

ORIGINAL ARTICLE

Why do or don't older employees seek knowledge from younger colleagues? A relation–opportunity model to explain how age-inclusive human resources practices foster older employees' knowledge seeking from younger colleagues

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Abstract

Knowledge-related interactions between older and younger employees are crucial for business success. Although research has contributed much to understanding why older employees share knowledge with younger colleagues, little is known about older employees' motivation to seek knowledge. In this study, we answer the question of how age-inclusive human resources (HR) practices can foster older employees' knowledge seeking from younger colleagues. Drawing on social learning theory that conceptualises learning-oriented behaviour (i.e. knowledge seeking) as being inextricably linked to social context and person-related factors, we develop a dual pathway relation–opportunity model outlining how age-inclusive HR practices foster older employees' development striving, which, in turn, promotes knowledge seeking from younger colleagues. On the one hand, we propose a relation-based pathway that identifies contact quality with younger colleagues as a socio-

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emotional mechanism linking age-inclusive HR practices with knowledge seeking via development striving. On the other hand, we suggest an opportunity-based pathway that identifies older employees' future time perspective as a person-related mechanism. We find support for our hypotheses in a sample of 502 older employees who participated in a three-wave survey. We discuss theoretical implications and encourage scholars to further shift the conversation towards an inclusive perspective that overcomes stereotypical views of older employees.

KEYWORDS

age-inclusive HR practices, global workforce ageing, knowledge management, knowledge seeking, managing an age-diverse workforce, older employees, United Kingdom

INTRODUCTION

Longer working lives along with technological advances and ever-evolving job and organisation changes have a profound impact on the human work experience, specifically for older employees (Ackerman & Kanfer, 2020). In today's rapidly changing world of work, older employees' continuous learning and seeking of new knowledge is increasingly important. Knowledge-related interactions between older and younger employees have been identified as a promising avenue for ensuring learning and generating cognitive benefits such as enhanced problem-solving, creativity and performance (Eldor, 2017; Gilson, Lim, Luciano, & Choi, 2013; Mesmer-Magnus & DeChurch, 2009; Pfrombeck et al., 2020). However, knowledge seeking—that is, observing and proactively asking others for knowledge—is an effortful activity that does not occur automatically (Burmeister, Alterman, Fasbender, & Wang, 2021), particularly when it concerns tacit knowledge that is difficult to explicate and tends to be context-specific (i.e. tacit knowledge; Endres, Endres, Chowdhury, & Intakhab, 2007; Wilkesmann, Wilkesmann, & Virgillito, 2009). We focus here on such tacit knowledge for which the knowledge seeker must spend time and cognitive resources on observing or asking others for information, especially when the interaction partner belongs to a different age group and a common understanding needs to be developed (Fasbender et al., 2021). Accordingly, to engage in knowledge seeking, employees need an internal drive reflected in development striving (i.e. the motivation to grow, increase competence and master or understand something new at work; Kooij & van de Voorde, 2011).

Previous research has largely relied on the notion of changing priorities throughout people's lifespan (Baltes, 1987) to explain motivational benefits in terms of feeling autonomous, competent and related to others at work when younger employees seek knowledge from older colleagues who share it (e.g. Burmeister, Wang, et al., 2020). While such research has provided relevant insights, it has also consolidated a prevailing perspective, namely, that younger employees seek knowledge from older employees who are considered to be experts and

therefore act as knowledge senders (Burmeister, Fasbender, et al., 2018; Tempest, 2003). This perspective, however, limits our understanding of how knowledge flows between older and younger employees in two ways: First, the lifespan perspective has led to a focus on the processes shaping younger employees' knowledge seeking from older colleagues, whereas the other side of the coin—that is, older employees seeking knowledge from their younger colleagues—has notably remained unexplored. However, from past research, we know that engaging in learning-oriented behaviours such as knowledge seeking can contribute to older employees' continuous learning, which is key to coping with ever-evolving job and organisation changes (Cegarra-Navarro, Wensley, Martínez-Martínez, & García-Pérez, 2020; Fenwick, 2012; Hennekam, 2015; Kortsch, Schulte, & Kauffeld, 2019; Park, Woo, Oh, & Park, 2021). Second, this prevailing view has led scholars to overlook the fact that older employees can still be motivated by development striving. Consequently, extant research has often neglected older employees' willingness to seek knowledge from their younger colleagues, thereby reflecting stereotypical views concerning older employees' lack of willingness to engage in continuous learning and development activities (Ng & Feldman, 2012).

In contrast to the prevailing perspective on knowledge seeking, we focus here on the reverse knowledge seeking process, namely, older employees seeking knowledge from younger employees. On the one hand, we argue that older employees have a need to regularly update their existing knowledge to cope with the ever-evolving changes at work (cf. Ackerman & Kanfer, 2020; Noe, Clarke, & Klein, 2014). On the other hand, we argue that younger employees can be an effective source of knowledge for older employees, because they tend to hold different and potentially unique information and skills. In fact, qualitative research showed that younger employees may contribute by sharing their up-to-date scientific or technical insights with their older colleagues (Gerpott, Lehmann-Willenbrock, & Voelpel, 2017; see also Harvey, 2012). It is therefore worth considering younger employees as potential knowledge sources for older employees' knowledge seek and investigate the factors that contribute to this reverse knowledge-seeking process.

In the present study, we seek to answer the research question of how older employees' knowledge seeking from younger colleagues can be fostered through age-inclusive human resources (HR) practices (i.e. bundles of HR practices aiming to provide equal opportunities for employees of all age groups; Boehm, Kunze, & Bruch, 2014). Specifically, we draw on social learning theory (Bandura, 1977, 1986) that conceptualises learning-oriented behaviour (i.e. knowledge seeking) as being inextricably linked to social context and person-related factors. Accordingly, we theorise two paths through which age-inclusive HR practices motivate older employees to strive for development and seek knowledge from their younger colleagues: On the one hand, we refer to the social context by proposing a relation-based pathway via which age-inclusive HR practices improve older employees' contact quality with their younger colleagues (i.e. positive, natural and cooperative social interactions; Iweins, Desmette, Yzerbyt, & Stinglhamber, 2013). Higher contact quality motivates older employees to strive for development because they feel safe to explore new knowledge. On the other hand, we refer to person-related factors by suggesting an opportunity pathway via which age-inclusive HR practices enhance older employees' future time perspective (i.e. their perceptions regarding the remaining time and opportunities in their careers; Zacher & Frese, 2009). A higher future time perspective motivates employees to invest in their development because they are confident that they can capitalise on their newly gained knowledge. In combination, both paths increase older employees' development striving, which, in turn, positively predicts their knowledge seeking from younger colleagues.

In developing this dual pathway relation–opportunity model, we make two contributions to the literature: First, we expand the knowledge-seeking literature by offering a more inclusive view on knowledge flows between older and younger employees through our focus on older employees' knowledge seeking from their younger colleagues. In doing so, our research also adds to the continuous learning literature (Finkelstein, Truxillo, Fraccaroli, & Kanfer, 2021; Noe, Clarke, & Klein, 2014; Ropes, 2013); it provides compelling arguments to oppose age norms according to which older employees tend to be associated with the role as knowledge sender (Dunham & Burt, 2011; Voelpel, Sauer, & Biemann, 2012; Wikström, Eriksson, Karamehmedovic, & Liff, 2018) and instead shifts the focus to older employees' continuous learning efforts. Second, by delineating a relation-based and an opportunity-based pathway via which perceived age-inclusive HR practices promote older employees' development striving and subsequent knowledge seeking, we complement the lifespan-focused literature by identifying two general processes grounded in social learning theory. The contributions made in this study are not only theoretically but also practically relevant, as understanding these process factors can help derive starting points for interventions intended to foster older employees' development striving.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

The organisational environment is important for continuous learning and knowledge-related interactions; research investigating the impact of HR practices, as a crucial part of the organisational environment in which continuous learning and knowledge-related interactions take place, has accordingly gained traction (Bednall, Sanders, & Runhaar, 2014; López-Cabrales, Real, & Valle, 2011; Oltra, 2005). We focus specifically on age-inclusive HR practices; these are bundles of HR practices aimed at providing equal opportunities for employees of all age groups, which entails that an organisation has comprehensive systems in place 'that are internally consistent and reinforcing to achieve some overarching results' (Lepak, Liao, Chung, & Harden, 2006, p. 221; see also Boehm & Dwertmann, 2015). For example, an organisation may have aligned the policies in its recruitment processes, career development measures or training and development opportunities such that these HR practices are equally open to and taken advantage of by employees of all age groups. Such inclusive practices create an age-friendly environment that supports knowledge-related interactions between employees from different age groups (Burmeister, van der Heijden, Yang, & Deller, 2018).

To explain how an age-inclusive organisational context can promote older employees' knowledge seeking, we build on social learning theory (Bandura, 1977, 1986) and develop a dual pathway relation–opportunity model that connects age-inclusive HR practices to older employees' learning-related motivation and behaviour. While social learning theory proposes that individuals can learn from observing others, it also emphasises that individuals do not automatically imitate the behaviours they observe but are instead active information processors who need to be motivated to develop their knowledge and skills. This development striving is, in turn, influenced both by the people around them and person-related factors.

First, whether a person pays attention to what someone else does or asks someone else for information depends on their relationship with others and whether they think they can

realistically learn the knowledge or skill in question. Capturing the motivational relevance of interaction partners, we thus propose a relation-oriented pathway according to which contact quality with younger colleagues is a crucial aspect in explaining older employees' development striving and subsequent knowledge seeking from younger colleagues.

Second, social learning theory emphasises that an important personal factor is an individual's anticipatory capacity for rewards, which means that their expectations regarding the rewards for learning new knowledge or skills have strong incentive-motivational effects (Bandura, 1977). It is this anticipation of future rewards for learning that leads us to propose an opportunity-based pathway through which age-inclusive HR practices foster older employees' learning-related motivation and behaviour.

The relation-based pathway

A relation-based perspective that considers age-inclusive HR practices as antecedents of positive relationships at work relies on the theoretical notion that these practices are signals of the organisations that seek to foster certain behaviour (Boehm, Kunze, & Bruch, 2014). In this regard, HR systems explicate to employees what is considered appropriate (Bowen & Ostroff, 2004), which entails that it can be expected that employees learn and adhere to age-inclusive behavioural guidelines that foster positive interactions among organisational members. In line with this notion, scholars have demonstrated that age-inclusive HR practices foster an age-inclusive climate characterised by low competition for resources between different age groups (Boehm, Kunze, & Bruch, 2014; Burmeister, van der Heijden, Yang, & Deller, 2018; Kunze, Boehm, & Bruch, 2011, 2013; Rudolph & Zacher, 2020). Accordingly, we expect that age-inclusive HR practices improve the perceived quality of interactions among individuals belonging to different age groups because younger and older employees feel they do not have to compete to advance their respective careers but instead can support each other (Boehm, Kunze, & Bruch, 2014; Rudolph & Zacher, 2020). We thus formulate the following hypothesis:

Hypothesis 1a. Age-inclusive HR practices are positively related to older employees' contact quality with younger colleagues.

According to social learning theory, not all models (i.e. others from whom a person can observe and learn behaviours or obtain new knowledge) are equally effective (Bandura, 1977). A person will be more motivated to learn when they interact with individuals whom they perceive to be attractive models for learning and when the individuals in question have established a relationship that allows the person who wishes to learn to be confident that they will be successful in doing so. When older employees perceive contact with their younger colleagues as pleasant and cooperative, we expect a positive effect on older employees' motivation to develop themselves for at least two reasons: First, building on the notion that development striving is strongly influenced by the social environment, older employees should feel more open to learn behaviour or knowledge from those with whom they identify and feel positive about (Carmeli, Brueller, & Dutton, 2009). Being motivated to learn more from others with whom one has good relationships is a promising avenue to become more alike, which further strengthens the positive interpersonal relationship and triggers a self-reinforcing intrinsically motivating learning circle (Glaman, Jones, & Rozelle, 1996). Second, when an older employee experiences positive interactions with younger colleagues at work, this makes the former's job more interesting and

enjoyable. In contrast to negative relationships at work, which prompt an avoidance reaction that discourages individuals from searching for new information (Yang & Kahlor, 2013), positive relationships prompt an approach reaction that fosters the exploration of new development opportunities and makes older employees less concerned about performance deficiencies and more engaged at and with their work (Abrams, Eller, & Bryant, 2006; Burmeister, Hirschi, et al., 2021). To summarise, we propose that age-inclusive HR practices improve older employees' contact quality with their younger colleagues, which, in turn, increases the former's motivation to expand their knowledge and skills at work:

Hypothesis 1b. Age-inclusive HR practices have a positive indirect relation with older employees' development striving via their contact quality with younger colleagues.

The opportunity-based pathway

To develop the opportunity pathway, the adoption of a signalling view on HR practices indicates that such practices not only communicate behavioural norms to employees but also transmit an organisation's intentions towards its employees (den Hartog, Boselie, & Paauwe, 2004). Age-inclusive HR practices represent an investment that communicates to an organisation's employees that it wishes to take care of them and offer them secure long-term career opportunities (Boehm, Kunze, & Bruch, 2014). This aspect is particularly crucial for older employees because the endpoints of their careers are much closer than for younger employees (Henry, Zacher, & Desmette, 2015; Zacher & Frese, 2009). This entails that older employees' future time perspective in terms of remaining time at work and occupational opportunities ahead of them tend to be more limited (Rudolph, Kooij, Rauvola, & Zacher, 2018). This, however, can be counterbalanced by age-inclusive HR practices because they transmit the message to older employees that their future is still open and that opportunities still exist in the future, which positively impacts older employees' future time perspective and perceived career opportunities (Fasbender, Wöhrmann, Wang, & Klehe, 2019). In line with this notion, research has found that an organisational climate that encourages successful ageing rather than having discriminatory elements benefits older employees' future time perspective (i.e. their focus on opportunities; Zacher & Yang, 2016). To summarise, we expect that age-inclusive HR practices encourage older employees' to have a more expanded future time perspective:

Hypothesis 2a. Age-inclusive HR practices are positively related to older employees' future time perspective.

In addition to the role played by social context as a development accelerator, social learning theory (Bandura, 1969) also emphasises the importance of expected rewards for learning new knowledge or skills in explaining why people are motivated to engage in developmental activities. That is, cognitive processes related to opportunities to potentially be able to apply acquired knowledge or skills play a role in determining whether an individual sees value in learning something new. When this is not the case—for example, because an individual expects that they will not be able to use a learned behaviour or information again in the future—an employee should not see much use in mastering new knowledge at work. A larger occupational time perspective, however, is beneficial for people's willingness to develop knowledge and adapt

to their careers (Fasbender, Wöhrmann, Wang, & Klehe, 2019). This conceptual reasoning underlies our hypothesised opportunity-based pathway specifying the positive impact of age-inclusive HR practices on older employees' development striving. When older employees are confident that sufficient time and occupational opportunities lay ahead of them because age-inclusive HR practices signal to them that they are wanted in an organisation, this should, in turn, motivate them to learn, as the development of skills could still pay off in the future. Taken these findings together, we hypothesise the following:

Hypothesis 2b. Age-inclusive HR practices have a positive indirect relation with development striving via future time perspective.

AGE-INCLUSIVE HR PRACTICES AND KNOWLEDGE SEEKING: SERIAL MEDIATION

Combining the previously outlined arguments, it is reasonable to expect that age-inclusive HR practices promote older employees' knowledge-seeking behaviour through a serial mediation via their (a) contact quality and (b) future time perspective and their subsequent development striving. That is, consistent with social learning theory, an inclusive environment can foster older employees' development motive through positive effects on their relationship with potential learning models (i.e. younger employees) as well as anticipated reward opportunities. This development motive triggers older employees' interest in expanding their knowledge base, thus motivating them to seek knowledge from their younger colleagues (Fasbender et al., 2021). This is because individuals who strive for development are more willing to invest energy in the effortful knowledge-seeking process because gaining new knowledge is intrinsically motivating for them (Kooij & van de Voorde, 2011). In line with this notion, older employees who are interested in learning something new and who are open to the perspectives of their younger colleagues have been found to actively ask younger colleagues for their insights (Fasbender et al., 2021; Gerpott, Lehmann-Willenbrock, & Voelpel, 2017). We thus hypothesise as follows:

Hypothesis 3. Age-inclusive HR practices have a positive indirect relation with older employees' knowledge seeking from younger colleagues via their contact quality with younger colleagues and subsequent development striving.

Hypothesis 4. Age-inclusive HR practices have a positive indirect relation with older employees' knowledge seeking from younger colleagues via their future time perspective and subsequent development striving.

METHOD

Sample and procedure

We collected data from a sample of older employees working at various organisations in the United Kingdom. As part of a larger research project, we commissioned an ISO 26362-certified online research company that manages a large research-only consumer and business panel to collect the data for this study. Data collected with panel companies allow access to participants

from various organisations and industries (Landers & Behrend, 2015) and have demonstrated similar psychometric properties and criterion validities compared with conventional data sources (Walter, Seibert, Goering, & O'Boyle, 2019). Following the recommendations of Newman, Bavik, Mount, and Shao (2021), we included attention checks (e.g. 'Please select "disagree" here if you pay attention') to ensure data quality, and participants were automatically screened out if they failed these. We used structured questionnaires across three time points with 1 week in between each time point. Given the focus of our research, we considered a 1-week interval to be suitable, as knowledge seeking from younger colleagues potentially varies on a weekly basis. Past research has also investigated different knowledge behaviours using similar time lags (e.g. Burmeister, Fasbender, et al., 2018; Gerpott, Fasbender et al., 2020; Jiang, Hu, Wang, & Jiang, 2019).

The study was advertised to about 3300 people who in principle fulfilled the inclusion criteria. The inclusion criteria were that participants had to be at least 50 years of age and employed for at least 20 h per week. Furthermore, participants needed to have opportunities to work with younger (≤ 35 years of age) colleagues regularly (i.e. at least once a week). Overall, 502 people participated in the study (response rate = 15.2%). Of those, 429 participated at Time 2 (dropout to Time 1 = 14.5%), and 391 participated at Time 3 (dropout to Time 2 = 8.9%). We investigated whether data are missing at random following Goodman and Blum's (1996) recommendation by regressing the control and Time 1 study variables on the binary outcome that indicated whether people participated at Time 3 of data collection ('stayers') or not ('leavers'). Results of a multiple logistic regression analysis revealed no significant effects of the control variables nor the study variables on participation at Time 3, suggesting that attrition should not bias the subsequent analyses (Goodman & Blum, 1996). Following recommendations on dealing with missing data by using all the available data (Graham, 2009; Newman, 2014; Wang et al., 2017), we modelled missing values of participants who did not take part at Times 2 and 3 using maximum likelihood estimation.¹ Therefore, the final sample size was 502 participants.

On average, participants worked 38.47 hours per week ($SD = 6.44$) in a variety of industries; the most represented industries were the public sector (13.5%), health (10.2%), education and research (10%), transport and logistics (9.6%) and professional services, such as consulting (8.2%). Participants were on average 56.64 years old ($SD = 4.71$). Of the participants, 57.8% were male, and 37.3% held a university degree.

Measures

We separated the measurement, with age-inclusive HR practices, contact quality and future time perspective being measured at Time 1; development striving being measured at Time 2; and knowledge seeking from younger colleagues being measured at Time 3, to reduce potentially occurring common method bias (cf. Podsakoff, MacKenzie, & Podsakoff, 2012). If not indicated otherwise, participants responded on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Age-inclusive HR practices

We measured age-inclusive HR practices with the 5-item scale from Boehm, Kunze, and Bruch (2014). Participants indicated the extent to which their respective organisation offered

equal opportunities irrespective of one's age on a 5-point scale ranging from 1 (*very low intensity*) to 5 (*very high intensity*). An example item was 'Offer equal access to training and further education for all age groups?' ($\alpha = .86$).

Contact quality

Contact quality was measured with the 3-item scale from Fasbender, Burmeister, and Wang (2020). Participants indicated the degree to which their contact with younger colleagues was 'positive', 'natural' and 'cooperative' ($\alpha = .89$).

Future time perspective

We assessed future time perspective with the 6-item scale from Zacher and Frese (2009). An example item was 'My occupational future is filled with possibilities' ($\alpha = .91$).

Development striving

We measured development striving with the 4-item scale developed by Kooij and van de Voorde (2011). A sample item was 'It is important to me to have the opportunity to learn something new' ($\alpha = .85$).

Knowledge seeking from younger colleagues

Participants assessed their knowledge seeking from younger colleagues using the four-item scale from Wilkesmann, Wilkesmann, and Virgillito (2009). We adapted the items by adding the word *younger* (colleagues) to each item. A sample item was 'I invested effort into gaining knowledge from my younger colleagues' ($\alpha = .95$).

Control variables

First, we included education (binary coded with 0 = *no university degree* and 1 = *university degree*) as a control variable, as participants who hold a university degree are likely to be sensitised to learning through seeking knowledge from others. Second, we controlled for participants' working hours per week, as working long hours may reduce participants' willingness to invest time and effort in seeking knowledge from younger colleagues (Gerpott, Fasbender, et al., 2020).

Analytical strategy

We applied structural equation modelling in Mplus 8.4 to test the hypothesised relations between age-inclusive HR practices, contact quality, future time perspective, development

striving and knowledge seeking from younger colleagues. We used bootstrapping (10,000 draws) to account for deviations from normality when estimating the indirect effects (Preacher, 2015). Furthermore, we controlled for the direct effects of age-inclusive HR practices on development striving and knowledge seeking, as well as the direct effects of contact quality and future time perspective on knowledge seeking, as not including these may have inflated the estimation of indirect effects (Preacher & Hayes, 2008). Furthermore, we regressed the control variables (i.e. education and working hours) on our outcome variable (i.e. knowledge seeking with younger colleagues).² In addition, we controlled for knowledge seeking at Time 1 to remove autoregressive effects and partial out common source bias in our outcome variable.

RESULTS

Preliminary analyses

Table 1 presents the means, standard deviations and correlations of the study variables. We conducted confirmatory factor analyses to assess the discriminant validity of the five measures. The intended five-factor structure yielded a good model fit ($\chi^2(199) = 627.73, p < .001, CFI = .94, RMSEA = .07, SRMR = .05$), and the fit indices were better than those of the three-factor model with the Time 1 variables (age-inclusive HR practices, contact quality, future time perspective) loading on one factor ($\chi^2(206) = 2533.69, p < .001, CFI = .67, RMSEA = .15, SRMR = .15$) and the one-factor model with all items loading on one common factor ($\chi^2(209) = 4489.05, p < .001, CFI = .40, RMSEA = .20, SRMR = .17$). These results support the discriminant validity of the five measures used in this study.

Hypotheses testing

The results of the structural equation modelling are shown in Figure 1 (direct effects) and Table 2 (indirect effects). Overall, our hypothesised model showed a satisfactory model fit ($\chi^2(338) = 968.51, p < .001, CFI = .93, RMSEA = .06, SRMR = .08$). Hypotheses 1a and 1b addressed the relation-based pathway consisting of the direct relation of age-inclusive HR

TABLE 1 Means, standard deviations, reliabilities and correlations of variables

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.
1. Education	0.37	0.48	-						
2. Working hours	38.47	6.44	.01	-					
3. Age-inclusive HR practices	3.58	1.01	.02	-.02	(.86)				
4. Contact quality	4.24	0.67	.03	-.00	.40**	(.89)			
5. Future time perspective	2.79	0.89	.05	.01	.31**	.15**	(.91)		
6. Development striving	3.71	0.73	.10*	-.00	.32**	.28**	.41**	(.85)	
7. Knowledge seeking	2.81	1.05	.05	-.03	.34**	.26**	.34**	.42**	(.95)

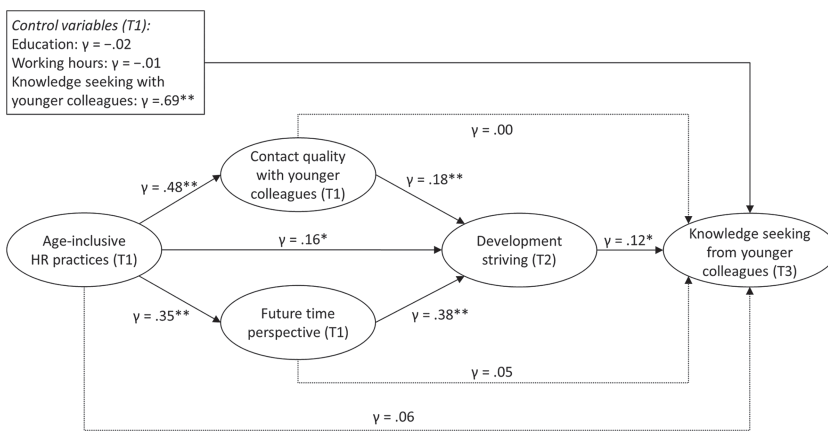
Note: $N = 502$ at Time 1, $N = 429$ at Time 2, $N = 391$ at Time 3. Cronbach's alphas are in brackets in the diagonal.

Abbreviation: HR, human resources.

* $p < .05$. ** $p < .01$.

practices with contact quality and their indirect relation with development striving via contact quality. Age-inclusive HR practices had a positive direct effect on contact quality ($\gamma = .48, SE = .05, p < .001$), supporting Hypothesis 1a. In turn, contact quality had a positive direct effect on development striving ($\gamma = .18, SE = .07, p = .016$). Furthermore, the indirect effect of age-inclusive HR practices on development striving via contact quality (*indirect effect* = .09, 95% CI [.02, .15]) was significant, supporting Hypothesis 1b.

Hypotheses 2a and 2b addressed the opportunity pathway consisting of the direct relation of age-inclusive HR practices with future time perspective and their indirect relation with development striving via future time perspective. We found that age-inclusive HR practices had a positive direct effect on future time perspective ($\gamma = .35, SE = .05, p < .001$), supporting Hypothesis 2a. In turn, future time perspective had a positive direct effect on development



Note. $N = 502$. Standardised direct effects are shown.
 $*p < .05, **p < .01$.

FIGURE 1 Results of structural equation modelling predicting older employees' knowledge seeking from younger colleagues. $N = 502$. Standardised direct effects are shown. $*p < .05, **p < .01$

TABLE 2 Indirect effects of age-inclusive HR practices on development striving and knowledge seeking from younger colleagues

	Indirect effects		
	Coeff	CI LL	CI UL
Age-inclusive HR practices → contact quality → development striving	.09	.02	.15
Age-inclusive HR practices → future time perspective → development striving	.14	.09	.20
Age-inclusive HR practices → contact quality → development striving → knowledge seeking	.01	.002	.03
Age-inclusive HR practices → future time perspective → development striving → knowledge seeking	.02	.002	.04

Note: $N = 502$. Coeff = unstandardised coefficient, CI LL = lower level of bias-corrected 95% confidence interval, CI UL = upper level of bias-corrected 95% confidence interval.
 Abbreviation: HR, human resources.

striving ($\gamma = .38$, $SE = .06$, $p < .001$). Furthermore, the indirect effect of age-inclusive HR practices on development striving via future time perspective (*indirect effect* = .14, 95% CI [.09, .20]) was significant, supporting Hypothesis 2b.

Hypotheses 3 and 4 addressed the serial indirect relations of age-inclusive HR practices with knowledge seeking from younger colleagues via (a) contact quality and (b) future time perspective and subsequent development striving. We found that development striving had a positive direct effect on knowledge seeking from younger colleagues ($\gamma = .12$, $SE = .06$, $p = .038$). Furthermore, we found significant indirect effects of age-inclusive HR practices on knowledge seeking from younger colleagues via contact quality and subsequent development striving (*indirect effect* = .01, 95% CI [.002, .03]), as well as via future time perspective and subsequent development striving (*indirect effect* = .02, 95% CI [.002, .04]), supporting Hypotheses 3 and 4.

DISCUSSION

This study is among the first to consider older employees' knowledge seeking from younger colleagues, as opposed to their knowledge sharing with younger colleagues. The findings indicate that perceived age-inclusive HR practices positively influence older employees' knowledge seeking via their development striving motive and two preceding pathways, namely, a relationship-based pathway (via contact quality with younger colleagues) and an opportunity pathway (via future time perspective).

Theoretical implications

Our findings contribute to the literature in several meaningful ways: First, the findings add to the knowledge transfer literature. We adopt a new perspective on the knowledge transfer logic by viewing older employees as knowledge seekers who learn from their younger colleagues (Pfrombeck et al., 2020). A predominant perspective in the knowledge transfer literature relied on lifespan theory (Baltes, 1987) to indicate that older (as compared with younger) employees' higher generativity striving (i.e. the concern to guide the next generation; Erikson, 1964; see also Doerwald, Zacher, van Yperen, & Scheibe, 2021) motivates older employees to share knowledge with younger colleagues at the workplace. Although there is indeed ample evidence for an age-related increase in social interactions for the purpose of knowledge transmission to others (e.g. Inceoglu, Segers, & Bartram, 2012; McAdams & de St. Aubin, 1998), this does not mean that older employees' development striving fully disappears (Fasbender et al., 2021; Henry, Zacher, & Desmette, 2017). In fact, ensuring that older employees continuously acquire new skills and knowledge by motivating them to strive for development has been identified as being crucial in terms of maintaining older people's employability (van der Heijde & van der Heijden, 2006; Žnidaršič, 2012) and increasing their retention rates, which contributes to long-term organisational success (Tourigny & Pulich, 2006). By pointing to development striving as a predictor of older employees' knowledge seeking from younger colleagues, we provide a new perspective on understanding the way in which knowledge flows in organisations and highlight that older employees can be motivated to develop using appropriate means, namely, age-inclusive HR practices. Our findings can also be interpreted as larger-scale empirical evidence for preliminary qualitative results that reported that older employees began to believe in their own development abilities again after they were encouraged through an HR-initiated training

programme to learn from and with younger employees (Gerpott, Lehmann-Willenbrock, & Voelpel, 2017).

We also contribute to the literature on continuous learning, as we focus on actual learning-oriented behaviour, such as knowledge seeking, and note that people are not passive receivers of information but active seekers of knowledge. In line with previous research (Burmeister, Alterman, Fasbender, & Wang, 2021), we highlight that knowledge seeking is an effortful learning-oriented behaviour that does not take place automatically but instead requires employees to observe and proactively seek knowledge from others. Relatedly, our findings could also be interesting for scholars studying reverse mentoring (i.e. older employees seeking to learn from younger employees), as the literature has thus far largely remained silent concerning the antecedents that motivate older employees to develop knowledge-seeking relationships (Chaudhuri & Ghosh, 2012; Garg, Murphy, & Singh, 2021; Marcinkus Murphy, 2012). In that regard, we adopt a 'mentee' perspective by identifying the factors that contribute to reverse mentoring and knowledge acquisition from the older mentee perspective.

Second, we explain the processes that link age-inclusive HR practices to knowledge seeking as a learning-oriented behaviour, thereby contributing a more detailed understanding of why knowledge seeking takes place. Scholars have long called for a stronger focus on understanding the mechanisms that link HR practices to learning-oriented behaviours (Bednall, Sanders, & Runhaar, 2014; López-Cabrales, Real, & Valle, 2011; Oltra, 2005). With our dual pathway model, we connect age-inclusive HR practices with learning-oriented motivation and behaviour via contact quality (relation) and future time perspective (opportunity). The relation-based pathway highlights the motivating potential of having high-quality contact with younger colleagues, who, in this case, are the providers of knowledge. These findings are relevant, as they not only show the importance of having good workplace relationships with knowledge holders (Burmeister, Alterman, Fasbender, & Wang, 2021) but also indicate that older employees seek knowledge from people they get on well with. The latter is in line with lifespan research pointing to the relevance of socio-emotional meaningful relations for older employees (Fasbender, Burmeister, & Wang, 2020; Henry, Zacher, & Desmette, 2015; Zhan, Wang, & Shi, 2015). The findings are also interesting when considered against the backdrop of previous theoretical arguments for the normative potential of age-inclusive HR practices to create a respectful environment in which everyone—irrespective of their age—is appreciated (Boehm, Kunze, & Bruch, 2014). The underlying idea of such an approach to managing people is a rather positive belief that organisational members will—in an organisation that institutionalises equal opportunities—appreciate positive interactions with each other, which, in turn, brings out the best in every employee and makes them strive for developing their full potential. Our findings indicate that this is not just an idealistic dream of humanistic HR practitioners and scholars but that older employees indeed tend to perceive the contacts with younger colleagues in such an organisational environment as rather positive, which consequently enhances their developmental striving—a construct that reflects people's inherent willingness to learn.

Furthermore, the opportunity pathway highlights the motivating potential of future time perspective, which focuses on the remaining time and opportunities in one's occupational life. Our findings reveal that there is substantial variance within the group of older employees concerning how they perceive their future at work and indicate that age-inclusive HR practices can improve older employees' future time perspective. These results are in line with recent evidence that reports a positive link between age-inclusive HR practices and occupational future time perspective among Portuguese employees (Oliveira, 2021). Additionally, the results can be interpreted in the light of meta-analytic evidence indicating that future time perspective motivates

older employees to continue developing themselves (Rudolph, Kooij, Rauvola, & Zacher, 2018). This higher development striving in turn makes older employees more motivated to seek knowledge from their younger colleagues (Fasbender et al., 2021). Overall, in disentangling the mechanisms that link age-inclusive HR practices to older employees' knowledge seeking from younger colleagues, we provide a more fine-grained understanding of how older employees continue to learn and grow.

Practical implications

Many organisations in industrialised countries have implemented sophisticated knowledge management programmes to ensure that the valuable knowledge of their older employees will not be lost due to the anticipated retirement waves caused by global workforce ageing (Burmeister & Deller, 2016). In this regard, older employees' knowledge sharing with younger colleagues has received much attention. Our research suggests that corporate leaders should consider the other side of the coin and create environments in which older employees feel comfortable learning new skills and knowledge by asking younger employees to share their knowledge. The findings of this study may support organisations in these endeavours.

First, organisations should be aware that age-inclusive HR practices not only have direct positive effects on older employees' skill development by providing them with equal access to formal training and development programmes but also offer indirect advantages, as these practices foster older employees' informal learning from others in their daily work. Consequently, we recommend that in addition to continuously monitoring whether an organisation's recruitment procedures, training and development offers, promotion paths and career activities are age-neutral, HR managers would also be well-advised to ensure ample opportunities for older and younger employees to interact and collaborate with each other at work. For example, an organisation could introduce cross-departmental project teams or communities of practice to deliberately foster contact between employees from different age groups and thereby ensure that it can truly leverage the advantages of an age-inclusive organisation in terms of fostering older employees' continuous learning.

Second, our research emphasises the often overlooked fact that many older employees are still motivated to develop themselves and obtain knowledge from their younger colleagues. This is in line with research showing that older people wish to advance their knowledge and skills until their retirement (Armstrong-Stassen & Schlosser, 2008) but are often held back by others' beliefs about their non-willingness to develop (Burmeister, Fasbender, et al., 2018; van Vianen, Dalhoeven, & De Pater, 2011). To countervail detrimental age norms and stereotypes, organisations may consider offering training programmes for younger employees in which they are sensitised to their older colleagues' development interest and learn strategies by which to pass on knowledge (Fasbender & Gerpott, 2021). Furthermore, organisations could introduce reverse-mentoring programmes in which an institutionalised expectation concerning reverse knowledge transfer is inherent. As a result of such interventions, it might become the norm in organisations that older employees seek knowledge and younger employees—despite their more limited experiences—proactively share what they know. Lastly, older and younger employees could also be encouraged to jointly participate in knowledge-focused training in which they work through a structured process of identifying their unique knowledge to develop shared mental models concerning the kind of valuable knowledge they can learn from each other (Burmeister et al., 2020).

Limitations and future research directions

First, although we collected data at different time points, the fact that we collected data via survey from one data source (i.e. perceptions of older employees) limits our abilities to draw conclusions about causality and could bring about risks of response bias. Although we acknowledge that it would not be not easy to implement a (quasi-)experimental design for the theoretical model discussed here, it may be possible should scholars identify an organisation that intends to implement age-inclusive HR practices. Researchers could then collect survey data from older employees before and after the age-inclusive HR practices are introduced and compare these data with older employees' perceptions of the variables of interest in a company in which no (or alternative) changes occurred. Relatedly, natural experiments that are characterised by the presence of 'naturally' occurring events such as the introduction of age discrimination-related regulations or laws that heterogeneously affect organisations or organisational branches might allow researchers to identify causal links between the relations observed in this research (Sieweke & Santoni, 2020). Alternatively, scholars could consider utilising a different data collection method that goes beyond survey data for capturing the outcome variable, namely, older employees' knowledge seeking. Specifically, they could observe interactions between older and younger employees and code for verbal behaviours that indicate knowledge seeking (e.g. asking questions or active listening) and thereby address the risk of response biases or socially desirable responding (Gerpott, Lehmann-Willenbrock, et al., 2020).

Second, we considered older employees' contact quality and future time perspective as malleable processes that can be altered by age-inclusive HR practices to foster older employees' knowledge seeking via their development motive. We focused on these constructs because they offer valuable starting points for organisations that wish to understand how they can foster older employees' continuous development. However, it is conceivable that individual differences, sociocultural contexts and organisational culture variables serve as boundary conditions limiting the proposed chain of effects, thus offering promising areas for future research. In terms of individual differences, social learning theory suggests that people evaluate their behaviour based on experiences they have made in their socialisation with others' reactions towards that behaviour. This entails that older employees may react based on implicitly held theories concerning how appropriate it is to seek knowledge from younger colleagues; such implicit theories may subtly influence how likely older employees are to translate a high development motive into actual knowledge-seeking behaviour (Knoll, Neves, Schyns, & Meyer, 2020). In terms of sociocultural determinants, we collected our data in an individualistically oriented country (the United Kingdom) in which individual achievement is valued (Hofstede, 1980; House, Javidan, Hanges, & Dorfman, 2002). Research has demonstrated that employees in individualistic countries tend to share more knowledge and engage less in knowledge receiving, whereas, in collectivistic countries (such as China), employees tend to both share and ask for knowledge (Burmeister, van der Heijden, Yang, & Deller, 2018). Accordingly, our findings may be rather conservative, and it would be worth exploring whether the effects of age-inclusive HR practices are even stronger in collectivistic countries, in which inclusive norms promote employees' inherent tendency to listen to others, value their input and actively request such input to benefit the organisation as a whole (Michailova & Hutchings, 2006; Yuan, 2010). In terms of organisational culture, it is conceivable that a culture characterised by traditionality (i.e. a corporate environment appreciating the values of submission to authority, filial piety, ancestor worship, fatalism and male dominance; Zhang et al., 2021) makes it much more difficult for older employees to engage

in knowledge seeking, even if their development striving might be enhanced. This is because in traditional organisational cultures, older employees are expected to act as wise knowledge senders, and they may lose their face when asking younger colleagues for advice. In line with this notion, Tempest (2003) found in a qualitative study that the (often exclusive rather than inclusive) knowledge-related language used in organisations is a strong indicator of the values associated with learning, such that a language associated with a traditional understanding of learning (i.e. younger workers as knowledge seekers and older workers as knowledge senders) inhibits upward and horizontal learning. To capture the impact of such cultural differences in empirical studies, future research could, for example, utilise the authority subscale from Cable and Edwards' (2004) work value survey that reflects the degree of conformity/traditionalism characterising an organisation according to Schwartz's (1992) values circumplex model. Older employees' knowledge-seeking behaviour from younger colleagues in more authoritarian organisational cultures could then be contrasted with older employees' behaviour in variety- or innovation-focused corporate cultures.

Lastly, future research may investigate potential moderators in the reverse knowledge transfer and learning relationship (i.e. transferring knowledge from younger to older employees). One aspect that maybe particularly important is whether older employees trust their younger colleagues' competence and abilities (see Mayer, Davis, & Schoorman, 1995 for trustworthiness defined as the evaluation of others' benevolence, competence and integrity; or Kruglanski, Dechesne, Orehek, & Pierro, 2009 for epistemic authority defined as a combination of perceived expertise and trustworthiness). In fact, previous research has shown that trust in others' competence is beneficial for individual knowledge transfer (Burmeister, Fasbender, et al., 2018; Pinjani & Palvia, 2013; van Acker, Vermeulen, Kreijns, Lutgerink, & Van Buuren, 2014). For example, the experimental study by Burmeister, Fasbender, et al. (2018) showed that people evaluate younger employees' motivation and ability to share knowledge higher when they perceived them as trustworthy. These findings suggest that trust in others' competence could indeed be a relevant moderator to the relationship between development striving and knowledge seeking from younger colleagues. That is, older employees, who are highly motivated to develop themselves, may only seek knowledge from their younger colleagues if they have faith in their younger colleagues' competence. Future research could therefore put more emphasis on attributes that older employees perceive as relevant when considering younger employees as potential sources of knowledge.

CONCLUSION

This research establishes perceived age-inclusive HR practices as an antecedent of older employees' knowledge seeking from younger colleagues via their development striving motive and two preceding pathways, namely, a relation-based pathway (via contact quality with younger colleagues) and an opportunity pathway (via future time perspective). We hope that the findings of this study contribute to an emergent stream of research on older employees' lifelong learning activities and serve as a starting point to shifting the conversation on knowledge flows in organisations towards an inclusive perspective that overcomes stereotypical views of older employees.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

ETHICS STATEMENT

This study was carried out in accordance with the ethical guidelines of the Justus-Liebig-University, Giessen (the first author's former employer) with an informed consent from all study participants.

ENDNOTES

¹ A sensitivity analysis revealed that the results did not differ when modelling missing values ($N = 502$) as compared with using listwise deletion ($N = 391$).

² We estimated the final model with and without control variables. The estimated effects remained stable and significant in the hypothesised direction even if we did not control for education and working hours.

DATA AVAILABILITY STATEMENT

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

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