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# Empathy at Work: The Role of Age and Emotional Job Demands

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Empathy—which typically instigates prosocial behavior—comprises both cognitive and affective facets. Research suggests that the cognitive facet of empathy (empathic accuracy) declines with age, whereas the affective facets of empathy (emotional congruence and sympathy) remain stable or increase with age. Going beyond main effects of age, we tested whether working in occupations with varying emotional job demands (EJDs) moderates the effects of age on empathy. We predicted that emotionally demanding occupations provide opportunities to practice empathy and, as a result, may lessen the negative relationship between age and empathic accuracy and/or strengthen the (positive) relationship between age and the affective facets of empathy. A sample of 128 employees (19–65 years) who differed in self-reported EJDs was recruited. Participants viewed film clips portraying different persons retelling a work event during which they experienced positive or negative emotions. After each clip, participants rated the intensity of the protagonist's and their own emotions. Consistent with prior research, our analyses revealed a negative association between age and empathic accuracy, while there were no age differences in emotional congruence and a positive association between age and sympathy. Only the relationship between age and emotional congruence was moderated by EJDs. Contrary to our prediction, relatively older employees in emotionally demanding jobs experienced lower emotional congruence than younger employees. This may suggest that people learn about the double-edged nature of sharing other's feelings as they progress in their career, and thus, keep a healthy distance. Implications for age-comparative research on prosocial processes across adulthood are discussed.


*Keywords:* emotion perception, emotional congruence, sympathy, work context, emotional job demands

The experience of empathy is seen as an important precursor of prosocial behavior. Empathy has been defined as a multidimen-

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sional construct involving both a cognitive facet (the ability to perceive others' emotions accurately) and affective facets (the capacity to share others' emotions and to feel sympathy). Research to date suggests that the cognitive facet is vulnerable to age-related decline, while the affective facets remain stable or even increase with age (e.g., Sze, Gyurak, Goodkind, & Levenson, 2012; Wieck & Kunzmann, 2015). Surprisingly, researchers so far have largely focused on main effects of age on empathy and have neglected potential boundary conditions for age differences in empathy. According to life span developmental theory and empirical studies on cognitive and emotional aging, adult development is contextually embedded and shaped by individuals' accumulated experiences over the life course (Baltes, 1987; Carr, Willis, Kail, & Carstensen, 2019). Seen from this perspective, individuals' life contexts and particularly their accumulated experience with emotionally challenging situations likely moderate age differences in empathy. Proceeding from this general idea, our goal was to investigate one important aspect of individuals' work life as a predictor of individual and age-related differences in empathy, namely, the extent to which an occupation is emotionally demanding and requires employees to be sensitive to others' feelings. Given that emotionally demanding jobs provide many opportunities to practice empathy, we predicted that older individuals, who have pursued emotionally taxing jobs over the course of their working life, show less age-related decline in empathic accuracy

and more signs of age-related increases in emotional congruence and sympathy than persons with less emotionally taxing jobs. By studying the role of occupational demands in shaping age-related differences in empathy, our study represents a contribution to theories and research on context effects in adult development which so far largely focused on cognitive aging.

### Defining and Assessing Empathy

Empathy is typically conceptualized as a multidimensional construct consisting of both cognitive and affective aspects (Davis, 1983; Walter, 2012). On the one hand, empathy involves the cognitive ability to infer another person's emotions accurately (often labeled as empathic accuracy or emotion perception). On the other hand, empathy involves two affective facets: emotional congruence and sympathy. Whereas emotional congruence can be described as "feeling with" another person, sympathy means "feeling for" another person (Batson, Fultz, & Schoenrade, 1987). That is, emotional congruence refers to affect sharing, whereas sympathy refers to feeling states such as compassion, love, or feelings of warmth that are distinct from the emotions experienced by the person one sympathizes with. Given that emotional congruence often involves the sharing of negative emotions (e.g., anger, sadness, or anxiety) and, thus, puts the individual at risk for personal distress, it is less closely and more equivocally related to prosocial behavior than is the case for sympathy (Bailey, Brady, Ebner, & Ruffman, 2018; Batson et al., 1987).

In past work, researchers have mainly focused on the measurement of empathic accuracy. In the tasks typically used, participants are presented with prototypical emotions in one modality (e.g., face) and are asked to select the correct answer from a list of emotion terms (FACES; Ebner, Riediger, & Lindenberger, 2010). Besides presenting emotions in a unimodal and decontextualized way, these tasks are ill-suited to elicit emotions in the perceiver. Therefore, this type of measure has often been criticized for its limited ecological validity (Blanke, Rieurs, & Riediger, 2015; Isaacowitz & Stanley, 2011). Taking up this criticism, we and others have developed film-based tasks, that allow to assess different facets of empathy simultaneously and in vivo by using multimodal and contextualized stimuli (e.g., Richter, Dietzel, & Kunzmann, 2011; Wieck & Kunzmann, 2015; Wieck, Scheibe, & Kunzmann, 2020, see also Bailey et al., 2018). We adopted this film-based paradigm in this study, given that it elicits emotional responses and better matches empathic reactions in real-life contexts than more traditional paradigms with unimodal and often static stimuli.

### Age Differences in Empathy

Age differences in empathy have typically been investigated by comparing groups of young adults (in their 20s and 30s) and older adults (in their 60s and 70s) in their empathic responses to various stimuli. These studies revealed that age differences in empathy are multidirectional: Compared to younger, older adults typically perform less well in recognizing others' emotions accurately. However, younger and older adults share other persons' emotions equally well and older adults often even experience higher sympathy than younger adults (Sze, Gyurak, et al., 2012; Wieck & Kunzmann, 2015).

These multidirectional age differences suggest that the processes and factors that determine the three facets of empathy differ.

Indeed, prior work suggests that empathic accuracy is associated with fluid cognitive abilities such as processing speed or logical thinking that typically decline with age (Kunzmann, Wieck, & Dietzel, 2018; Schlegel et al., 2019). This link makes sense if one considers that recognizing others' emotions accurately requires an individual to rapidly process and integrate multiple modalities of emotional cues, effectively inhibit interfering information, and continuously update judgments based on changing information. In contrast, the affective facets of empathy have been thought to be more determined by emotional and motivational processes (Cameron & Payne, 2011; Losoya & Eisenberg, 2001), which do not require extensive cognitive resources. For example, emotional congruence requires emotion regulation skills such as the ability to maintain emotional reactions within a tolerable range, and sympathy requires a certain motivational orientation to care for and support others. These emotional and motivational skills seem to be largely stable or even increase across adulthood and into old age (Kunzmann & Baltes, 2003; Scheibe & Carstensen, 2010).

In contrast to young and older adults, middle-aged adults (in their 40s and 50s)—who represent a large part of the working population—have rarely been included in studies on age and empathy. The few studies that included this age group have focused on the cognitive facet of empathy only, with mixed findings. Some studies replicated the abovementioned negative age-related trend in empathic accuracy from young to middle-aged adults (Kunzmann et al., 2018; Sze, Goodkind, Gyurak, & Levenson, 2012), some studies reported age-related stability (Moreno, Borod, Welkowitz, & Alpert, 1993), and others found a peak in the cognitive facet of empathy for middle-age adults (Hartshorne & Germine, 2015). We are aware of only one study that examined sympathy in midlife, showing a linear increase with age (Sze, Gyurak, et al., 2012).

These divergent findings demonstrate that age differences in empathy across adulthood are not necessarily linear and thus cannot be inferred from extreme-age group comparisons (Scheibe, 2018). In fact, middle-aged adults are unique in their motivational and capacity profile. In terms of motivation, middle-aged are similar to older adults in that they report a reduced time perspective, yet they are similar to young adults in that they show a maintained focus on future opportunities (Cate & John, 2007). In terms of capacities, midlife is a period in which gains and losses in cognitive capacities are assumed to reach an optimal balance (Lachman, Teshale, & Agrigoroaei, 2015) and primary control capacity peaks (Heckhausen, Wrosch, & Schulz, 2010). Not surprisingly, therefore, middle-aged adults hold key roles in society and their developmental tasks center around generativity and caring for others (McAdams, 2001). In occupational settings people in midlife often occupy leadership or mentoring positions, and their effectiveness requires prosocial action (Kellelt, Humphrey, & Sleeth, 2002). With the current study, we aim to contribute much-needed data on different facets of empathy in middle-aged adults.

### Emotional Job Demands: One Aspect of the Work Context That May Moderate Age Differences in Empathy

Human development does not proceed in a vacuum, rather, people develop in interactions with different environmental contexts (Baltes, 1987; Bronfenbrenner, 1977). It is generally ac-

knowledge that various phenomena—be they individual preferences, knowledge, skills, or behavior—may be better understood when context effects are taken into account (Schooler, Mulatu, & Oates, 1999; Staudinger, Smith, & Baltes, 1992). Despite this consensus, only few studies to date have provided a theoretical elaboration or empirical investigation into the role of context in shaping social–cognitive and emotional development during adulthood. In this project, we argue that, in western societies today, a context of central importance for adult development is the work context. Work is a core part of life and most people during adulthood spend a considerable amount of their time at work. The work environment provides a continuous stream of tasks, demands, and potential learning opportunities that affect adults' development (Hertzog, Kramer, Wilson, & Lindenberger, 2008; Reh, Wieck, & Scheibe, 2019). Thus, it may constitute a critical factor shaping adult age differences in empathy.

### Defining Emotional Job Demands as One Main Characteristic of the Work Context

Occupations vary in the demands that are placed on workers. Job demands are defined as those aspects of the job that require sustained physical, cognitive, or emotional effort and are associated with work motivation, performance, and well-being (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The present study focuses on emotional job demands (EJDs), which we consider particularly relevant to the development of empathy in adulthood.

EJDs represent those aspects of a job that require emotional effort (Diefendorff, Greguras, & Fleenor, 2016; Glomb, Kammeyer-Mueller, & Rotundo, 2004). In contrast to nonemotional job demands such as workload, time constraints, and organizational barriers, EJDs relate primarily to the exposure to, experience, and expression of emotions in interpersonal encounters with clients, coworkers, or supervisors (Tuxford & Bradley, 2015). Examples of occupations with relatively low emotional demands are those in which employees interact primarily with technical devices (e.g., IT service, machine controllers). Examples of occupations with relatively high emotional demands are those in which employees provide a service to others (e.g., lawyers, lodging managers) or care for others (e.g., teachers, nurses). In their effort to delineate specific EJDs, Zapf, Vogt, Seifert, Mertini, and Isic (1999) distinguished display demands (i.e., requirements to express positive emotions and/or hide negative emotions as part of organizational rules), sensitivity demands (i.e., the necessity to be sensitive and consider other's emotions), and sympathy demands (i.e., requirement to show sympathy for other people's suffering). Among those three aspects of EJDs, sensitivity and sympathy demands directly map onto empathy and are thus the focus of this study.

It is generally assumed that both sharing someone else's feelings, coupled with a sense of concern and warmth, and recognizing feelings facilitate effective interpersonal encounters and prosocial behavior at work (Neumann et al., 2007). The shared emotional experience prompts employees to build a connection with the customer, student, or patient, to comfort (or rejoice with) them, and to offer reassurance, comfort, and help. Being served by an empathic employee, in turn, may lead the counterpart to feel emotionally supported and safe (Decety & Fotopoulou, 2015). Furthermore, picking up another person's negative emotion (e.g., a client's anger) can help employees to infer information about the

counterpart's needs, goals, and behavioral intentions (Keltner & Haidt, 1999).

### Emotional Job Demands and Age Differences in Empathy

Similar to other competencies and skills, empathy can be cultivated and facilitated through a variety of life contexts (Mattingly & Kraiger, 2019; Schumann, Zaki, & Dweck, 2014). Being embedded in a rich, stimulating, and complex environment affords opportunities for individuals to gain and train relevant skills and thus accumulate experience over time (Hertzog et al., 2008). Work contexts with high EJDs ideally offer a nourishing and stimulating environment that provide many opportunities to practice and expand empathic skills. Employees in these environments are permanently prompted (a) to be attentive and sensitive toward other's feelings in emotionally exceptional circumstances, (b) to quickly and accurately perceive and identify the thoughts and feelings of the counterpart, (c) to show an understanding and/or prosocial behavior to alleviate another's distress, (d) to manage self-focused, negative emotions in order to focus on others' needs, and (e) to convey a sense of security in handling the situation. For example, by dealing with customers on a daily basis, call center employees train to deduce the customer's emotions based on subtle cues in the voice, to be sensitive toward indignant customers, to reassure them, and to cope effectively with own emotions in order to concentrate on the customer's needs. Furthermore, employees who are exposed to emotionally taxing situations typically receive instant feedback as to whether they managed the situation well. The availability of feedback may have a positive effect on learning and future performance (Sonntag, 1998). Exposure to the breadth of these EJDs and the immediate feedback from the interaction partner should lead workers to train and, in the long run, improve their competencies necessary to fulfill these tasks (Hertzog et al., 2008).

Although life span researchers generally acknowledge contextual influences on human development, empirical research is surprisingly scarce. Yet, promising findings stem from the realm of basic cognitive functioning and its neurophysiological correlates, suggesting a considerable amount of plasticity in response to cognitive stimulation (Baltes, Lindenberger, & Staudinger, 2006; Hertzog et al., 2008). Particularly relevant for present purposes, longitudinal studies on the impact of cognitive job demands suggest that cumulative exposure to high job complexity leads to maintenance or enhancement of cognitive functioning in later life or even postpones age-related cognitive decline (Carr et al., 2019; Oltmanns et al., 2017; see however Salthouse, 2006). Viewing mental activity as a factor that protects against age-related cognitive decline is in line with the *differential-preservation* hypothesis (Salthouse, Babcock, Skovronek, Mitchell, & Palmon, 1990). Yet, notice that some researchers propose the alternative hypothesis of *preserved-differentiation*, which regards an individual's current level of activity as a manifestation of their enhanced baseline level of cognitive ability (Bielak, Cherbuin, Bunce, & Anstey, 2014). Studies that disentangled the effects of cognitively demanding environments from selection effects indicate that although cognitively high-functioning individuals are more likely to be selected into cognitively demanding environments, the reciprocal effect holds as well: Exposure to such environments leads to better

cognitive functioning (Schooler, 2007). Together the studies support the idea that cognitive job demands provide access to experiences that help employees train and maintain cognitive functioning as they get older.

Applying these ideas to the realm of empathy, particularly to its cognitive facet, suggests that employees can acquire and accumulate task-specific emotion recognition skills over the course of the working life span that neutralize the effect of fluid cognitive decline on empathic accuracy. Moreover, exposure to enriched environments that enable to practice empathy likely fosters automatization such that empathic accuracy becomes less cognitively costly and occupies workers' cognitive resources to a lesser extent (see Labouvie-Vief, 2003; Scheibe & Blanchard-Fields, 2009, for similar arguments regarding emotion regulation). Consequently, EJDs may weaken negative age-related trends in empathic accuracy. As to the affective facets of empathy, continued exposure to emotionally demanding work environments likely facilitates the acquisition and further refinement of emotion regulation strategies helping the individual to down-regulate personal distress, one precondition of emotional congruence and sympathy (Okun, Shepard, & Eisenberg, 2000). By inference, age-related gains in the affective facets of empathy should be more pronounced in workers who have faced high EJDs during their work life.

### The Present Study

Using ecologically valid film-based tasks, a first goal of this study was to replicate the multidirectional pattern of age differences in empathy. In contrast to most prior studies that have used extreme age-group designs, we tested continuous age effects in a sample ranging from young to older employed adults and predicted negative age main effects on empathic accuracy and positive age main effects on emotional congruence and sympathy. A second goal was to test the idea that these age differences are moderated by one feature of the work context that arguably is particularly relevant to the development of empathy, that is, EJDs, operationalized as demands to be sensitive to customers and sense their feelings. Proceeding from the idea that jobs posing high emotional demands facilitate access to empathy-related experiences, we predicted that negative age-related differences in empathic accuracy are less pronounced and positive age differences in emotional congruence and sympathy are more pronounced in employees with high emotionally taxing jobs, relative to employees with low emotionally taxing jobs (see Figure 1).

### Method

#### Participants

A sample of 128 employees ranging in age from 19 to 65 years was recruited in Leipzig, a midsize German city via newspapers and online ads and through the department's participant pool. The sample was stratified by age and gender with a roughly equal number of participants across the age spectrum. Overall, participants were highly educated with 63.3% having a university degree and worked in various occupational sectors. Of the sample, 36.7% worked on average more than 8 hrs per day, 42.2% worked 6 to 8 hrs per day, and 21.1% worked less than 6 hrs per day. Of note, the distribution of participants of different ages was largely similar in

terms of most characteristics. As expected, the older the participant, the more years of occupational and organizational tenure they had,  $r = .86$ ,  $p < .001$  and  $r = .58$ ,  $p < .001$ . As incentive, participants received 6 EURO/hour. All experimental methods were approved by the ethics committee of the medical faculty of Leipzig. Participants' demographic characteristics are listed in Table 1.

#### Stimuli

To assess different facets of empathy in work-related settings in an ecologically valid manner, we deployed 20 well-validated work-related film clips from the validation phase of a film development project as described in Wieck et al. (2020).<sup>1</sup> To produce the films clips, age-diverse male and female employees were invited to the laboratory and instructed to remember, relive, and think-aloud about a negative or positive emotionally intense event from their working life while they were being video-taped. After editing the films, protagonists returned to the laboratory, watched their recordings, and rated the intensity of the emotions they had felt during retelling their event on a list of the following 21 emotional adjectives: angry, mad, furious, sad, downhearted, grieved, afraid, alarmed, worried, disgusted, nauseated, sickened, happy, glad, delighted, proud, productive, satisfied, relaxed, calm, and easygoing; rated on a scale ranged from 1 (*not at all*) to 5 (*extremely*).

The 20 films used for present purposes portrayed seven young (20–31 years), six middle-aged (36–50 years), and seven older protagonists (56–64 years). Most contributed one film, but four protagonists contributed two films. Of those 16 protagonists, 10 were female and six were male. The films covered seven positive and 13 negative work-related events, focusing on different topics and providing a broad range of emotional expressivity rated by two independent human coders (range = 2–5,  $M = 3.36$ ,  $SD = 1.0$ , response scale ranged from 1 [*not at all expressive*] to 5 [*very expressive*]).

#### Procedure and Design

All participants completed an online survey of about 1 hr and participated in a subsequent laboratory session of approximately 2 hrs. In the online survey, participants completed a demographic questionnaire and the self-report scale of EJDs. In the laboratory session, groups of two to nine participants were seated in cubicles and asked to wear headphones. All participants were first instructed to watch one neutral film of a man thinking aloud about his way from home to the laboratory to adapt to the testing procedure and to clarify any open questions. Subsequently, participants were presented the emotional films in pseudorandomized order, so that no more than two films with protagonists of the same age or gender, or with the same valence were shown in a row. To limit participant burden, we split the film clips into two equal sets that were balanced in terms of protagonist age, gender, and film clip valence; participants were randomly assigned to view one of the sets.

<sup>1</sup> We originally deployed 26 film clips, which were split and presented in two equal sets of 13 film clips each. During the validation phase, six films were dropped due to unacceptable psychometric characteristics.

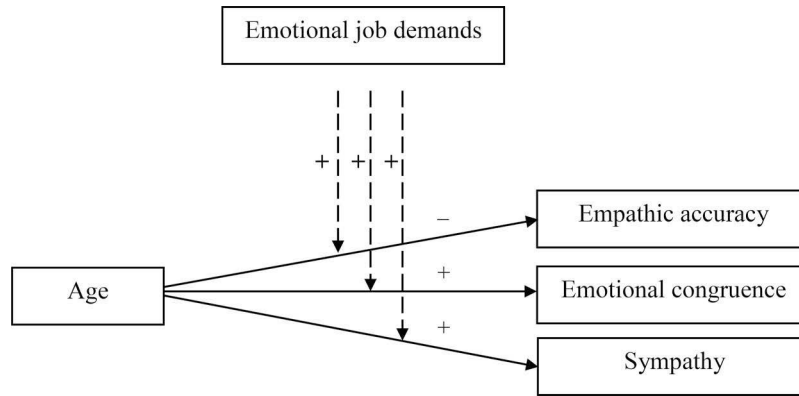


Figure 1. Theoretical model. Age is hypothesized to relate negatively to empathic accuracy and positively to emotional congruence and sympathy. All three age effects are hypothesized to be stronger to the extent that employees face higher levels of emotional job demands.

After each film clip, participants rated the intensity of the protagonist's emotions (used to calculate empathic accuracy) and their own emotions during the film clip (as a measure of emotional congruence and sympathy) using the same adjective lists as the protagonists used, but with different instructions.<sup>2</sup> The self-report adjective list for the participants included three additional adjectives to assess sympathy: sympathetic, moved, and compassionate.

## Measures

**Empathic accuracy.** As a measure of empathic accuracy, we computed the 2-way random, consistency, single-rating measures

Table 1  
Summary the of Participants' Demographic Characteristics

Characteristic	<i>M</i> ( <i>SD</i> ) or %
Age (years)	42.60 (12.46)
Gender	
Female	53.1%
Male	46.9%
Working time	
25%	7.8%
50%	13.3%
75%	20.3%
100%	58.6%
Tenure (years)	
Occupational tenure	19.21 (13.20)
Organizational tenure	7.83 (9.13)
Occupational sector	
Administration, insurance and finance	9 (7%)
Civil service	8 (6.3%)
Construction and engineering (e.g., carpenter)	9 (7%)
Culture and art (e.g., actor, musicologist)	9 (7%)
Education (e.g., teacher, coach)	17 (13.3%)
Healthcare and social welfare (e.g., nurse, social worker)	30 (23.4%)
Hospitality, sales and customer service	9 (7%)
Industry and production	6 (4.7%)
Media and marketing (e.g., journalist)	20 (15.6%)
Science (e.g., research associate)	5 (3.9%)
Transport and logistics (e.g., driving instructors)	2 (1.6%)
Other	4 (3.1%)

Note. *N* = 128.

intraclass correlation coefficients (ICCs) between the protagonists' self-reported emotions and the participants' other-report of protagonists' emotions. For the statistical analyses, ICCs were Fisher *r*-to-*Z* transformed to be normally distributed for subsequent analyses (Fisher, 1921). To facilitate interpretation, however, the findings are presented as original ICCs.

As presented in Table 2, internal consistency of empathic accuracy across films was acceptable (film set 1:  $\lambda_2 = .73$ ; film set 2:  $\lambda_2 = .70$ ), suggesting that empathic accuracy represents an ability that is consistent across different protagonists and can be analyzed on the aggregated level. The mean score of empathic accuracy across the 20 films was moderate and comparable with studies using similar film-based tasks (e.g., Katzorreck & Kunzmann, 2018).

**Emotional congruence.** As a measure of emotional congruence, we computed the two-way random, consistency, single-rating measures ICCs between the participants' self-ratings of their emotions during the film clip and the protagonists' self-ratings of their own emotions. Again, the ICCs were *r*-to-*Z* transformed for the statistical analyses but are reported in terms of original ICCs for better interpretability. Internal consistency of emotional congruence was acceptable (Film Set 1:  $\lambda_2 = .71$ ; Film Set 2:  $\lambda_2 = .77$ ). Consistent with prior studies (Wieck & Kunzmann, 2015), the mean score of emotional congruence was considerably lower than the mean score of empathic accuracy,  $t(127) = 25.63, p = .001$ .

**Sympathy.** As described above, the adjective list assessing participants' own emotions during the films included three items, sympathetic, moved, and compassionate, assessing the intensity of feeling sympathy. Reliability across the film-based tasks was good (Film Set 1:  $\lambda_2 = .86$ ; Film Set 2:  $\lambda_2 = .86$ ) and the mean score was moderate.

Intercorrelations among the three facets of empathy show that emotional congruence is positively related to empathic accuracy

<sup>2</sup> As one of our studies (Dietzel, 2012) revealed that the order of the tasks had no effect on participants' empathic responses, we kept with standard procedures and inquired about the protagonist's emotions (other-reports) before participants own emotions (self-reports).

Table 2  
*Descriptive Statistics, Internal Consistencies, and Intercorrelations Among Study Variables*

Variable	<i>M</i> ( <i>SD</i> )	Intercorrelation												
		1	2	3	4	5	6	7	8	9	10			
1. Empathic accuracy <sup>a</sup>	0.68 (0.08)	(.72)												
2. Emotional congruence <sup>a</sup>	0.45 (0.23)	.433***	(.77)											
3. Sympathy <sup>b</sup>	3.05 (0.62)	-.139	.381***	(.86)										
4. EJDs	3.35 (1.26)	.077	.182*	.211*	(.96)									
5. Age	42.60 (12.46)	-.274*	-.125	.196*	-.013	—								
6. Gender (0 = male, 1 = female)	—	.136	.008	-.017	.195*	-.062	—							
7. Neuroticism	3.67 (1.29)	.016	.045	-.053	.004	-.052	.234**	(.69)						
8. Processing speed	45.9% (16.3%)	.027	.039	-.039	.029	-.321**	-.136	.104	(.92)					
9. Vocabulary	79.8% (7.7%)	-.023	-.115	.128	.058	.141	-.068	-.088	.023	(.82)				
10. Daily client contact <sup>c</sup>	—	.037	.222*	.152	.627**	.008	.030	.020	-.003	.015	—			

Note. *N* = 125. EJDs = emotional job demands. Numbers on the main diagonal denote Guttman's Lambda2 as measures of internal consistency.

<sup>a</sup> Scores refer to intraclass correlation coefficients. <sup>b</sup> Response scale from 1 (*not at all*) to 5 (*extremely*). <sup>c</sup> Response scale from 1 (*no client contact*) to 6 (*more than 8 hours a day*).

\* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

and sympathy, while empathic accuracy is unrelated to sympathy (see Table 2).

**Emotional job demands.** Participants completed shortened versions of two subscales of the Frankfurt Emotion Work Scales (FEWS, 4.0; Zapf et al., 2000), sensitivity demands (e.g., "How often is it of importance in your job to know how the clients are feeling at the moment?") and showing sympathy (e.g., "How often do you have to express sympathy towards clients?"). From the original FEWS, we selected those three items per subscale that could be rated on a 5-point scale ranging from 1 (*very rarely or never*) to 5 (*very often [several times an hour]*). Because the two subscales were highly correlated,  $r = .83$ ,  $p < .001$ , we combined them into one scale for EJDs. Internal consistency of EJDs across the six items was excellent and the mean score was moderate (see Table 2).

To test whether the participants' self-reported EJDs were valid (e.g., a nurse should report high EJDs, whereas an engineer should report low EJDs), participants' occupations were classified by Cornelia Wieck according to an objective classification developed by Glomb et al. (2004) and compared with the subjective self-reports. In addition, on the basis of the mean of the EJDs scale ( $M = 3.35$ ), participants were classified as having either high (i.e., values  $\geq 3.3$ ) or low EJDs (i.e., values  $\leq 3.3$ ). The comparative analysis revealed that a total of 85.9% of our participants made "correct" assignments. This clearly suggests that our self-report measure is valid and generally corresponds to objective job classifications terms of their emotional demands. However, a total of 18 participants were identified, who reported higher or lower EJDs than one would expect on the basis of the more objective classification (e.g., a teacher had a low score of only 1.67). Rerunning the analyses without these participants did not change the prediction-relevant results.

**Covariates.** We considered four types of theoretically relevant covariates to establish the robustness of findings. First, given that, in comparison with men, women often report greater sympathy as well as negative self-related emotional reactions to stressors (Christov-Moore et al., 2014) and work more frequently in highly emotionally demanding jobs (Guy & Newman, 2004), we added gender as a covariate to our prediction-relevant analyses (0 =

male, 1 = female). Second, given that individuals with elevated levels of neuroticism tend to use ineffective ways of emotion regulation and are more likely to interpret minor frustrations as hopelessly overwhelming (Bolger & Zuckerman, 1995), one might argue that they have greater difficulties dealing with emotionally taxing situations. Relatedly, research has shown that high levels of neuroticism contribute to poor work performance due to emotional preoccupation and exhaustion (Ozer & Benet-Martínez, 2006). This is why we added neuroticism, as assessed via three items from the BFI-S (Gerlitz & Schupp, 2005), a short form of the German Big Five Inventory (Lang, Lüdtke, & Asendorpf, 2001), as a further covariate to our prediction-relevant analyses. Third, given that fluid and crystallized cognitive abilities are both related to age (Lindenberger, von Oertzen, Ghisletta, & Hertzog, 2011) and empathy, particularly empathic accuracy (Kunzmann et al., 2018), we added one indicator for each type of cognitive abilities as covariates. More specifically, processing speed (fluid cognition) was measured via the cognitive test battery (Leistungsprüfsystem, Horn, 1983). Vocabulary (crystallized cognition) was assessed by the German *Wortschatztest* (Schmidt & Metzler, 1992). Fourth, we considered participants' average number of daily working hours with clients because they determine the time that participants are exposed to EJDs and thus may be critical for our prediction that accumulated experience with emotionally taxing jobs and age interactively determine empathic outcomes.

## Statistical Analyses

To test the role of EJDs in age differences in empathy, we calculated separate multilevel models for each of the three outcome variables: empathic accuracy, emotional congruence, and sympathy. To implement the models, we used the *lme4* package (Bates, Mächler, Bolker, & Walker, 2015) in R (R Development Core Team, 2019). Film-level scores of the three empathy components served as Level-1 variables that were nested in participants (Level 2). Participants' age and EJDs were specified as predictors at the between-subjects level (Level 2). Both, participants' age and EJDs were used as continuous variables in the analyses. As participants were as-

signed to only one film set, all models accounted for film set. We did not specify any Level-1 predictors. All continuous predictors were grand-mean centered (Enders & Tofighi, 2007). To identify the random effects structure, we followed the recommendations of Bliese (2016): We started examining the group-level properties of the outcome variable to estimate the ICC(1). In a second step, we tested the proposed relationships with simpler models and added random effects in a stepwise way, comparing the  $-2 \log$  likelihood-based model fits for selecting the best-fitting baseline model. To this baseline model, we added the predictors in a stepwise way. For reasons of transparency, we first ran the models without any covariates before calculating the models with covariates (Becker et al., 2016).

To complement these analyses, we also report Bayesian statistics conducted with JASP (JASP Team, 2019). In contrast to making a dichotomous reject/do-not-reject decision with respect to null hypotheses based on a  $p$  value, Bayes can quantify the relative strengths of evidence for one model (e.g., null hypothesis) relative to another model (e.g., alternative hypothesis) in the form of an odds ratio known as the Bayes factor. In Bayesian analyses, the *prior* model represents the probability distribution of the size of an effect before taking the data into account and can be based on theoretical or empirical work about the variables investigated. We performed Bayesian regression analyses with JZS prior and default prior scale ( $r$  scale = 0.354). The default priors are recommended when little or inconclusive knowledge about the effect exists (Wagenmakers et al., 2018). The prior probability distribution is updated with information from the observed data, yielding a posterior distribution, which quantifies the relative plausibility of uncertainty about the unknown effect after considering the data. The change from prior to posterior odds given the data is quantified by the Bayes factor (labeled BF<sub>10</sub>), which provides a continuous measure of how much more likely the data are under the alternative hypothesis as compared to the null hypothesis.<sup>3</sup>

## Results

### Preliminary Analyses

EJDs were positively associated with emotional congruence and sympathy, but unrelated to empathic accuracy. Furthermore, age was unrelated to EJDs. Gender was positively related to EJDs (0 = male, 1 = female) and unrelated to the three facets of empathy.<sup>4</sup> Moreover, workers' average number of client contact was positively related to EJDs and emotional congruence. However, none of the remaining person-related variables (i.e., neuroticism, perceptual speed, and vocabulary) were associated with EJDs or empathy. Finally, age was negatively related to processing speed, but unrelated to verbal ability. Following recommendations by Becker et al. (2016), variables were only included as covariates if they correlated with one of the empathy components, worker age or EJDs. Based on this rule, we did not include neuroticism or vocabulary in our model (see Table 2).

### Hypotheses Testing

Table 3 summarizes the results of the three multilevel models that tested the main effects of participants' age and EJDs, as well

as the interaction effect of participants' age and EJDs, on the three facets of empathy.

**Main effects of age and emotional job demands.** Participants' age was significantly negatively related to empathic accuracy, suggesting that relatively younger participants were better able to recognize protagonists' emotions accurately than older participants. As to the affective facets of empathy, age was unrelated to emotional congruence, indicating that participants shared other persons' emotions to the same extent—independent of their age. Yet, participants' age was significantly positively related to sympathy, which suggests that relatively older participants experienced more sympathy than younger participants. Bayesian linear regression models revealed, in Jeffreys (1998) terminology, anecdotal evidence for the alternative hypotheses, namely, that age had an effect on empathic accuracy (BF<sub>10</sub> = 2.231) and sympathy (BF<sub>10</sub> = 1.907), indicating a positive association between age and the two facets of empathy, as compared to the null hypotheses (i.e., age is unrelated to the two facets). In contrast, there was moderate evidence for the null hypothesis that age is unrelated to emotional congruence (BF<sub>10</sub> = 0.274).

EJDs were positively related to sympathy, indicating that participants with high EJDs reported a higher level of sympathy across the film clips than participants with lower EJDs. In contrast, EJDs predicted neither empathic accuracy nor emotional congruence. Similarly, Bayesian linear regression models revealed anecdotal evidence for the null hypotheses that EJDs had no effect on emotional congruence (BF<sub>10</sub> = 0.953) and empathic accuracy (BF<sub>10</sub> = 0.245), as compared to the alternative hypotheses that there is an effect. However, there was anecdotal evidence for the alternative hypothesis that EJDs had an effect on sympathy (BF<sub>10</sub> = 2.632).

**Interaction effects of age and emotional job demands.** As shown in Table 3, the interaction between age and EJDs was neither significant for empathic accuracy nor for sympathy. However, for emotional congruence, a significant Age × EJDs interaction suggested that EJDs moderate age differences in emotional congruence. Simple slope analyses, using conditional values of the

<sup>3</sup> A BF<sub>10</sub> of, for example, 5 suggests that the data are five times more likely given the alternative hypothesis than given the null hypothesis; a BF<sub>10</sub> of 0.2 suggests the data are five times more likely given the null hypothesis than the alternative hypothesis (Lakens, McLatchie, Isager, Scheel, & Dienes, 2018). Evidence for the alternative hypothesis is considered anecdotal with a BF<sub>10</sub> between 1 and 3, moderate with a BF<sub>10</sub> greater than three, strong with a BF<sub>10</sub> greater than 10, very strong with a BF<sub>10</sub> greater than 30, and extreme with a BF<sub>10</sub> greater than 100. In contrast, evidence for the null hypothesis is considered anecdotal with a BF<sub>10</sub> between 1 and 1/3, moderate with a BF<sub>10</sub> smaller than 1/3, strong with a BF<sub>10</sub> smaller than 1/10, very strong with a BF<sub>10</sub> smaller than 1/30, and extreme with a BF<sub>10</sub> smaller than 1/100 (Jeffreys, 1998).

<sup>4</sup> To explore whether gender of protagonists moderates any prediction-relevant findings, we specified gender of protagonists (0 = male, 1 = female) as an additional predictor at the within-subject level (Level 1) in our multilevel models. We also specified a set of interaction terms between protagonists' gender, participants' age, and EJDs. The analyses revealed main effects of protagonists' gender on empathic accuracy and sympathy. Although the emotions of male protagonists were more accurately perceived than those of female protagonists,  $b = -.148$ ,  $SE = .024$ ,  $t = -6.10$ ,  $p < .001$ , participants reported to feel more sympathy for female protagonists than for male protagonists,  $b = .326$ ,  $SE = .055$ ,  $t = 5.93$ ,  $p < .001$ . However, none of the interaction effects became significant (all  $ps > .10$ ).



Table 3  
Estimates for Three Multilevel Models

Effect	Empathic accuracy			Emotional congruence			Sympathy		
	Estimate	SE	95% CI	Estimate	SE	95% CI	Estimate	SE	95% CI
Fixed effects									
Intercept	.774***	.019	[.759, .789]	.569***	.026	[.519, .620]	3.07***	.072	[2.91, 3.20]
Age of participants	-.003**	.001	[-.006, -.001]	-.002	.001	[-.005, .001]	.011*	.004	[.002, .019]
EJDs	.008	.010	[-.014, .029]	.026	.015	[-.003, .055]	.099*	.042	[.016, .182]
Film set	-.167*	.027	[-.220, -.114]	-.186***	.037	[-.258, -.114]	-.016	.105	[-.223, .190]
Age × EJDs	-.001	.001	[-.003, .0004]	-.003*	.001	[-.005, -.001]	-.005	.004	[-.012, .002]
Random effects									
Variance intercept	.006***	.007	[.026, .112]	.024***	.014	[.118, .188]	.258***	.045	[.429, .599]
Residual variance	.171***	.037	[.397, .431]	.193***	.039	[.422, .458]	.876***	.083	[.899, .975]

Note. Unstandardized estimates, standard errors, and 95% confidence intervals (CIs) are presented. EJDs = emotional job demands.  
\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

mean and 1 *SD* above and below the mean on the moderator EJDs (Nezlek, 2011), revealed that age was unrelated to emotional congruence in employees with low ( $b_{-1SD} = .002$ ,  $SE = .002$ ,  $p = .427$ ) and medium levels of EJDs ( $b_{Mean} = -.002$ ,  $SE = .002$ ,  $p = .214$ ). In contrast, age was negatively related to emotional congruence in employees with high EJDs ( $b_{+1SD} = -.006$ ,  $SE = .002$ ,  $p = .009$ ). Inspection of Figure 2 suggests that EJDs are most relevant for emotional congruence in young adulthood. As follow-up, we conducted an additional multilevel model by reversing the moderator and the independent variable. In this analysis, we probed the regions of significance according to the Johnson-Neyman technique (Johnson & Fay, 1950) using the *jtools* package (Long, 2019), which indicates the values of the moderator variable from which the simple slopes of the focal predictor are significant or insignificant. Indeed, the analysis revealed that only up to an age of 40 years, EJDs predicted emotional congruence. Over the

age of 40 years, the effect of EJDs on emotional congruence were insignificant.

### Additional Analyses

In a second set of analyses, we first reran the three multilevel models by adding three covariates, namely, gender, perceptual speed, and hours of client contact. None of the covariates had a significant effect on the dependent variables, and the main results remained largely unchanged. That is, all effects that were significant in the original model remained significant, all effects that were nonsignificant remained nonsignificant, and the direction of the significant effects remained the same. The only exception was the main effect of EJDs on sympathy, which was no longer significant in the model with covariates, although the effect was still in the same direction (i.e., positive).

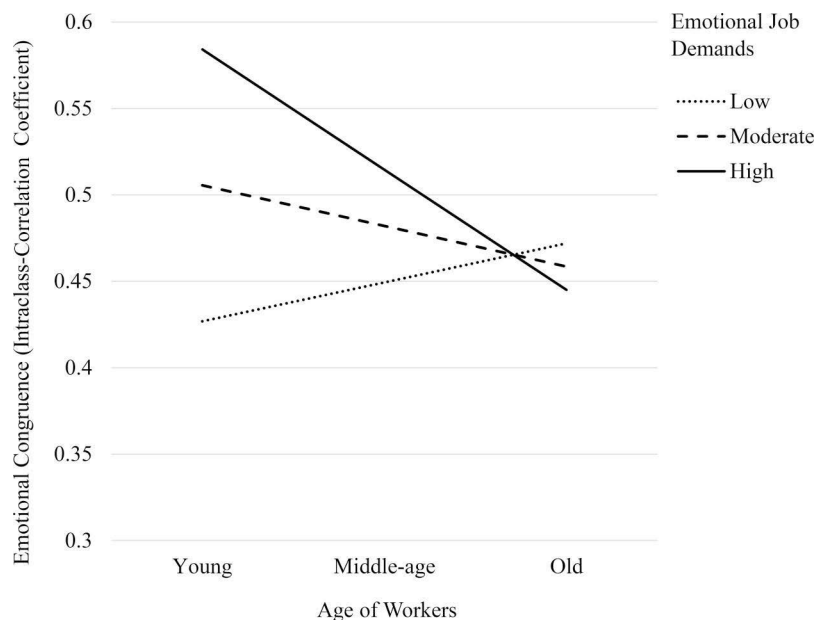


Figure 2. Interaction effect of age and emotional job demands on emotional congruence. Low and high emotional job demands refer to values 1 standard deviation below and above the mean, respectively.

## Discussion

In this study, we investigated one important characteristic of the work environment, EJDs, as a moderator of age differences in three facets of empathy, that is, empathic accuracy, emotional congruence, and sympathy. Drawing on the idea that frequent exposure to emotionally demanding situations at work leads to an accumulation of skills needed to fulfill these demands, we expected older workers with high EJDs, relative to their younger counterparts, to acquire an experience-based advantage in empathy. Consequently, the negative age trend in empathic accuracy should become less apparent if people work in emotionally taxing jobs and the positive age trend in the affective facets of empathy should become more pronounced.

Two main findings emerged. First, we replicated multidirectional age differences in empathy reported in previous studies that had mainly used extreme-age group comparisons (Richter & Kunzmann, 2011; Wieck & Kunzmann, 2015). As in previous work, age was negatively associated with empathic accuracy, but was unrelated and even positively related to emotional congruence and sympathy, respectively. Second, EJDs modulated the relationship between age and emotional congruence. In contrast to the predicted “experience” effect, however, older employees with emotionally demanding jobs achieved lower rather than higher emotional congruence than their younger counterparts with similarly emotionally demanding jobs. Additional analyses revealed that EJDs only predicted emotional congruence in relatively young adults up to an age of 40. Also inconsistent with our predictions, EJDs did not moderate the effects of age on either empathic accuracy or sympathy. These findings were robust when accounting for a set of covariates.

### Multidirectional Age Differences in Empathy

Extant age-comparative studies on empathy often deploy (a) extreme-group designs that neglect middle-age adults; (b) self-reports or traditional test-based tasks, which often have been criticized for lacking ecological validity (Isaacowitz & Stanley, 2011); and/or (c) tests that measure only one facet of empathy, thus, failing to consider the multidimensionality of the empathy concept. These practices have resulted in some ambiguity about whether and how the components of empathy differ by age. By using ecologically valid tasks tailored to a context central to most adults, namely the work context, and integrating middle-aged adults (i.e., relatively old workers), we corroborated past work. Our findings suggest that recognizing others’ emotions accurately may already decrease in middle adulthood (similar to Isaacowitz et al., 2007; Kunzmann et al., 2018), while our findings match studies that largely omit middle age by showing that older workers shared other people’s emotions equally well as younger ones and even reported higher sympathy (Bailey et al., 2018; Sze, Goodkind, et al., 2012). Thus, age deficits in empathic accuracy are already evident at an age that often is considered as middle age and conceptualizations of midlife as a period of prime performance may be in need of qualification. In addition, the evidence supports the view that age differences in sympathy may be linear in adulthood. To the best of our knowledge, this is one of the very few studies that examined linear effects of age on all three facets of empathy.

### Emotional Job Demands Moderate Age Differences in Emotional Congruence

To the best of our knowledge, this is the first study that tested whether the work context, and in particular emotionally demanding jobs, set individuals on a more positive age-related trajectory of empathy than one would expect normatively (i.e., from the typical studies with unselected samples). A mechanism that we had thought would be responsible for this positive dynamic is the continued practice and accumulated experience that workers potentially gain when embedded in enriched and stimulating environments over years as they pursue emotionally demanding jobs (see Hertzog et al., 2008). In contrast to the expected experience-based advantage, however, our results indicate that high levels of EJDs rather prompt a negative age-related trend in emotional congruence, whereas EJDs seem to leave age differences in workers’ empathic accuracy and sympathy largely unaffected. Stated differently, among those working in highly emotionally demanding jobs, younger employees showed higher levels of emotional congruence than older employees. In contrast, among those with low or medium levels of EJDs, emotional congruence was unrelated to age. These findings have some similarity with previous studies on early career development. For example, longitudinal studies investigating changes in empathy during medical training and residency provide evidence of a decline in self-reported empathy over the course of the clinical semester (Bellini & Shea, 2005; Neumann et al., 2011). Our findings suggest that this pattern can also be observed when comparing younger, middle-aged, and older workers.

A first, methodological explanation for this unexpected pattern of findings is that participants’ subjectively reported EJDs may not be perfectly valid and thus may not match the objectively occurring emotional demands of their respective job. However, additional analyses revealed that over 80% of our participants reported a level of EJDs that was consistent with the objective job demands criteria reported by Glomb et al. (2004). It is also notable that our self-report measure of EJDs was unrelated to person-variables such as neuroticism, speaking against the idea that this measure represents participants’ emotional competencies or deficits rather than more objective contextual characteristics of their jobs. Although we find these additional findings promising, future research is needed that tests EJDs more comprehensively and by using multiple and more valid methods, for example, supervisor- or peer-ratings of EJDs or objective data on occupational job demands drawn from job classification systems such as the O\*NET (see also Glomb et al., 2004).

A second methodological explanation for the unexpected finding refers to the problem that we obtained only a snapshot of participants’ *current* EJDs. Because we have little information about our participants’ job history, we cannot completely rule out that the professional demand profiles of younger and older adults changed over the years. Notably, however, analyses that included occupational and organizational tenure confirmed that relatively older employees indeed worked much longer in their current profession and organization than relatively younger employees.

A third and more conceptually driven explanation for the absence of experience effects on empathy in older workers with high EJDs could be that continuous exposure to EJDs may exhaust employees’ resources and make them more vulnerable rather than

resilient over time (see Reh et al., 2019). This idea is supported by the argument that aging is not only accompanied by emotional and motivational strengths, but also by vulnerabilities such as cognitive and physiological losses (Charles & Luong, 2013). Cognitive and physiological impairments are assumed to result in increasingly greater difficulties for aging individuals to outplay socioemotional strengths in taxing situations that often characterize jobs that are emotionally demanding. Thus, we had considered it possible that the relatively low emotional congruence scores in older workers with emotionally demanding jobs may only hold for older workers with low cognitive functioning and not generalize to older workers with high cognitive functioning. However, in the present relatively “young” sample, fluid cognitive abilities did not predict any of the three components of empathy; there were neither significant main effects nor significant interaction effects with age and EJDs. Given that our cognitive measure was limited and we did not include physiological measures, these ideas clearly deserve further research.

A final conceptual explanation for the age-differential findings in emotional congruence refers to the idea that older adults may have learned to dampen emotional sharing while continuing to experience sympathy. More specifically, as people progress in emotionally demanding careers, they may learn about the double-edged nature of resonating with someone else’s feelings, posing a risk of burnout. Career starters are often full of idealism and enthusiasm leading them to spend their time and energy sharing other’s emotional experiences and showing prosociality toward them. However, research shows that empathic processes may increase workers’ susceptibility to burnout. For example, a study by Le Blanc, Bakker, Peeters, van Heesch, and Schaufeli (2001) showed that oncology care providers with strong susceptibility to emotional contagion were more vulnerable to emotional exhaustion than oncology care providers low in susceptibility to emotional contagion. As a means of protecting their own as well as their interaction partners’ well-being, older job incumbents may thus limit the sharing of their counterparts’ emotions. Permanently sharing others’ pain can initiate a process of wear and tear and thereby result in empathic distress, emotional exhaustion, and decreased prosocial behavior (Batson et al., 1987). In fact, empathic responses to witnessing someone else in pain are usually experienced as aversive (Lamm, Decety, & Singer, 2011). This may be especially problematic for people working in professions where suffering is routinely encountered. Physicians, for example, should strive for emotional detachment in order to reliably care for their patients regardless of their personal feelings. Given that older participants reported a higher degree of sympathy toward the protagonists than their younger counterparts—independent of the extent of EJDs, sharing other’s emotions to a lower degree may be seen as a strength rather than a weakness of ageing. Future research is needed to better understand and directly test the idea that three facets of empathy, particularly the affective facets, are differently related to prosocial behavior in various contexts, including jobs with high EJDs (e.g., Beadle, Sheehan, Dahlben, & Gutches, 2015). Given our own evidence, we would expect interactive effects of the two affective facets on prosocial behavior, in the sense that a profile of high sympathy but low emotional congruence may be most beneficial for oneself but also one’s clients, coworkers, or patients.

Although this argument at first sight only applies to sharing negative emotions, follow-up analyses revealed that in emotionally demanding contexts, valence does not matter for age differences in emotional congruence.<sup>5</sup> A potential explanation for this finding could be that the “decision” to not share negative feelings with other people may become a general tendency to not share any emotions, whether negative or positive. One reason for this generalization process may be that sharing positive emotions is one way for employees to become attached to others. This very attachment would make it hard to disengage in case these others suddenly experience negative emotions. Seen in this light, it is easier for employees to work with others or care for them if they remain neutral and thus keep a “healthy distance.”

### Limitations and Future Research Directions

A first limitation of this study is its cross-sectional design. Thus, we cannot disentangle the effects of experience and selection. Longitudinal studies are indispensable to uncover whether it is indeed the case that people, who start their career with high levels of emotional congruence, lose this empathic reaction over the course of their career (e.g., through a process of motivated disengagement to avoid burnout) and what factors may moderate these within-person changes over time.

A second limitation of the current study is our reliance on a self-report measure of EJDs. Although our follow-up analyses suggested that participants’ self-evaluations with regard to their EJDs match more objectively determined job characteristics and were unrelated to neuroticism, we cannot fully rule out that these evaluations were influenced by introspective abilities and impression management, at least partly. Thus, future studies should use a more comprehensive multimethod approach to measure job characteristics that includes objective methods (e.g., Occupational Information Network; see Reh et al., 2019). In addition, it would be advantageous to test more nuanced predictions about different facets of EJDs and more or less subtle differences among different occupations and occupational specializations (e.g., an oncologist probably reports a higher degree of EJDs than a radiologist).

A third limitation refers to our focus on a single job characteristic. Yet, exposure to job demands alone will not help employees to accumulate knowledge and/or expand emotional competencies. Instead both personal characteristics (e.g., general mental ability, motivation to learn) and characteristics of the work environment (e.g., opportunities to develop, feedback from job tasks) contribute to develop empathy-related skills (Noe, Clarke, & Klein, 2014). Thus, an interesting avenue for future research is the investigation

<sup>5</sup> To test whether film clips’ valence has an effect on age differences in empathy, we included valence of the film clip (0 = negative, 1 = positive) at the within-person level (Level 1) as an additional predictor and allowed this effect to vary, and specified a set of cross-level interactions between valence, participants’ age, and EJDs in our models. The analyses revealed that film clips’ valence had significant main effects on all three facets of empathy. Although emotion perception and emotional congruence was better if the protagonists talked about positive, as compared with negative, events (emotion perception,  $b = .439$ ,  $SE = .032$ ,  $t = 13.79$ , 95% CI [.376, .501], emotional congruence,  $b = .290$ ,  $SE = .035$ ,  $t = 8.30$ , 95% CI [.221, .359]), participants reported to feel more sympathy with protagonists retelling negative events than positive ones,  $b = -.115$ ,  $SE = .055$ ,  $t = -2.09$ , 95% CI [-.223, -.007]. However, none of the interaction effects between age, valence, and EJDs became significant.

of both external and internal job factors that enable employees to train and expand the skills necessary to deal with EJDs.

Finally, we investigated the work context as one sample case in shaping age-related differences in empathy. An interesting direction for future research is to consider other contexts (e.g., family) and specific features within such contexts (e.g., parenthood vs. nonparenthood) as predictors of individual and age-related differences in empathy.

## Conclusion

Older adults typically have greater difficulties than younger adults in recognizing others' emotions, while they share others' emotions equally and experience increased sympathy. Yet, the environment in which adult development unfolds may have an impact on the magnitude and direction of age-related differences in empathy. The current study sought to examine whether exposure to high EJDs leads to an experience-based advantage in older employees' empathy. The results do not clearly confirm such an experience-based advantage. Whereas EJDs had no moderating effect on age-related differences in empathic accuracy or sympathy, high EJDs unexpectedly predicted lower emotional congruence at higher age. This finding raises the intriguing question whether such a trend reflects older employees' motivated distancing from others' emotions (in combination with enhanced sympathy) to protect their own well-being and professional efficiency, or rather a wear-and-tear process where exposure to EJDs exhausts employees' resources and make them less able to share emotions over time. Future research is needed to disentangle these possibilities.

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