

Understanding retirement: the promise of life-span developmental frameworks

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Abstract The impending retirement of large population cohorts creates a pressing need for practical interventions to optimize outcomes at the individual and societal level. This necessitates comprehensive theoretical models that acknowledge the multi-layered nature of the retirement process and shed light on the dynamic mechanisms that drive longitudinal patterns of adjustment. The present commentary highlights ways in which contemporary life-span developmental frameworks can inform retirement research, drawing on the specific examples of Bronfenbrenner's Ecological Model, Baltes and Baltes Selective Optimization with Compensation Framework, Schulz and Heckhausen's Motivational Theory of Life-Span Development, and Carstensen's Socioemotional Selectivity Theory. Ultimately, a life-span developmental perspective on retirement offers not only new interpretations of known phenomena but may also help to identify novel directions for future research as well as promising pathways for interventions.

Keywords Retirement · Ecological systems theory · Selective optimization with compensation · Life-span theory of control · Socioemotional selectivity

Introduction

As populations around the world are greying (OECD 2006), an unprecedented number of workers in industrialized nations are approaching retirement age. A better

understanding of the factors that predict entry into and adjustment to this phase of life is critical for developing policies that optimize individual well-being and limit strain on societal resources. In response to this need, recent years have seen a surge in research examining antecedents and consequences of retirement (Shultz and Wang 2011) and the individual contributions in this special section reflect the richness of contemporary retirement research. Two of the articles examine predictors of retirement, whereas Gørtz (2012) focuses on characteristics of the working environment and physical health, Blekesaune and Skirbekk (2012) examine individual differences in personality traits. Clarke and colleagues (2012), in turn, investigate links between expectations about retirement and life satisfaction in the post-retirement phase.

Although the articles differ in subject matter, they share key methodological strengths. This includes the use of large samples drawn from representative datasets and followed over multiple years, proper attention to gender differences, and the inclusion of relevant covariates. One would hope that the high methodological standards of the present work set the stage for future research efforts.

A successful translation of basic research into specific policies requires not only sound methods but also theoretical models that capture the full complexity of the retirement process. In this regard, the present contributions are characterized by a relative absence of consistent and overarching theoretical frameworks. Although each of the articles provides a compelling rationale for hypothesis generation, there is little overlap in theoretical concepts across studies and limited attempts to bridge levels of analysis within a given study. Importantly, such concerns are not specific to the present articles but symptomatic of the retirement literature at large. In this commentary, I discuss the fragmentation of current theoretical

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perspectives on retirement and argue that life-span developmental theories can promote integration across levels of analysis and help in modeling the temporal dynamics of the retirement process.

Current fault lines in retirement research

In part, the lack of overarching theoretical frameworks derives from basic differences in conceptualizations of retirement across fields. Broadly speaking, prior research has examined retirement as a form of decision making, as a career development stage, and as a process of personal adjustment (Shultz and Wang 2011). Each of these perspectives highlights specific aspects of retirement and emphasizes different theoretical angles.

Conceptualizations of *retirement as decision making*, for example, draw on psychological decision models and sociological perspectives (Feldman and Beehr 2011), as well as economic theory (French 2005). While this perspective is helpful in predicting an individual's propensity to retire as well as the voluntariness of their retirement, it does not speak much to long-term adjustment.

Research on *retirement as a career development stage*, in turn, is based in the occupational literature and extends theoretical frameworks that were originally developed to describe career trajectories and occupational performance to the retirement transition (e.g., Hesketh et al. 2011; Sterns and Gray 1999). This work provides key insights into the role of older workers' individual characteristics (e.g., work performance, career goals) as well as relevant contextual variables (e.g., working conditions). However, because the underlying theoretical models were developed in the context of work settings, they have limited applicability in the post-retirement phase.

Finally, research on *retirement as an adjustment process* is rooted in models of stress and coping (Folkman and Lazarus 1980) and emphasizes subjective appraisals and individual predictors of risk and resilience (Pinquart and Schindler 2007; Löckenhoff et al. 2009). Adjustment-based perspectives are also useful in modeling the longitudinal dynamics of the retirement process (e.g., Shultz and Wang 2011), but less effective in capturing objective predictors of the retirement decision.

In response to this fragmented research record, several recent reviews have re-emphasized that retirement is not a binary transition experienced by an isolated individual at a specific point in time (Hesketh et al. 2011; Shultz and Wang 2011). Instead, it should be considered as a process that begins long before the actual date of retirement and continues for an extended period thereafter before a new equilibrium is reached (Hesketh et al. 2011; Sterns and Gray 1999; Shultz and Wang 2011; Atchley 1976). A full

understanding of retirement also requires the consideration of multiple levels of analysis ranging from individual characteristics to interpersonal mechanisms, and societal factors (Shultz and Wang 2011; Feldman and Beehr 2011).

Recent models of retirement have begun to capture this complexity (Shultz and Wang 2011; Feldman and Beehr 2011; Hesketh et al. 2011). However, they are primarily descriptive in nature and have limited value for hypothesis generation because they do not speak to the hierarchical structure among predictor variables or the underlying mechanisms that link them. Further, although retirement is an inherently age-graded transition (Atchley 1976) and perceived as a key marker for entering old age (Laslett 1991), prominent life-span developmental frameworks have yet to be applied to the retirement literature. The remainder of this commentary will illustrate how developmental perspectives can inform novel theoretical frameworks for retirement research. Specifically, I will explore how life-span developmental perspectives can aid in integrating multiple levels of analysis and help to conceptualize change over time.

Integrating levels of analysis

As outlined above, people's retirement trajectories are influenced by a variety of factors ranging from an individual's mental, physical, and financial resources to social policies and labor market forces (Shultz and Wang 2011). In response to this realization, researchers have begun to consider a wide array of relevant contextual variables (e.g., Gørtz, 2012). However, such efforts are hampered by a lack of theoretical frameworks to conceptualize the dynamic interplay among multiple levels of analysis.

In this regard, retirement research could be informed by Bronfenbrenners' (2000) ecological systems model which proposes that humans develop through a process of reciprocal interactions between an active individual and its surrounding environment. Particular emphasis is placed on enduring patterns of interactions within a person's immediate environment, also referred to as "proximal processes" (Bronfenbrenner 2000), and the ways in which such processes are shaped by individual characteristics and contextual factors. The ecological model further differentiates among nested environmental systems ranging from *microsystems* (immediate interactions within a specific setting) to *mesosystems* (interactions across multiple microsystems), *exosystems* (interactions of a person's microsystems with external settings), and *macrosystems* (cultural and societal factors). Finally, the concept of *chronosystems* captures changes in subsystems over time.

The *process-person-context model* of the ecological approach (Bronfenbrenner 2000) was originally applied to

childhood developmental research (e.g., Bronfenbrenner et al. 1984), but could be easily adapted to the retirement process. For instance, researchers might examine how retirement intentions are linked to social interactions in the workplace (proximal processes within a microsystem) as a function of physical health (individual characteristic), work-family conflict (mesosystem), spouse's work context (exosystem), and public incentives for retirement (macrosystem). Importantly, situating retirement-related variables within an ecological systems framework is not just an exercise in re-labeling but results in testable predictions (e.g., regarding the hierarchical structure of variables or the primacy of proximal processes as a force of development). A systems view is also helpful in the generation of novel research questions. For instance, when significant effects on retirement outcomes are found for one type of exosystem (e.g., spouse's work context) researchers may proceed to explore related exosystems (e.g., adult children's work context).

Motivational perspectives of the retirement process

Life-span developmental approaches can also contribute to our understanding of the motivational dynamics that shape people's paths into retirement. As noted above, retirement is best understood as a longitudinal process that can stretch over several years (Shultz and Wang 2011; Hesketh et al. 2011). In recent decades, many industrialized nations have seen a rise in phased retirement and bridge employment (Quinn 2010) resulting in even lengthier transitions (Mutchler et al. 1997; Shultz and Wang 2011). Although there is increasing access to large, longitudinal datasets that follow retirees over time (e.g., the Health and Retirement Study), relatively little is known about the mechanisms that shape individual retirement trajectories. Life-span developmental theories can fill this gap by offering specific insights into how individuals manage retirement-related gains and losses, maintain a sense of control, and respond to changing time horizons.

Managing gains and losses

Like any developmental transition, retirement involves both gains and losses, although—consistent with other aspects of late life development—losses may outweigh gains (Baltes 1997). Baltes and Baltes' selective optimization with compensation model (SOC, Baltes 1997; Baltes and Baltes 1989) can provide key insights into people's approach to managing such tradeoffs.

According to the SOC model, older individuals proactively respond to age-related losses by prioritizing specific life domains for which they optimize functioning through the selective allocation of effort and resources.

Simultaneously, they compensate for losses in other aspects of functioning (e.g., via adaptive technology or task delegation). Although the SOC model has not been directly applied to the retirement context, it has been successfully used in occupational settings to examine the management of work-family conflicts (Baltes and Heydens-Gahir 2003), the balance of career goals among younger adults (Wiese et al. 2000), and the maintenance of job performance among older workers (Zacher and Frese 2011).

An SOC perspective would benefit retirement research in a number of ways. First, it could provide a framework for understanding the reorganization of work-related tasks as older workers shift toward part-time employment. Presumably, individuals who choose to optimize work-related goals are less likely to retire than those who shift toward compensatory strategies. Also, building on the work by Gørtz (2012), the SOC model may help to explain how working conditions and health status affect commitment to work-related goals. Finally, in post-retirement years, SOC principles may be used to model strategies for achieving a new equilibrium among leisure goals, family commitments, and activities of daily living.

Maintaining a sense of control

Even if retiring individuals use SOC to adaptively manage gains and losses, the separation from work-related roles and responsibilities is likely to affect their sense of agency and control. The Motivational Theory of Life-Span Development (MTLD, Heckhausen et al. 2010) can help to explain how retirees maintain a sense of control under these circumstances. According to MTLD, individuals master developmental challenges through the proactive use of primary control strategies (aimed at changing the environment) and secondary control strategies (aimed at changing internal states Heckhausen and Schulz 1995). In combination, the two types of strategies are thought to promote primary control wherever possible, but leverage secondary control strategies to maintain a personal sense of control when primary control is limited by a lack of personal resources or environmental contingencies (Heckhausen et al. 2010).

Although MTLD has informed research on career transitions in younger adults (Poulin and Heckhausen 2007; Heckhausen and Tomasik 2002), it has yet to be studied in the context of retirement. For most individuals, retirement represents a firm developmental deadline for achieving career-related goals. Research testing the tenets of MTLD in the context of other developmental deadlines (e.g., childbearing, vocational training, Heckhausen et al. 2001) indicates that the association between control strategies and well-being depends on an individual's status relative to the deadline: Before the deadline, primary control strategies are associated with better well-being, whereas after the

deadline, secondary control strategies appear to be more beneficial (Wrosch et al. 2007). By extension, one would expect that a focus on primary control over work-related goals is beneficial before retirement but detrimental in the post-retirement phase. Longitudinal data could help to pinpoint the specific stage of the retirement transition at which this switch occurs and help to target counseling and behavioral interventions accordingly. A better understanding of control perceptions and strategies could also inform future research on expectations for retirement. For instance, building on Clarke et al., it may be possible to buffer the negative effects of unmet expectations for continued employment by fostering secondary control mechanisms in the post-retirement phase.

Appreciating the role of time horizons

Retirement affects not only people's sense of control (MTLD) and the balance of gains and losses (SOC), it also serves as a powerful reminder that time is passing and that an important phase of life has come to an end (Laslett 1991). The life-span developmental framework of Socio-emotional Selectivity Theory (SST, Carstensen 2006) can provide insights into people's responses to this realization.

According to SST, people's perceived time horizons influence their motivational priorities in systematic ways (Carstensen 2006). When time is open-ended, as is typically the case in young adulthood, people are thought to prioritize goals and activities that optimize the future. For instance, they may strive to acquire new information or extend their social circles. In contrast, when time is limited, as is typically the case in older adulthood, individuals are found to optimize well-being in the present moment by seeking out emotionally rewarding experiences and spending time with close social partners (Carstensen 2006; Charles 2010).

Although chronological age is the most obvious influence on perceived time horizons, life events (e.g., geographical moves, graduating from college) or changes in health status were shown to temporarily shift time horizons and goal priorities akin to the patterns seen in advanced old age (Fung and Carstensen 2006). Based on these findings, one would expect that subjective time horizons become increasingly limited as retirement approaches, but expand again as individuals begin to plan for their post-retirement years.

In previous research, age and future time horizons were shown to be associated with motivational priorities, satisfaction with work, and job commitment among older and younger workers (de Lange et al. 2011; Bal et al. 2010; Ng and Feldman 2010). In addition, measures of future orientation have been linked to individuals' anticipation and financial preparedness for retirement (Yang and Devaney 2011; Hershey and Mowen 2000). However, time horizons

have not been tracked over the full course of the retirement transition. Similar to the divergent patterns of retirement expectations observed by Clarke et al., individuals may differ in the degree to which their time horizons respond to retirement. For instance, individuals whose time horizons shift well in advance of their eventual retirement may have a smoother transition than those who show a delayed response. Similarly, failure to re-expand one's time horizons after retirement may be linked to suboptimal outcomes.

Obviously, time horizons, control strategies, and SOC do not act in isolation. Future research is needed to understand their joint influence on the retirement process and their association with relevant individual difference variables such as personality (see Blekesaune and Skirbekk, 2012). Within the ecological approach, control and SOC strategies may be conceptualized as proximal processes and linked to variables at the meso-, exo-, and macro-systems level. It is also important to note that in contrast to demographic variables or stable personality traits, motivational constructs can be shifted by appropriate instructional manipulations (e.g., Fung and Carstensen 2006), which opens up pathways for corrective interventions.

Conclusion

In summary, the impending retirement of the populous baby boom and post-WWII cohorts creates a pressing need for practical interventions to optimize retirement outcomes at the individual and societal level. This challenge necessitates comprehensive theoretical models that acknowledge the multi-layered, longitudinal nature of the retirement process. After taking stock of existing gaps in the research record, this commentary highlighted ways in which contemporary life-span developmental frameworks can be applied to retirement research. For instance, building on the work presented in this issue, developmental perspectives may provide insights into the dynamic processes by which dispositional traits are translated into retirement-related behaviors (Blekesaune and Skirbekk 2012), provide frameworks for integrating individual and contextual variables (Gørtz 2012), and explore how individuals cope with unmet expectations about retirement (Clarke et al. 2012).

For the sake of brevity, this commentary focused on a few select examples in the hope of inspiring broader efforts to apply a life-span perspective to the retirement literature. Ultimately, this approach not only offers new interpretations of known phenomena and novel directions for future research but may also help to identify promising pathways for interventions.

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