COMMENTARY

# Clarifying multilevel and temporal influences on successful aging at work: An ecological systems perspective

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In explaining the influences of older workers' ability and motivation to continue working (i.e., successful aging at work), Kooij et al. (2020) discuss the influences of macro, meso, micro, and temporal factors. Conceptually, this set of potential influences is comprehensive. However, the authors provide less clarity on the scope of the particular influences themselves. At the macro (societal) level, detail was lacking on the scope of potential institutional and cultural influences. At the meso level, more explanation was needed on how social aspects of the workgroup and the job, such as the people that one works with and the skill- or knowledge-based characteristics of the job that one does, influence older workers' ability and motivation to continue working. At the micro level, sociocultural aspects of the individual older workers themselves, such as their gender, subjective age, and communal affiliation, were not discussed. Finally, the different aspects of time that may influence an older worker's ability and motivation to continue working were not elaborated upon. The purpose of my commentary is to provide insight regarding these issues via reference to a recently advanced ecological systems view of work and aging by Marcus et al. (2020). Using the ecological systems perspective, explained below, I expand upon the focal article by clarifying the roles of (macro) institutional and cultural, (meso) workgroup/job, (micro) demographic, and temporal factors on older workers' ability and motivation to continue working.

# The ecological systems perspective

Drawing from the ecological and systems theories of human development (Bronfenbrenner, 1979; Ford & Lerner, 1992), the ecological systems view situates macro, meso, and micro influences as concentric nested circles, whereby individual behavior is seen as embedded within larger organizational and societal systems; time is depicted as cutting across all three circles, thereby potentially interacting with factors *at any level* to influence behavior (Marcus et al., 2020). This conceptualization finds confluence with Kooij et al.'s (2020) Figure 1, wherein the lower-level meso and micro influences are depicted as being nested within (or underneath) the overarching macro level. However, it also extends Figure 1 to recognize the potential interplay of time not only with the individual but also with the larger organizational and societal contexts surrounding the individual. From an ecological systems perspective, macro and meso factors may thus also be viewed as potentially interacting with time to affect individual older workers' ability and motivation to continue working. Importantly, the ecological systems perspective considers the meso and micro levels of antecedents in terms of their social and sociocultural influences. This complements the primarily psychological mechanisms posited by Kooij et al., providing for a more contextually

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bound theoretical perspective. Following, I clarify the scope of these various multilevel and temporal influences on successful aging at work.

# Societal influences: institutional versus cultural

Research in cross-cultural organizational science has established that culture is an endemic social construct arising as a function of overarching environmental features such as the economic, political, and legal contexts (Aycan et al., 2000). Culture is thus viewed as distinct from the institutional context, enjoying a closer relationship with human behavior than more distal exogenous environmental influences of behavior (Aycan et al., 2000). The ecological systems perspective follows this line of reasoning, positing institutional versus cultural influences on successful aging at work.

Institutional influences on successful aging at work may include governmental policy, the legal environment, industry standards and practices, and the market environment (Marcus et al., 2020). Older workers' ability and motivation to continue working may be subject to the influences of any of these institutional forces. For example, the age of retirement has been gradually increasing across countries, with severely aging societies such as Japan and the United Kingdom even debating raising it to age 75 (Hurst, 2017; Swinford, 2016). Correspondingly, the traditional retirement model has been upended, with governments increasingly shifting from defined benefit to defined contribution plans and thereby putting the onus of financial security in late life on workers themselves (Munnell, 2006). Older workers may thus be expected to be both able and motivated to continue working well into late life as a result of such institutional forces acting upon the retirement process. On the other hand, competing institutional forces such as the advent of the protean and boundaryless career, and the increasing use of technology in modern white-collar jobs, may act as countervailing negative influences acting upon older workers' ability and motivation to continue working. To the extent that older workers are stereotyped as resistant to change (Ng & Feldman, 2012) and face greater discrimination when attempting to obtain jobs in fields that are different from their career jobs (Fritzsche & Marcus, 2013), their successful aging at work may be impeded.

Next, the cultural value dimensions most relevant to work and aging have been identified to be societal collectivism and tightness (Marcus et al., 2020). Societal collectivism refers to the extent to which group needs and norms are emphasized over individual desires and attitudes; societal tightness refers to the extent to which the range of permissible individual beliefs and behaviors is restricted (Triandis, 1995; Uz, 2015). These two value dimensions, emphasizing the relative impermeability of group boundaries (collectivism) and the relative impermissibility of group norms (tightness), have been theorized as core cultural dimensions acting upon the social-identity-laden and group-based category that is age (Marcus & Fritzsche, 2016). Older workers' ability and motivation to continue working may be viewed as a function of these two core cultural value dimensions. Older workers living in highly collectivistic and tight societal cultures may encounter social norms sanctioning the employment of (non-normative) older workers, thereby impeding their work success. Illustratively, a meta-analysis by North and Fiske (2015) found that older adults are viewed more negatively in highly collectivistic and tight Eastern societies such as the United States and UK.

### Workgroup influences: social aspect

Kooij et al. (2020) draw upon social psychological theories to explain the influences of group-level age diversity climate and high-quality leader-member exchanges to predict older workers' ability and motivation to continue working. Although their agentic focus on individual cognitive mechanisms (e.g., self-regulation) explains workgroup influences from the psychological side of the equation, the countervailing social influence side was not well clarified. Here, I distinguish

between two primary sources of social influence acting upon the older worker, including vertical and horizontal influences.

The literature on career-graded age norms suggests that negative mismatch occurs when a worker is older than the normative individual in an organizational position (Lawrence, 1988). Older workers' ability and motivation to continue working may thus be influenced by the extent to which the positions they occupy within their workgroups match such *vertical* age-role hierarchies. Older workers occupying lower (i.e., junior) workgroup positions than is the norm for their age group may be demotivated to continue working; vice versa for older workers holding age-appropriate (i.e., senior) positions.

Whereas age-role hierarchies pertain to top-down (vertical) social influences, the peer relationships that older workers have with the members of their workgroup represent countervailing *horizontal* social influences. The organizational demography approach has been theorized to help explain such peer-group influences on work and aging, whereby the negative influences of age-role hierarchies may be mitigated in more age-homogeneous workgroups (Marcus et al., 2020). This line of reasoning finds confluence with research on the social identity of age suggesting that older workers who are able to better identify with their workgroups will experience more successful aging at work (Zacher et al., 2019). Older workers who are demographically dissimilar to their workgroups on age and/or other subgroup memberships (and thus less able to identify with them) may likely be less motivated to continue working.

# Job influences: age-job characteristic fit

Whereas Kooij et al. (2020) conceptualize the interplay between the job and the individual in terms of a psychologically defined demands-resources conceptualization, the ecological systems perspective provides an alternative socioculturally embedded view, as fit between worker chronological age and specific job characteristics. Here, the age–job fit approach to work design by Truxillo et al. (2012) is relevant. These authors theorized that chronological age will interact with task (e.g., task variety), knowledge (e.g., job complexity), and social (e.g., task interdependence) job characteristics to predict worker attitudes and behaviors. For example, Truxillo et al. (2012) posited that whereas older workers may benefit from job autonomy more than younger workers may benefit more than do older workers from task variety because of the association between old age and fluid intelligence.

Overall, Truxillo et al. (2012) theorized that the best work outcomes will be derived when there is a match between the age of the worker and the physical and professional capacities of the job. Applying an ecological systems perspective, it may thus be surmised that younger and older workers' ability and motivation to work will be optimized when the job is designed such that its social, task, and knowledge characteristics best fit the needs and wants of their respective age groups. Illustratively, Fazi et al. (2019) found that jobs requiring a high level of interdependence resulted in greater work engagement for older workers whereas jobs requiring more interaction outside the organization resulted in higher job satisfaction for younger workers.

### Individual influences: demographic intersectionality

Kooij et al. (2020) focus on the role of psychologically based self-regulatory individual factors such as personality and lifestyle. The ecological systems view provides a complementary perspective, focusing on socioculturally based demographic aspects of the individual as boundary conditions for successful aging at work. These other demographic aspects of the chronologically older worker include subjective age, gender, and communal affiliation (e.g., race, religion; Marcus et al., 2020). Such intersecting aspects of one's demography have been theorized to color the experience of aging at work. The experience of aging at work is expected to unfold differently for older men vis-à-vis older women (Marcus & Fritzsche, 2015).

For example, chronologically older women who feel subjectively younger report higher selfesteem and less perceived gender discrimination at work relative to their subjectively older counterparts; the reverse pattern holds for chronologically older men (Marcus et al., 2019). Hence, different cognitive strategies may be relevant for different subgroups of older workers' successful aging at work. Given evidence that older men derive overall more positive work outcomes compared with older women (Marcus et al., 2019), it is possible that minority groups (e.g., women, Blacks) may face larger hurdles to their ability and motivation to continue working in late life. Organizations should thus adopt age-inclusive HR practices with an eye toward such intersectional nuances of older worker demography.

# Temporal influences: experienced time, perceived time, and timing

Experienced time refers to the temporal process of aging across the course of one's career (Rudolph et al., 2018). Perceived time refers to psychologically constructed notions about the temporal process such as future time perspective (Kooij et al., 2018). Timing refers to contextually bound discrete events and temporal fluctuations such as the implementation of changes in industry standards and practices and labor market dynamics (Marcus et al., 2020). All three of these distinct aspects of time may potentially interact with micro-, meso-, and macro-level antecedents to influence older workers' ability and motivation to continue working. Although research is overall scant with respect to the role of time on successful aging at work (see Rudolph et al., 2018, for a review), findings generally point to this notion of an interplay between time and other macro-, meso-, and micro-level factors. For example, older workers' experienced time at work varies as a function of macro-level institutional differences in retirement policy (Henkens et al., 2018), suggesting that the process of retirement may itself be different across national contexts. As another example, older women are more likely to retire early than are older men (von Bonsdorff et al., 2017); thus, there may likely be micro-level age  $\times$  sex differences in older workers' perceived remaining time at work.

# Conclusion

The ecological systems perspective delineated above complements the focal article's process model, providing further clarity on the scope of potential macro, meso, micro, and temporal antecedents of older workers' ability and motivations to continue working. Although much more empirical evidence is needed on the effects of all these theorized antecedents of successful aging at work, and particularly regarding potential contextual  $\times$  temporal interactions, the ecological systems view provides a potential guide. Better understanding of socially and socioculturally bound antecedents of successful aging at work (e.g., demographic intersectionality; age–job fit) may help further research on work and aging, by accounting for complementary contextual factors accompanying the focal article's theorized individual psychological antecedents of older workers' ability and motivation to continue working.

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Cite this article: Marcus, J. (2020). Clarifying multilevel and temporal influences on successful aging at work: An ecological systems perspective. *Industrial and Organizational Psychology* **13**, 408–412. https://doi.org/10.1017/iop.2020.67