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RETIREMENT AND WELL-BEING:
EXAMINING THE CHARACTERISTICS OF LIFE COURSE TRANSITIONS*

Esteban Calvo
Instituto de Políticas Públicas
Facultad de Economía y Empresa
Universidad Diego Portales

Natalia Sarkisian
Department of Sociology
Boston College

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*Manuscript under review in American Sociological Review. Please send any inquiries to Esteban Calvo, Institute of Public Policy, School of Business and Economics, Universidad Diego Portales, Av. Ejército 260, Santiago, Chile, esteban.calvo@udp.cl. The authors would like to thank Sonia Bralic, Paula Errázuriz, Shari Grove, and Joy E. Pixley for their comments and other forms of help in connection to this article. However, the authors should be held responsible for any errors or inaccuracies that remain in this article. The research reported herein was supported by grants from the Department of Sociology and Graduate School of Arts and Sciences at Boston College. The findings and conclusions expressed are solely those of the authors and do not represent the views of Universidad Diego Portales or Boston College.

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Retirement and Well-being: Examining the Characteristics of Life Course
Transitions

Esteban Calvo & Natalia Sarkisian

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Abstract

Much literature debates whether transitions to retirement lead to increased or reduced well-being. We attribute this controversy to the lack of theorizing on life course transitions and argue that the effects of such transitions depend on their characteristics such as speed (gradual/abrupt), perceived control (voluntary/forced), anticipation (expected/unexpected), timing (earlier/later), and synchronicity with other life changes (focal/overlapping). Using change models with Heckman correction on the panel data from the Health and Retirement Study, we examine the effects of retirement on four dimensions of well-being – psychological, physical, economic, and social. Retirement transitions can be both beneficial and detrimental to well-being, depending on their characteristics, dimensions of well-being, and the specific point in the trajectory of change. Compared to abrupt retirement, gradual retirement is beneficial for health and income but it dampens social ties; the effects on income and social ties disappear once the transition is completed. Perceived control boosts well-being. Unexpected transitions dampen social ties, but only after the transition is completed. Retiring later is associated with better psychological and economic outcomes but worse health outcomes. Finally, the effects of synchronicity depend on the nature of contemporaneous changes. Our findings underscore the need for a more complex view of life course transitions.

Esteban Calvo

Instituto de Políticas Públicas
Facultad de Economía y Empresa
Universidad Diego Portales
Ejército 260, Santiago, Chile
esteban.calvo@udp.cl

Natalia Sarkisian

Department of Sociology
Boston College
140 Commonwealth Ave.
Chestnut Hill, MA 02467, USA
natalia@sarkisian.net

Retirement and Well-being: Examining the Characteristics of Life Course Transitions

The difficulties and opportunities of the transition into retirement are a source of a substantial controversy (George 1993; Marshall, Clarke, and Ballantyne 2001; Moen and Chermack 2005; Szinovacz and Davey 2004b; Weiss 2005). Many scholars characterize retirement as a stressful time in the life course (Alavinia and Burdorf 2008; Almeida and Wong 2009). They argue that retirement puts a damper on older adults' well-being because of the loss of multiple roles (Bossé et al. 1990; Freedman 2007; Havighurst, Neugarten, and Tobin 1968). Specifically, these scholars link retirement to an increase in depression rates and health problems and a reduction in income and social contacts.

In contrast, other scholars emphasize the opportunities that arise with retirement and argue that these opportunities may provide a boost to well-being (Cumming and Henry 1961; Drentea 2002; Gall, Evans, and Howard 1997; Mein et al 2003; Mojon-Azzi, Sousa-Poza, and Widmer 2007; Westerlund et al. 2009). They argue that an increase in leisure time associated with retirement may allow individuals to enjoy a variety of pleasurable activities, to take better care of their physical and psychological health, and to spend more time with friends and family.

Finally, yet another group of scholars argues that retirement does little to alter well-being (Butterworth et al. 2006; Charles 2004; Coe and Lindeboom 2008; Neuman 2007; van Solinge 2007). They maintain that whatever problems individuals have with regard to their psychological and physical health will persist into retirement. They also argue that the levels of social engagement will remain unchanged, determined more by personality than by labor force status.

These disagreements about the effects of retirement persist despite the proliferation of research on retirement and well-being in recent decades. We argue that this controversy should

be addressed by approaching retirement from the life course perspective. Designed for understanding individuals' experiences over time, this perspective recognizes the dynamic, contextual, and subjective nature of age-related transitions (Butz and Torrey 2006; Dannefer and Uhlenberg 1999; Elder 2003; Mayer 2009; Settersten 2006). We draw on the life-course perspective to conceptualize the retirement transition as a process of shift between life statuses and to identify the key characteristics of this process that determine its impact on well-being.

The literature on transitions into adolescence, adulthood, marriage, and parenthood generated from the life course perspective reveals a clear awareness of the importance of various characteristics of these transitions for well-being (Seidman and French 2004; Shanahan and Porfeli 2006; Simmons and Blyth 1987; Umberson et al. 2005; Wheaton 1990). In contrast, the extensive literature on retirement and well-being often ignores the complexity of the transition to retirement (see George 1993; Moen 1996; Szinovacz and Davey 2004b for this argument).

We argue, however, that theorizing about the complexity of retirement transitions is especially important given the expanding range of retirement paths taken by older workers. Standardized lock-step careers prevalent throughout much of the 20th century are much less common today (Kohli 2007; MacMillan 2005; Moen and Sweet 2004), thus reducing the sociological value of traditional definitions of retirement as a voluntary and expected exit from the workforce at age 65 that entails an “overnight” shift from full-time employment to full-time leisure (Atchley 1982; Burr et al. 1996; Henretta 1992). Recent data show that for many older workers, retirement is a gradual transition and not a single event of moving directly from full employment to full labor force withdrawal (Calvo, Haverstick, and Sass 2009; Hutchens and Papps 2005). Many workers retire either early in response to employer incentives or late due to financial concerns. In addition, a substantial number of workers are forced to retire, in one way

or another (Han and Moen 1999; Szinovacz and Davey 2004b, 2005). Given this range of experiences, in this study we hypothesize that retirement can be either beneficial or detrimental to older adults' well-being depending on the specific characteristics of this transition.

Drawing on life course studies of adolescence (Simmons and Blyth 1987), we identify five key characteristics of transitions: (1) speed of transition (also known as continuity), that is, whether it is gradual or abrupt, (2) perceived degree of control over the process, (3) anticipation of the transition, that is, whether it is expected, (4) timing of transition, and (5) synchronicity with other life changes. Prior research has demonstrated the importance of these characteristics for the well-being of children transitioning into adolescence, but, as Settersten (2006:4) remarked, "the principles and concepts related to children and adolescents, which had been the targets of inquiry through the first half of the twentieth century, could not simply be extended to adults." Therefore, this study investigates whether these five characteristics play an important role in shaping the effects of retirement on well-being.

We begin by reviewing the literature on these five characteristics of life-course transitions. We then utilize panel data from the Health and Retirement Study to analyze the effects of these characteristics on well-being. We operationalize well-being as a multidimensional construct encompassing psychological well-being, physical health, economic prosperity, and social connectedness. We then examine the effects of retirement characteristics on changes in each of these aspects of well-being that take place (1) when an individual first enters into retirement, whether complete or partial, and (2) when an individual reaches full retirement. In conclusion, we evaluate the advantages of a life course model of later life transitions and consider the implications of our findings for social policy governing retirement.

CHARACTERISTICS OF LIFE COURSE TRANSITIONS

Speed of Transition

For decades, retirement has been portrayed as an abrupt shift from full-time employment to full-time leisure. Recently, however, the speed of retirement received considerable attention (Marshall et al. 2001; Moen and Chermack 2005; Moen and Sweet 2004). Traditional abrupt retirement is now often contrasted with gradual retirement wherein a worker moves smoothly from employment to partial retirement and then to full retirement (Calvo, Haverstick, and Sass 2009). Folk wisdom typically regards gradual retirement as associated with enhanced well-being (De Vaus et al. 2007). Indeed, more than half of older workers say they would prefer to retire gradually (Hutchens and Papps 2005). Most policymakers also view gradual retirement favorably, as a way for workers to extend their careers and improve retirement income security. Thus, the idea of expanding opportunities for gradual or phased retirement has gained a prominent place on the policy agenda as a way to accommodate worker preferences, facilitate adaptation to retirement, and improve retirement income security.

Supporting these views, life course perspective postulates that slow, gradual transitions provide greater *continuity of change* and thus do not disrupt individuals' well-being. Examining children and adolescents, Simmons and Blyth (1987) highlighted the negative impact of discontinuity of change in the transition from elementary school to junior high school on social and psychological adjustment of youths. Applying these insights to aging, Atchley (1999) underscores the benefits of continuity of activities, lifestyles, and social interactions as people age. Crosnoe and Elder (2002) also argue that life courses involving gradual transitions are associated with steady adjustment to new roles and more well-rounded aging, while abrupt transitions entail instability and are associated with maladjustment. Similarly, Gilbert (2007)

argues that because individuals barely notice transitions that happen gradually, they can accept even those transitions that they would reject if they happened abruptly. In sum, theoretical and empirical work suggests that gradual retirement may be beneficial for older adults.

Perceived Control over the Transition

Another key characteristic of life course transitions is perceived control over the transition. Perceived control—a notion related to agency, mastery, and self-efficacy—reflects the extent to which people see themselves as capable to shape their own life according to their preferences by making strategic choices within existing constraints (Moen 1996; Pearlin 1989).

Although it is true that workers in the U.S. always have a choice to retire or to remain in the workforce, in practice, individuals frequently have little control as their retirement decisions are made in response to changing incentives, opportunities, and constraints (Flippen and Tienda 2000; Szinovacz and Davey 2004b, 2005). Perceived control is shaped by both intrinsic factors (e.g., health problems and personality) and external circumstances (e.g., downsizing and stressful events), and reflects the accumulated advantages and disadvantages of past experiences, integrating them with the present transition (Mirowsky and Ross 2007; O’Rand 2006).

Life course perspective postulates that perceived control serves as a protective mechanism at all stages of the life course (Bandura 1997; Moen 1996; Pearlin 1989). While all individuals want to increase their well-being, those with more control and power are more successful in their attempts. In support of these theoretical insights, empirical evidence suggests that high perceived control in the work to retirement transition is associated with positive well-being outcomes (De Vaus et al. 2007; Gall et al. 1997; Gallo et al. 2006).

Anticipation of the Transition

Another important characteristic of transitions is the degree to which they can be anticipated. Although the majority of older workers expect to eventually retire, the exact timing of retirement can be at odds with their expectations (Ekerdt et al. 2001; Riley 1987). Retirement is not always anticipated, and this is true even for people that wanted and planned their transition. Unexpectedness is an important characteristic of life course transitions that has only been marginally taken into account in life course research (Han and Moen 1999). In most cases, the assumption is that an unexpected transition involves uncertainty and thus will be associated with negative well-being outcomes, but few studies empirically assess and support this assumption (Elder and Rudolph 1999; Quick and Moen 1998).

Timing of the Transition

Another important characteristic of transitions is their timing. The “biographical pacing” of transitions in roles and relationships determines the progression through the life course (Han and Moen 1999; Waglimmer et al. 2006). Thus, timing of a transition can have major implications not only for the outcomes of that specific transition but also for the subsequent life course (George 1993; Kaplan 1996). Literature on transition to adolescence suggests that timing is critical for the outcomes of that transition. This literature advances and finds support for the “developmental readiness hypothesis” that suggests that experiencing a transition too soon, before one is ready for the change, can have short-term and long-term negative effects (Simmons and Blyth 1987). Empirical research on retirement also provides some evidence on the benefits of later transitions—extensive evidence suggests that delaying retirement helps individuals to accumulate more resources as they benefit from enhanced opportunities to remain active, productive, and socially engaged, and increase their retirement income (O’Rand 2006; Siegrist, von dem Knesebeck, and Pollack 2004; Taylor and Bengtson 2001).

Synchronicity of Transitions

When approaching transitions from the life course perspective, it is also important to consider the timing of different transitions vis-à-vis one another because the cumulation of multiple life changes at one point in time will likely affect the experience of any one of these changes (DiPrete and Erich 2006; Link and Phelan 1995). Specifically, the “focal theory of change” postulates that it is easier for a person to focus on one transition at a time (Fomby and Cherlin 2008; Simmons and Blyth 1987). Indeed, the research on adolescents has found that individuals who experienced a greater number of major life changes in early adolescence (i.e., children who simultaneously experienced the transition into junior high school, puberty, early onset of dating, residential mobility, or change in parents’ marital status) had more negative outcomes than those who experienced changes one at a time (Simmons and Blyth 1987).

Similarly, it is possible that experiences of other major life changes simultaneously with retirement would have negative consequences for well-being. Indeed, because many older adults experience the death of a spouse or another relative, get divorced or remarried, change their residence, or undergo other life changes as they retire from the labor force (Crosnoe and Elder 2002; Moen, Dempster-McClain, and Williams 1992; Szinovacz and Davey 2004b), the retirement transition must be viewed in the context of multiple and cumulative transitions.

RESEARCH HYPOTHESES

Based on these theoretical propositions and empirical findings, we generate five major hypotheses to test in this study.

(1) Gradual retirement will be associated with better well-being outcomes (psychological, physical, economic, social) than abrupt retirement.

(2) Perceived control (viewing retirement as wanted rather than forced) will be associated with better well-being outcomes.

(3) Retirement transitions that are expected will be associated with better well-being outcomes than retirement transitions that are unexpected.

(4) Retirements that happen later in life will be associated with better well-being outcomes than early retirements.

(5) Simultaneous experience of other major life changes, such as death of a spouse, death of a relative, divorce, marriage, residential mobility, or change in household composition, during the transition to retirement will have negative repercussions for well-being.

We expect these hypotheses to hold at the outset of the transition as well as after the transition is completed—that is, when individuals have reached full retirement.

METHODOLOGY

Data and Sample

We use data from the Health and Retirement Study (HRS), a nationally representative, biennial, panel survey of older Americans and their spouses (University of Michigan 2009). The HRS began in 1992 and the final release data are available through 2006. We selected our sample from the age-eligible individuals belonging to the initial HRS cohort. These are 9,760 individuals born between 1931 and 1941 who became HRS respondents in 1992.

For our sample, we had to identify individuals who made the transition from work to retirement. Researchers use a variety of measures to characterize individuals as employed or retired. Among the most common are self-reported retirement status, change in hours worked (per week or per year), change in earnings, and claimed Social Security benefits (Chen and Scott

2006; Gustman and Steinmeier 2000). In this study, we used respondents' self-reported retirement status to identify individuals in the HRS who made a partial or full transition from work to retirement, marking the beginning of transition at the wave when a respondent first reported being either "partly" or "fully retired." While the terms gradual or "phased" retirement are sometimes limited to full-time workers reducing their hours in their current job, our focus here is on the concept of leaving paid work in stages, regardless of whether an individual was employed part-time or full-time or even was unemployed but looking for a job prior to reporting a transition. We did, however, exclude those individuals who were not in the labor force or were disabled at the last observation before self-reporting retirement. For simplicity, we will refer to this transition as one from employment to retirement. Of the 9,760 individuals in the HRS cohort, 5,395 initiated a transition to retirement (they reported themselves "not retired" in 1992 and "partly" or "completely retired" by or before 2006) and 4,111 made a full transition (they reported themselves "not retired" in 1992 and "completely retired" by or before 2006). Our analyses utilize both of these subsamples to evaluate the effects of retirement characteristics on well-being at the onset of retirement transition as well as at full retirement. The final sample size for each model depends on the number of missing data for the corresponding dependent variable and the results of multiple imputations for self-reported employment/retirement status.

Dependent Variables

Our dependent variables represent change in psychological, physical, financial, and social well-being between two time points. This change is calculated separately for two samples described above. Specifically, for the retirement onset sample, we calculated change in well-being between the last period in the labor force and the period immediately following it, that is, the first period of retirement, regardless of whether an individual was completely or partially

retired at that point in time. For the full retirement sample, we calculated change in well-being between the last period in the labor force and the first period of complete retirement. Note, that for individuals who experienced an abrupt retirement, these two calculations are identical, but they diverge for gradual retirees.

To measure psychological well-being, we reversed the CES-D depression scale and counted the absence of depressive symptoms based on the following questions: “Now think about the past week and the feelings you have experienced. Please tell me if each of the following was true for you much of the time this past week: you were happy; you enjoyed life; you felt lonely; you felt depressed; you felt sad; you could not get going; felt that everything you did was an effort; your sleep was restless.” The resulting scale ranges from -8 to 0, with values closer to zero 0 indicating an euthymic or non-depressed mood. The change in psychological well-being scale ranges from -8 to 8, with a positive value indicating a positive change in mood.

Our measure of physical health is a scale combining five indicators: activities of daily living, large muscles activity, mobility, chronic diseases, and self-reported health. Activities of daily living indicator reflects the number of limitations that respondents experience in performing the following tasks: taking a bath, getting dressed, eating, getting in/out of bed, and walking across a room. Large muscle activity indicator is the number of limitations experienced in performing the following tasks: walking one block, walking several blocks, climbing one flight of stairs, and climbing several flights of stairs. Mobility is the number of limitations experienced in performing the following tasks: sitting for two hours; getting up from a chair; stooping, kneeling or crouching; and pushing or pulling large objects. Chronic diseases is the number of chronic illnesses ever diagnosed by a doctor, including: high blood pressure or hypertension; diabetes or high blood sugar; cancer or a malignant tumor of any kind except skin

cancer; chronic lung disease except asthma such as chronic bronchitis or emphysema; heart attack, coronary heart disease, angina, congestive heart failure, or other heart problems; stroke or transient ischemic attack (TIA); emotional, nervous, or psychiatric problems; and arthritis or rheumatism. Respondent's self-reported health status is rated on a scale from 1 ("excellent health") to 5 ("poor health"). For the purposes of creating the scale, each indicator was standardized using the means and standard deviations calculated at the last wave of employment. The change in physical health variable based on the scale combining these five items ranges from -23.30 to 18.22, with a positive value indicating improvements in health.

To measure change in financial well-being, we use total individual retirement income as a percentage of pre-retirement income (both were adjusted by Consumer Price Index to 2005 real dollars). Values higher than 100 reflect an increase in individual income and values lower than 100 reflect a decrease. We topcoded this variable at 200 to improve its distributional properties.

Finally, we use frequency of social contacts to measure social well-being. The question asked how frequently respondents got together with neighbors to chat or for a social visit; respondents were asked to provide the approximate number of contacts and the time unit they considered, including a day, a week, two weeks, a month, or a year. In the first wave, a different format was used for this question—it specified the following categories: daily or almost every day, several times a week, several times a month, several times a year, or hardly ever; for that wave, we recoded category to its approximate numeric equivalent. For all waves, our measure is calculated as the average number of contacts per month. Based on that measure, we created the change variable and then top and bottom coded this change variable at 80 and -80, respectively. A positive value on this change variable indicates an increase in the frequency of social contacts.

Characteristics of Retirement Transition

To measure the speed of retirement, for the onset of retirement sample, we use respondents' self-reported retirement status and create a dichotomy coded 0 for individuals classified as abrupt retirees (i.e., those who transition directly from "not retired" to "completely retired") and 1 for individuals classified as gradual retirees (i.e., those who transition from "not retired" to "partly retired"). In our models for the full retirement sample, we used a length of transition variable indicating the number of months that elapsed between employment and full retirement; it is calculated as the difference between (a) the mid-point between the last wave of employment and the subsequent wave and (b) the mid-point between the first wave of complete retirement and the preceding wave. This variable was topcoded at 120 months.

Our perceived control measure is a dichotomy measuring the respondent's perception on whether retirement was something the respondent "wanted or partly wanted to do," as opposed to "forced into," as reported at the second time point in a given analysis. It is based on the following question: "Thinking back to the time you (partly\completely) retired, was that something you wanted to do or something you felt you were forced into?"

To measure anticipation of the transition, we estimate the degree to which the exact timing of retirement is at odds with the expectation of retirement. Specifically, we calculate the difference (in years) between age 66 and respondent's age at the mid-point between the second time point in a given analysis and the preceding wave, and multiply this value by the probability of working at age 65 that was self-reported at the last available observation before the onset of the retirement transition. A high value on this variable indicates a highly unanticipated transition. We topcoded this variable at 5 to improve its distributional properties.

Timing of retirement is measured as respondent's age at the mid-point between the second time point in a given analysis and the preceding wave, ranging from 52.30 to 75.75. We also tested for potential curvilinear effects of age but did not find any significant curvilinearity.

Finally, we include indicators of five life changes that may take place simultaneously with the retirement transition. First, death of a relative is a dichotomy that indicates the death of a parent, parent in-law, sibling, or child that happened at some point between the two waves of observation used in a given analysis. Second, loss of a spouse is a dichotomy based on respondents' marital status; specifically, if a respondent's marital status changes from "married," "married, spouse absent," or "partnered" to "widowed," "divorced," or "separated" at some point between the two waves used in a given analysis, we coded them as experiencing the loss of a spouse. Third, marriage is a dichotomy indicating those respondents whose marital status has changed from "widowed," "divorced," "separated," or "partnered" to a marital status of "married" or "married spouse absent" at some point between the two waves used in a given analysis. Fourth, residential mobility measure is a dichotomy based on the measure of distance in miles between the household addresses at the two waves of observation used in a given analysis. If this distance was more than zero miles, we coded the respondent as having experienced residential mobility. In those cases where individual-level data were missing or suggested no mobility, we supplemented them with household-level data collected from heads of respondents' households. Finally, change in household size is based on the difference in the number of people living in the household (excluding the spouse) between the two waves used in a given analysis.

Control Variables

To isolate the effect of the retirement transition characteristics on well-being and take additional precautions against the risk of self-selection of retirees into a specific type of

transition, it is necessary to control for a number of possible confounding factors. Therefore, we include controls for demographic factors, job characteristics, and baseline levels of well-being.

Demographic control variables include gender, race/ethnicity, and education. Gender is a dichotomy coded 1 for women and 0 for men. Race/ethnicity is a dichotomy indicating non-White individuals (including Black/African American, American Indian/Alaskan Native, Asian/Pacific Islander, Brown/combination, Hispanic or Latino, and other); the omitted category includes respondents who classified themselves as White/Caucasian and non-Hispanic. Our education variable is a dichotomy indicating those who had less than high school education.

Job-related controls include occupation type, job demands, hours of work, and self-employment status. Occupation type is a dichotomy indicating that the respondent worked in blue-collar occupations (including farming/forestry/fishing, mechanics/repair, construction trade/extractors, precision production, operators, and members of armed forces) at the last wave of employment, with other types of occupations being the omitted category. Job demands is an index that measures the frequency with which the job held by the respondent at the last wave of employment involved each of the following five characteristics: physical effort, lifting heavy loads, stooping/kneeling/crouching, good eyesight needed, and stress. For each job characteristic, respondents indicated the frequency on the scale from 1 (“none or almost none of the time”) to 4 (“all or almost all of the time”); thus, the resulting index ranges from 0 to 20. The hours of work variable reflects the usual hours worked per week at the main and second jobs (combined) at the last wave of employment. Finally, our self-employment status variable indicates whether the respondent was self-employed at the last wave of employment.

Finally, given that different dimensions of well-being are related, our models also include controls for well-being baselines in domains other than the outcome analyzed in a given model.

Here, the absolute values at the last wave of employment rather than change measures are utilized. That is, we use the mood scale ranging from -8 to 0, the physical health index logarithmically transformed and ranging from .69 to 3.09, total individual income topcoded at \$200,000 and logarithmically transformed, and frequency of social contacts topcoded at 30 contacts. For all the well-being baselines, a higher value indicates a higher well-being level.

Analytic Strategy

The panel nature of the HRS is extremely valuable for a study on the effects of retirement transition characteristics on well-being. Most studies of well-being in old age use cross-sectional designs, which can raise serious concerns about the direction of causation and about self-selection biases (for a methodological discussion, see Charles 2004). This study takes advantage of the longitudinal nature of the HRS by establishing a baseline level of well-being for all individuals when they were in the labor force and calculating the change in well-being between that time point and two later time points: (1) immediately after the onset of retirement transition, when some are partially retired and others are fully retired, and (2) when both groups reach full retirement. Johnson (2005) recommends change score models for studying the effects of transitions in non-experimental situations. By focusing on the *change* in well-being, we minimize the effects of inter-individual differences that may be causing older adults to self-select or be disproportionately channeled into certain kinds of retirement transitions (e.g., gradual rather than abrupt, late rather than early retirement, or forced rather than wanted retirement).

In addition, we include a rigorous set of control variables and use Heckman correction as a two-stage procedure (Heckman 1979; Puhani 2002) to further minimize potential self-selection issues. Specifically, those individuals who were not included in our analysis because they had not started their retirement transition or had not reached full retirement by 2006 are more likely

to be those who obtain greater well-being benefits from their employment or from their gradual retiree status, but these people will likely reach full-retirement at later time points. Heckman correction allows us to correct for this potential selection bias. In the first stage of this two-stage procedure, we used logistic regression models to predict the probabilities for each of the 9,760 individuals to be selected into our samples (that is, probabilities of starting and finishing the retirement transition by 2006). These first-stage regression models included demographics, job characteristics, well-being measures, availability of health insurance from a current or previous employer, and type of pension (any defined benefit pension, any defined contribution pension, or no pension), all measured in 1992. In the second stage, we included these predicted probabilities as additional control variables in our analyses of change scores.

We analyze the change scores using OLS regression models adjusting for clustering of individuals within the same households as the original HRS sample included a number of marital couples. We conducted diagnostics for collinearity, nonlinearity, heteroscedasticity, and non-normality, as well as examined outliers and influential data. When necessary, we employed corrective transformations; these were documented in the descriptions of variables above.

For each of the outcome measures, we estimate two regression models, one for each of the two samples. That is, the first set of models uses the sample that has started the transition to retirement and focuses on the immediate change in well-being, and the second set of models uses the sample that fully transitioned into retirement and focuses on the more durable effect on well-being. In the latter set of models, the amount of time between the two measurement points is longer for gradual than for abrupt retirees, but our measure of retirement speed (length of transition) controls for time elapsed between the two measurement points. In both models, we

mean-centered all continuous predictors with the exception of the length of transition variable where zero corresponds to the length of transition for those who retired abruptly.

To handle missing data, we performed a two-stage multiple imputation by chained equations (MICE), wherein each model was estimated over 20 imputed datasets, each including a random component (Royston 2004). Given that the self-reported retirement status used for sample selection had a substantial number of missing values, we first imputed these missing values for each wave for those respondents among the original 9,760 individuals in the HRS cohort who were still alive at the corresponding wave. We used a range of supplementary variables from the dataset, such as details of employment at each wave, to assist us in this imputation. Using these imputed retirement status variables, we then selected individuals into each of our two samples. Thus, the sample sizes vary slightly across the 20 imputed datasets. At the second stage, we performed the imputation for the other variables used in the analyses. Imputed values of the dependent variables were dropped from the analyses (von Hippel 2007).

RESULTS

Descriptive Statistics

[TABLE 1 ABOUT HERE]

Table 1 reports descriptive statistics for the change in each well-being domain, transition characteristics, and control variables. The first set of descriptive statistics, located in the column “at the onset,” is based on the sample including everyone who started the retirement process. The second set of results, in the column entitled “at full retirement,” is based on the sample that reached full retirement. For both samples, Table 1 shows a decline in psychological, physical, and financial well-being, and an increase in social well-being, on average. Thus, the change in

well-being is not uniform across the four domains. The descriptive statistics also suggest that many respondents retired in non-traditional ways: gradually, forced, unexpectedly, and on average earlier than age 65. In addition, a substantial proportion of respondents have experienced a death of a relative, residential mobility, or changes in their household size during their transition to retirement.

Regression Results

[TABLE 2 ABOUT HERE]

The results of the regression models for well-being using the sample that initiated the transition into retirement are reported in Table 2. Given that our dependent variables are change scores, positive regression coefficients may mean either a larger increase or a smaller decrease in the corresponding measure of well-being, depending on the general direction of change determined by the constant and the effects of other characteristics of a given individual. The constant provides information on the average change in well-being for an individual that scores zero on all independent variables, that is, a white male with high SES, not self-employed, forced into an abrupt retirement, not experiencing major life changes other than retirement, and who is average on all continuous variables. For such an individual, our models predict a significant decline in mood, health, and income, but no significant changes in social ties.

Table 2 also shows that the effects of the characteristics of retirement vary across well-being domains. Compared to abrupt retirees, people taking the gradual retirement path report significantly smaller decreases in health and in individual income, but they also report worse outcomes in terms of social contacts. There is no significant difference between these two groups in terms of their changes in mood. Hence, our first hypothesis is only partially confirmed by this analysis. Confirming our second hypothesis, we find that having control over the retirement

decision (reporting that retirement was wanted or partly wanted rather than forced) is associated with smaller decreases in mood, health, and income. Perceived control exhibits no relationship to changes in social ties, however. Next, we find no significant effects of unexpected transitions on immediate changes in well-being. Therefore, we fail to confirm our third hypothesis. In partial confirmation of the fourth hypothesis, we find that a later timing of the transition is associated with smaller decreases in mood and income. We also find, however, that later retirements are associated with bigger increases in health problems. No relationship is found between the timing of retirement and changes in social ties.

Finally, these results offer very limited support for the fifth hypothesis postulating the detrimental nature of synchronicity. Those who lost a relative during their transition to retirement experienced larger increases in health problems, and those who lost their spouse experienced larger decreases in mood, but other concurrent life changes were not associated with any negative outcomes. Residential mobility and change in household size had no effect on the immediate change in well-being. The loss of a spouse was associated with smaller decreases in income—perhaps due to inheritances, benefits received from survivor pensions and life insurances, as well as spousal pension benefits. The loss of a spouse was also associated with significantly larger increases in social ties—those individuals who become widowed and divorced may seek and receive more support than those who do not experience such changes in marital status. Furthermore, a new marriage was associated with smaller decreases in mood and income. Thus, the focal theory of change received very limited support in this analysis.

[TABLE 3 ABOUT HERE]

The results of the regression models for well-being using the sample that completed their transition into full retirement are reported in Table 3. These models focus on the more long-term

effects on well-being, while the previous models focused on the immediate changes. Like the previous models, the effects of retirement vary across well-being domains and are exacerbated or compensated by specific characteristics of this transition. Specifically, these models predict that for an individual scoring zero on all independent variables, retirement is associated with a decline in health and income, but has no significant change in mood and social ties.

First, looking at the speed of retirement, we observe a beneficial effect of lengthier retirement for health: Slower transitions to full retirement are associated with smaller declines in health. The other effects of gradual retirement that we observed in Table 2 do not last into full retirement, however. Second, like the previous set of models, these models provide support for the second hypothesis, demonstrating that having control over the retirement decision is associated with better outcomes in terms of mood, health, and income. Specifically, reporting that retirement was wanted or partly wanted rather than forced is associated with a smaller decrease in mood, and smaller decreases in health and income. Perceived control exhibits no association with social ties, however. Third, in contrast to the previous set of models, these models provide limited support for the third hypothesis, suggesting that more unexpected retirement transitions are associated with significant decreases in social ties. That is, unexpectedness only has a detrimental effect once the transition is completed, but not at the onset of the transition. In partial support of the fourth hypothesis, we once again find that later timing of retirement is associated with better outcomes in terms of mood and income, worse outcomes in terms of health, and exhibits no relationship to changes in social contacts.

Finally, we find limited support for the fifth hypothesis postulating the detrimental nature of synchronicity. On the one hand, the loss of a spouse that happens in combination with full retirement is associated with larger decreases in mood, and a death of a relative as well as

changes in household are associated with larger decreases in health. In addition, residential mobility is associated with worse outcomes in terms of income. On the other hand, the loss of a spouse is again associated with smaller decreases in income, though there are no lasting effects on social ties. Also, a full retirement accompanied by a new marriage enhances mood.

To better illustrate how changes in well-being associated with retirement vary depending on retirement characteristics, we examine predicted values of these changes for different combinations of these characteristics. We focus on three characteristics that had the largest impact on outcomes, that is, speed of transition, sense of control, and timing. Predicted values are calculated for an individual who scored zero on all other independent variables, that is, a White, not self-employed male with high SES who is average on all continuous variables. These predicted values are presented in Figure 1 along with their confidence intervals. White bars represent predicted changes associated with the onset of retirement, while grey bars represent changes associated with transition to full retirement.

[FIGURE 1 ABOUT HERE]

As the panel for the change in mood in Figure 1 demonstrates, retirement is associated with decreases in mood for all types of forced retirement transitions. In contrast, most of the wanted transitions are not associated with any significant changes in mood. In addition, we do observe improvements in mood for those who experience gradual wanted retirement with a later timing, but only at the onset of transition.

In terms of changes in health, most forced transitions to retirement are associated with declining health, with the exception of gradual forced retirement that happens early on. In contrast, only one type of wanted retirement is associated with a decline in physical health--abrupt wanted retirement with later timing. Other types of wanted retirement transitions are

associated either with no change or with improvements in health, as is the case with gradual and abrupt wanted transitions that happen earlier, as well as gradual wanted transitions with average timing. Thus, perceived control is important when it comes to understanding the effects of retirement transitions on health. While in general individuals' health declines as they transition into retirement (no doubt partially due to the biological aging that they experience during this transition), perceived control over the retirement is associated with better health outlooks.

In terms of changes in income, retirement is also mostly associated with declining incomes, as indicated by all the predicted values being under 100%, but again, there are some exceptions. Specifically, at the onset of gradual wanted retirements, especially with a later timing, individuals do not appear to experience much of an income loss.

Finally, although most forms of retirement are not associated with changes in social ties, some types of abrupt retirements are linked to significant increases in socializing, including all forms of abrupt wanted retirement as well as abrupt forced retirement with either earlier or average timing. In sum, this figure demonstrates that retirement cannot be linked to uniformly positive or uniformly negative outcomes; the nature of the changes depends on the type of well-being as well on specific characteristics of retirement transition.

DISCUSSION

This study follows older workers as they make a major life course transition, that from labor force participation into retirement. Although there is considerable research on the retirement transition (Burr et al. 1996; Calvo, Haverstick, and Sass 2009; Charles 2004; Henretta, O'Rand, and Chan 1993; Marshall et al. 2001; Moen 1996; Szinovacz and Davey 2004b), we argue that scholars should pay more attention to specific characteristics of this

transition to better understand its consequences for the well-being. Drawing on the life course approach, we asked: How do the speed, control, anticipation, and timing of the transition, as well as the accumulation of multiple changes, affect well-being during the transition and by full retirement? Our findings suggest that the work to retirement transition can be both beneficial and detrimental to well-being depending on its dimension, the specific characteristics of the transition, and the location in the trajectory (at the onset versus at full retirement).

Dimensions of Well-Being

For a white male, high SES, not self-employed, forced into an abrupt retirement, not experiencing major life changes other than retirement, and who is average on all continuous variables, retirement is—on average—detrimental for mood, health, and income. Social ties, however, remain mostly unchanged. In addition, retirement is associated with better mood outcomes for educated individuals with better baseline health, better health outcomes for those individuals who worked fewer hours pre-retirement and had better baseline mood levels, better income outcomes for those who were self-employed or worked in less demanding jobs prior to retirement, and better social outcomes (at least at the onset) for women.

Furthermore, our findings indicate that three out of four dimensions of well-being—psychological, physical, and financial—are highly responsive to the characteristics of retirement transitions. Below, we will discuss how each of these characteristics modifies the average effects of retirement on these dimensions of well-being. In contrast, changes in social ties are non-significant on average and are mostly unrelated to retirement characteristics, with three notable exceptions: First, for abrupt retirees, the frequency of social interactions increases on average at the onset of retirement. When the transition is completed, however, there appears to be no lasting effects of its speed on social ties. Second, more unexpected transitions decrease social ties at full

retirement. Third, loss of a spouse that happens simultaneously with the onset of retirement is associated with an increase in socializing.

Speed of Transition

Surprisingly, the speed of transition—that is, whether one’s retirement was gradual or abrupt—did not consistently affect well-being. Many scholars theorize that a gradual retirement transition enhances individuals’ well-being, preserving their physical and mental health and allowing them to maintain their economic well-being as well as the social ties they acquired through paid work (Atchley 1999; Crosnoe and Elder 2002; De Vaus et al. 2007; Gilbert 2007). Furthermore, many workers themselves see gradual retirement as an attractive idea. In contrast to these beliefs, we found that a gradual transition is only beneficial in terms of physical health and income, and the income benefits are only available during the transition. In addition, compared to abrupt retirement, gradual retirement does not allow for the initial expansion of socializing the same way an abrupt retirement does, although that difference disappears by the time the transition is completed. Thus, most effects of gradual retirement appear to stem from continued paid work during the transition rather than from the slower speed of transition itself. Overall, while in theory gradual retirement seems like a good idea, in practice this alternative has both advantages (for health and income) and disadvantages (for social ties).

It is possible, however, that current policies and institutional practices serve as barriers that prevent gradual retirement from being more of a positive force for individuals’ well-being. Many policies and practices are designed for individuals who follow the age-graded schema of a sharp transition from full-time work to full-time leisure (Moen and Sweet 2004). Those not fitting this standardized lock-step life course may experience difficulties with their employers and encounter barriers such as laws on pension entitlement and age discrimination (Hutchens and

Papps 2005). A discrepancy between workers' preference for gradual retirement and their experiences with taking this path given existing structural barriers (Riley, Kahn, and Foner 1994 refer to this as "structural lag") may be in part explaining why gradual retirement—despite its apparent appeal—is not more rewarding. It is, therefore, possible that people who choose to retire gradually could be experiencing greater rewards if they were to confront fewer barriers. Thus, if policies, laws, and institutional practices are changed, retiring gradually could become a better alternative for future generations.

Furthermore, increasing the availability of gradual retirement options may increase the perceived control over the speed of transition, and this may have positive effects on well-being. It may be the case that individuals' ability to retire gradually if one wants to—not the effect of the gradual transition per se—produces positive outcomes for older adults' well-being. In this study, our measure of perceived control focused on the freedom of choice to retire and did not address the choice between abrupt and gradual retirement, but the latter choice might be as important as the former. Unfortunately, our data do not allow us to test this hypothesis. Given the prominence of structural barriers to gradual retirement in contemporary society, future research should examine the issue of perceived control over the speed of transition to retirement.

Perceived Control

Our findings regarding perceived control confirm that the retirement transition has more negative consequences when individuals report that they were forced to retire. Those individuals who reported that their retirement was not wanted experienced larger decreases in their physical and mental health and larger decreases in income at the onset of transition as well as when the transition was completed. These findings are compatible with a conceptualization of perceived control as a protective mechanism against the stresses of transitions (De Vaus et al. 2007;

Flippen and Tienda 2000; Gall et al. 1997; Gallo et al. 2006; Szinovacz and Davey 2004b, 2005) and as a source of power to achieve desired outcomes (Kemper 2006).

In theory, such findings for perceived control could reflect higher levels of control and better outcomes in retirement among economically advantaged individuals. Indeed, prior research reports that perceived control increases with education, wealth, and socioeconomic standing: Advantaged individuals accumulate more opportunities for controlling their transitions throughout the life course (Mirowsky and Ross 2007; O’Rand 2006). Our models, however, control for a number of socioeconomic characteristics, ruling out this alternative explanation.

Anticipation of Transition

While some of our findings are compatible with the theoretical arguments postulating that an unexpected transition involves uncertainty and therefore will be associated with negative well-being outcomes (Elder and Rudolph 1999; Quick and Moen 1998; Szinovacz and Davey 2005), we find no significant links between the level of unexpectedness of transition and immediate changes in well-being. That is, at the onset of retirement, those individuals that retired much earlier than originally planned do not experience any immediate negative consequences because of their unexpected retirement. Thus, as long as the transition is wanted, it initially does not matter whether it was expected ahead of time. However, once the transition is completed, higher unexpectedness dampens social ties, even when individuals perceive high control over the transition. Note that we only examined the effect of retirements that happened earlier than expected; therefore, our data did not allow an examination of potentially negative effects of retirements that happened later than originally planned.

Timing of Transition

The life course can be conceptualized as a series of transitions among roles and relationships over time (Elder and Giele 2009; Settersten 2006). Our findings are consistent with previous studies suggesting that the timing of each transition has major implications for the subsequent life course (George 1993; Kaplan 1996; Waglimer et al. 2006). Specifically, our findings are mostly compatible with the “cumulative resources” hypothesis stating that later retirement enhances well-being as individuals benefit from the enhanced opportunities to remain active and productive. We also find, however, that later retirements can be linked to larger decreases in physical health.

Our findings might also reflect social norms surrounding retirement in the contemporary U.S. society. Culturally grounded norms, rules, and expectations shape individuals’ beliefs about the appropriated time for retirement (Han and Moen 1999; Riley et al. 1994). The United States has been described in this regard as a “work-oriented culture,” where being out of the workforce is devalued, while remained employed is glorified, with employment serving as a marker of status and identity (Kessler, Turner, and House 1989; Moen 1996). Retaining the role of worker as one ages is socially desirable, but the social pressure to remain active and productive decreases with age. Therefore, all things equal, leaving the workforce earlier may be a more stressful experience than leaving it later.

Importantly, a discrepancy exists between the cultural norms of work and retirement and the pressures exerted by governmental and organizational policies, practices, and regulations that define workers’ options regarding timing of retirement. Existing policy in the United States is more likely to support early rather than late retirement and therefore creates a structural lag when viewed vis-à-vis the cultural expectation of longer working lives (Han and Moen 1999). In recent

years, however, the concern for the aging of the workforce forces government and employers to review their policies and rethink the issue of timing of retirement.

Although conceptually different, the effect of timing may be confounded with the effect of biological age when it comes to changes in psychological and physical health. To reduce such confounding and capture some of the effects of aging, our models control for the baseline levels of well-being. In addition, in terms of psychological well-being, previous longitudinal and cross-sectional studies reported only a weak relationship between age and happiness after controlling for the decline in health and the loss of social roles and loved ones that comes with aging (Jorm 2000; Pinquart 2001). Thus, our finding of smaller decreases in psychological well-being for those who retired later is likely due to the timing of transition itself rather than to their older age. The confounding problem may be more substantial in the model explaining changes in physical health, however: It is possible that larger declines in health among those who retired later are due to their more advanced age rather than to the timing of retirement transition per se.

Focal versus Synchronic Change

Our findings provide limited support to the hypothesis that synchronicity of change (or cumulative change) negatively influences well-being. The data show that the direction of the effect depends fundamentally on the nature of the synchronous change. That is, negative synchronous changes, such as the death of a relative, tend to affect well-being negatively; and positive synchronous changes, such as new marriage, tend to affect well-being positively. Overall, older adults seem to be better prepared than adolescents to cope with synchronous or cumulative life changes. While older adults can draw inner stability from their formed personalities, adolescents cope better with “focal change”—one major transition at a time—

rather than cumulative change because they need an “arena of comfort” or area of life in which they can feel in peace, to which they can withdraw to recover emotional energy.

Future Research

The limitations of analyses presented here point to some directions for future research. First, these analyses cannot capture the historical timing and cultural context of transitions or the effects of these transitions on the entire life course of individuals (Elder and Giele 2009). Different cohorts and cultures face different expectations, opportunities, and constraints regarding the retirement transition. For instance, it is possible that the lack of persistent effects of gradual transitions on well-being is due to historical and contextual barriers that make gradual retirement less rewarding to individuals; we cannot assess this proposition using our data. Future research should include more recent observations collected by the HRS to analyze period and cohort effects.

Including more recent observations will also: (1) allow researchers to increase the sample size, as more people would have reached full-retirement; and (2) increase the number of people who reenter the labor force, allowing researchers to study the effects of reverse transitions from retirement to employment (unretirement) on well-being.

Next, future research should use additional time points to model trajectories of change in well-being. Our change score measures focused on two points in time and aimed to minimize self-selection effects (Johnson 2005). Using additional time points would allow future studies to better understand the shape of the trajectory of the change as well as examine variations in starting points and the relationship between starting points and the shape of the trajectory.

Future research should also model the causal structure of potential cumulative advantage and disadvantage processes. This mechanism of inequality formation, whereby an earlier

advantage becomes a resource that produces further advantages (DiPrete and Eirich 2006), is frequently invoked in sociological literature but is rarely examined empirically. While this study includes the direct effects of structural variables on well-being, future studies could conceptualize both the transition characteristics and well-being as embedded in exogenous structural variables that may reproduce advantages and disadvantages over time.

Another direction for future research is suggested by the possibility that the effect of timing may be confounded with the effect of biological age when it comes to changes in psychological well-being and physical health. To find out whether that explanation holds, especially for physical health, future research should compare individuals of the same age who did and did not retire and who possess similar characteristics on other variables that may affect selection into retirement.

In addition, future research can improve upon the measures of well-being, especially in terms of social well-being. We found that the social ties were largely unaffected by retirement characteristics, but this finding could be due to the limitations of the measure. It is possible that other aspects of social well-being such as the frequency of contact and quality of relationships with coworkers, friends, or family would be more responsive to retirement and its characteristics than the frequency of contacts with neighbors used in this study.

Finally, future research should further explore the contexts under which the retirement transition takes place. Like in previous research discussing the “widowhood effect” (Elwert and Christakis 2006) and “retirement honeymoon effect” (Szinovacz and Davey 2004a), our analysis of cumulative life changes captures the importance of marital contexts for understanding the effects of retirement on well-being. Future studies could further examine marital contexts by

focusing on individuals with spouses and incorporating data on spouses' retirement transitions and their characteristics into analyses of retirement outcomes.

Conclusion

In sum, our study suggests that retirement transitions can be both beneficial and detrimental to individuals' well-being depending on the specific characteristics of transitions, the dimensions of well-being, and the specific point in the trajectory of change (e.g., at the onset of retirement or at full retirement). Retirement transitions are almost universally associated with decreases in economic well-being, but have mixed effects on physical health, psychological well-being, and social connectedness. Our study also provides evidence of substantial beneficial compensatory effects of perceived control. Furthermore, we find mixed effects for the speed of retirement—gradual retirement produces better outcomes in terms of health and income but not in terms of social ties, and most of its effects are transient in that they do not last beyond the gradual phase itself. Later retirement is beneficial for psychological well-being and income, but it is also associated with steeper declines in health both at the onset and when the transition is completed. Whether the transition is unexpected has very little effect on its well-being outcomes. Finally, only negative synchronous life changes appear to affect well-being negatively.

Thus, the debates about the effects of retirement on well-being in recent decades are best understood in terms of approaching retirement from the life course perspective. It is impossible to declare retirement as universally negative or universally positive as its outcomes depend on its characteristics as well as on the type of well-being outcome. Life course research in earlier life (e.g., adolescence) has been more attentive to the characteristics of transitions and generated more theoretical work about them. We argue that it is also important to do that for retirement.

Our findings can be used to inform policymakers interested in retirement issues. We provide evidence suggesting that giving workers a sense of control over their retirement and opportunities to retire in stages and to work longer should have an important place on the policy agenda. Whereas increases in the legal retirement age and decreases in retirement benefits can promote later retirements, such policies are not desirable as they would reduce the sense of control over the transition which is likely to have a detrimental impact on older workers' well-being. Such policies are also problematic given racial disparities in life expectancy.

Nevertheless, numerous other federal, state, and organizational policies can be created that would facilitate gradual, wanted, and later transitions. Laws allowing easier access to retirement benefits while working part-time and organizational policies promoting flexible work schedules would help remove structural and institutional barriers to gradual retirement and facilitate the process for both employers and employees. Tax incentives could be used to reward organizations that promote longer working lives and give workers a sense of control over their retirement through providing financial education, fighting age discrimination, building an organizational environment friendly to older workers, keeping a larger fraction of positions exclusively for older workers, and assisting older workers in finding bridge jobs.

Overall, this study demonstrates that a life-course model of the dynamic, contextual, and subjective aspects of the retirement transition and its characteristics can do much to illuminate on the link between retirement and well-being, as well as help to create public strategies to achieve greater well-being at older ages.

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Table 1. Descriptive Statistics

Variable	At the onset (N=5,395)		At full retirement (N=4,111)	
	Mean	Std. Dev.	Mean	Std. Dev.
<i>Well-being outcomes</i>				
Change in mood	-.229	1.879	-.266	1.953
Change in health	-.115	3.260	-.435	3.457
Change in income	85.643	57.425	78.286	56.511
Change in social ties	1.287	12.574	1.591	13.499
<i>Characteristics of the transition</i>				
Gradual transition	.499	.500	.343	.475
Length of the transition	–	–	15.704	27.329
Wanted or partly wanted transition	.721	.449	.727	.446
Unexpectedness	.738	1.343	.684	1.307
Retirement age	62.755	3.781	63.719	3.832
Death of a relative	.115	.319	.172	.377
Loss of a spouse	.047	.211	.057	.231
New marriage	.025	.156	.031	.174
Residential mobility	.219	.413	.284	.451
Change in household size	.251	.434	.318	.466
<i>Controls</i>				
Female	.485	.500	.491	.500
Non-White	.262	.440	.260	.439
Less than high school	.255	.436	.263	.441
Blue-collar worker	.304	.460	.315	.465
Job demands	12.765	2.905	12.736	2.916
Hours of work	38.774	14.899	38.454	14.596
Self-employment	.163	.369	.126	.332
Mood baseline	-1.124	1.694	-1.158	1.732
Health baseline	.000	3.242	.000	3.236
Income baseline	3.889	3.494	3.933	3.394
Social ties baseline	7.408	9.087	7.449	9.203
Selection probability	.779	.183	.618	.182

Note: Raw values (before transforming and mean-centering) are reported for continuous variables.

Table 2. Regression Results for the Change in Well-being At the Onset of The Transition

	Mood		Health		Income		Social ties	
<i>Characteristics of the transition</i>								
Gradual transition	.057	(.063)	.491***	(.124)	12.286***	(1.783)	-1.389**	(.503)
Wanted or partly wanted transition	.423***	(.079)	1.429***	(.160)	8.556***	(2.178)	.102	(.578)
Unexpectedness	-.028	(.028)	-.078	(.054)	-.578	(.749)	-.355	(.204)
Retirement age	.038***	(.009)	-.167***	(.015)	.990***	(.252)	-.024	(.066)
Death of a relative	-.196	(.111)	-.391*	(.186)	-.986	(2.849)	.139	(.832)
Loss of a spouse	-1.035***	(.235)	.064	(.340)	12.363*	(6.244)	3.362*	(1.444)
New marriage	.471*	(.211)	.097	(.310)	17.455*	(8.415)	-1.215	(1.678)
Residential mobility	.073	(.074)	-.127	(.135)	-.309	(2.091)	-.180	(.633)
Change in household size	.015	(.072)	-.177	(.132)	-.247	(2.003)	-.389	(.565)
<i>Controls</i>								
Female	-.038	(.069)	-.078	(.128)	.434	(1.888)	1.127*	(.561)
Non-white	.031	(.077)	.097	(.146)	.646	(2.204)	-1.118	(.582)
Less than high-school	-.200*	(.085)	.027	(.159)	.046	(2.306)	-.350	(.621)
Blue-collar worker	-.029	(.080)	-.103	(.146)	.712	(2.223)	.611	(.631)
Job demands	-.012	(.011)	.020	(.020)	-.245	(.322)	-.091	(.093)
Hours of work	-.003	(.002)	-.018***	(.004)	-.102	(.070)	.013	(.021)
Self-employment	-.073	(.097)	.087	(.180)	15.773***	(3.048)	-.215	(.826)
Mood baseline	–	–	.176***	(.039)	.379	(.574)	.078	(.153)
Health baseline	.146*	(.059)	–	–	-2.277	(1.853)	.466	(.563)
Income baseline	.017	(.067)	.232	(.131)	–	–	-.035	(.595)
Social ties baseline	.020	(.025)	.004	(.043)	-.795	(.796)	–	–
Selection probability	.055	(.226)	.433	(.447)	-8.970	(6.268)	.354	(1.641)
Constant	-.465*	(.211)	-1.532***	(.399)	79.083***	(5.673)	1.389	(1.480)
N	4,082		3,684		4,476		3,270	

Notes: Standard errors are in parentheses. Time 1 is measured at last period of employment. Time 2 is measured at the period following time 1. The sample size reported is the number of observations found when fitting the model in the first imputation, but the sample size varies slightly between imputations.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two tailed tests for all variables.)

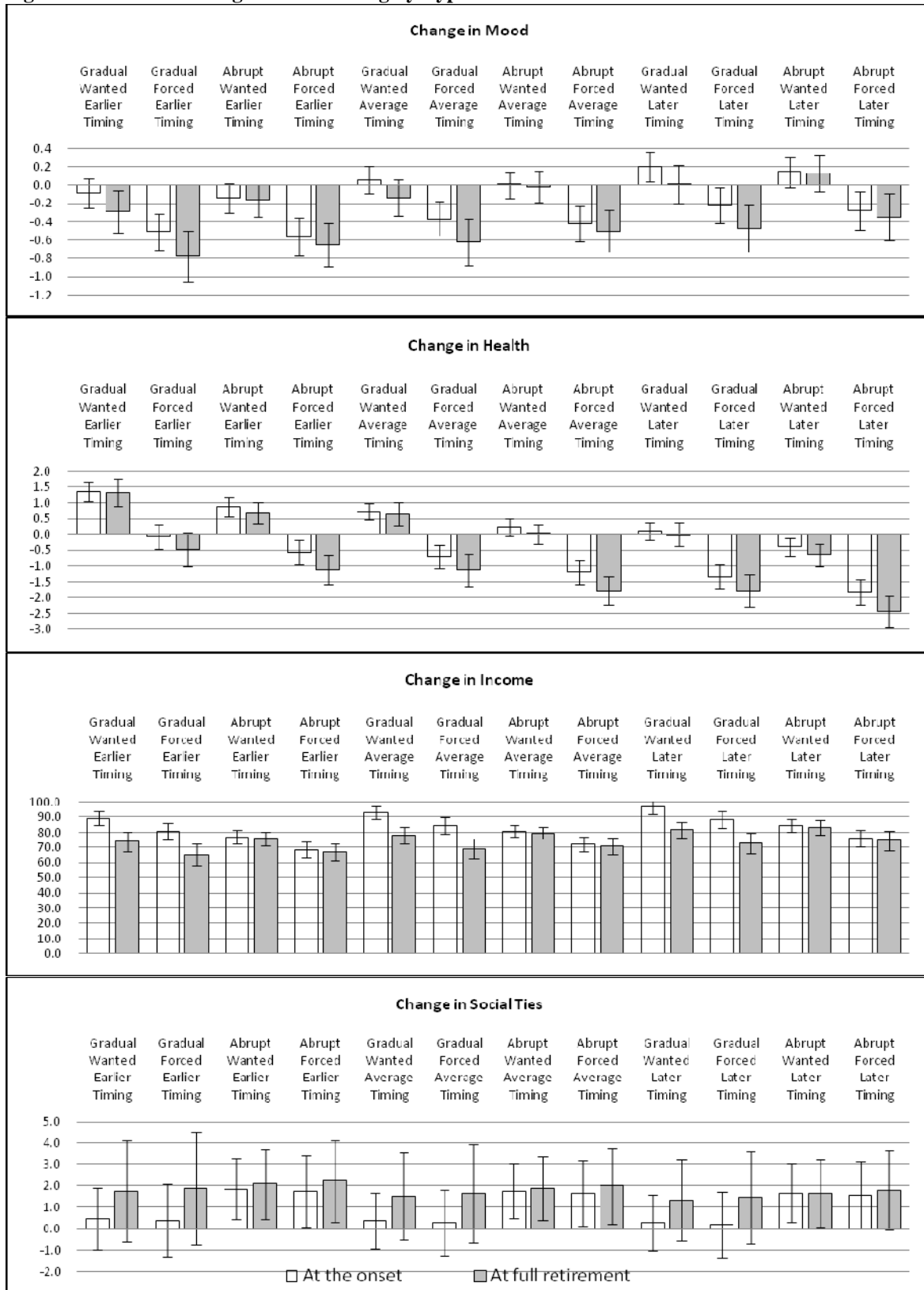
Table 3. Regression Results for the Change in Well-being At Full Retirement

	Mood		Health		Income		Social ties	
<i>Characteristics of the transition</i>								
Length of the transition	-.003	(.002)	.014***	(.003)	-.036	(.046)	-.007	(.015)
Wanted or partly wanted transition	.484***	(.097)	1.788***	(.200)	8.837***	(2.413)	-.126	(.704)
Unexpectedness	-.042	(.036)	-.124	(.071)	-.002	(.891)	-.493*	(.243)
Retirement age	.039***	(.011)	-.172***	(.020)	.991***	(.293)	-.056	(.085)
Death of a relative	.026	(.111)	-.388*	(.195)	.583	(2.901)	.024	(.833)
Loss of a spouse	-.801***	(.238)	.306	(.359)	16.365**	(5.961)	.458	(1.705)
New marriage	.642**	(.215)	.120	(.339)	6.656	(7.745)	-2.522	(1.768)
Residential mobility	-.031	(.085)	-.091	(.157)	-4.335*	(2.205)	-.654	(.713)
Change in household size	-.003	(.085)	-.309*	(.152)	-.567	(2.208)	.030	(.664)
<i>Controls</i>								
Female	.041	(.081)	.004	(.151)	.998	(2.079)	.637	(.697)
Non-white	.132	(.090)	.333	(.173)	-1.741	(2.410)	-.512	(.713)
Less than high-school	-.147	(.099)	-.182	(.186)	2.324	(2.492)	-.823	(.762)
Blue-collar worker	-.089	(.093)	-.042	(.178)	.439	(2.519)	.940	(.771)
Job demands	-.016	(.014)	-.005	(.023)	-.745*	(.361)	-.124	(.103)
Hours of work	.003	(.003)	-.022***	(.006)	-.150	(.079)	.026	(.025)
Self-employment	-.091	(.141)	.478	(.255)	28.303***	(4.094)	.414	(1.120)
Mood baseline	–	–	.124**	(.043)	.214	(.614)	.060	(.179)
Health baseline	.170*	(.070)	–	–	-2.784	(2.071)	.242	(.629)
Income baseline	.044	(.082)	.268	(.161)	–	–	-.334	(.751)
Social ties baseline	.015	(.030)	-.001	(.052)	-.988	(.787)	–	–
Selection probability	-.254	(.266)	1.663***	(.485)	-16.115*	(6.972)	2.468	(1.958)
Constant	-.500***	(.113)	-1.781***	(.223)	70.636***	(2.771)	2.012	(.887)
N	3,295		2,938		3,650		2,622	

Notes: Standard errors are in parentheses. Time 1 is measured at last period of employment. Time 2 is measured at the first period of retirement. The sample size reported is the number of observations found when fitting the model in the first imputation, but the sample size varies slightly between imputations.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two tailed tests for all variables.)

Figure 1. Predicted Changes in Well-Being by Type of Transition



Notes: Gradual retirement effects at full retirement are calculated for an average length of gradual retirement (48 months). Earlier/later timing is defined as one standard deviation below/above the average (62.8 years old).