Chapter 3
The Linked Lives Principle in Life Course Studies: Classic Approaches and Contemporary Advances

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Social relationships are essential to our emotional, social, physical, and economic well-being at every stage of the life course (House et al. 1988). National surveys consistently show that more than 95 percent of persons in the United States rate their families as "very" or "extremely" important to them, and more than three-quarters rate their friendships as such (Moore 2003). Yet even our most personal and intimate relationships are powerfully shaped by social structures, including historical and cultural contexts, and the social institutions in which we are embedded. That social contexts shape human relationships is a core theme of sociological perspectives on the life course (Elder 1994, 2000). This framework rests on four foundational concepts: historical context; personal timing; agency versus structure; and social relationships (i.e., linked lives). The latter theme is essential to the study of contemporary research on social networks, which uses state of the art methods to understand the complex role that social ties play in shaping attitudes, behaviors, health, and well-being over the life course.

In this chapter, I provide an overview of four integrative themes widely used by sociologists working in the life course tradition, and offer examples of classic and contemporary studies exemplifying these themes. Second, I describe recent developments in data collection and analytic methods that enable researchers to more effectively study linked lives over the life course, with particular attention to the use of dyadic, family-level, and network data. Third, I focus on one core substantive area in linked lives research – the impact of marriage and marital transitions on health and well-being – to illustrate how our understanding of linked lives is

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advanced by adopting dyadic and family-level perspectives. I conclude by showing how attention to linked lives can redirect and challenge conventional wisdom regarding social relationships and health.

Sociological Perspectives on the Life Course: An Overview

Life course sociologists have developed sophisticated theoretical frameworks for examining human lives and the social contexts and relationships that shape these lives (Alwin 2012; Elder 1994). Sociological perspectives on the life course share commonalities with yet diverge in significant ways from psychological models of the life span, which generally conceptualize human development as a function of biological and genetic influences and behavioral adaptation (see Mayer 2003, for review). Sociological approaches to the life course, by contrast, emphasize the influence of social institutions, structures, and public policies on individual lives (Kohli 2007).

Sociologists have adopted a variety of conceptual frames for studying the life course, although Elder's articulation of the life course paradigm is arguably the most influential and widely cited (Alwin 2012). Conceptually, four key assumptions guide this research: (a) lives are embedded in and shaped by historical context; (b) the meaning and impact of a life transition is contingent on when it occurs; (c) individuals construct their own lives through their choices and actions, yet within the constraints of historical and social circumstances, and (d) lives are "linked" through social relationships – the theme that is most central to this volume.

Life course scholars also rely on rigorous research methods and data sources – including national censuses, sample surveys, in-depth interviews, and historical records – to document continuity and change in human lives. Because a key question of life course research is "how do historical time and place shape lives?" researchers often compare data obtained at different points in time, from different birth cohorts, and from different national and cultural contexts. Researchers also rely heavily on longitudinal data, or data obtained from the same person at multiple points in time, so they can track continuity, change, and maturation within a single life. Until relatively recently, however, most studies conducted in the life course tradition relied on data from a single reporter – even when researchers were focused on inherently social phenomena, such as the individual's personal relationships and integration within social networks. This single individual would report on persons belonging to their social networks, or would rate the quality of relationships with family members and friends, yet studies rarely if ever incorporated data directly from those other actors. Much of this chapter will focus on the ways that methodological, data collection, and theoretical advances have enabled life course researchers to truly capture linked lives and social networks in their work. Before delving more fully into these important advances, I provide a brief synopsis and historical overview of the core themes, concepts, and methods of the life course paradigm (Elder 2000).

Historical Time and Place

The life course of individuals is embedded in and shaped by the historical times and places they inhabit. Socioeconomic prospects and trajectories including the choice of one's occupation (Signer and Saldana 2001), the financial wherewithal to purchase a home (U.S. Census Bureau 2015), and whether one's schooling is interrupted by war or a financial crisis are shaped by macroeconomic and political factors (Elder 1994). Social relationship structures and processes also are shaped by sociocultural norms and historical contexts. For example, when and whether to marry and have children (Manning et al. 2014); the social acceptability of divorce, cohabitation, life-long singlehood, and same-sex relations (Baunach 2012; Thornton and Young-Demarco 2001); the balance of power and division of household labor among spouses (Cunningham 2007); and cultural expectations for providing care to aging relatives have changed dramatically over the 20th and 21st centuries (Brody et al. 1983).

The notion that human lives are shaped by social and historical context dates back to the writings of C. Wright Mills. In *The Sociological Imagination*, Mills (1959) asserted that to understand human social life, scholars must consider both one's "biography" and "history." Mills observed that "the sociological imagination enables its possessor to understand the larger historical scene in terms of its meaning for the inner life and external career of a variety of individuals" (Mills 1959: 7).

The impact of history on individual lives is most evident during periods of rapid social change. Adjacent birth cohorts may experience very different historical contexts during their formative years, which lead to a generational divergence in values, beliefs, and life chances (Mannheim 1928/1952). For example, during the latter half of the twentieth century, women's social roles changed dramatically, as educational and occupational opportunities expanded in the wake of the Women's Movement. White middle-class women who were stay-at-home mothers in the 1950s witnessed their Baby Boom and Generation X cohort daughters grow up to have successful professional careers that historically were considered men's domain. Although mothers and daughters share many similarities, including genetic background, ethnicity, religion, and (often) social class, historical changes created a seismic divide in the life choices made by these two generations of women (Carr 2004a). Theoretical writings underscore the importance and complexity of generations for understanding the life course. Alwin and McCammon (2007) clarify that "generation" encompasses three related yet distinct concepts: (1) position in family lineages (e.g., mothers and daughters); (2) birth cohort (e.g., Greatest Generation versus Baby Boom cohort); and (3) an indicator of historical participation (e.g., exposure to flourishing versus restricted opportunities for women).

The impact of history on life course trajectories varies based on one's age when a major historical trend unfolds. Young people who were in elementary school when the internet explosion occurred can't remember life before e-mail, and pre-

fer to maintain social ties with terse text messages. Older adults, by contrast, prefer the more personal connection conveyed with a telephone call or face-to-face visit (Smith 2011; Teo et al. 2015). The effects of specific historical events also vary based on one's age when the event occurred. Elder (1974) showed that World War II affected soldiers differently, based on their age during the war years. Young enlistees had no family or work responsibilities when they shipped off to Japan or Europe, whereas older soldiers were leaving behind jobs and marriages when they headed overseas. While the young soldiers returned home to new opportunities in work, family, and education (due in part to the educational benefits provided by the G.I. Bill), the older soldiers often came home to find their marriages were strained, or their former jobs were no longer available (MacLean and Elder 2007).

Place also affects how individual lives unfold. Place can be defined as broadly as one's nation, or as narrowly as one's neighborhood or city block. Nation-level characteristics, such as the level of economic development can profoundly influence its citizens' attitudes, values, gender roles, childbearing behavior, educational opportunities, health, and even personality (Inkeles and Levinson 1969). One's local social context also matters. Neighborhood characteristics like the social cohesiveness and integration of a city block and or the level of instability, poverty, and crime in one's neighborhood can affect residents' educational prospects, physical and mental health, occupational opportunities, and life span (Sampson et al. 2002). Social networks are tightly tied to place as well; both classic (Cantor 1975) and contemporary (Clarke et al. 2014) research shows that older adults' mobility, health, social integration, and capacity to access instrumental and expressive support is linked to characteristics of the neighborhoods in which they live. Although geography and history are hardly destiny they do play essential roles in shaping one's social networks, interpersonal relations, and life trajectories.

Timing in Lives

The developmental impact of a personal transition or historical event is contingent on when it occurs in a person's life. For example, marrying at age 17 may mean that a young person is especially likely to drop out of high school, divorce, have many children, and hold a poorly paying job that does not require a high school diploma. By contrast, persons who marry for the first time at age 35 likely have already completed their education, perhaps earning a graduate degree, and having spent many years in the paid work force prior to marrying. Yet marrying at age 35 may mean that one will have only one or two children, given that the likelihood of conceiving a child declines steadily for women after age 35 (e.g., Bumpass 1990). Family size and generation length, in turn, can affect socioemotional aspects of intergenerational and sibling relations (Seltzer and Bianchi 2013).

Importance of Agency and Constraint

Individuals construct their own life course through their choices and actions, within the opportunities and constraints of historical and social circumstances. Sociological perspectives on the life course emphasize that life chances are a function of both personal agency and structural constraint. Individuals select social roles and opportunities that are consistent with their own personal preferences, traits, resources, and even genetic predispositions (e.g., Landecker and Panofsky 2013; Scarr and McCartney 1983) – yet freedom of choice is not distributed evenly throughout the population. Persons with fewer economic resources have fewer opportunities to seek out and pursue desirable options, while characteristics such as age, race, gender, physical ability status, sexual orientation and religion may create obstacles for some individuals – at least at certain points in history.

John Clausen's (1993) classic book *American Lives* provides a compelling example of the ways that agency and structure influence life course trajectories. Clausen tracked a cohort of men and women who were born in the early twentieth century, and followed them for more than 60 years. A cluster of traits he labeled "planful competence" increased one's chances of successful careers, stable marriages, rewarding interpersonal relationships, and good health more than five decades after the adolescents had graduated from high school. Planful competence encompasses self-confidence, intellectual investment, and dependability. These attributes, in turn, are associated with superior academic performance in school, well-developed plans for post-secondary schooling, and focus when selecting one's career. Planful competence encompasses one's own ambition, aspirations for the future, and conscientiousness in pursuing one's goals. Yet these traits are shaped by structural constraints. Children from more advantaged social and economic backgrounds were more likely than their less well-off peers to enjoy high levels of competence (Clausen 1993). In sum, human lives are shaped by the complex interplay between individual-level preferences, traits and aptitudes and macrolevel economic, political, and social structures (Elder 1994).

Linked Lives

The life course theme of linked lives is most germane to and unifies the chapters in this edited volume. This integrative theme proposes that lives are experienced interdependently in the context of social networks, and social and historical influences are expressed through this network of shared relationships. The linked lives principle specifies the ways that one's life is embedded in a large network of social relationships – with parents, children, siblings, friends, coworkers, in-laws, romantic partners, and others. The notion that social relationships matter dates back to Émile Durkheim's (1951: 1897) classic writings on social integration in *Suicide*. Durkheim

Linked Lives over the Life Course: Methodological Advances

Sociological research on the life course is distinguished by its conceptual richness, with deep attention to continuity and change, agency and structure, macro- and micro-social intersections, biography and history, a focus on complex intersections across life domains, and recognition of the importance of dyadic, family-level, school, neighborhood, and workplace relationships for individual-level experiences. Methodologically, however, most life course research has focused on a single individual as its unit of analysis – until recently. Even in studies of social relationships and health, relationships traditionally were assessed by asking only one person – such as one spouse, one parent, or one child – to appraise the levels of love, support, strain, influence, instrumental and expressive support, and financial resources exchanged. As Carr and Springer (2010: 755) observed, "one of the most ironic limitations of studies on 'families' and health is that most studies focus on one individual within the larger family network. This limitation is due, in part, to traditional models of data collection where one person answers survey questions on his or her own union, parental status, relationship quality, and own health as well as the health of one's spouse or a randomly selected child." As elaborated below, this single-reporter approach offers an incomplete and potentially misleading portrayal of both the nature of one's relationships and the implications of these relationships for health and well-being. However, over the past two decades social science data and analytic techniques have expanded dramatically, offering tools to better explore the complexities of linked lives.

Data Resources

Multi-generation, multi-reporter data resources have flourished in recent years (Institute of Medicine 2014; National Research Council 2013, 2014). In the U.S., these new data resources or expansions to long-standing data sets span the life course, focusing primarily on *childhood and adolescence* (National Longitudinal Study of Adolescent Health [Add Health]); *adulthood* (Midlife Development in the United States [MIDUS]), *later life* (Changing Lives of Older Couples [CLOC]; Disability and Use of Time [DUST]; Health and Retirement Study [HRS]; National Social Life, Health and Aging Project [NSHAP]); or *extended observation periods spanning several life course stages* (Longitudinal Study of Generations [LSOG]; National Longitudinal Studies of Youth [NLSY]; Panel Study of Income Dynamics [PSID]; Wisconsin Longitudinal Study [WLS]). An important exception to these longitudinal data resources is the General Social Survey [GSS], a repeated cross-sectional survey started in 1972, which uses a name generator method to obtain egocentric network data on respondents. A brief summary of selected data resources is presented in Appendix A. This list is not intended to be inclusive, but rather

highlights widely used population-based data sets for studying social networks and their influence on health over the life course, including several data sets featured in other chapters in this volume.

In general, these data resources can be grouped into four main categories: (a) husband and wife reports (e.g., CLOC, DUST, HRS, NSHAP, WLS); (b) sibling and/or twin reports (MIDUS, WLS); (c) intergenerational studies, typically with reports from parents and children, although some extend to as many as four generations (LSOG, NLSY, PSID); and (d) data sets which enable linkages between the focal respondent and social network members, such as high school classmates or friends (Add Health, WLS). These data sets typically obtain parallel interviews from two persons, such as husbands and wives, and also ask respondents to provide their own assessments of partner traits such as health and personality. Others ask study participants to name network members, enabling researchers to link an individual's response with the survey responses of his or her named friends and classmates, provided that those persons are in the study's sample.

Data from multiple reporters in one's interpersonal networks enable researchers to explore a range of innovative questions, as the empirical chapters in this edited volume reveal. Substantive advances fostered by these data resources include assessments of concordance and discrepancy in the reports made by network members as well as the implications of such (mis)matches in perceptions for health and well-being (e.g., Carr and Boerner 2009 [CLOC]); investigations of cross-over and "contagion" effects (e.g., Carr et al. 2014a, b, 2015 [DUST]; Larson and Almeida 1999); explorations of within-family differences in parent transfers to and treatment of children (e.g., Behrman and Rosenzweig 2004 [PSID]; Davey et al. 2009 [MIDUS]); similarities and differences in the consequences of early social and economic resources for sibling outcomes (e.g., Hauser et al. 1999[WLS]); the impact of social network members' attitudes and health behaviors on one's own health and well-being (e.g., Cohen-Cole and Fletcher 2008 [Add Health]; Falba and Sindelar 2008 [HRS]); and factors linked with changes in the composition and nature of one's social ties over the life course (e.g., Cornwell et al. 2014 [NSHAP]). The sections below provide further detail on how these relational data resources, used with appropriate analytic tools, have expanded our understanding of the ways social relationships shape physical and emotional health over the life course.

Dyadic Data Analytic Techniques

One of the most important advances in the study of linked lives is the development of dyadic data analysis techniques. These methods enable researchers to use data from multiple reporters, such as husbands' and wives' reports of marital quality, to estimate how much each person's outcome is associated with both own (i.e., actor) and partner characteristics. The most widely used statistical approach is actor-partner interdependence models (APIM; Cook and Kenny 2005). These models are

increasingly widely used because they enable researchers to simultaneously esti-mate the effect of a person's own variable (i.e., "actor effect") and the effect of the same variable provided from the partner (i.e., "partner" effect) on some outcome measure. For instance, in a study examining the impact of one partner's health on the other partner's psychological well-being, a researcher would not only want to examine whether a wife's psychological well-being is affected by her husband's physical health (i.e., partner effect) but would simultaneously explore whether the wife's own physical health affects her own psychological well-being, given well-documented correlations between husbands' and wives' health due to factors like shared social environment and (un)healthy lifestyle (Kenny, Kashy and Cook 2006).

Social Network Methods

The design, collection, and use of social networks data to understand life course processes will be elaborated in subsequent chapters. I provide a brief summary here, to show how these techniques enable researchers to rigorously examine the role of linked lives in shaping health over the life course. A social network is a collection of relationships – referred to as "edges" – connecting individuals, or aggregations of individuals (e.g., schools or workplaces) – called "nodes." Contemporary social net-work research has been informed by life course scholarship, with researchers using sophisticated data to show how social ties shift as one ages. For example, a recent analysis of NSHAP data traced changes in the social networks of older adults over a five-year period, and found that 80 percent added at least one person to their social circle and more than half acquired new confidantes with whom they could share their private thoughts and feelings (Cornwell and Laumann 2015). Surprisingly, a higher proportion of NSHAP participants reported a net gain (38 percent) versus a net loss (27 percent) in the size of their social networks. This longitudinal research challenges earlier cross-sectional studies showing that the mean number of ties reported by retirement age persons was lower than persons of working age, and that persons in their upper 70s had fewer ties than those in slightly younger age groups (Morgan 1988).

Methodological advances including the use of Exponential Random Graph Models (ERGMs) and Stochastic Actor-Based Models (SABMS) such as SIENA enable researchers to model dynamic aspects of networks over time, and to docu-ment links between micro-level processes and macro-level outcomes (Snijders et al. 2006; Snijders et al. 2010). Researchers can then explore how multiple aspects of these relationships affect individual-level outcomes over the life course. For exam-ple, Cornwell and Laumann (2015) found that older adults who added new confi-dantes to their social circles went on to show improvements in physical health, physical and cognitive functioning, and psychological well-being, whereas those whose social networks constricted experienced a slight decline in physical (but not emotional) health.

Network data on younger adults allow researchers to explore questions of peer influence in more sophisticated ways than ever before. For example, the Add Health, a study of adolescents and young adults in the United States, allowed participants to name up to five female and five male friends at the baseline interview. These data have been widely used to examine prospectively how young adults' health, health behaviors, and sexual activity are shaped by the behaviors of their friends, romantic partners, friends-of-friends, and friends-of-romantic partners. Analyses of these data also show that the strength of peer influences is conditional upon a particular peer's place in the social network – such as how popular he or she is, or how tightly-knit or diffuse the social network is. For instance, Kreager and Haynie (2011) examined 449 dating couples in the Add Health and found that one's romantic partner connected the teenager to new peer contexts that, in turn, triggered changes in drinking behavior. By using network data and APIM models, they could document the unique effects of a romantic partner's drinking, friends' drinking, and friend-of-partner's drinking on teen's own future binge drinking and drinking frequency. Surprisingly, they found that friends-of-partners' drinking had stronger effects than own friends' drinking. This study powerfully shows how methodological advances are enabling researchers to specify precisely how social network members can have complex and often surprising effects on youth as they make the transition to adulthood.

Contemporary Linked Lives Research: Have We Learned Anything New About Marriage and Health?

Research dating back to Durkheim (1951: 1897) shows that married persons enjoy better health than their unmarried counterparts. Empirical studies in the United States, Europe, and most wealthy nations consistently document protective effects of marriage on health outcomes including disability, morbidity, mortality, and self-assessed mental and physical health. By contrast, never married persons and persons whose marriages ended either via divorce or widowhood have poorer physical and mental health than their married counterparts (see Carr et al. 2014b for review). Yet researchers have recently documented that marriage is not uniformly protective; rather, the "marriage benefit" is limited to those who enjoy supportive, high quality unions (Proulx et al. 2007). For example, mounting research suggests that unmarried persons report better mental health than married persons in unhappy or high-conflict marriages (Williams 2003).

High quality marriage is protective because it provides emotional support that enhances mental health, and instrumental support that may directly bolster physical health or buffer against the health-depleting effects of stress (Carr and Pudrovska 2015). Happily married persons also enjoy more satisfying sexual relations, which provide physical and emotional health benefits (Waite et al. 2015). High quality marriages are considered a particularly effective source of social control (Umberson

1992). Spouses who love and care for one another will encourage the adoption of healthy behaviors and the loss of unhealthy ones. Husbands and wives may encourage each other to eat nutritious meals, take their daily medications, eschew or limit their smoking and alcohol consumption, and exercise together. By contrast, persons in poor quality marriages exhibit poor eating habits, erratic sleep patterns, and higher rates of smoking, alcohol use, and nonmedical use of prescription medications (Miller et al. 2013).

Yet much of what we know about marriage and health is based on only one partner's self-reported behaviors and marital assessments, raising questions about the processes through which marital dynamics affect health (Carr and Springer 2010). Further, most studies of marriage and health fail to consider that spouses are embedded in extended social networks, such that relationships with children, friends, and other relatives may condition the associations among marriage and health. The following sections briefly highlight contemporary studies using innovative data and methods to challenge taken-for-granted assumptions about marriage and health, thus advancing our understanding of linked lives over the life course.

Marital Quality and Well-Being: His, Hers, and Ours?

An implicit assumption underlying most research on marital quality and well-being is that one partner's perception of the marriage provides an accurate snapshot of the couple's life together. However, mounting research spanning multiple data sets including the CLOC, DUST, and HRS shows that spouses' marital quality appraisals are modestly correlated (r = 0.30 to 0.50), even in long-married couples (Bulanda 2011; Carr and Boerner 2009; Carr et al. 2014a, b, 2016). Thus, researchers are increasingly interested in exploring whether the well-documented association between marital quality and well-being (e.g., Proulx et al. 2007; Robles et al. 2014) differs based on whether one's own or one's partner's appraisals are considered, and whether the effects of marital quality are amplified when both spouses offer similar appraisals. These analyses are motivated by the recognition that marital quality is a fluid, dynamic, and mutually constructed component of a relationship. For example, if one partner is dissatisfied with the marriage, he or she could act negatively toward the spouse by criticizing or withdrawing affection. Conversely, happily married persons may be motivated to provide support and encouragement to their partner, thereby enhancing their partner's health and happiness. Thus, one partner's marital (dis)satisfaction may be linked to the well-being of the other, even independent of their own appraisal (Carr et al. 2014a, b).

Recent studies using dyadic data and APIM methods find strong evidence of both actor and partner effects, occasionally revealing counterintuitive results. For example, Choi et al. (2016) examined changes in marital quality and health among couples in the HRS and found that increases in positive aspects of marriage, such as feeling loved and supported by one's partner, led to declines in disability and functional limitations of the other partner. Yet very different patterns result when

researchers explore linkages between marital quality and emotional, rather than physical health. In an analysis of couple-level data from the DUST, Carr et al. (2016) found that when wives report high levels of marital support, their husbands report higher levels of frustration, perhaps because the help they received undermines their feelings of autonomy or competence.

Other studies find that one spouse's marital quality appraisal may buffer or amplify the effects of the other's appraisal. Birditt et al. (2015) tracked married couples in the HRS and found that negative relationship quality predicted increases in both husband's and wife's blood pressure when *both* members of the couple reported strained relations. Carr and colleagues (2014a, b) found evidence of amplification for men only; in an analysis of dyadic data in the DUST, the effect of men's marital quality appraisals on his own life satisfaction is contingent on his wife's marital appraisals. A man who views his marriage very unfavorably may still enjoy relatively high levels of life satisfaction if his wife views the marriage favorably. A happily married woman may be highly motivated to provide care and practical support to her spouse, such that even an unhappily married man may receive practical benefits that enhance his overall well-being. Women also tend to engage partners in marital issues, whether a happily married woman praising positive aspects, or an unhappily married woman criticizing her husband. Men tend to take a more passive approach, where their feelings toward the marriage may not be conveyed to their spouse and thus may not compound their wives' marital dissatisfaction to affect her overall well-being. These complexities would not have been detected in studies using only one spouse's appraisal of the relationship.

Marriage and Health: Whose Health Behaviors Matter?

Marriage is considered protective for health because spouses, especially wives, exert social control over one another's health behaviors (Umberson 1992). An underlying assumption is that spouses encourage healthy behaviors and dissuade unhealthy ones. The "marriage as social control" perspective has been challenged and extended in recent years by dyadic studies examining the health behaviors of both spouses. In general, this work shows that a spouse with an unhealthy lifestyle may increase unhealthy behaviors in their partner, thus undermining the protective effects of marriage on health (Meyler et al. 2007).

For example, Falba and Sindelar (2008) analyzed multiwave dyadic data from the HRS and found that one spouse's changes in smoking, drinking, exercising, cholesterol screening, and obtaining a flu shot triggered comparable changes in the other partner's behaviors; these strong patterns persisted even when sociodemographic and shared environment factors were controlled. Further challenging the assumption that marriage is uniformly protective, Margolis and Wright (2016) found that being married to a smoker was more deleterious to one's well-being than not being married at all. Using multiwave data from the HRS, they found that persons married to smokers and those whose spouses had quit but then relapsed back

into smoking were less likely than their unpartnered counterparts to quit smoking and adhere to smoking cessation themselves. By contrast, partners of non-smokers or quitters fared better than their unmarried counterparts with respect to their own health behaviors, revealing that individuals may be "better alone than with a smoker" (Margolis and Wright 2016).

Another nuanced study explored the extent to which health behaviors change following transitions in and out of marriage, uncovering the complex ways that marital status, gender, and a partner's health behavior shape one's own health behaviors. Analyzing multiwave data from the HRS, Reczek et al. (2016) found that spouses' drinking converges over the course of a marriage, albeit in different ways for men and women. Wives' heavy alcohol use is associated with decreases in husbands' alcohol use, whereas husbands' heavy drinking is associated with increases in wives' heavy drinking (Reczek et al. 2016). Taken together, these studies suggest that being married does not necessarily promote healthy behaviors; rather, spouses may also adopt one another's (un)healthy behaviors, underscoring the complex influence of linked lives on marriage.

Beyond the Dyad: The Role of Other Linked Lives in Marriage and Health Research

Even the most interdependent married couple maintains relationships with friends, siblings, parents, and children, and these relationships may shape both the nature of one's marriage and the ways that marriage and marital dissolution affect health and well-being.

Mounting research suggests that marriage and marital transitions are linked with other social relationships in complex ways (see Wrzus et al. 2013 for review). For example, conventional wisdom would suggest that friendships heighten the protective effects of marriage, where more support is generally better for individuals. However, one recent analysis of network data from the NSHAP suggests otherwise. Cornwell and Laumann (2011) explore how social integration beyond the marital dyad affects one particular health outcome: men's risk of erectile dysfunction (ED). Paradoxically, they find that one presumably positive aspect of the marital relationship, the couple's level of social integration, actually threatens men's sexual health. Wives who talk frequently to her husband's confidants pose a threat to the husband's sense of masculinity and consequently, his risk of ED.

Emerging research underscores the importance of social networks as both a resource and liability as one experiences marital transitions. Although transitions like widowhood and divorce historically were considered stressful events with uniformly deleterious consequences, more recent work suggests that marital transitions may trigger changes in one's other social relations, and these changes, in turn may buffer against or exacerbate the distressing consequences of marital dissolution. For

Conclusion

This chapter has described the importance of sociological perspectives on the life course for understanding human connections and their consequences for health and well-being. Our knowledge of the complex ways that relationships shape health has been advanced in the past two decades, due in part to investments in multi-generation, multi-reporter longitudinal data sets and the development of analytic tools that enable researchers to move beyond the individual as the unit of analysis, and explore the intricate and often surprising ways that social ties within and beyond the family shape individual lives. Contemporary research reveals that two individuals in a single relationship may experience that relationship very differently, with perceptions often shaped by cohort-specific gendered dynamics and expectations (e.g., Carr et al. 2014a, b; 2016). The perceptions of both partners, however, may have multiplicative effects on the health and well-being of one or more partner, where the harmful effects of strain are amplified when both partners offer negative appraisals of the relationship (e.g., Birditt et al. 2015) or buffered when only one rates the relationship as problematic. Experiences within a marital dyad also are intricately linked to one's other social ties, with children, friends and other relatives. As such, transitions out of marriage – historically considered a uniformly distressing event – may be less difficult for those with high levels of support (Bookwala et al. 2014), whereas transitions into new romantic relationships are more or less desirable depending on the level of support or strain experienced in one's other social ties (Carr 2004b; Carr and Boerner 2013a, b).

Despite these advances and challenges to what we know about relationships and health, the study of linked lives and their implications for health and well-being is still in its nascent stages. Future generations of researchers face the challenge of adopting a broader and more expansive view of what constitutes meaningful social ties. Emerging family structures and processes over the past five decades include: non-marital cohabitation; non-coresidential romantic partnerships (i.e., living apart together [LATs]); same-sex marital and non-marital unions; higher order marriages; presence of step-parents, step-children and step-siblings in families; enduring social and economic ties with former spouses and partners; and "skip-generation" families (i.e., grandparent-grandchild households where middle generation is absent). Each of these social ties, in turn, is embedded in their own networks of neighbors, coworkers, friendships, social networking site (SNS) ties, and so on. As such, researchers will need to cast a wider net in conceptualizing and measuring social relationships, and in theorizing the ways that these diverse relationships – permanent versus fleeting, "real" versus virtual, coresidential versus physically distant, collegial versus conflicted, legally recognized versus socially recognized – will shape social, emotional, physical and economic well-being over the life course.

Appendix A: Selected Resources for Investigating Link Lives over the Life Course: Dyadic, Multigenerational, and Network Data Sets

Data set	Study summary	Respondents	Example publications	Website
Changing Lives of Older Couples (CLOC)	Prospective study of spousal bereavement in later life.	1545 married persons at baseline (including 423 spousal dyads); 250 of whom become bereaved.	Carr et al. 2001; Carr and Boerner 2009	http://cloc.isr.umich.edu/
Disability and Use of Time (DUST)	Daily diary and survey study of married couples ages 60 + .	DUST sampled more than 500 older couples in the 2009 PSID.	Carr et al. 2014a, 2016	http://psidonline.isr.umich.edu/DUST/dust09_UserGuide.pdf
General Social Survey	Biannual repeated cross-section started in 1972. Egocentric network data in selected years.	Persons ages 18–99, with sample size averaging around 3000.	Smith, McPherson, and Smith-Lovin 2014;	http://gss.norc.org/
Health and Retirement Study (HRS)	Multiwave study of older adults started in 1992, with attention to finances and health.	Persons born 1931–41 and their spouses.	Birditt et al. 2015; Falba and Sindelar 2008	http://hrsonline.isr.umich.edu/
Longitudinal Study of Generations (LSOG)	Multiwave survey of four generations, focused on values and affiliation.	300 four-generation families in southern California.	Bengtson et al. 2002.	http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/22100
Midlife Development in the United States (MIDUS)	Psychosocial and biological factors in health, among adults born 1920–75 interviewed at three waves since 1995.	More than 3000 adults, 950 of their siblings, and nearly 1000 twin pairs.	Davey et al. 2009; Schnittker 2008	http://midus.wisc.edu/

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