

Empirical Article

Worlds Apart: Does Perceptual Congruence Between Leaders and Older Employees Regarding Age-Friendly Organizational Climate, Management, and Work Design Matter?

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Abstract

Research on the effectiveness of age-friendly organizational practices tends to focus on older employees' perceptions of these. Drawing on perceptual congruence and psychological contract theory, we hypothesize that leaders' perceptions of these organizational practices are relevant as well. Specifically, we argue that (dis)agreement between leaders' and older employees' perceptions (i.e., perceptual (in)congruence) of organizational practices related to age-friendly organizational climate, management, and work design plays a role in older employees' well-being. Polynomial regression and response surface analysis were applied to a dyadic sample of 484 older employees and their leaders from 100 diverse organizations. Results reveal that leader-employee perceptual congruence on high levels of perceived age-friendly work design was related to higher employee well-being. By contrast, older employees' well-being was lower when leaders evaluated the three age-friendly organizational practices higher than their older employees. Our findings suggest that further theoretical consideration of the role of leader-employee perceptual (in)congruence for aging workforces is needed, and that scholars and organizations should acknowledge the relevance and interplay of different stakeholders' perceptions within an organization.

Keywords: health, human resource management, leadership, psychological contracts, work design

Demographic change has impacted workforces worldwide, and especially in Western countries organizations are faced with growing age diversity and labor force shortages. Considering these developments, strategies to promote older employees' health, motivation, and performance become increasingly important for organizations to stay productive (e.g., Zacher, 2015). At the same time, the relevance of different aspects of the work environment, such as human resource (HR) practices, changes with employees' age due to varying needs, values, and motives across the lifespan (e.g., Cadiz et al., 2019; Kooij et al., 2013). Accordingly, researchers have started to investigate "organizational practices for the aging workforce" (Wilckens et al., 2021, p. 354) that are specifically targeted toward enhancing older employees' ability and motivation to continue working (e.g., age-friendly organizational climate, management, and work design; Wilckens et al., 2021). This research shows that older employees' perceptions of these age-friendly organizational practices predict their job attitudes, work behavior, and well-being (e.g., Finsel et al., 2023; Kooij et al., 2014; Pak et al., 2019).

The present study builds upon this prior research yet advances it by considering that older employees are situated in a social work context. Socioemotional selectivity theory (Carstensen et al., 1999) proposes that older employees put more emphasis on emotion-oriented goals and social relationships because they perceive their remaining time at work as limited. Social work context factors, such as leadership, might therefore be more relevant for older employees compared to younger or middle-aged employees (Rauschenbach et al., 2013). In other words, an older employee's leader could be particularly important in affecting the employee's attitudes, behavior, and well-being. Indeed, leaders' attitudes and actions, which are driven by *leaders' perceptions* of the organizational context (Nishii et al., 2018), can greatly impact employees by shaping organizational practices and thus the *employees' perceptions* of organizational practices (Dulebohn et al., 2012; Hannah et al., 2020). This consecutive process entails the notion that leaders and employees can differ in their perception of organizational practices (Nishii et al., 2018). The level of agreement between

a leader's and an employee's perceptions of organizational practices in turn can predict employee outcomes, such as job satisfaction and performance (e.g., Černe et al., 2014; Gibson et al., 2009; McKay et al., 2009).

However, this concept of perceptual agreement, or congruence (Heald et al., 1998; Turban & Jones, 1988), is largely missing from existing theoretical literature and empirical research on age-friendly organizational practices. Rather, existent research tended to focus on only older employees' perceptions of age-friendly organizational practices in relation to older employees' work outcomes and did not consider the potential role of leaders' perceptions in this regard. According to the concept of perceptual congruence, leaders and older employees might however have a different awareness of age-friendly organizational practices. For example, flexible work time arrangements might be perceived by leaders in the organization (e.g., because of a kick-off seminar for leaders) but not by their older employees (e.g., because the leader fails to implement the practices for their employees). Drawing on psychological contract theory (Rousseau, 1990), we argue that such leader-employee perceptual (in)congruence regarding different age-friendly organizational practices (i.e., age-friendly organizational climate, management, and work design) plays a role in older employees' well-being beyond the older employees' perception alone.

We focus on older employees' well-being because it is a particularly important indicator of successful aging at work, the "attainment, growth, or maintenance of favorable work outcomes with increasing age" (Zacher et al., 2018, p. 123). Well-being predicts working in later life (Siegrist et al., 2007), and low well-being might lead to physical, psychological, or behavioral problems that could detrimentally impact organizational outcomes, including absenteeism, health insurance costs, and productivity (Danna & Griffin, 1999). Hence, maintaining and enhancing older employees' well-being is essential.

The present study contributes to research and practice on work and aging in several ways. For one, we contribute to the literature on age-friendly organizational practices—an important and timely topic considering the challenges posed by demographic change—by highlighting the crucial role of older employees' perception of age-friendly organizational practices for their well-being. Additionally, we advance the flourishing research field of leader-employee dyads (Kim et al., 2020), at the same time supporting the need to consider different organizational stakeholders' perceptions of organizational practices and obtain multi-source data. To obtain reliable results and ensure high generalizability across industries and organizational sizes, we surveyed a unique diverse sample comprising 484 dyads of older employees and their leaders nested in a total of 100 organizations. By applying polynomial regression and response surface methodology to analyze the data, we also answer calls for more elaborated methods in research on work and aging (e.g., Bohlmann et al., 2018). Finally, we focus on employees' well-being, an outcome that becomes more vital with increasing age (Pilipiec et al., 2021) and is highly relevant for working in later life (Polat et al., 2017).

To arrive at robust findings and provide a comprehensive empirical foundation for future research advancements and theory development, we examine the role of perceptual congruence with regard to three fundamentally different but all of them important organizational practices for older employees

(see Wilckens et al., 2021): age-friendly organizational climate, management, and work design. Our study opens up a so-far underrecognized starting point for research and organizational interventions focused on age-friendly organizational practices and leader-employee relationships, respectively, that aim to maintain and foster older employees' well-being. Specifically, since many current theoretical approaches concentrate on older employees' perceptions and neglect the possible influence of leaders' perceptions, our study aims to encourage theoretical advancements that integrate the leaders' perceptions to predict older employees' outcomes.

Theory and Hypotheses

Age-friendly organizational practices and their role for older employees' well-being

Age-friendly organizational practices aim to facilitate successful aging at work by supporting, motivating, and retaining older employees (Wilckens et al., 2021). They can pertain to different aspects of the organizational work environment, including organizational climate, leadership approaches, and HR practices such as individual development programs or flexible transitions to retirement (Boehm & Dwertmann, 2015; Wilckens et al., 2021). This study examines three specific age-friendly organizational practices: age-friendly organizational climate, age-friendly management, and age-friendly work design. We focus on these three because they are particularly relevant for older employees' health-related outcomes (Pak et al., 2019).

An age-friendly organizational climate is characterized by a nondiscriminatory treatment of older employees and equal opportunities for all age groups (Boehm et al., 2014). Empirical research has shown that experiencing an age-friendly organizational climate is positively related to older employees' job-related well-being and work ability (Finsel et al., 2023; Wilckens et al., 2021). Likewise, the perception of organization-wide age-friendly management practices based on appreciation, respect, and support for employees of all ages is positively related to employees' well-being and health (Wilckens et al., 2021; Wöhrmann et al., 2017), as are related management behaviors such as benevolent leadership (Erkutlu & Chafra, 2016). Age-friendly work design includes flexible working time and workplace arrangements as well as adaptations of the work environment to meet older employees' needs and abilities (Wilckens et al., 2021). Such work design practices are positively related to older employees' well-being and work ability (Finsel et al., 2023; Kooij et al., 2013; Pak et al., 2019).

In sum, older employees' perceptions of their organization's age-friendly climate, management, and work design are positively related to their well-being. Extending this previous research, we suggest that the older employees' leader's perceptions of these organizational practices, specifically the perceptual agreement between the older employee and their leader, are important as well.

The role of leader-employee perceptual congruence

The similarity of perceptions held by two or more individuals is referred to as *perceptual congruence* (Heald et al., 1998; Turban & Jones, 1988). Researchers have investigated different areas of perceptual congruence within the work context, among them perceptual congruence on diversity climate

(McKay et al., 2009), organizational support (Bashshur et al., 2011), and organizational values (Ostroff et al., 2005). These studies have shown that perceptual (in)congruence between leaders and employees matters for diverse employee outcomes, such as commitment, job satisfaction, performance, turnover intentions, and work engagement. Leader-employee perceptual congruence regarding organizational factors can thus be considered an important predictor of outcomes beneficial for both employees and organizations.

Several theoretical approaches can explain how specifically leader-employee perceptual *incongruence*, for example, regarding age-friendly organizational practices, might emerge. The theory of HR management systems strength (Bowen & Ostroff, 2004) suggests that a weak distinctiveness, consistency, and consensus of HR management systems would lead to divergent perceptions of the same organizational practice. Whereas consistent communication could promote shared perceptions, inconsistent communication from HR representatives and higher-level management could lead to inconsistent messages sent by lower-level leaders and, consequently, different perceptions among their (older) employees (Ostroff & Bowen, 2016). This aligns with social information processing theory (Salancik & Pfeffer, 1978), according to which employees would use the information provided by their direct leaders to form perceptions of their work environment. Depending on the amount or type of information supplied versus withheld by their direct leader, the perception formed by an (older) employee could differ from the leader's perception (Hasson et al., 2020).

Moreover, although leaders might be aware of (i.e., perceive) specific organizational practices developed by HR management, they do not necessarily implement them as intended. A leader's motivation to enact a specific organizational practice might be higher if it serves a subjectively desirable goal (Nishii et al., 2018) but might be lower if the implementation is time-consuming, supposedly ineffective, or conflicts with the leader's agenda (Sikora et al., 2015). Leaders and (older) employees could thus have different access to information. Additionally, leaders tend to overrate their own leadership behavior relative to their employees' perceptions (Song & Meier, 2022). This could, for example, be caused by self-enhancement bias (Hasson et al., 2020). For this reason, self-other disagreement (Yammarino & Atwater, 1997) is a known phenomenon in leadership research. Given that leaders are organizational representatives (Lester et al., 2002), it seems likely that leaders could also overrate age-friendly organizational practices. On the other hand, employees' perceptions of specific organizational practices could depend on whether the respective practice has personal relevance or creates an added personal value (Nishii et al., 2018). Accordingly, older employees could be more aware of age-friendly organizational practices compared to younger leaders, for example.

Drawing on these theoretical assumptions, we argue that a leader's and their older employee's perceptions of their organization's age-friendly organizational climate, management, and work design might differ. Furthermore, we propose that the extent and form of this perceptual (in)congruence matter for the older employees' well-being.

According to self-other agreement theory (Yammarino & Atwater, 1997), leader-employee perceptual (in)congruence can be divided into four types: in-agreement at high levels, in-agreement at low levels, leaders' overestimation relative to their employee, and leaders' underestimation relative to

their employee. In-agreement reflects perceptual congruence, whereas over- and underestimation reflect perceptual incongruence. Literature on perceptual congruence suggests that "more positive outcomes occur when an individual's perceptions of the work environment are similar to the perceptions of others" (Ostroff et al., 2005, p. 593). Based on psychological contract theory (Rousseau, 1990), we explain why leader-employee perceptual (in)congruence on age-friendly organizational practices should matter to older employees' well-being.

Psychological contracts refer to "employees' beliefs about the reciprocal obligations between them and their organization" (Morrison & Robinson, 1997, p. 226). Age-friendly organizational practices can shape the older employee's evaluation of their psychological contract as they can be perceived as a fulfillment of the organization's obligations (Polat et al., 2017). If older employees perceive such fulfillment, they are more likely to experience more favorable job attitudes like higher job satisfaction and higher well-being (Zhao et al., 2007). In their role as organizational representatives, leaders are responsible for fulfilling the organization's contractual obligations (Lester et al., 2002). In their role as leaders, these obligations might include socioemotional factors like loyalty and support that aim to preserve the employee-employer relationship (Morrison & Robinson, 1997; Rousseau, 1990). Accordingly, when leaders' and older employees' perceptions of organizational age-friendliness are aligned—specifically when they are aligned at high levels (i.e., both perceive high age-friendliness)—older employees believe their leader's view to be accurate and thus fair. Older employees can feel assured that leaders implement age-friendly organizational practices reliably, thereby increasing trust in the leaders. Trust, fairness, and high-quality relationships in turn are important predictors of well-being (Danna & Griffin, 1999; Erkutlu & Chafra, 2016). Consequently, leader-employee perceptual congruence on age-friendly organizational practices should positively affect older employees' well-being beyond the employee's own perception of these practices alone.

Moreover, given the to-be-expected positive main effects of older employees' perception of age-friendly organizational practices on their well-being (e.g., Pak et al., 2019), we suggest that the level at which leaders and older employees align plays a role. Specifically, in line with self-other agreement theory (Yammarino & Atwater, 1997), leader-employee perceptual congruence should be more beneficial for older employees' well-being if the agreement happens at higher levels of perceived age-friendliness (i.e., both the leader and the employee perceive high age-friendliness) compared to lower levels. Hence, we predict:

Hypothesis 1: When leaders and older employees are aligned at high levels of perceived age-friendly organizational climate, older employees' well-being is higher compared to when they are aligned at low levels of perceived age-friendly organizational climate.

Hypothesis 2: When leaders and older employees are aligned at high levels of perceived age-friendly management, older employees' well-being is higher compared to when they are aligned at low levels of perceived age-friendly management.

Hypothesis 3: When leaders and older employees are aligned at high levels of perceived age-friendly work design,

older employees' well-being is higher compared to when they are aligned at low levels of perceived age-friendly work design.

In case of perceptual *incongruence*, leaders' overestimation of age-friendly organizational climate, management, and work design could be perceived as a particularly precarious psychological contract breach (Morrison & Robinson, 1997). In this case, older employees are not just confronted with an age-unfriendly work environment and thereby an unmet obligation by the organization but also with a leader who does not acknowledge these issues (i.e., does not perceive them) and thereby takes no further action to fulfill their obligation either. Psychological contract breach in turn can induce feelings of anger, disappointment, and mistrust (Morrison & Robinson, 1997; Zhao et al., 2007) as well as emotional exhaustion (Zacher & Rudolph, 2021) and impaired employee well-being (Erkutlu & Chafra, 2016; Hill et al., 2016). Moreover, Bal et al. (2008) showed that in the case of psychological contract breach, older employees' job satisfaction declined stronger compared to younger employees, suggesting that psychological contract breach might be particularly relevant for older employees. Leaders' overestimation of age-friendly organizational practices could thus be especially detrimental to older employees' well-being. Regarding an age-friendly organizational climate, for example, whereas the older employee might feel mistreated or discriminated against, the leader might see no need for action (Bashshur et al., 2011). This would decrease the chance of the leader taking action to improve the work situation of their older employees (Song & Meier, 2022). This situation could invoke feelings of dissonance, distrust, dislike, and negative affect (e.g., Bashshur et al., 2011), which might induce low employee well-being (Danna & Griffin, 1999). Hence, in line with self-other agreement theory (Yammarino & Atwater, 1997), when a leader's rating of age-friendly organizational practices is higher than that of their older employees (i.e., leader's overestimation), the older employees' well-being should be lowest.

Although the opposite case, when an older employee perceives organizational practices as more age-friendly than their leader (i.e., leader's underestimation), might still invoke misunderstandings and uncertainty due to different expectations and assessments, the negative effect on older employees' well-being stemming from these emotions and cognitions should be smaller (Cogliser et al., 2009; Yammarino & Atwater, 1997). Older employees could already be content with their organization's age-friendliness, thereby having their expectations met and organizational obligations from the psychological contract fulfilled (Polat et al., 2017), which could foster their well-being (Zhao et al., 2007). Additionally, some leaders who perceive low age-friendliness might be motivated to create a more age-friendly work environment. They might therefore increase their efforts to improve the working conditions for their older employees (Song & Meier, 2022), which older employees could interpret as a sign of support and trustworthiness and thus evaluate positively regarding the fulfillment of the contractual obligations (Morrison & Robinson, 1997). Consequently, leaders' underestimation might not be perceived as a psychological contract breach. Moreover, the positive effect of leaders' fulfillment of their organizational obligations on the older employees' feelings and attitudes could attenuate the potential negative effect of perceptual

incongruence. Based on these arguments, we hypothesize the following directional incongruence effects:

Hypothesis 4: When leaders perceive a higher age-friendly organizational climate than older employees compared to when they perceive a lower age-friendly organizational climate than older employees, well-being is lower.

Hypothesis 5: When leaders perceive higher age-friendly management than older employees compared to when they perceive lower age-friendly management than older employees, well-being is lower.

Hypothesis 6: When leaders perceive a higher age-friendly work design than older employees compared to when they perceive a lower age-friendly work design than older employees, well-being is lower.

Methods

Sample and procedure

Data collection was part of a larger research project in Germany on age-friendly organizational practices. Data for this study were collected from two sources, namely employees aged 50 years and older and their direct leader. We recruited organizations through the authors' professional networks, student recruiters, and several institutions that served as multipliers. Once an organization expressed interest in study participation, an HR management representative within the organization identified dyads composed of a leader and an older employee each. Those identified participants either received a direct link to an online survey or a paper-and-pencil survey. The surveys were assigned an identification code to match older employees and leaders.

In total, we contacted 1,882 organizations. We received data from 106 organizations, yielding a response rate of 5.6%. Out of 639 older employees and 636 leaders who responded to the survey, we obtained data from 501 complete dyads. Thirteen dyads were excluded since the employees either stated their age to be younger than 50 years or did not specify their age. Another four dyads were excluded due to missing responses to the dependent variable.

The remaining 484 dyads were obtained from 100 organizations comprising 39.0% industrial organizations, 36.0% service organizations, 18.0% public institutions, and 7.0% trading companies. Organizational sizes ranged from 27 employees to more than 100,000. Among the older employees, 47.8% were female and 36.0% had a college education or above. The mean age was 56.3 years ($SD = 3.7$) and 73.4% of the older employees had been working for their organization for more than 15 years. Among the leaders, 33.8% were female and 72.8% had a college education or above. The mean age was 48.9 years ($SD = 9.1$) and 60.8% had been working for their organization for more than 15 years.

Measures

Age-friendly organizational practices

We assessed both older employees' and leaders' individual perceptions of *age-friendly organizational climate* (10 items) and *age-friendly management* (6 items) with the organizational climate and leadership subscales from the Later Life

Table 1. Model fits for confirmatory factor analyses.

Model	χ^2	<i>df</i>	$\Delta\chi^2$	<i>p</i>	CFI	TLI	RMSEA	SRMR
Seven-factor model	3815.05	1980			.89	.89	.04	.07
Four-factor model	10942.61	2009	7127.56	<.001	.47	.45	.10	.14
Three-factor model	10084.49	2012	6269.44	<.001	.52	.50	.09	.11
One-factor model	14194.85	2015	10379.80	<.001	.27	.25	.11	.15

Note. *N* = 484. Four-factor model, collapsing ratings for the three organizational practices each across both raters; three-factor model, collapsing ratings from both raters each across the three organizational practices; one-factor model, collapsing across all items. CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

Workplace Index (Wilckens et al., 2021) on a rating scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*, and *age-friendly work design* (14 items) with the work design subscale from the Later Life Workplace Index on a rating scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Sample items for age-friendly organizational climate include “In our organization, there is a positive attitude toward older employees” (older employees, $\alpha = .90$; leaders, $\alpha = .86$), for age-friendly management “Managers of our organization address the personal needs and living conditions of their employees” (older employees, $\alpha = .92$; leaders, $\alpha = .90$), and for age-friendly work design “Employees of our organization can reduce or increase the number of hours specified in their work contract according to their individual needs” (older employees, $\alpha = .86$; leaders, $\alpha = .83$). Separate confirmatory factor analyses for the measures showed that there was an acceptable model fit for all six measures (comparative fit index [CFI] ranged from .90 to .99, Tucker-Lewis index [TLI] from .88 to .99, root mean square error of approximation [RMSEA] from .05 to .10, and standardized root mean square residual [SRMR] from .01 to .09).

Well-being

We measured older employees’ well-being with the German version of the five-item World Health Organization Well-Being Index (WHO-5; WHO Collaborating Center for Mental Health, 1998), one of the most widely used scales for the measurement of subjective well-being (Topp et al., 2015). A sample item is “I have felt cheerful and in good spirits” (0 = *at no time* to 5 = *all of the time*; $\alpha = .87$). The model fit for this measure was good (CFI = .99, TLI = .97, RMSEA = .08, SRMR = .02).

Control variables

We controlled for older employees’ and leaders’ age and tenure as well as older employees’ gender. The tenure of older employees and leaders could affect the perception of age-friendly organizational practices as knowledge and familiarity with the organizational practices increase with the time spent in the organization. Further, employees and leaders might perceive age-friendly organizational practices more comprehensively with increasing age as they gain personal relevance. Also, employee age and gender are predictors of well-being (Blanchflower & Oswald, 2008; Pinquart & Sörensen, 2001).

Discriminant validity

We conducted confirmatory factor analyses with all measures used in this study to confirm that they had acceptable construct validity. Results showed an acceptable model fit of

the proposed seven-factor model, $\chi^2 = 3815.05$, *df* = 1980, $p < .001$, CFI = .89, TLI = .89, RMSEA = .04, SRMR = .07. We tested three conceivable alternative models to detect potentially overlapping constructs (Jackson et al., 2009). First, we collapsed the items across the raters to ensure that we measure distinct perceptions. Second, we collapsed the items across age-friendly organizational practices to ensure that we measure distinct practices. Finally, we collapsed all items to address the potential for common method bias (Podsakoff et al., 2003). As Table 1 shows, all alternative models had a significantly lower fit. Our measures thus represent distinct constructs and perceptions.

Data analysis

To test our hypotheses, we applied polynomial regression analysis and response surface methodology (Edwards & Parry, 1993) with reference to the procedure recommended by Shanock et al. (2010). This approach has numerous advantages compared to using difference scores. In particular, by examining the data in a three-dimensional space, polynomial regression analysis enables testing and interpretation regarding how incongruence at high versus low levels and the direction of incongruence (i.e., leaders’ overestimation vs. leaders’ underestimation) relate to older employees’ well-being. Since difference scores only measure the combined effects of both perceptions, we would not be able to test these more complex relationships (Edwards & Parry, 1993). For example, in our study difference scores would presume that congruence on higher levels (e.g., joint perception of high age-friendly work design) is statistically equivalent to congruence on lower levels (e.g., perception of low age-friendly work design) and relates to older employees’ well-being in a similar way (Schönbrodt et al., 2018). Accordingly, difference scores would not allow us to test our specific hypotheses, but polynomial regression analysis does.

To reduce nonessential collinearity and facilitate model estimation, we grand-mean centered the predictor variables (Schönbrodt et al., 2018). Since dyads were nested within organizations, we applied a multilevel random-slope random-intercept model using the organization as a grouping variable. We used the lme4 package (Bates et al., 2015) and the syntax provided by Nestler et al. (2019) to conduct our analysis in R. We dealt with missing data using predictive mean matching which calculates missing values by replacing them with the value of a donor from a pool of donors with complete cases whose regression-predicted values are closest to the predicted missing value (Kleinke, 2017). If participants did not answer more than half of the items on a scale, no items on this scale were imputed, and no

Table 2. Frequencies of overestimation, underestimation, and in-agreement between leaders and older employees.

Agreement groups	%	Older employees		Leaders	
		M	SD	M	SD
Age-friendly organizational climate					
Leader < older employee	34.57	5.54	0.79	4.54	0.80
In-agreement (high levels)	16.94	5.76	0.55	5.96	0.48
In-agreement (low levels)	12.76	4.36	0.41	4.79	0.35
Leader > older employee	35.73	4.04	0.88	5.76	0.63
Age-friendly management					
Leader < older employee	34.93	5.76	0.87	4.62	0.88
In-agreement (high levels)	15.80	5.74	0.59	5.95	0.50
In-agreement (low levels)	13.72	4.17	0.57	4.66	0.53
Leader > older employee	35.55	4.09	1.03	5.94	0.64
Age-friendly work design					
Leader < older employee	31.83	3.36	0.53	2.79	0.46
In-agreement (high levels)	18.92	3.46	0.38	3.56	0.31
In-agreement (low levels)	15.92	2.55	0.33	2.84	0.30
Leader > older employee	33.33	2.62	0.66	3.59	0.56

Note. $N = 431, 481, 333$. Age-friendly organizational climate and management were measured on a 7-point Likert response format. Age-friendly work design was measured on a 5-point Likert response format.

scale mean was calculated for those participants to be used in further analyses.¹

Before conducting the polynomial regression and response surface analysis, we examined the amount of incongruent and congruent dyads to ensure a sufficient base rate for both cases (see Fleenor et al., 1996). If the z -standardized ratings from an older employee and their leader deviated more than half a standard deviation, they were defined as discrepant, such that either the older employee or the leader rated the age-friendly organizational practice higher. We also divided the in-agreement group into in-agreement at low versus high levels based on recommendations by Fleenor et al. (1996). In-agreement dyads were considered to be a low-level agreement if the older employee rating was below the mean rating of the overall employee sample and a high-level agreement if the older employee rating was higher than the mean rating. There was a sufficient base rate for all four (dis)agreement groups for all three organizational practices (see Table 2).

In total, we carried out three separate polynomial regression analyses, each focusing on one of the three age-friendly organizational practices. Older employees' well-being was regressed on the respective employee's and leader's ratings of the organizational practice, the squared terms of those ratings, and their interaction terms (Nestler et al., 2019). We then computed the four surface values (a_1, a_2, a_3 , and a_4). We interpreted the surface values following recommendations by Shanock et al. (2010) and Barranti et al. (2017). Additionally, to help interpretation, we plotted the results in three-dimensional response surface graphs. The relationship between leader-employee perceptual congruence and older employees' well-being is depicted by the line of congruence (LOC; $X = Y$) running diagonally from the front to the back of the response

surface graph. The slope a_1 of the LOC describes how the agreement is related to the outcome. The curvature a_2 of the LOC shows whether this relationship is linear or nonlinear. The relationship between leader-employee perceptual incongruence and older employees' well-being is characterized by the line of incongruence (LOIC; $X = -Y$) running diagonally from the left corner to the right corner of the response surface graph. Here, the curvature a_4 of the LOIC shows how disagreement is related to the outcome. The slope a_3 of the LOIC reveals whether the direction of incongruence (i.e., whether the employee or the leader rating is higher) relates to older employees' well-being.

Since the use of covariates can increase the likelihood of Type I errors and decrease the power of the model (Becker, 2005), we re-performed the polynomial regression and response surface analyses without the control variables. The overall pattern of results remained, and especially findings regarding the hypotheses were stable. Thus, we report the results of the analyses with control variables.

Results

Preliminary analyses

Correlations, means, and standard deviations for all measures are reported in Table 3. In line with prior research, we found significant positive relationships between older employees' perceptions of all three age-friendly organizational practices and their well-being. The leaders' perceptions of these practices were not directly related to older employees' well-being.

Hypotheses tests

Results of the polynomial regression and response surface analyses are presented in Table 4. Figures 1–3 show the three-dimensional surface plots of the relationship between

¹To test the robustness of our results, we re-performed the polynomial regression and response surface analyses without using predictive mean matching. The pattern of results did not differ between the two analyses.

Table 3. Descriptive statistics and correlations for study variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Organizational climate (E)	4.89	1.06	(0.90)											
2. Management (E)	4.95	1.19	.66***	(.92)										
3. Work design (E)	2.99	0.68	.33***	.38***	(.86)									
4. Organizational climate (L)	5.24	0.90	.14**	.14**	.02	(.86)								
5. Management (L)	5.30	0.96	.12*	.11*	.00	.60***	(.90)							
6. Work design (L)	3.21	0.59	.06	.05	.38***	.29***	.40***	(.83)						
7. Well-being (E)	3.12	0.98	.28***	.27***	.28***	-.03	-.02	-.02	(.87)					
8. Older employee gender ^a	0.48	0.50	-.04	-.06	.06	.00	.06	.01	.12*	.00				
9. Older employee age	56.35	3.68	.02	.01	.06	.01	.03	.06	.04	.00				
10. Older employee tenure ^b	0.93	0.25	-.03	-.11*	-.03	.00	.05	.05	-.07	-.03	.15**			
11. Leader age ^a	48.92	9.11	-.01	-.03	.00	-.08	-.09	-.06	.00	-.02	.06	.08		
12. Leader tenure ^b	0.90	0.30	.04	-.04	-.04	.00	-.04	.00	-.10*	-.06	.01	.14**	.33***	
13. Organizational size ^c	10,305.50	23,186.52	.02	.02	-.01	-.02	-.02	-.04	-.13*	.02	.00	.08	.05	.05

Note. N = 333-484. Internal consistency coefficients, Cronbach's alphas are reported in the parentheses on the diagonal. E = older employee rating; L = leader rating.

^a0 = male, 1 = female.

^b0 = less than four years, 1 = four years and more.

^cOrganizational size is a Level-2 variable (i.e., organizational level). Reported correlations pertain to Level-2 correlations. We report supplemental polynomial regression and response surface analyses including this Level-2 control variable in the [online Supplemental material](#).

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4. Polynomial regression results of age-friendly organizational practices on older employees' well-being.

		Predictor: organizational climate	Predictor: management	Predictor: work design
Constant	2.06**	2.55***	2.09**	2.72**
Step 1				
Older employee gender ^a	0.24*	0.28**	0.25**	0.19 [†]
Older employee age	0.02	0.01	0.02	0.01
Older employee tenure ^b	-0.18	-0.23	-0.13	-0.36
Leader age	0.01	0.01 [†]	0.01 [†]	0.00
Leader tenure ^b	-0.31 [†]	-0.47**	-0.28 [†]	-0.35 [†]
Step 2				
E		0.21***	0.19***	0.39***
L		-0.07	-0.07	-0.13
E ²		-0.10*	-0.06*	-0.03
E*L		0.07	0.06	0.47*
L ²		0.02	0.04	-0.21
Pseudo R ²	.03	.15	.12	.13
<i>Surface tests</i>				
a_1		0.14 [†]	0.12 [†]	0.25
a_2		-0.01	0.04	0.23
a_3		0.27**	0.27***	0.52
a_4		-0.15	-0.08	-0.71

Note. $N = 423, 378, 420, 282$. Unstandardized regression coefficients are reported. R^2 was computed using Bartoň's (2020) calculation of marginal R^2 , which refers to the variance explained by fixed effects (Nakagawa & Schielzeth, 2013). E = older employee rating on age-friendly organizational climate, management, and work design, respectively; L = leader rating on age-friendly organizational climate, management, and work design, respectively.

^a0 = male, 1 = female.

^b0 = less than four years, 1 = four years and more.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

older employees' and leaders' perceptions of age-friendly organizational practices and older employees' well-being.

Hypotheses 1, 2, and 3 stated that older employees' well-being would be higher when older employees and leaders are aligned at high levels of perceived age-friendly organizational climate, management, and work design, respectively, compared to when they are aligned at low levels. For an age-friendly organizational climate, both the slope and the curvature of the LOC were nonsignificant ($a_1 = 0.14, p = .05$; $a_2 = -0.01, p = .90$). This means that older employees' well-being did not increase linearly along the LOC. Hypothesis 1 was thus not supported.² Similar results emerged for age-friendly management. Again, both the slope and the curvature of the LOC were nonsignificant ($a_1 = 0.12, p = .07$; $a_2 = 0.04, p = .55$; see Figure 2). Thus, Hypothesis 2 was not supported. Regarding age-friendly work design, the slope of the LOC was significant ($a_1 = 0.25, p < .05$), whereas the curvature was nonsignificant ($a_2 = 0.23, p = .14$). As Figure 3 shows, older employees' well-being increased along the LOC. These results support Hypothesis 3.

Hypotheses 4, 5, and 6 stated that older employees' well-being would be lower when leaders evaluate the age-friendly organizational practices higher than older employees

compared to when older employees evaluate them higher than their leader (i.e., directional incongruence effect). For age-friendly organizational climate, the slope along the LOIC was significantly positive ($a_3 = 0.27, p < .01$), whereas the curvature was nonsignificant ($a_4 = -0.15, p = .15$). As shown in Figure 1, at the left of the graph where older employees perceive lower levels of age-friendly organizational climate than their leaders, employees' well-being was lower compared to the right of the graph where older employees perceive higher levels than their leaders. That is, the results showed the expected directional incongruence effect for older employees' well-being. Hypothesis 4 was thus supported. Regarding age-friendly management, again the slope of the LOIC was significantly positive ($a_3 = 0.27, p < .001$), whereas the curvature was nonsignificant ($a_4 = -0.08, p = .26$). In line with this, Figure 2 shows that well-being was lower at the left side of the surface plot (i.e., leaders perceive age-friendly management higher than their older employees) compared to the right side of the surface plot. These results support Hypothesis 5. Likewise, with regards to age-friendly work design, the slope of the LOIC was significantly positive ($a_3 = 0.52, p < .01$) and the curvature was nonsignificant ($a_4 = -0.71, p = .05$). As can be seen in Figure 3, the lowest outcome values can be found at the left corner of the surface plot (i.e., leaders perceive age-friendly work design higher than their older employees). Hypothesis 6 was thus supported.

In addition to these findings regarding the hypotheses tests, the response surface plots provide further interesting information for the comparison of perceptual congruence and incongruence. As Figure 3 indicates, when older employees and their leaders aligned at low levels of perceived

²In a supplemental analysis provided in the online Supplemental material, we added organizational size as a Level-2 control variable for the polynomial regression and response surface analyses. For age-friendly organizational climate, the inclusion of this Level-2 control variable led to a significant slope of the LOC ($a_1 = 0.14, p = .045$). Although this finding provides support for Hypothesis 1, we advise being careful in the interpretation and conclusion since this finding only emerged when the Level-2 variable organizational size was added as a control variable.

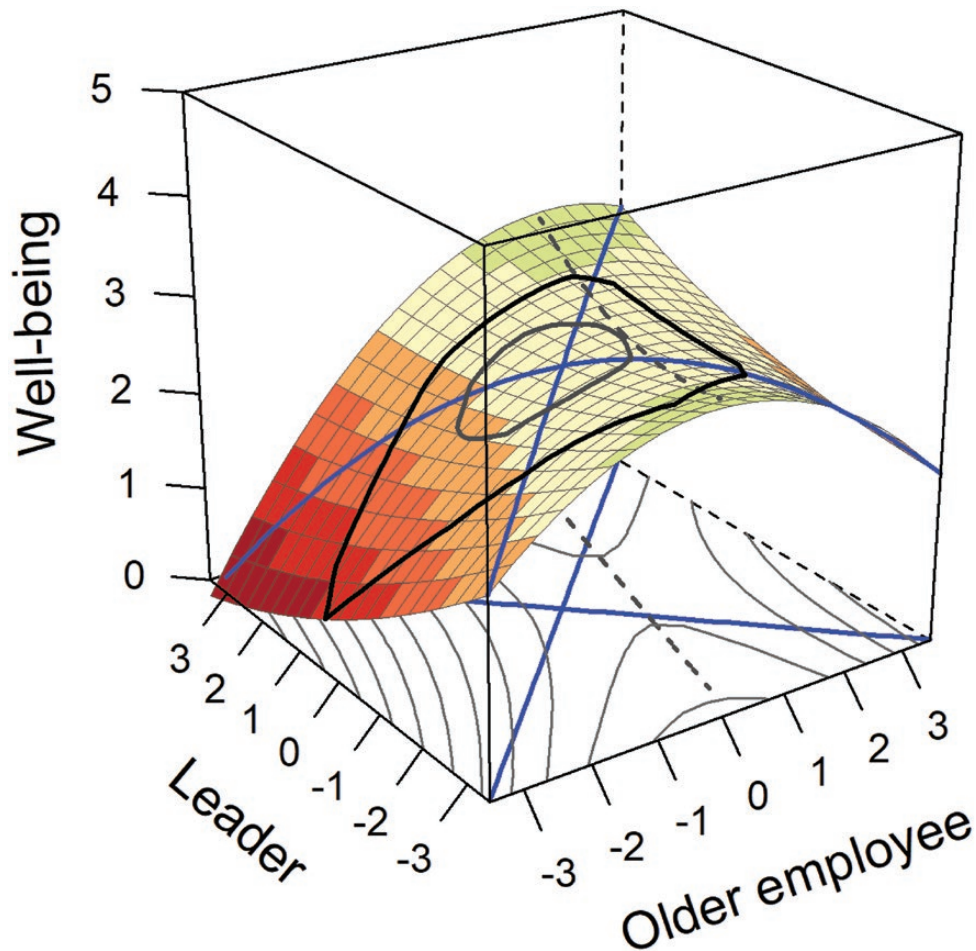


Figure 1. Relationship between perceptual (in)congruence on age-friendly organizational climate and older employees' well-being.

age-friendly work design (front of the surface plot), older employees' well-being appears to be still higher compared to when leaders' perceptions were higher than older employees' perceptions (left side of the surface plot). This suggests that perceptual congruence, even if it is on lower levels of age-friendliness, could be related to higher well-being compared to leaders' overestimation. Although less pronounced, similar findings appeared for age-friendly climate and management. A strict congruence effect would indicate that leader-employee congruence is generally related to higher well-being compared to both leaders' overestimation and underestimation. For such a strict congruence effect to occur, the response surface value a_4 would have to be significantly negative (Nestler et al., 2019). Since this was not the case for all three age-friendly organizational practices, our findings do not indicate that leader-employee congruence was generally related to higher employee well-being compared to leader-employee incongruence.

Discussion

Leader-employee perceptual congruence has been shown to be an important predictor of employees' work outcomes (e.g., Černe et al., 2014; Ostroff et al., 2005). Yet to date, little research has considered this concept in the context of aging workforces and age-friendly organizational practices.

Drawing on the literature on perceptual congruence (Heald et al., 1998; Turban & Jones, 1988) and on psychological contract theory (Rousseau, 1990), we assessed the relevance of leader-employee perceptual (in)congruence on age-friendly organizational climate, management, and work design for older employees' well-being using polynomial regression analysis and response surface methodology. Our results widely support the proposed role of leader-employee perceptual (in)congruence regarding the three age-friendly organizational practices, particularly concerning age-friendly work design. In the case of perceptual congruence, older employees' well-being was higher when older employees and their leaders were aligned at high levels of perceived age-friendly work design. While the results indicated similar relationships for age-friendly organizational climate and management, these relationships were not significant. In the case of perceptual incongruence, older employees' well-being was lower when leaders perceived higher levels of age-friendly organizational climate, management, and work design, indicating a directional incongruence effect for all three organizational practices. Compared to prior studies on the predictive validity of age-friendly organizational practices for employee well-being (e.g., Gilbreath & Benson, 2004; Hughes & Parkes, 2007), the inclusion of the polynomial regression terms increased the amount of explained variance beyond the variance explained by individual perceptions alone. This further indicates that leader-employee perceptual (in)congruence

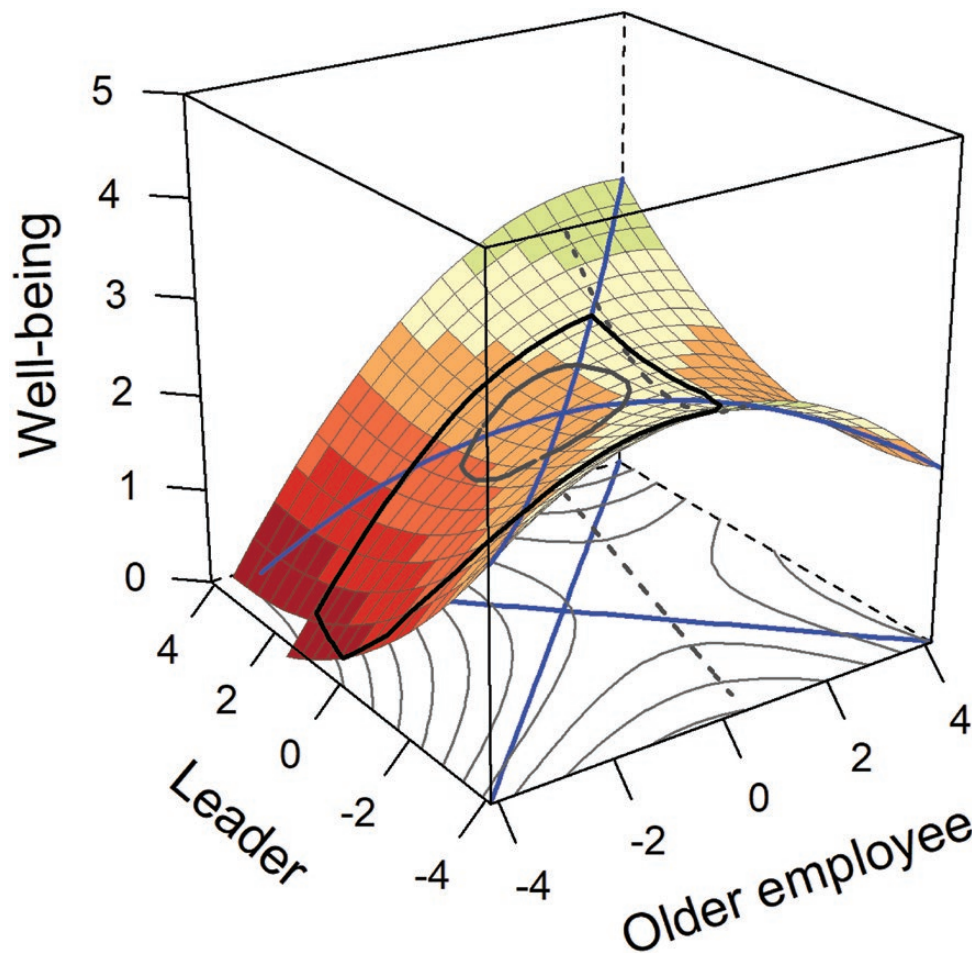


Figure 2. Relationship between perceptual (in)congruence on age-friendly management and older employees' well-being.

on age-friendly organizational practices plays a role for older employees' well-being.

Implications for theory and research

This study extends existing research on age-friendly organizational practices by taking on a multi-stakeholder perspective and highlighting the role of leader-employee perceptual (in)congruence for older employees' well-being. First, we revealed significant discrepancies between older employees' and their leaders' perceptions of age-friendly organizational practices. In line with existing theories (Bowen & Ostroff, 2004; Salancik & Pfeffer, 1978; Yammarino & Atwater, 1997), these findings indicate that not all stakeholders within an organization necessarily perceive their shared work environment similarly. Furthermore, although older employees' perceptions were positively correlated with leaders' perceptions, only the older employees' perceptions were directly related to older employees' well-being. It is thus essential to consider the perceptions of the affected stakeholders (i.e., older employees), even in organizational-level research. However, this does not mean that other stakeholders' perceptions, for example, leaders' perceptions, do not play any role at all.

Indeed, second, by including the leaders' perceptions we demonstrated that leader-employee perceptual (in)congruence regarding age-friendly organizational practices matters for older employees' well-being beyond older employees'

individual perceptions alone. These results extend the findings from prior studies on leader-employee perceptual congruence (e.g., Černe et al., 2014; Gibson et al., 2009; McKay et al., 2009) to the context of aging workforces. We showed that it is not only the older employees' individual perception that matters for their well-being but also the complex interplay with perceptions of other stakeholders in their work environment, specifically their leader. It is therefore not sufficient to examine direct relationships or simple interactions to explain the role of organizational practices for older employees' work outcomes. The social work context plays an essential role for older employees and should be considered when conducting research on aging workforces. As such, our study emphasizes the usefulness of obtaining multi-source data and using polynomial regression and response surface analyses.

We found that especially leaders' overestimation of age-friendly organizational practices was negatively related to older employees' well-being. This suggests that perceptual incongruence might, for example, explain inconsistencies in the findings from prior empirical studies on the effectiveness of organizational practices for older employee outcomes (Nishii et al., 2018). Based on this, perceptual incongruence could be considered as another antecedent of the overall effectiveness of organizational practices that aim to improve the work environment for employees. Consequently, future research that explores different determinants of the effective implementation of organizational practices should

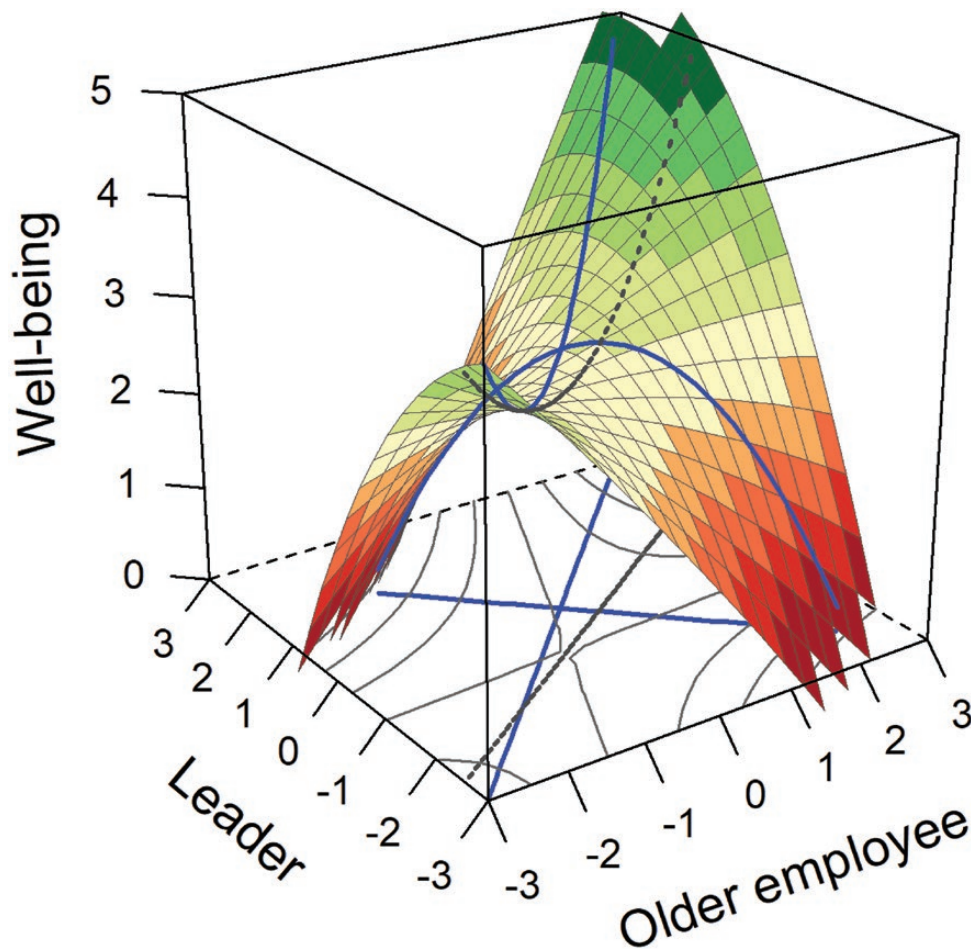


Figure 3. Relationship between perceptual (in)congruence on age-friendly work design and older employees' well-being.

consider including the concept of perceptual congruence and accordingly obtain data from different stakeholders in the organization.

However, we can only speculate about the mechanisms that underlie the found effects. Thus, third, our study revealed a need for theoretical and empirical advancements on perceptual (in)congruence. Specifically, solid theoretical explanations for the specific effects of leader-employee perceptual (in)congruence are largely missing from the literature. In line with prior research (e.g., Bashshur et al., 2011; Cogliser et al., 2009; Tafvelin et al., 2017), we suggest that psychological contracts, trust, fairness, and other factors related to leader-employee relationships are the mechanisms through which leader-employee perceptual (in)congruence transfers to older employee outcomes. Now, research is needed that empirically tests these theoretical underlying mechanisms. In this regard, by investigating perceptual (in)congruence on three different age-friendly organizational practices at once, our study provides a sound empirical foundation for the development of deeper theoretical explanations to spark future research to investigate these thoroughly.

Such future research could also help to find explanations for why the role of leader-employee perceptual (in)congruence differs for the three organizational practices studied. Whereas the alignment on higher levels of age-friendly work design was significantly positively related to older employees' well-being, the alignment on higher levels of

age-friendly organizational climate and management was not, although it was tending in the same direction. Since work design is considered one of the main antecedents of employee well-being (Parker et al., 2017), perceptual congruence on this particular aspect might lead to more pronounced congruence effects.

Practical implications

Older employees' well-being is a crucial aspect of organizational functioning in times of demographic change (Zacher, 2015). Our findings on the role of leader-employee perceptual (in)congruence on age-friendly organizational practices for older employees' well-being thus have relevance for organizations. First, our results replicate previous studies' findings that older employees' perception of a high age-friendly organizational climate, management, and work design is positively related to their well-being. Organizations should therefore strive to implement an age-friendly work environment to support this positive work outcome among their older workforce.

Second, our results demonstrate that organizations and leaders should be aware of the possible gap between leaders' perceptions of organizational practices and their employees' perceptions. Especially perceptual (in)congruence regarding age-friendly work design seems to play a role in older employee well-being. Accordingly, organizations should strive to reach similar perceptions among leaders and older employees to generate better employee outcomes. Leaders, in turn,

should try to learn about their older employees' perceptions to recognize potential incongruences. This could be achieved through regular communication with the employees to reduce the risk of leaders' overestimation or employees missing information. Moreover, in the case of work design, for example, leaders could observe whether older employees use the organizational practices (e.g., flexible working time arrangements or ergonomic adjustments to the workplace) to ensure that older employees are aware of them (Tafvelin et al., 2017).

Third, HR management can help to prevent or reduce possible gaps between leaders' and older employees' perceptions. For instance, by training leaders on how to implement changes in organizational practices and monitoring the implementation process, organizations can ensure that leaders implement organizational practices as intended. In general, HR managers should follow the three principles of the HR management systems strength theory (i.e., distinctiveness, consistency, and consensus; Bowen & Ostroff, 2004) when they develop organizational practices as well as keep their leaders and employees informed about developments and changes to foster the emergence of similar perceptions.

Limitations and future research directions

Despite the strengths of our study, there are some limitations worth mentioning that highlight opportunities for future research. First, causal effects cannot be analyzed in our research. Future studies could use longitudinal, cross-lagged designs to shed light on the question of directionality of effects, for example, whether older employees' well-being shapes their perception of age-friendly organizational practices over time, as well as to examine underlying processes that transfer the effects of perceptual (in)congruence on individual employee outcomes. In extending our study, future research could also use intervention designs to investigate possible antecedents of perceptual (in)congruence, for example, the consistency of communication (Bowen & Ostroff, 2004; Heald et al., 1998). Such intervention studies could aim to implement new organizational practices, thereby investigating what processes are necessary to reinforce similar perceptions among different organizational stakeholders.

Second, despite the large and diverse sample that promotes the generalizability and representability of the results, some sampling issues need to be considered. We recruited a convenience sample which might thus be prone to selection bias. It is possible that our study mainly appealed to organizations that have already taken an interest in the topic of age-friendly organizational practices. However, we approached organizations through various channels, and descriptive results show considerable variance in the perception of age-friendly organizational practices in our sample. Moreover, we asked HR representatives to identify leader-older employee dyads to participate in the research. Considering that participating organizations received a report displaying the mean ratings of the age-friendly organizational practices, it could be that HR representatives selected dyads whom they expected to rate the practices favorably. While this circumstance could potentially have increased the ratings of age-friendly organizational practices and the occurrence of perceptual (in)congruence, it should not affect the role of perceptual (in)congruence for older employees' well-being. Furthermore, participating organizations were interested in receiving reliable reports that they could work with in the future, and we ensured them

that these reports would not be made public. The variance in the descriptive results demonstrates that both leaders and employees were willing to point out areas for improvement. Still, future studies that use a more probabilistic method to select organizations and either conduct a full survey targeting all employees or randomly select participating leaders and employees would be helpful to replicate our findings.

Another limitation of our research lies in the measurement method. We acquired information regarding the predictors from two sources (i.e., older employees and their leaders), thereby reducing potential common method bias (Podsakoff et al., 2003). However, the criterion variable was employee-rated. Common method bias could therefore still be a problem. Consistency motives, implicit theories, or social desirability might have affected the older employees' ratings (Podsakoff et al., 2003). However, the quadratic and interaction terms used in polynomial regression cannot become artificially significant due to common method bias; they can only be deflated by it (Siemsen et al., 2010). Furthermore, Fuller et al. (2016) demonstrated that the threat of common method bias is lower for studies using reliable multiple-item measures. Still, future research could benefit from considering other measurement sources such as leader's ratings or objective data for outcomes (e.g., number of sick days).

Future studies could additionally examine the role of leader-employee perceptual congruence for other criteria of successful aging at work (Zacher, 2015), including performance, organizational citizenship behavior, and retirement intentions. Future studies could also aim to replicate our findings for other organizational practices. Research has shown that developmental HR practices are related to older employees' employability and motivation to continue working (Pak et al., 2019). Such developmental practices could be especially prone to perceptual incongruence since leaders play an important role in providing training opportunities and discussing development steps. Studies on the interplay between different stakeholders' perceptions could further help to evaluate which source of assessment (e.g., older employee, leader, or HR manager) is most suitable for rating organizational practices for the aging workforce in empirical research.

Finally, our finding that 12%–15% of the variance in older employees' well-being can be explained by the respective age-friendly organizational practice, its polynomial regression terms, and the control variables also indicates that there are several other factors contributing to older employees' well-being. Indeed, prior research suggests that individual variables like personality factors and contextual resources on the individual, group, and organizational level can also be considered important predictors of employee well-being (Anglim et al., 2020; Nielsen et al., 2017), thereby highlighting the multilevel nature of antecedents of employee well-being. Future research should include these multilevel antecedents to analyze the relative importance of these predictors for older employees' well-being.

Conclusion

In conclusion, this study integrates existing research on age-friendly organizational practices with the theoretical concept of perceptual congruence to extend knowledge on work-related factors connected to older employees' successful aging at work. The results highlight the role of leader-employee perceptual (in)congruence on age-friendly organizational climate,

management, and work design for older employees' well-being and thus provide recommendations for organizations and leaders on how to effectively implement organizational practices for the aging workforce. Lastly, the findings reveal a need for theoretical advancements to understand the underlying mechanisms surrounding perceptual (in)congruence.

Supplementary Material

Supplementary material can be found at: http://www.oxfordjournals.org/our_journals/workar/

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