

---

# Using the Life Course Perspective to Study Library and Information Science Careers

VICTOR MARSHALL, SUSAN RATHBUN-GRUBB, AND  
JOANNE GARD MARSHALL

---

## ABSTRACT

This article provides an overview of the life course perspective as an approach to studying work and careers, and outlines the ways in which it was used by the Workforce Issues in Library and Information Science 1 (WILIS1) survey to capture the context of LIS graduates' career choices, transitions, outcomes, and perceptions over time. We describe the types of analyses that can be conducted when a survey instrument is grounded in the life course perspective. We will argue that the approach taken to understanding individual lives in a broader social context implicit in the life course perspective is particularly appropriate for studying library and information science careers using either or both quantitative or qualitative measures. As such, we can add the life course perspective to the wide range of theories from the social sciences that can be used as frameworks for examining issues of importance to the field.

## INTRODUCTION

The Workforce Issues in Library and Information Science 1 (WILIS 1) project (J. G. Marshall, et al., 2005) was launched to gain a better understanding of issues related to recruitment, education, career patterns, retention, and retirement in library and information science (LIS) careers from the perspective of LIS graduates.<sup>1</sup> A large-scale retrospective survey of graduates of North Carolina professional and paraprofessional LIS programs (1964–2007 graduation cohorts) was conducted to gather data that would characterize the variability in age and life stage, work and personal roles, and life experience of LIS professionals. The measurement strategy used to design the survey was informed by the life course

perspective, a theoretical framework that has increasingly been used to support the study of work lives and occupational concerns over time—in the context of careers that, among WILLIS respondents, could range from one to forty-plus years.

This article provides an overview of the life course perspective as a tool for studying work and careers, and outlines the ways in which it was used by the WILLIS 1 survey to capture the context of LIS graduates' career choices, transitions, outcomes, and perceptions over time. We describe the types of analyses that can be conducted when a survey instrument is grounded in the perspective, and we will argue that the approach taken to understanding individual lives in a broader social context implicit in the life course perspective is particularly appropriate for studying library and information science careers using either or both quantitative or qualitative measures. As such, we can add the life course perspective to the wide range of theories from the social sciences that can be used as frameworks for examining issues of importance to the field.

### THE LIFE COURSE PERSPECTIVE

The life course perspective provides a lens through which the entirety of individual lives can be seen in several contexts. The perspective directs attention in a systematic way to support understanding of the interaction of individual-level factors, such as one's biological maturation and psychological development, with broader factors in the person's environment, such as the historical, generational, geographical, and social forces that enable or constrain a person's life choices and life chances over the life course, from birth to death.

Since its first formal articulation half a century ago (Cain, 1959, 1964), the life course perspective "has attained a remarkable degree of institutionalization in contemporary social theory and research" (V. W. Marshall & Mueller, 2003, p. 3), and while sociology is its primary intellectual home, the perspective is also prominent in the areas of life-span developmental psychology, demography, anthropology, social epidemiology, biology, and history (V. W. Marshall & Mueller, 2003; Settersten, 2003). We have not, however, found any explicit use of this framework by researchers in the LIS literature.

Not merely an interpretive tool, it is a "a framework for descriptive and explanatory research . . . that covers the identification and formulation of research problems, rationales for variable selection, and strategies for research design and data analysis" (Elder, Johnson, and Crosnoe, 2003, p. 4). There are two major dimensions to the life course perspective: one at the individual level, focusing on biographies unfolding through time, and another focusing at the level of social institutions and "macro-level" phenomena, which provide the context in which individuals fashion their lives. In the latter sense it is possible to conceive of a "social structure of

the life course,” shaped by public policies, economic conditions, historical changes that constrain or enable individual choice, and so on.

At the individual level, which is where we focus our research, a study using the life course perspective is designed to explore research questions through life histories, as seen in the context of global and national events, economic conditions, age cohort, life stage, social role, personal psychology, timing over the life course, and personal relationships. However, to adequately deal with individual biographies, we of necessity also attend to the institutional structure of the life course and are sensitive to the macro-level forces that establish, reinforce, or modify the social structure of the life course.

Thus, in life course research, the tension between “structure” (institutional/social forces) and “agency” (individual choice), and their influence or constraints on life choices and chances are explored (Anisef & Axelrod, 2001; Marshall & Clarke, in press). Marshall and Mueller (2003) note that North American researchers have emphasized “individual transitions” and agency in life course scholarship, while European researchers have focused more on the forces of social institutions and structure on the individual life course, as well as individuals’ sense-making or “subjective appraisal” of their biographies (p. 20).

Different scholars have their lists of the major principles and concepts that come together to constitute the life course perspective. As defined by Elder, Johnson, and Crosnoe (2003), the five key principles in the life course framework focus on: life-span development, agency, time and place, timing, and linked lives, all of which are applicable to research on work and careers, as they are equally applicable to research in other life course areas, such as those dealing with the family life course or the health life course. It is increasingly recognized that an adequate understanding of the life course can only be attained if attention is paid to the intersecting biographical experiences of the individual in the domains of work, family, and health (and perhaps additional domains as well). In the domain of work and occupations, the life course perspective brings into focus the background and context of career decisions and outcomes in a person’s life—their timing, the individual’s location in history and society, the influence of close relationships, and the significance and meaning that individuals assign to them as they make sense of their working lives.

Human development processes do not end at adulthood but continue throughout the entire life span, as a person encounters new experiences and takes on new family, social, and work roles. *Worker* is potentially one of the longest roles a person can hold, given that some form of work can be done from youth to elderhood, providing sustenance, social connections, and identity. The work environment connects employees with colleagues, clients, and supervisors, expanding their social networks and interactions with the community. Work can produce or impede social, psychological,

and even biological changes in individuals that may impact their lifelong well-being and the welfare of their families. For example, because health insurance is most often obtained through the employer in the United States, the loss of a job could have far-reaching effects on the health of the employee and his or her family; access to a “better” benefit package or a less hazardous work environment could lead to much better health outcomes.

Elder (1994) stresses that, in spite of contingencies, “within the constraints of their world, competent people are planful and make choices among alternatives that form and can recast their life course” (p. 6). The ability to make choices and take action to shape a life is known as *agency*. Marshall (2005; Marshall & Clarke, in press) distinguishes four ways in which the construct of agency can be differentiated:<sup>2</sup> an individual’s capacity for intention or choice, access to the resources that can be used to make this choice, behavior that represents the choice, and the social and physical structuring of choices. Choices in the context of work, occupations, and careers could be constrained by a deficiency in any one of these dimensions.

In the latter case, agency can be limited by structural impediments such as a failing economy, an imperiled industry, or the continuing trend toward replacing long-term employment arrangements in organizations with short-term contract and temporary positions, outsourcing, and off-shoring strategies that can be coordinated with changing production needs (Cappelli, 1999). Heinz (2003) suggests that social structural changes in the world of work herald a time ripe for individual agency in career development:

In periods of social transformation, however, self-socialization in the sense of developing self-reflexive strategies for coming to terms with changing job conditions and career breaks becomes a dominant pattern. . . . The individual must assume greater importance as the agent of the timing of transitions, as investor of time in education and paid work, and as the producer of self-constructed pathways through the employment system. (pp. 192, 195)

Occupational career<sup>3</sup> patterns of individuals and even generational cohorts are unavoidably influenced by the events and circumstances of a particular time and geographical place. On a macro level, timing refers to the historical time period into which an individual is born, the political, economic, and social climate of a generation, as well as major events such as wars or epidemics that influence and constrain life experiences and choices. In the macro sense, timing is outside of the control of the individual and serves as structural constraint or facilitator of choices. Elder (1994) states that “the personal impact of any [social] change depends on where people are in their lives at the time of the change” (p. 6). On a micro level, an individual usually chooses the timing of important life events, such as leaving the parental home, getting married, having children, and

changing occupations. While this type of timing is typically under the control of the individual, it is also driven by social norms that prescribe the customary age ranges in which people transition from school to work, or from work to retirement.

The term *career* has a long history in sociology (Becker & Strauss, 1956; Hughes, 1971), and its use as a concept extends beyond the occupational sphere (where it suggests some sort of continuity greater than that connoted by a single job) (Marshall, Morgan, & Haviland, in press) to become a metaphor for histories and patterns embracing not only work, but education, family, health, and other transitions (Marshall & Mueller, 2003; Moen, 1998).

Another important distinction is to be made between the subjective and objective dimensions of an individual's life course. Hughes (1971) captures this, using the term *career* in a broader sense than the more restricted occupational domain:

In a highly and rigidly structured society, a career consists, objectively, of a series of status and clearly defined offices. In a freer one, the individual has more latitude for creating his own position or choosing from a number of existing ones. . . . But unless complete disorder reigns, there will be typical sequences of position, achievement, responsibility, and even of adventure. . . . Subjectively, a career is the moving perspective in which the person sees his life as a whole and interprets the meaning of his various attributes, actions, and the things which happen to him. (p. 137)

Henretta (2003), in an overview of work and retirement from the life course perspective, indicates that the parameters of a working life have been dictated, at least in the last seventy-five years, by institutionalized norms of compulsory education for children and mandatory retirement for elders. Structural changes in society and industry have led to greater flexibility in this age-based model, resulting in breaks in employment to pursue education or training, late-career job changes and reentry of retirees to the workforce, or simply to loss of employment (Blossfeld, Buchholz, & Hofacker, 2006; Mendenhall, Kalil, Spindel, & Hart, 2008).

In terms of timing over the life span, the midlife years often coincide with family transitions, such as spousal job change, divorce, widowhood, the departure of grown children, or the birth or adoption of new children. These turning points have been found to influence midlife occupational changes because they are accompanied by psychological and economic changes necessary for major life transitions that "are purposeful—not haphazard" (Carr & Sheridan, 2001, p. 223). Women who shoulder the burden of family caregiving responsibilities often require more flexible work schedules, and they may seek an opportunity for self-employment in spite of the associated investments and risks (Carr, 1996). Significant changes in family structure or needs may offer adults an opportunity to

revive ambitions and career goals that were shelved earlier in life, or require them to make difficult career choices. For example, relocation associated with a spouse's promotion or other career move may result in the abandonment of one career path for another, and a new city, state, or country may offer a very different set of circumstances related to work, occupations, and education or training.

Spousal relocation and its consequences for the career of the trailing spouse typify the interconnectedness of work decisions and linked lives or relationships. Elder (1994) emphasizes that "no principle of life course study is more central than the notion of interdependent lives. Human lives are typically embedded in social relationships with kin and friends across the life span. . . . The principle of linked lives refers to the interaction between the individual's social worlds over the life span—family, friends, and coworkers" (p.6). Family ties are critical in career decision making, and relationships may be the final arbiter in major work life decisions, given that the interests of the individual and the family may conflict (Hareven, 2001).

Employment instability can impact the financial security of a family, and occupational changes or transfers can create logistical challenges for couples restricted by geography, schedules, and caregiving responsibilities. Couples use adaptive strategies they think will help balance family and work needs, but these may also be constrained by social norms about who should, or is able, to make changes in work schedules or occupations. Moen (2003) echoes Elder's assertion that people are planful when faced with work situations or alternatives that will ultimately impact the family when she notes that couples' work-related decision making is "constrained, but intentional" (p. 243). She argues that

what is fundamental to understanding contemporary occupational career development is the fact that individuals are simultaneously members of both families and workplace organizations. . . . This confluence of overlapping role and status memberships—each with a set of distinctive goals, expectations, patterning, constraints, and possibilities—provides the backdrop against which people in intimate relationships, and even those anticipating such relationships, make vocational and occupational career choices. (p. 241)

Interdependence is not limited to family relationships, but is also evidenced by the network of colleagues established over the course of a career in one occupation. Becker and Strauss (1956) use the term *sponsor* to refer to mentors who help to promote and guide a subordinate's passage through an organization or career. Relationships with sponsors and colleagues are not only important socially, but often influence job autonomy, power, and promotion—critical investments that could be lost by changing jobs. However, alterations in the lives of these sponsors or peers could also necessitate a job change. For example, if a critical spon-

sor loses status in an organization or occupation, the relationship may become tenuous and detrimental to the subordinate; if a mentor leaves the organization, the mentee may choose to follow suit. The maintenance of work ties could also provide a safety net for someone who wants to try a new occupation, but wants to preserve the option of returning if things do not work out well. Alternatively, a colleague who successfully negotiates an occupational change can serve as a role model or as a contact in another profession, inspiring someone to follow through with a change intention. Higgins (2001) studied the voluntary career transitions of 136 MBA students, and found that “the greater the diversity of an individual’s network of advisors, the greater the likelihood that the individual will change careers” (p. 612).

Additionally, the importance of friends and community ties should not be understated. A change in employment may require relocation and the relinquishment of established social ties, leisure activities, and regular interaction with extended family. Involvement in and commitment to local religious, civic, and interest groups may provide more satisfaction than work. Nonwork social relationships are a rich source of personal fulfillment and the benefits of a job change may not outweigh the losses of these social networks.

Elder et al.’s five principles of the life course perspective—stressing the importance of life-span development, agency, time and place, timing, and linked lives—imply but do not make explicit the role that social structures, such as government, employing organizations, and social or economic policies play in facilitating or constraining choices related to work and career. At any age, workers entering and leaving the labor market experience some form of structural support or impediment related to education, training, retraining, unemployment benefits, spousal or family benefits, retirement pensions, or Social Security.

It is likely that some structural support has at least a marginal influence on upward or downward occupational mobility, and often these structural factors can have a great effect. For example, policies governing educational grants or small business loans may help to overcome financial barriers to pursuing a particular line of work. Alternatively, a layoff or company restructuring due to an economic recession may slow career progression, require a change of occupation, or leave the individual in a period of extended unemployment. Only recently have unemployment benefits been available to a recipient who is simultaneously retraining for a new job, a policy that begins to address the needs of those who are in the midst of work transitions. For those nearing the end of their working years, policies that limit the pension or Social Security benefits allotted to older adults who want or need to work may have the unintended consequences of “under the table” employment or the impoverishment of those who play by the rules.



A study of careers from a life course perspective benefits from the collection of data that provides the researcher with clues to the context of the worker's entry to or exit from the profession, job changes, gaps in employment, and career progression.<sup>4</sup> Since the library and information profession attracts a high proportion of women and since the field has proved to be attractive as a second career, approaches such as the life course perspective, which can capture the job changes that occur during a worker's career in a broader social context, are particularly useful.

### DEVELOPMENT OF THE WILIS PROJECT

The Workforce Issues in Library and Information Science 1 (WILIS 1) project (J. G. Marshall, et al., 2005) sought to identify and understand issues related to recruitment, education, career patterns, retention, and retirement in LIS careers through a large-scale retrospective survey of graduates of North Carolina LIS programs (1964–2007). The idea for the project grew out of the investigators' interests in two areas: the library and information science workforce and aging workforce issues. This multidisciplinary investigator team included several faculty members then at the School of Information and Library Science at UNC Chapel Hill (J. Marshall, Barreau, Moran, and Solomon) as well as sociologists at the UNC Institute on Aging with expertise in aging workforce issues (V. Marshall, Morgan). Since library and information science has an aging workforce that is older on average than other professional groups (Wilder, 1999), a career study that would probe recruitment and retirement issues in a broad context was considered to be of potential value for workforce and educational planning.

The interest of the Institute of Museum and Library Services (IMLS) in workforce issues was also a major stimulant for the development of this research. In 2004, IMLS commissioned a national study on *The Future of Librarians in the Workforce* (Griffiths, 2004; reports from this national study are under preparation). The national study used libraries as their unit of analysis to develop a snapshot of the current workforce and requested that one-fifth of the library directors send a brief survey to twenty-five of their professional and paraprofessional staff members. Our research group sought to develop a complementary study that would provide a more in-depth look at the career trajectories of library and information science graduates. The resulting WILIS 1 study, funded by IMLS in 2005, uses the life course perspective, which allows an examination of factors affecting workforce participation over the entire career. Surveys were sent to individual graduates of all six library and information science programs (five master's programs and one paraprofessional program) in North Carolina between 1964 and 2007. This design allowed full follow-up of nonrespondents while the survey was in the field. In addition, a



nonresponse survey was used to verify the representativeness of the respondent group.

Respondents completed an extensive Web survey about their education, employment history, job details, and job attitudes and satisfaction. Depending on the length of the respondent's career, the survey could take up to sixty minutes to complete. The use of the life course perspective in the design of the survey will be presented here, but for information on the full methodology of the study please refer to Morgan et al.'s article "Designing and Implementing a Career Retrospective Web-based Survey of Library and Information Science Graduates," also in this issue of *Library Trends*.

The WILIS 1 project is unique in that it was not limited to graduates currently working in the LIS field. Since LIS program graduates from a forty-year period were the unit of analysis, a variety of perspectives could be obtained from people at different stages of life and career, regardless of current employment status or occupation. Additionally, the graduates represented five different professional LIS programs that offer a range of degrees and specializations; together these programs approximate the diversity that characterizes the education and training of information professionals.

In order to capture the timing, context, and "subjective appraisal" of career decisions, the WILIS 1 survey would need to be comprised of closed- and open-ended questions that, when combined, could tell the story of a respondent's working life. One goal of the survey design was to be able to reconstruct lifelong patterns of educational pursuits, work, and breaks in employment for individuals and groups of respondents through quantitative data. A second goal could be accomplished through career narratives and open-ended responses, which would contextualize career choices and explain how timing, family responsibilities, chance, and personal agency interacted to facilitate or constrain those choices.

Two online surveys were developed—one for the five professional programs, and one for the paraprofessional program; these surveys were essentially identical, with wording changed to reflect the different positions and responsibilities held by the two groups. The survey was comprised of seventeen sections, although skip patterns would preclude a single respondent from seeing all of them. It included questions on the educational and career histories of graduates, as well as data related to demographics, specific jobs held, breaks in employment, continuing education, opinions about trends in and satisfaction with the LIS field, and perspectives of recent graduates about their LIS programs and entry into the workforce.

Three sections of particular interest were designed to allow the researchers to examine various sequences of activity over the life course: education, work history, and breaks in employment. In the education section,

respondents could specify the following data on up to six degrees that had been pursued:

- Major area of study
- Type of degree
- Year in which the degree was started
- Status of degree (graduated, still pursuing, did not finish)
- Year in which the degree was completed, if completed

In the work history section, respondents could supply a narrative overview of their career and were asked to specify the following data on up to five specific jobs held (job immediately before LIS program, job immediately after LIS program, current job or previous job if unemployed/retired, job held for the longest period of time, job respondent considered to be the highest achieving):

- Job title
- Year in which the job started
- Year in which the job ended (if no longer working in the position)

Skip logic was programmed into the survey to move the respondent to specific sections, depending upon the number of different jobs indicated and the category or categories into which each job fell.

All of the job sections contained questions about the nature of the work and job setting, salary, level of employment, benefits, control and autonomy, sense of belonging, and reasons for leaving. The sections for current job and previous job were expanded to include more questions on specific job functions, work environment, benefits, career development, retirement plans, experiences of discrimination, and views on older and younger workers.

In the breaks in employment section, respondents were asked to specify the dates and durations of unemployment due to maternity/paternity leave, childcare, care for other family members or household responsibilities, poor health, disability, involuntary unemployment, career training, sabbatical or leave, and leisure activities. One question asked who fulfilled parenting responsibilities and the extent to which these were fulfilled by the respondent.

The design of the WILIS 1 survey facilitates a more comprehensive analysis of career patterns on the individual level, profession-wide, and among groups who specialize in an area of LIS. By using the birth year and years associated with particular degrees, jobs, and breaks, career trajectories can be constructed and annotated with the text responses to see a fuller picture of LIS employment patterns.

The article by J. Marshall et al. in this issue provides an overview of the basic WILIS 1 results including an overall picture of the workforce and data on retirement intentions. The detailed analysis of the careers of the

library and information science graduates based on the WILIS 1 data is just beginning and, with 1,700 variables, this broad spectrum of data offers many possibilities for analysis. For example, Rathbun-Grubb (2009) has completed a doctoral dissertation on the career trajectories of those who leave the profession, and the article by Patillo, Moran, and Morgan in this issue probes job satisfaction.

Our use of the life course perspective in WILIS 1 has shown that this approach is particularly appropriate for use in workforce studies in the library and information science field. The fact that women continue to comprise the largest proportion of library and information science graduates and the popularity of the field as a second career mean that careers tend to be greatly influenced by the linked lives principle from the life course perspective. Women are more likely to have interruptions in their careers due to spousal relocation and family caregiving responsibilities. These women may also experience difficulties reentering the workforce after their children become independent or elder care responsibilities lessen. This suggests that library and information science educators and employers should pay particular attention to the creation of continuing education opportunities and mentorship in the workplace.

Social and economic conditions have led to an overall increase in female participation in the labor force since World War II; however, this has also led to a greater range of career options for women graduates. In the case of library and information science, graduates may be likely to find employment opportunities outside of libraries in other information service organizations. Consideration should be given to creating opportunities for library and information professionals to move more easily from other information organizations back into libraries and even between different types of libraries, for example, public, academic, school, and special.

Libraries have increased their use of outsourcing over the years, a general trend that has also an impact on employment opportunities both inside and outside libraries. The emergence of the Internet and digital libraries are transforming library and information science work and the knowledge and skills needed to perform that work. The impact of changing technology on employment is another aspect that can be informed by the life course perspective. The role of government and organizational policy can help or hinder labor force participation. As the field of library and information science confronts an anticipated shortage of professionals over the next twenty years as the boomers retire, policy makers at all levels would do well to create policies that enhance recruitment into the profession, create greater opportunities for continuing education and advancement, and develop mentorship programs and work arrangements that will enhance the organization's ability to retain valuable older workers. Our WILIS 1 data suggest that many experienced professionals would be willing to stay on longer if there were greater workforce flexibility or

project work available. As we continue to plumb the WILIS 1 data we will have more to say about these possibilities based on what our respondents have told us about their career experiences, both positive and negative. Such evidence may help us to develop a new approach to human resources planning in library and information service organizations that will help to ensure a bright future for our professional workforce.

## NOTES

1. The WILIS 1 study was supported by a grant from the Institute of Museum and Library Services. The primary research team from the School of Information and Library Science at the University of North Carolina at Chapel Hill and the University of North Carolina Institute on Aging consisted of: Joanne Gard Marshall, lead principal investigator; Victor W. Marshall, coprincipal investigator; Jennifer Craft Morgan, coprincipal investigator; Deborah Barreau, coinvestigator; Barbara Moran, coinvestigator; Paul Solomon, coinvestigator; Susan Rathbun-Grubb, research scientist; Cheryl A. Thompson, project manager; and Shannon Walker, graduate research assistant.
2. As Marshall and Clarke (in press; Marshall 2005) point out, Elder's usage is not consistent. They identify four different ways in which he uses the term: as a basic principle recognizing that individuals construct their own life course, as choices themselves, as the cause of behavior that overcomes resistance, and as operative in moments of transition rather than continuity. Hitlin and Elder (2007) elsewhere make a different distinction of four types of agency. These issues need not concern us here.
3. The term *career* is used in life course studies of work (Moen, 1998; Moen and Han, 2001; Wilensky, 1960, 1961). However, several life course scholars use the term more broadly, as in Hughes' (1971) concept of career (see below).
4. For extensive examples from the related study of information technology workers, from which the WILIS project drew guidance for both theory and measurement, see McMullin (in press) and McMullin & Marshall (in press).

## REFERENCES

- Anisef, P., & Axelrod, P. (2001). Baby boomers in transition: Life-course experiences of the 'Class of '73.' In V. M. Marshall, W. R. Heinz, H. Kruger, & A. Verma (Eds.), *Restructuring work and the life course* (pp. 473-488). Toronto: University of Toronto Press.
- Becker, H. S., & Strauss, A. L. (1956). Careers, personality, and adult socialization. *The American Journal of Sociology*, 62(3), 253-263.
- Blossfeld, H. P., Buchholz, S., & Hofäcker, D. (Eds.). (2006). *Globalization, uncertainty and late careers in society*. London: GlobalLife.
- Cain, L. D., Jr. (1959). The sociology of aging: A trend report and bibliography. *Current Sociology*, 8, 57-133.
- Cain, L. D., Jr. (1964). Life course and social structure. In R. E. L. Faris (Ed.), *Handbook of modern sociology* (pp. 272-309). Chicago: Rand McNally.
- Cappelli, P. (1999). *The new deal at work: Managing the market-driven workforce*. Boston: Harvard Business School Press.
- Carr, D. (1996). Two paths to self-employment?: Women's and men's self-employment in the United States, 1980. *Work and Occupations*, 23(1), 26-53.
- Carr, D., & Sheridan, J. (2001). Family turning-points and career transitions at midlife. In V. W. Marshall, W. R. Heinz, H. Kruger, & A. Verma (Eds.), *Restructuring work and the life course* (pp. 201-227). Toronto: University of Toronto Press.
- Elder, G. H., Jr. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly*, 57(1), 4-15.
- Elder, G. H., Jr., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3-19). New York: Kluwer Academic.

- Griffiths, J. M. (2004). The future of librarians in the workforce. UNC School of Information and Library Science: Institute of Museum and Library Services.
- Hareven, T. K. (2001). Historical perspectives on aging and family relations. In R. H. Binstock, L. K. George & Associates (Eds.), *Handbook of aging and the social sciences* (pp. 141–159). San Diego: Academic Press.
- Heinz, W. R. (2003). From work trajectories to negotiated careers: The contingent life course. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 185–204). New York: Kluwer Academic/Plenum.
- Henretta, J. C. (2003). The life-course perspective on work and retirement. In R. A. Settersten, Jr. (Ed.), *Invitation to the life course: Toward new understandings of later life* (pp. 85–106). Amityville, New York: Baywood Publishing.
- Higgins, M. C. (2001). Changing careers: The effects of social context. *Journal of Organizational Behavior*, 22, 595–618.
- Hitlin, S., & Elder, G. H., Jr. (2007). Time, self, and the curiously abstract concept of agency. *Sociological Theory*, 25(2), 170–191.
- Hughes, E. C. (1971). *The sociological eye: Selected papers*. Chicago: Aldine.
- Marshall, J. G., Marshall, V. W., Morgan, J. C., Barreau, D., Moran, B. B., Solomon, P., et al. (2005). *Workforce issues in library and information science 1 (WILIS1)*. UNC Institute on Aging and UNC School of Information and Library Science: Institute of Museum and Library Services.
- Marshall, V. W. (2005). Agency, events, and structure at the end of the life course. In R. Levy, P. Ghisletta, J.-M. Le Goff, D. Spini, & E. Widner (Eds.), *Towards an interdisciplinary perspective on the life course. Advances in life course research* (Vol. 10, pp. 57–91). Amsterdam: Elsevier.
- Marshall, V. W., & Clarke, P. J. (in press). Agency and social structure in aging and life course research. In D. Dannefer & Chris Phillipson (Eds.), *International handbook of social gerontology*. Thousand Oaks, CA: Sage.
- Marshall, V. W., Morgan, J. C., & Haviland, S. B. (in press). Making a life in IT: Jobs and careers in small and medium-sized information technology companies. Chap. 3 in J. A. McMullin & V. W. Marshall (Eds.), *Aging and working in the new economy: Careers and changing structures in small and medium size information technology firms*. Cambrey, UK, and Northampton, MA: Edward Elgar Publishing.
- Marshall, V. W., & Mueller, M. M. (2003). Theoretical roots of the life-course perspective. In W. R. Heinz & V. W. Marshall (Eds.), *Social dynamics of the life course* (pp. 3–32). New York: Aldine de Gruyter.
- McMullin, J. A. (Ed.) (in press). *Working in information technology firms: Intersections of gender and age*. Vancouver: University of British Columbia Press.
- McMullin, J. A. & Marshall, V. W. (Eds.) (in press). *Aging and working in the new economy: Careers and changing structures in small and medium size information technology firms*. Cambrey, UK, and Northampton, MA: Edward Elgar Publishing.
- Mendenhall, R., Kalil, A., Spindel, L. J., & Hart, C. M. D. (2008). Job loss at mid-life: Managers and executives face the “new risk economy.” *Social Forces*, 87(1), 185–209.
- Moen, P. (1998). Recasting careers: Changing reference groups, risk, and realities. *Generations*, 42(Spring), 40–45.
- Moen, P. (2003). Linked lives: Dual careers, gender, and the contingent life course. In W. R. Heinz & Marshall, V. W. (Eds.), *Social dynamics of the life course: Transitions, institutions, and interrelations* (pp. 237–258). New York: Aldine de Gruyter.
- Moen, P., and Han, S-K. (2001). Reframing careers: Work, family and gender. In V. W. Marshall, W. Heinz, H. Krueger, & A. Verma (Eds.), *Restructuring work and the life course*. Toronto: University of Toronto Press.
- Rathbun-Grubb, S. (2009). *Leaving librarianship: A study of the determinants and consequences of occupational turnover*. Unpublished Dissertation, University of North Carolina, Chapel Hill, NC.
- Settersten, R. A., Jr. (2003). Propositions and controversies in life-course scholarship. In R. A. Settersten, Jr. (Ed.), *Invitation to the life course: Toward new understandings of later life* (pp. 15–45). Amityville, NY: Baywood Publishing.
- Wilder, S. (1999). *The age demographics of academic librarians: A profession apart*. New York: Haworth.

- Wilensky, H. L. (1960). Work, careers, and social integration. *International Social Science Journal*, 12(Fall), 543–560.
- Wilensky, H. L. (1961). Orderly careers and social participation: The impact of work history on social integration in the middle mass. *American Sociological Review*, 26(4), 521–539.