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Cognitive Ability, Expectations, and Beliefs about the Future: Psychological Influences on Retirement Decisions

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Introduction

Past research has documented extensive health and economic influences on retirement decisions. It has, however, paid less attention to psychological influences on such decisions. In part, this is a result of the lack of data on psychological characteristics.

Recent advances in behavioral decision research, behavioral economics, and life-span development psychology can help expand our understanding of retirement timing decisions. Using data available from the American Life Panel, we examine how perceptions of the future, cognitive abilities, financial literacy, and decision-making styles may influence retirement behavior for three populations: retirement expectations among those over age 45 but yet to retire, retirement age for those who have retired, and a third special sample of persons who have retired in the past five years, for whom we ask whether their retirement was earlier than expected, as expected, or later than expected.

Hypotheses and Findings

We explore six hypotheses: 1.) Those with greater cognitive abilities, including financial literacy, will be more likely to retire later. 2.) Those with greater cognitive abilities will have more coherent retirement expectations. 3.) Those with greater longevity expectations retire later. 4.) Those with greater expectation of future Social Security reform reducing personal benefits will retire earlier. 5.) Those focusing on opportunities (i.e., seeing a more expansive future) will choose later retirement, while those focusing on limitations will choose earlier retirement. 6.) Those endorsing maximizing behavior, particularly those who continually search for better alternatives, will retire later.

Regarding our first hypothesis, we found, among persons not yet retired, that those with higher cognitive ability had a greater expectation of working full-time later in life. However, for those already retired, we did not find cognitive ability to be consistently associated with retirement age. Those with higher levels of fluid intelligence, reflecting problem solving and related abilities, were less likely to retire early, but those with higher levels of crystallized intelligence, reflecting knowledge and experience, were less likely to retire late.

Regarding our hypothesis on coherence of retirement expectations, we compared two questions on the probability of working past age 62 (P62) and past age 65 (P65). We considered those for whom P65 was no greater than P62 to have coherent expectations, and those for whom P65 exceeded P62 to have incoherent expectations. As hypothesized, those with greater cognitive ability were more likely to have coherent expectations. This suggests that those with lower cognitive ability may think less coherently about retirement and, therefore, may benefit more from assistance in retirement planning.

Regarding our third hypothesis, we found greater longevity expectations (after controlling for actuarial expectations from life tables) were strongly associated with greater expectancy of working full-time later in life. We also found specifically that such expectations were associated with a low perceived likelihood of stopping full-time work before age 62.

For our fourth hypothesis, we found little support. Expectations of Social Security changes were strongly associated with expectations of working full-time later in life, and specifically having a high expectation (≥ 80%) of working full-time after age 65, contrary to our hypothesis. A possible alternative hypothesis might entail a belief that Social Security changes will require a longer working career for financial soundness in retirement. We did not find an association between Social Security expectations and actual retirement age (for those retired), suggesting that Social Security expectations may drive pre-retirement considerations more than actual retirement age.

Regarding our fifth hypothesis, we found mixed evidence. Among those not yet retired, a focus on future opportunities was associated with greater expectation for working full-time later in life, supporting our hypothesis, but controlling for age and other demographics largely accounted for this. Conversely, a focus on limitations was also associated with expectations of working full-time after age 65, contrary to our hypothesis. Among those already retired, a focus on opportunities was associated with a lower retirement age, also contrary to our hypothesis. It is possible that many of these mixed results stem from a causal relationship in the reverse direction, particularly if early retirement expands feelings of opportunity.

Finally, for our sixth hypothesis, we found that continually searching for better options was associated with a planned later retirement among those not yet retired — consistent with our hypothesis but largely accounted for by demographic characteristics. Lower decision difficulty was also associated with later retirement. High standards (a separate aspect of maximizing) were associated with an earlier retirement, contrary to our hypothesis. These results suggest that the different aspects of maximizing behavior have differing relationships with retirement behavior.

Conclusion

Our results suggest that cognitive ability may shape how retirement is anticipated and experienced, such that those with higher cognitive ability expect to retire later. Yet, given that cognitive ability was not a consistent predictor of actual retirement age, influences on pre-retirement decision making (e.g., planning) may not be the same as those influencing final retirement timing decisions. This may suggest that a psychological expectation (or indeed, desire) to retire later may not be able to counter other influences on retirement age.

Our finding that those with greater cognitive abilities have more coherent retirement expectations has important and immediate implications. Specifically, it appears that some persons may be systematically disadvantaged in retirement planning. Our findings on maximizing behavior and retirement may suggest, contrary to our hypothesis, that those simply focusing on doing well for themselves, rather than struggling to find "the best," are valuing the benefits of early retirement more than the additional income and wealth gained by later retirement.

Future work should further expand this data in a targeted direction. For example, recent research notes that adolescent decision-making competence can be improved with training, and to the extent that this trainability extends to older adults, decision skills may be a useful target for intervention. Stronger longitudinal research designs may also help untangle possible endogeneities between retirement and psychological variables.

Ultimately, these results do demonstrate that efforts to improve retirement decision making would benefit from considering psychological characteristics. With more targeted measurement and larger samples, the psychological influence on retirement behavior may be better understood.