 128. Level 1 N = 1248. Changes in positive and negative affect were modeled by controlling for positive and negative affect baselines.

*p < .05.

**p < .01.
16 LI ET AL.

![Figure 3](image)

**FIGURE 3** Cross-level moderating effect of relationship value on the relationship between inclusion experience and change in negative affect

**Supplements.** In addition, we conducted a supplemental analysis for the direct cross-level moderating effects of age when relationship value was not included as a cross-level moderator (for details, please see Online Supplements). The cross-level interactions between age and inclusion experience were not significant (for change in positive affect, $\gamma = -.02$, $se = .08$, $p = .776$; and for change in negative affect, $\gamma = -.05$, $se = .08$, $p = .543$). Nevertheless, this step is not needed when testing mediated moderation because it severely reduces statistical power for detecting indirect effects (Kenny & Judd, 2014; Kenny et al., 1998; Shrout & Bolger, 2002). To elaborate, when testing Type II mediated moderation, “... setting up one hypothesis for the effect of W on M and another hypothesis for M moderating the relationship between X and Y is theoretically sufficient to advance the mediated moderation hypothesis” (D. Liu et al., 2012). Our current analytic approach is consistent with the existing literature (e.g., Fasbender et al., 2020; Gielnik et al., 2018).

5 **DISCUSSION**

In this study, we integrate socioemotional selectivity theory with the affect theory of social exchange to investigate whether and why older workers may be more affectively responsive to inclusion experience at work on a daily basis. According to our results, at the daily level, the positive effect of inclusion experience on positive affect change and the negative effect of inclusion experience on negative affect change were both stronger for older (vs. younger) workers through the mediation of higher relationship value. Changes in positive and negative affect, in turn, were related to work engagement. We discuss our implications below.

5.1 **Theoretical implications**

Our study provides several important theoretical implications. First, in light of socioemotional selectivity theory, we articulate age differences in employees’ responses to daily inclusion experience though the mediating mechanism of
relationship value. A strength of our study is that we directly pinpointed relationship value as an underlying mechanism in explaining age differences. So far, very little is known about the contingency roles of diversity attributes for inclusion or exclusion. As an exception, Hitlan et al. (2006) examined gender as a moderator for the effect of exclusion experience on work-related attitudes and psychological health, yet the mechanism through which this occurs is unclear. In this respect, our investigation of relationship value as an explanatory mechanism offers an important insight to more fully understand the contingency role of age as a diversity attribute. Relatedly, guided by socioemotional selectivity theory, prior aging and lifespan development studies have identified future time perspective as a key mechanism that explains how age shapes the effects of coworker contact quality (Fasbender et al., 2020) and opportunity identification (Gielnik et al., 2018). Our study adds to this research stream by identifying relationship value as a new inclusion-specific mechanism that explains age-based differences in employees’ affective responses to daily inclusion experience.

Notably, we conducted a follow-up survey among employees who participated in this daily diary study (N = 72 with a response rate = 56%) and asked these participants to report their future time perspective. Specifically, future time perspective was measured with the six-item scale from Zacher and Frese (2009; see also Fasbender et al., 2020) (α = .79). We matched the new survey data with the previous daily diary data. We found that age was negatively correlated with future time perspective (r = -.24, p = .039), consistent with the assumptions from socioemotional selectivity theory. The correlation between future time perspective and relationship value was not significant (r = -.02, p = .880), suggesting that future time perspective and relationship value are two distinct underlying mechanisms that can be used to explain age-based differences in light of this theory. Notably, the correlation between age and future time perspective in our sample was generally lower than the correlation observed by previous empirical studies (see D. T. A. M. Kooij et al., 2018 and Rudolph et al., 2018 for meta-analyses). This relatively weak correlation is likely due to our sample containing a large portion of younger and middle-aged workers and therefore has restriction in the range of age.

Second, our within-subject daily diary design provides a new paradigm to study inclusion at work. As McCormick et al. (2020, pp. 322–323) highlighted, “... within-person research offers promise as a means to facilitate contributions that enhance temporal precision, elucidate dynamic phenomena, and provide novel insights about constructs and their relationships with one another that are not possible with a between-person perspective.” Importantly, the impact of within-person research is most significant when there is adequate within-person variability in the constructs and when such a research design offers findings that extend beyond those that could be procured with between-person research (McCormick et al., 2020). Based on our findings, about half of the variance of inclusion experience was from the within-person level, demonstrating that individual employees’ inclusion experience was dynamic and fluctuated on a daily basis. In addition, such within-individual variations in inclusion experience matter for older workers’ affective shifts over the course of a workday. Therefore, moving beyond the between-subject design to examine within-subject daily inclusion experience brings a new theoretical insight to the inclusion literature. Importantly, the descriptive statistics (Table 1) suggest that the correlation between inclusion experience and exclusion experience at the daily level (rwithin = -.08, p = .003) was much weaker than the correlation of the two constructs at the individual level (rbetween = -.68, p < .001). This finding indicates that although inclusion and exclusion are more or less opposite points of the same continuum at the between-person level (i.e., across days, an individual who feels more included is very likely to feel less excluded), conclusions from between-subject designs examining these constructs may not be applied to the within-person level (i.e., on a given day, an individual may experience both inclusion and exclusion at the same time). As such, it is important to examine inclusion and exclusion simultaneously as two distinct constructs at the within-person (daily) level.

Third, drawing upon the affect theory of social exchange, our daily study examined affective shifts as underlying mechanisms linking inclusion experience to work engagement. We conclude that older workers are more likely to value relationships at work, which makes them more sensitive to inclusion in terms of affective reactions and thereby work engagement. We bridged prior research that adopted a social exchange perspective to understand employees’ responses to workplace inclusion (e.g., Boehm et al., 2014; Chen & Tang, 2018) with the affect theory of social
exchange, which pointed to affective explanations why employees who experience inclusion engage in work activities toward the organization. Hence, we contribute to this research stream by revealing novel affective mechanisms that help explain daily work engagement following a favorable social exchange (i.e., inclusion experience) between the organization and individual employees.

Notably, based on our findings, the direct effect of inclusion experience on positive affect change was only marginally significant and the effect of inclusion experience on negative affect change was not significant. The results suggest that the within-person effects of inclusion experience on affective shifts largely depend on one’s age via relationship value. In other words, one’s daily fluctuations in inclusion experience may only trigger strong affective responses when one values social relationships at work, which is more likely to be the case for older workers. As such, this study highlights the importance of taking a contingency view to consider the “who” factor, as individual differences play a critical role in shaping one’s affective responses to daily inclusion experience.

5.2 Practical implications

Practically, our research underscores the importance for organizations to pay particular attention to cultivating employees’ positive inclusion experience at work. In this respect, it is important for organizations to develop an inclusive climate that provides employees equal opportunities to succeed (e.g., equitable employment practices such as fair selection process, unbiased promotion, and equal pay for equal work), integrates employee differences (e.g., cultivating a collaborative conflict culture; Gelfand et al., 2012), and includes diverse employees in important decision-making processes (Nishii, 2013). Such organizational efforts could fundamentally alter the socioemotional context where heterogeneous individuals interact and fulfill employees’ needs for belongingness and uniqueness (Shore et al., 2011). Moreover, to promote inclusion, organizations should train their managers to engage in inclusive leadership to ensure that they interact with all subordinates respectfully, openly share decisions, and encourage subordinates to express their unique insights and perspectives (Randel et al., 2018). In addition, self-reflection interventions (e.g., Jennings et al., 2021; Lanaj et al., 2019) that ask employees to reflect on their unique differences and contributions to the organization and what makes (or would make) them feel accepted at work may help facilitate perceived inclusion at work.

Importantly, for older workers who often attach greater importance to social relationships, inclusion experience is likely to play a more significant role in eliciting their positive affect and reducing their negative affect, which in turn influence their work engagement throughout the day. Yet, age stereotypes are prevalent in many workplaces, and older workers sometimes experience less support, unfavorable treatments, and lack of inclusion at work (Armstrong-Stassen & Ursel, 2009; Kunze et al., 2011, 2013; Posthuma & Campion, 2009). To facilitate older workers’ inclusion experience, organizations may consider implementing development and accommodation practices targeted toward older workers to better meet their personal needs (Pak et al., 2021; Van Dalen et al., 2015). Organizations may also adopt flexible HR practices and opportunity-enhancing HR practices (e.g., flexible job design, team work, and decentralized decision-making) to stimulate older workers’ job crafting behavior, which allows them to better deal with resource loss, enhance their perceived person-job fit, and improve their experience of belongingness and uniqueness toward the organization (D. T. Kooij et al., 2017, 2021; Kuipers et al., 2020).

In addition, it is important for organizations to cultivate age-inclusive work environments to foster positive socioemotional experiences for employees across different age groups (Li et al., 2021). For example, organizations may focus on creating positive intergenerational interactions (e.g., by pairing younger workers with an older worker mentor), providing team and leadership training to manage and leverage age differences, and implementing career management interventions to help employees throughout their lifespan (e.g., by facilitating career goal setting as work and nonwork goals evolve across life stages, Hirschi, 2020; and by helping employees prepare for navigating challenges in the latter stages of their careers; Vuori et al., 2019) (Iweins et al., 2013; Truxillo et al., 2015).
Limitations and future research directions

Although our research offers several strengths, such as a daily within-person design over the course of two workweeks and time separation between key model variables, it has several limitations, which point toward future research directions. First, as all the measures were self-reported, our daily diary design raised the concern of common method bias (P. M. Podsakoff et al., 2003). To alleviate this concern, we separated our initial survey with cross-level moderators (i.e., age and relationship value) from daily surveys by one week. Inclusion experience was measured at noon, separately from the dependent variables. In addition, the mediating mechanisms were modeled as affective changes from the beginning to the end of the workday. Nevertheless, we were not able to separate our measures of end-of-work affect from work engagement. Yet, considering that scholars have demonstrated the associations between affective shifts and work outcomes (e.g., Bledow et al., 2011), the main goal of this study was to theorize and test the effects of inclusion experience on affective changes, as well as the cross-level moderators of these relationships. Thus, separating the measurement timing of inclusion experience from other variables was more important in probing the consequences of inclusion experience.

Second, in this study, we draw upon socioemotional selectivity theory and the affect theory of social exchange to investigate age-based differences in affective responses to inclusion experience. While we identified relationship value as an important underlying mechanism to understand the contingency role of age, other mechanisms may also pay a role. For example, people of different ages may hold different expectations about their inclusive treatments and inclusion experience within the organization and larger departures from those expectations are likely to trigger stronger affective responses. Additionally, we suggest future research extend our findings regarding affective mechanisms by investigating alternative pathways (e.g., cognitive mechanisms) for inclusion experience to impact work-related outcomes.

Third, in this study, we only focused on age differences in employees’ responses to inclusion experience. As a promising future research avenue, we encourage researchers to investigate whether employees’ daily responses to inclusion experience vary across other specific diversity attributes or minority status categories (e.g., gender, race, disability, etc.). Such an investigation is important in that it bridges inclusion and diversity research. For example, it is theoretically plausible that employees who consider themselves as belonging to a minority group tend to be more sensitive to workplace inclusion, because they are conscious about their minority status and thus may pay particular attention to workplace cues that signal inclusion. Additionally, we encourage scholars to integrate our findings with emerging research on “invisible” and stigmatized diversity attributes, such as neurodiversity or developmental disability (e.g., autism; Vogus & Taylor, 2018) and whether such attributes are disclosed to others (Johnson & Joshi, 2016; Lynch & Rodell, 2018), to reveal additional insights about who may be most likely to benefit from workplace inclusion.

Fourth, based on our findings, a sizable portion of variance in inclusion experience is at the within-person level, demonstrating that employees’ inclusion experience varies from day to day and holds important implications for work outcomes on a daily basis. Considering the importance of intraindividual variations in inclusion experience, we suggest future studies systematically examine daily-level antecedents that predict within-person fluctuations of inclusion experience. For example, contextual factors such as daily inclusive treatments from leaders and coworkers (e.g., daily inclusive leadership behaviors, coworker helping, and coworker incivility) may be viable predictors. Relatedly, one promising research avenue is to study whether people of different ages interpret similar inclusive treatments differently, which renders different psychological experience surrounding inclusion. Future research may also investigate how employees attribute their inclusive treatments as well as inclusion experience at work (e.g., due to age, gender, race, or other diversity attributes) and how such attribution affects their responses to inclusion. Additionally, the current research focuses on employees’ general inclusion experience at work. Future studies may look into different sources of inclusion experience (e.g., inclusion from the leader vs. coworkers) to further the current understanding about workplace inclusion.
Finally, as we used a Chinese sample of frontline employees from a manufacturing firm for hypotheses testing, the generalizability of our findings needs to be tested. Although the age distribution of our sample generally reflects workforce age composition for non-managerial workers in Chinese manufacturing firms, it contains a large portion of younger and middle-aged workers and thus has restriction in the range of age, preventing us from detecting a stronger association between age and relationship value. Yet, with only 128 participants, we were still able to find a significant effect of age on relationship value at the between-person level, which substantiates our theorizing. Moreover, considering that sampled employees are relatively young (M = 34.53) and the cross-level moderating effects are relatively strong, it is not surprising to see weak main effects of daily inclusion experience on affective changes. Following this logic, we expect stronger associations between daily inclusion experience and affective changes for samples containing employees with older ages in general. Taken together, our findings represent a conservative test for the hypothesized research model and we were still able to find general support for age differences in employees’ affective responses to daily inclusion experience via the mediating mechanism of relationship value. That being said, we expect the studied effects to be stronger when testing with an older sample with a wider range of age. Accordingly, we call for future studies to test our research model with more dispersed age distribution and in other cultural contexts to enrich our understanding of inclusion at work. In addition to chronological age differences, researchers may also examine subjective age differences in employees’ responses to daily inclusion experience across cultures, as one’s subjective age is context-dependent and may deviate from chronological age (D. Kooij et al., 2008; Kunze, Raes, et al., 2015).

6 CONCLUSION
Adopting a daily diary approach, we examine age-based differences in employees’ affective responses to inclusion experience on a daily basis. Supporting socioemotional selectivity theory, we found that compared to younger workers, older workers generally put more value on relationships at work, which made them more affectively responsive to daily inclusion experience. Affective shifts, in turn, were associated with work engagement over the course of a workday. Our study provides a new research paradigm to investigate intraindividual variations in inclusion at work, identifies affective shifts as important within-person mechanisms through which inclusion experience takes effect, and articulates why fostering inclusive work environments each day can ultimately energize employees, especially older workers with higher relationship value.

ACKNOWLEDGMENTS
The contribution of Dr. Kaili Zhang was partially supported by National Natural Science Foundation of China (71902061).

DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID
Yixuan Li https://orcid.org/0000-0002-0685-2875
Catherine E. Kleshinski https://orcid.org/0000-0002-9536-5840
Kelly Schwind Wilson https://orcid.org/0000-0002-8242-280X
Kaili Zhang https://orcid.org/0000-0002-4463-2822

ENDNOTES
1 There is no clear scholarly consensus regarding the cut-off between younger and older employees and the terms “younger employees” and “older employees” are for descriptive purposes only (Li et al., 2021). Indeed, the categorization of older (vs. younger) workers largely depends on the retirement context. The current empirical study was conducted in China, where
the normative retirement age is younger than Western countries (Zhan et al., 2015). In this context, workers can apply to retire at 45 years old for females and 50 years old for males. Results from a follow-up survey of the frontline employees in the sampled firm (N = 142) showed that the mean expected retirement age in the firm was 49.57 years old. On average, surveyed participants considered employees above the age of 42.78 years old to be older workers.

This argument is consistent with self-determination theory (Deci & Ryan, 1985, 1991, 2000), which states that basic human needs (e.g., relatedness, autonomy, and competence) are highly compatible and complementary. However, there are several important distinctions in how self-determination theory and inclusion theory attend to employee needs. The former takes an employee perspective and focuses on employees’ self-motivation to develop and grow toward their fullest potential and function optimally through need fulfillment (Greguras & Diefendorff, 2009), while the latter takes an organizational perspective and focuses on how organizational context constantly facilitates employees’ belongingness and uniqueness (Jansen et al., 2014; Shore et al., 2011).

The correlation between belongingness and uniqueness at the within-person level was .45 (p < .001) and at the between-person level was .89 (p < .001). Given the high correlations, we combine these two dimensions into one by averaging their scores to comprehensively assess employees’ inclusion experience. A similar approach was taken by previous inclusion studies to examine inclusion-related constructs (e.g., Jansen et al., 2017; Nishii, 2013). Alternatively, inclusion can be assessed using the product term of belongingness and uniqueness to capture the joint fulfillment of both dimensions (Jansen et al., 2014). When the product term is used, a more balanced score renders higher inclusion when the average of the two dimensions is the same (e.g., three for belongingness and three for uniqueness has a larger product term than five for belongingness and one for uniqueness). Our results are similar across these two operationalizations. For purpose of brevity, we only present results that used the average score to capture inclusion experience. Results that used the product term to capture inclusion experience are available in the Online Supplements.

Using raw score changes of positive and negative affect rendered similar results. They are available in the Online Supplements.

As a robustness check, we conducted the analysis using a latent variable decomposition approach to center positive and negative affect, along with work engagement. Our results are similar to the ones reported in the manuscript. They are available in the Online Supplements.

We calculated the cumulative probability of finding significance, following the procedure outlined by Bliese and Wang (2020). As Bliese and Wang (2020) noted, this method provides a way to understand observed power by using the original statistics (t-value in particular) to show how significant results vary in terms of cumulative probabilities of being significant. Assuming a .05 alpha level cutoff and based on the t-values corresponding to the results in Table 2, the cumulative probability of finding significance was 43.8% for the within-person effect of inclusion experience on positive affect change and 6.4% for the within-person effect of inclusion experience on negative affect change. The cumulative probability of finding significance was 90.4% for the cross-level interaction of relationship value with inclusion experience on positive affect change and 89.1% for the cross-level interaction of relationship value with inclusion experience on negative affect change. The between-person effect of age on relationship value had a cumulative probability of 71.1%. In addition, the cumulative probability of finding significance for the within-person effects of positive and negative affect changes on work engagement were 96.2% and 93.9%, respectively. Overall, this set of power analysis suggests that our sample has a decent post-hoc power of detecting the effects of the proposed research model.

REFERENCES


**SUPPORTING INFORMATION**

Additional supporting information may be found in the online version of the article at the publisher’s website.