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Health and Families

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Introduction

Health is the single most important indicator of the overall well-being of a society. The World Health Organization (2006) defines health as “complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” Family is among the most powerful influences on health, as it provides economic, social, and psychological resources (and strains) that protect (or threaten) the health of its members. One of the most important developments in recent decades is that contemporary scholars have moved beyond the question does family structure affect health, and instead explore *under what conditions, for which outcomes, for whom, and through which pathways* do family structure, context, and process affect health?

In this chapter, we synthesize contemporary theories and empirical research that explore how families affect physical and mental health over the life course. We also highlight gender, race, socioeconomic status (SES), and cross-national differences in the distinctive ways that families shape health.

We begin by describing core concepts in the study of families and health. Second, we explore how family structures and processes affect the health and well-being of children and adolescents. Third, we document how marital roles, relations, and transitions affect adult health, with attention to the competing perspectives of social selection versus social causation. Fourth, we investigate how parenthood and its structural context affect adult health. We conclude by suggesting directions for future research on families and health.

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Core Concepts and Measures in the Study of Families and Health

Measuring health

Research on families and health typically focuses on physical and mental health conditions and symptoms, and health behaviors. Many researchers rely on large-scale sample survey data sets that include detailed measures of family structures and processes as well as self-reported indicators of physical health (e.g., symptom and illness checklists, self-rated health, functional limitations), mental health (e.g., depression, anxiety), and health behaviors (e.g., smoking, drinking, and exercise patterns). A growing number of population-based surveys now obtain biological indicators of health (or “biomarkers”), allowing studies to examine the physiological and social responses to stress that may contribute to physical and mental health (McEwen, 1998).

Stress perspectives

Conceptual models of stress provide a useful framework for understanding how health is affected by family structures (e.g., the composition of one’s family), relationship quality, and family transitions, (e.g., divorce or the death of a spouse). *Stress* refers to any environmental, social, biological, or psychological demand that requires a person to adjust his or her usual patterns of behavior or emotional responses. Stressors may be *chronic* and persistent, such as strained marital quality or abusive parenting practices, or *acute events*, such as a parent’s death or a residential relocation. Although stressors often exact a toll on physical and mental health, the adverse effects depend on the nature of the stressor and characteristics of the individual, including the availability of social, economic, and psychological resources (Thoits, 1995).

Social support and control frameworks

Although stress models emphasize health disadvantages associated with family strain and distressing transitions, social support and social control models emphasize the health benefits provided by families. Social support and control models propose that persons with high-quality close relationships are more likely than those with tenuous or strained ties to engage in health-enhancing behaviors and to enjoy better health (House, Landis, and Umberson, 1988). Social support perspectives emphasize that those who have meaningful social ties receive emotional and instrumental supports that are health enhancing (House *et al.*, 1988; Thoits, 1995). Social control perspectives, by contrast, focus on the role of significant others in directly regulating and encouraging positive health behaviors (Lewis and Rook, 1999), which, in turn, enhance health.

Social selection versus causation perspectives

Both stress and social support and control models argue that family affects health (social causation). However, scholars also recognize that a statistical association between aspects of family life and health may reflect *social selection* processes in

which, for example, healthy and financially secure people are more likely to marry and remain married, relative to their less well-off counterparts. In other words, married people are healthier than single people because they were better-off even prior to marrying. Taken together, each of these perspectives provides an important framework for interpreting empirical findings.

Families and Child Health: Core Concepts and Measures

Measuring child health

Families play a critical role in shaping children's health and well-being. Because most children do not have major illnesses or health conditions, many researchers instead examine behaviors or temperaments conceptualized as either correlates of, or precursors to, compromised physical and mental health. Many studies focus on "externalizing" behaviors and "internalizing" problems. Externalizing behaviors encompass antisocial, delinquent, and/or aggressive behaviors such as acting impulsively, disobeying at home, and having a bad temper (King and Sobolewski, 2006). More extreme instances include violent behaviors (e.g., fighting and using weapons) and/or drug use (Hawkins, Amato, and King, 2007). Internalizing problems refer to symptoms of psychological distress including depression, anxiety, and low self-esteem (King and Sobolewski, 2006; Hawkins *et al.*, 2007).

Conceptualizing family of origin

A child's *family of origin*, or the family (or families) in which he or she grew up, may have powerful consequences for health. *Family structure* refers to the composition of a child's coresidential family – including whether parents and children are related by blood (e.g., biological parent), marriage (e.g., stepparent), or neither (e.g., a "social" father, such as the cohabiting boyfriend of child's biological mother). *Family transitions* that affect child health include residential and relational (e.g., divorce) family changes. *Family processes and characteristics* encompass dynamics and attributes that exist within any type of family, such as parenting style, parent–child closeness, or economic hardship. The following sections describe how each of these aspects of family life affects child and adolescent health.

Families and Child Health: Empirical Research

Family structure

The assumption that children's health is best served by living with two biological parents has provided the foundation for much empirical work over the past half century. However, contemporary research foci have changed in response to dramatic shifts in family structures. For example, children living in two-parent households may reside with legally married parents, stepparents, cohabiting parents, or same-sex parents; each such context may have distinctive implications for child well-being (Brown, 2010; Carr and Springer, 2010). Similarly,

single-parent households vary widely, encompassing nonmarital births as well as two-parent households that end in divorce or, in rare cases, widowhood (Kreider, 2008).

In the United States and much of western and northern Europe, the two-parent family is no longer as ubiquitous as it was in prior decades. In the United States in 2011, only 65% of children resided with two parents (Child Trends, 2011). Even more pronounced patterns are evidenced outside the United States. For example, in 2008 in Sweden and Estonia, almost 50% of children under 18 years of age lived in households not headed by two married parents (Iacovou and Skew, 2011). Although the two-parent biological family may no longer be the statistical norm, the arrangement arguably persists as a *cultural norm* of what families should be. This cultural idealization of the two-parent biological family may explain, in part, why this arrangement is more protective for children's health than other family forms (Brown, 2010).

Scholars increasingly recognize that a narrow focus on legal and biological ties is insufficient to capture the complexity of family structures and contexts that shape child health. For example, such an approach would categorize many children in gay and lesbian families as living with an unmarried biological parent, and thus hypothesize that they have poorer health than children in two married-parent families. However, recent studies suggest that children living with two same-sex parents have health outcomes similar to children living with two heterosexual married parents, despite experiencing some stigma associated with their parents' sexual orientation (Stacey and Biblarz, 2001). Scholars also challenge the assumption that it is "best" for children to reside with one mother and one father; a synthesis of recent empirical studies found that children raised by a mother and father fared no better than children raised by two mothers (Biblarz and Stacey, 2010).

Important questions persist regarding why and how family structure matters for child health. The protective effects of the two-parent biological family are particularly strong for adolescent mental health (Barrett and Turner, 2005), behavioral outcomes such as drug use (Hoffman, 2002), and early sexual behavior (Upchurch *et al.*, 2001). The latter patterns may reflect the social control function provided by two coresidential parents. The advantaged economic position of two-parent families is another important mechanism, but economic factors alone cannot fully explain the child health benefits of residing with married parents (relative to single parents) as such effects persist even in generous welfare states such as Sweden (Ringbäck *et al.*, 2003). Further, the benefits of residing in a two-parent household are not due solely to the stability of the parents' relationship, as 5-year-old children living with continually married parents have better health than those residing with equally stable cohabiting parents (Schmeer, 2011). Other potential explanatory pathways considered include cultural context, such as the stigmatization of "nontraditional" family forms; psychosocial influences, such as the greater parental attention given to children with two coresidential parents; evolutionary explanations, which highlight parents' motivation to provide more support to biological versus nonbiological children (Brown, 2010); and social selection processes in which socioeconomic resources and emotional stability are positively associated with forming and remaining in two-parent biological households (Amato, 2005).

Family transitions

Simple indicators of a child's family structure may capture both enduring and changing aspects of family life. Whereas a single-parent household captures the enduring experience of a child living with one adult, it also may represent a transition in the parent's life, which in turn affects child well-being. Key family transitions that affect child well-being – by either adding or subtracting a parent or caregiver from the family home – include parental divorce, separation, remarriage, or death. Transitions, even transitions that may be desirable such as a parent's remarriage, are a potential source of health-depleting stress (Sweeney, 2007).

Parental divorce adversely affects mental health of young children (Strohschein *et al.*, 2005), adolescents (Oldehinkel *et al.*, 2008), and even subsequent generations including grandchildren (Amato and Cheadle, 2005). The magnitude and time course of these effects vary by child gender (Oldehinkel *et al.*, 2008); the number, types, and timing of transitions; and parenting quality (Osborne and McLanahan, 2007). For example, Oldehinkel *et al.* (2008) found that Dutch boys and girls of divorced parents had similar rates of depression when they were 10 years old, but these gender gaps widened over time, as the daughters developed more depressive symptoms throughout adolescence.

The recent proliferation of longitudinal panels that include multiple observations over time on a single study participant has allowed researchers to identify the distinctive health effects of the event of parental divorce, the chronic strains that preceded (and gave rise to) the transition, and secondary stressors that resulted from the transition. For example, studies examining the effects of parental divorce on teens have found that such teens faced considerable stress even prior to the parents' divorce, including psychological and behavioral problems, problem drinking, and lower SES (Furstenberg and Kiernan, 2001).

A single transition, such as parental divorce, also may be part of a trajectory of several transitions that jointly influence child health. Many children from divorced families become members of a stepfamily when their parent remarries. Although this transition may carry independent effects on child health, the magnitude may depend on prior family context. For example, children entering a stepfather family after a parental divorce experience fewer depressive symptoms than children entering a stepfather family after a nonmarital birth, underscoring the importance of the specific nature of family trajectories (Sweeney, 2007).

Family processes and characteristics

Family *processes* such as parental child-rearing practices, father involvement, and adaptations to stressors like poverty each have direct implications for child well-being. The association between family processes and health may be reciprocal, where child health may affect processes including parents' marital quality and employment experiences, further complicating research on family effects.

Parenting practices

Problematic parent–child relations and parents' strained marital relations generally have deleterious effects on child well-being. A cross-national meta-analysis revealed

that parental rejection is associated with children's "psychological maladjustment" (Khaleque and Rohner, 2002). Parental conflict is associated with adverse outcomes ranging from adolescent antisocial behavior (Feinberg, Kan, and Hetherington 2007) to infant emotion dysregulation (Du Rocher Schudlich *et al.*, 2011). Parental substance use and mental health problems also have harmful effects on children's mental health and behavioral outcomes, operating via diminished parenting practices (Meadows, McLanahan, and Brooks-Gunn, 2007).

More severe forms of domestic conflict take a harsh toll on child health. Cross-national studies have focused on the most dire outcome, child death. According to a World Health Organization (2002) report, in 2000, there were an estimated 57,000 homicides among children under age 15 across the world, with children ages 0–4 at the greatest risk. Most of these murders are perpetrated by parents. Rates of violence against children, even some culturally approved forms of violence, are staggering. Childhood psychological, physical, and sexual abuse also has long-term implications for adult health (Springer, 2009).

Father involvement

Research on families and child health historically focused on maternal behaviors, as mothers traditionally have been primary caregivers. However, an emerging area of study is the ways that fathers affect children, with an emphasis on the distinctive effects of father–child legal, biological, and residential ties. An exciting new area of inquiry is the role of "social" fathers, or men who coreside with a child yet are not a biological parent. Half of all children in the United States are expected to reside with a biological mother and social father at some point during childhood (Kennedy and Bumpass, 2008).

Most studies concur that high-quality involvement, support, and communication from *any type* of father predict better health for children (Bzostek, 2008), including less smoking and drinking (Coley and Medeiros, 2007), and fewer internalizing and externalizing unhealthy behaviors (King and Sobolewski, 2006). Some research even suggests that children fare best when they maintain positive ties with *multiple* fathers, such as a stepfather and nonresident biological father (King, 2006). However, the child–father tie that is most closely linked to child well-being is typically the one marked by coresident status and the most frequent and regular interaction (King, 2006).

Parental socioeconomic status (SES)

The association between family SES and child health is well established across the globe. Family poverty is linked with children's poorer health, low birth weight, lead poisoning, emotional problems, injuries from accidents or abuse, undernourishment, infectious diseases, and death (Brooks-Gunn and Duncan, 1997). Similar patterns are found whether SES is measured as income, poverty status, parental occupation, or parental education. SES is not static and therefore recent studies emphasize the importance of studying a family's economic trajectory. Living in poverty for multiple years during childhood is worse for children's health than a single or short stint of poverty (Brooks-Gunn and Duncan, 1997). Poverty during adolescence is particularly damaging, as its deleterious effects may persist through adulthood (Sobolewski and Amato, 2005).

In sum, child well-being is shaped by one's family of origin structures, transitions, and processes. As families further diversify, researchers must continue to expand the meaning of family effects; explore how family structures, transitions, and processes interact to shape health outcomes in complex ways; and examine the reciprocal effects of family factors and childhood health to better understand their causal ordering.

Marital Status, Transitions, and Processes: Implications for Adult Health

Research on family relationships and adult health has its conceptual roots in Durkheim's (1897) *Suicide*. Close relationships provide emotional, social, economic, and instrumental supports that can be protective for physical and emotional health. Although social relationships encompass ties to relatives, friends, and colleagues, most studies of adult health focus on the protective effects of marriage, which is assumed to be the most salient relationship for most adults.

The assumption that marriage (or a long-term marriage-like relationship) is protective for all persons and all health outcomes has been challenged in the past decade. Four discoveries are particularly influential. First, the health benefits of being in a romantic partnership vary based on *structural* aspects of one's union; legal marriage is more protective than cohabitation or a long-term same-sex union, and first marriage is more protective than remarriage (Carr and Springer, 2010). However, scientists have yet to explicate *why* all unions are not equal in their consequences. Second, not all marriages are "good" marriages; health benefits are contingent upon processes and interactions within a marriage. Mounting research based on survey, biomarker, qualitative, and experimental data reveals the specific processes that affect adult health, with most concurring that negative processes (e.g., conflict) are stronger predictors than positive interactions (e.g., feeling loved and cared for). Third, longitudinal surveys that track individual-level health changes in response to marital transitions have allowed researchers to better distinguish social causation versus selection processes in understanding the association between marital status and health.

Finally, scholars increasingly recognize the diversity of the unmarried population, which includes those in nonmarital unions as well as never-married, divorced/separated, and widowed persons. Even within one unmarried category, individuals differ with respect to their duration and pathway into that status. Yet because married persons continue to serve as the benchmark against which other relationship statuses are compared, scholars have not adequately explored the ways that unmarried categories differ from one another. Further, scholars are only beginning to document sources of heterogeneity *within* each unmarried category, with respect to health outcomes, health-depleting stressors, and health-enhancing resources.

These new research foci have been motivated, in part, by dramatic changes in family structure over the past five decades including delayed age at first marriage, rising rates of nonmarital cohabitation, rising and then stabilizing rates of divorce and remarriage, and greater cultural acceptance of "nontraditional" family forms

such as lifelong singlehood and same-sex partnerships. In this section, we synthesize contemporary research on the consequences of family structures and processes for adult health, with attention to sources of within- and between-group differences.

The “marriage benefit”

Empirical studies in the United States, Europe, and most developed nations consistently document protective effects of marriage on health outcomes including lower levels of disability (Schoenborn, 2004; Hughes and Waite, 2009), morbidity (Lorenz *et al.*, 2006), and mortality (Gardner and Oswald 2004; Manzoli *et al.*, 2007) and better self-assessed mental (Johnson and Wu, 2002; Williams, 2003) and physical health (Williams and Umberson, 2004). The few studies that distinguish first marriage from remarriage generally concur that the health benefits of remarriage are more modest and short-lived than those of first marriage (Barrett, 2000; Williams and Umberson, 2004).

Marriage improves individual health through economic, psychosocial, and behavioral mechanisms. The psychosocial benefits of marriage have received the most attention, given the well-established centrality of social support, social integration, and behavior modification via social control for health (House *et al.*, 1988). The benefits of marriage for economies of scale and spousal specialization (Waite, 2009) translate to greater wealth that can be used to access health insurance and quality care (Jovanovic, Lin, and Change, 2004). The extent to which spouses garner such benefits varies widely across marital contexts, however.

Heterogeneity in the marriage benefit

Mounting evidence indicates that the health benefits of marriage are not universal but are limited to particular outcomes and vary substantially by aspects of the individual, the marital dyad, and the larger social context. Gender differences in the marriage benefit have been a traditional focus. Recent studies focused on physical health support the early claims of feminist scholar Jessie Bernard (1972) that marriage benefits men more than women (Johnson *et al.*, 2000; Gardner and Oswald, 2004, but see Manzoli *et al.*, 2007). However, studies focused on mental health generally find that men and women manifest different symptoms, where marriage protects against women’s depressive symptoms and men’s problematic alcohol use (Williams 2003; Strohschein *et al.*, 2005).

Scholars have only recently begun to explore the ways that SES and race condition the marriage–health relationship. For example, Choi and Marks (2008) find that among men only, the mortality benefit associated with marriage is limited to those with low incomes. Studies of race differences are few and inconclusive. Some show that marriage is equally protective for blacks and whites (Johnson *et al.*, 2000; Schoenborn, 2004), yet others suggest that marriage is less protective for blacks because the psychological, economic, and instrumental benefits received in marriage vis-à-vis other social relationships (e.g., extended family, religious community) are less pronounced for blacks (Kroeger-D’Souza, 2012). This remains an important avenue for future research. Blacks’ low rates of marriage may contribute to their elevated risk of mortality and morbidity, especially if marriage provides significant health benefits for blacks.

Marital quality

Recent studies underscore that the marriage benefit is limited to those who enjoy supportive, high-quality unions (Hawkins and Booth, 2005; Proulx, Helms, and Buehler, 2007). Some studies even conclude that unmarried persons report better mental health than married persons in unhappy or high-conflict marriages (Williams 2003; Hawkins and Booth, 2005).

Gender differences in the health impact of marital quality are inconsistent, with some studies suggesting that marital quality is more important to women than men (Proulx, Helms, and Buehler, 2007) and others revealing no differences (Williams, 2003). However, as Umberson and Williams (2005) argue, even if marital quality similarly affects men and women, women experience consistently lower levels of marital quality over their lives than men; thus, this gender gap in marital quality may place married women at a health disadvantage compared to men.

Cohabitation

Cohabitation is now the dominant pathway to family formation in the United States and many European countries (Kennedy and Bumpass, 2008). Most research finds that cohabitants fare better than unmarried persons but less favorably than married persons with respect to health outcomes including depressive symptoms (Brown, 2000), mortality (Koskinen *et al.*, 2007), and self-rated physical health (Wu *et al.*, 2003). Differences in relationship quality and union stability may contribute to this disparity, as fewer than half of all cohabiting relationships in the United States last longer than 2 years (Kennedy and Bumpass, 2008). Selection processes also are an important consideration. Studies based on data from the United States (Musick and Bumpass, 2012), Sweden (Drefahl, 2012), and several other European nations show that a considerable proportion of the married-cohabiting health disparity is due to factors such as lower SES, weaker religiosity, and lower employment rates among cohabiting persons.

The relative health benefits of cohabitation vis-à-vis marriage vary cross-nationally; the gap is typically narrowest in nations where cohabitation is most prevalent. An analysis of 28 European countries finds substantially smaller disparities in countries where cohabitation is a legally recognized family status (Soons and Kalmijn, 2009). An important question for future study is whether the health consequences of cohabitation vary based on one's reason for cohabiting. In the United States, approximately half of cohabitators eventually marry their partners (Bumpass and Lu, 2000), whereas others view cohabitation as a long-term alternative to marriage, a convenience, or an economic necessity (Manning and Smock, 2005). Further, the health consequences of serial cohabitation – a growing pattern in the United States (Cohen and Manning, 2010) – deserve attention. Taken together, these patterns suggest that as cohabitation becomes increasingly normative and a less select form of union formation, its health benefits may approximate those gained in marriage.

Gay and lesbian relationships

Little is known about the health of men and women in same-sex unions, although a recent report by the Institute of Medicine (2011) suggests that chronic stress associated with sexual minority status may undermine the benefits of being in a

stable partnership. Until very recently, population-based US studies of the health consequences of same-sex unions have been limited by data availability, requiring researchers to merge data from multiple sources. One such study found few differences in self-assessed health between partnered gay and lesbian adults and their married or straight cohabiting counterparts (Wienke and Hill, 2009). However, a more recent analysis of national data challenges this conclusion by showing that at similar levels of SES, being in a same-sex cohabiting relationship is associated with worse self-assessed health than being in a different-sex marriage (Liu, Reczek, and Brown, 2013). An important question for future research is whether legal recognition of same-sex unions confers greater health benefits. Although direct comparative evidence is unavailable, research in Denmark where same-sex unions have legal status as registered unions suggests few benefits (Drefhal, 2012). However, the evidence is currently too limited to suggest clear conclusions.

Divorce

Divorce, or the legal dissolution of marriage, is a stressful life event that typically follows a period of chronic strain (e.g., marital conflict) and precedes a period of chronic secondary strains (e.g., poverty). As such, decades of research indicate that divorced individuals have poorer physical and mental health than their married counterparts, yet mounting evidence suggests that divorce represents a temporary crisis from which adult mental health eventually rebounds (Gardner and Oswald, 2004; Strohschein *et al.*, 2005; Lorenz *et al.*, 2006). The long-term consequences for physical health are not well understood, however, with some studies showing persistent long-term decrements (Williams and Umberson, 2004; Hughes and Waite, 2009), others showing short-term effects only (Dupre and Meadows, 2007), and other showing lagged effects that do not appear until roughly 10 years after the divorce due to the multiple secondary stressors that follow divorce (Lorenz *et al.*, 2006).

Another important focus is documenting heterogeneity in divorce consequences, particularly by gender, race, and prior marital quality. Some longitudinal studies have found that divorce is associated with steeper declines in psychological well-being for women than men (Kalmijn and Monden, 2006) and greater declines in physical health for men than women (Dupre and Meadows, 2007), yet others find no gender differences (Williams, 2003; Strohschein *et al.*, 2005; Manzoli *et al.*, 2007). The processes through which marital dissolution influence health also may differ by gender, triggering risky health behaviors among men, yet socioeconomic disadvantage for women (Dupre, Beck, and Meadows, 2009). Race and class differences in divorce consequences have received less attention but the evidence available indicates few differences (Barrett, 2003).

The impact of divorce also varies based on the quality of the marriage being exited. Studies generally concur that exiting a problematic marriage may be beneficial; longitudinal analyses show that persons who dissolved stressful marriages reported long-term gains in self-rated health, relative to persons who remained in troubled marriages (Williams and Umberson, 2004; Hawkins and Booth, 2005). Limited evidence suggests, however, that distress may persist even

after a troubled marriage ends. Kalmijn and Monden (2006) found that persons who exited marriages marked by verbal and physical aggression showed a subsequent increase in depressive symptoms, perhaps reflecting ongoing custody or child support battles.

Two important questions remain unresolved. First, we do not know precisely how the stress of divorce affects physical health. Laboratory-based research offers promising new findings: divorce-related stressors may affect blood pressure reactivity which, if persistent, could impede health (Sbarra *et al.*, 2009). Second, studies fail to consider that divorce occurs within a larger family context, and its consequences could vary based on other concurrent family roles and obligations such as caring for parents or children.

Widowhood

Widowhood, like divorce, is a stressful transition that can compromise health. Also like divorce, the health consequences of widowhood vary based on characteristics of the individual, the marriage, and the transition. Widowhood is distinct from divorce, however, in that it disproportionately affects older adults; two-thirds of the two million deaths occurring in the United States each year befall persons aged 65 and older (Federal Interagency Forum on Aging-Related Statistics, 2012). As such, the health-depleting effects of marital loss may be compounded by preexisting health complications that accompany the processes of aging.

The death of one's spouse is associated with elevated risk of mortality (Manzoli *et al.*, 2007), functional limitations (Schoenborn, 2004), and depressive symptoms (Carr *et al.*, 2000), with effects strongest during the first 2 years postloss. Common wisdom attributes the widowhood–mortality link to the survivor's "dying of a broken heart," yet empirical evidence points to spouses' shared health-promoting (or health-depleting) environment; the strains of caregiving for a dying spouse; poor health behaviors postloss (especially for men), including erratic sleep, compromised diet, and poor compliance with medication regimens; and social selection, where the healthiest widow(er)s are most likely to remarry, thus leaving less health widowed persons at elevated risk of mortality (Elwert and Christakis, 2008).

The health decrements associated with widowhood are more severe for men than women, because wives are more likely than husbands to monitor their husbands' health behaviors. Consistent with social control perspectives, one study based on a sample of more than 150,000 persons in Finland found that widowers are more likely than married men to die of accidents, alcohol-related deaths, lung cancer, and heart disease during the first 6 months after their loss, but not from other causes that are less closely linked to health behaviors (Martikainen and Valkonen, 1996). Women also fare better than men because they typically maintain closer ties with children and friends over the life course, and thus receive more instrumental and emotional support as they cope with loss (Ha, 2008).

The well-being of older widow(er)s also is linked to the emotional climate of the late marriage and the context of the death. The loss of high-quality marriages is more distressing than the loss of conflictual marriages (Carr *et al.*, 2000). Anticipated

deaths tend to be less distressing than sudden or unanticipated ones, yet for older adults the former often are preceded by stressful spousal caregiving and neglect of one's own symptoms – which may harm one's own health (Carr *et al.*, 2001). Thus, the health effects of widowhood are contingent upon the nature of the stressful event, as well as one's resources to cope with the death, and its stressful precursor and consequences.

Never-married persons

Little is known about the factors that influence the health of never-married persons. This lack of knowledge largely reflects methodological constraints. The population of “never-married” persons is small and difficult to define; most young and midlife persons identified as “never married” in cross-sectional surveys will marry eventually. Among persons aged 65+ in the United States, only 3–4% of men and women have never married (Spraggins, 2005). This small number limits researchers' ability to conduct adequately powered analyses using data from nationally representative health surveys.

Mortality is one of the few physical health outcomes studied among never-married persons because mortality and marital status data are available on large administrative data sets and vital registries, especially in Europe. However, these data include limited demographic measures, so investigators cannot adequately identify the pathways through which singlehood affects health. Analyses show that never-married persons are at elevated risk of overall and some cause-specific (e.g., heart disease, suicide) mortality risks yet they do not explicate *why* (Johnson *et al.*, 2000; Manzoli *et al.*, 2007).

A handful of survey-based studies provide preliminary insights into how singlehood affects health in later life (because “never-married” persons in younger samples may still ultimately marry). Older (age 65+) never-married women enjoy mental health (Pudrovskaya, Schieman, and Carr, 2006) and physical health (Cwikel, Gramotnev, and Lee, 2006) equal to their married peers and superior to their formerly married counterparts. These patterns partly reflect social selection, where older cohorts of never-married women are more educated than their married and formerly married peers, and have higher levels of economic stability than their divorced or widowed peers. Both studies conclude that never-married women adjust to their status over time; they choose relationships that provide socioemotional support (Pudrovskaya *et al.*, 2006) and rely on formal services such as meal preparation services to help manage age-related health declines (Cwikel *et al.*, 2006).

In sum, research suggests that never-married women are not disadvantaged with respect to mental health, yet unmarried men and women have an elevated – and unexplained – mortality risk relative to their married peers. Psychologists' recent strides in conceptualizing and operationalizing “loneliness” (i.e., a discrepancy between one's desired and actual relationships) may help scholars to explicate the linkage between singlehood and physical health. Loneliness is linked to sleep problems, poor cardiovascular health, and elevated blood pressure, each of which carries long-term consequences for mortality risk (Luo *et al.*, 2012).

Implications of Parenthood for Adult Health

Parenthood is a common yet pivotal experience in the adult life course and its consequences for health have long been of interest to family scholars and the general public. Until recently, most empirical studies indicate that the strains associated with parenthood undermine well-being more than the benefits of parenthood protect it (Umberson, Pudrovska, and Reczek, 2010). Implicit in the study of parenthood is a comparison to the childless – a topic of increasing interest as rates of childlessness approach or exceed 20% in the United States and Western Europe (Dykstra, 2009; U.S. Census Bureau, 2010). Despite long-standing norms that stigmatize childlessness, there is little evidence that it is accompanied by psychological distress (Nomaguchi and Milkie, 2003; Evenson and Simon, 2005) or poor physical health (Mastekaasa, 2000). In fact, most studies find that childless persons have fewer depressive symptoms than parents of young children (Nomaguchi and Milkie, 2003; Evenson and Simon, 2005). An exception is research indicating that childless adults have higher rates of mortality than parents (Grundy and Tomassini, 2005), but this may partly reflect differential selection due to the influence of health on infertility.

Contemporary scholars recognize that the social context of childbearing has changed dramatically in recent decades, and these new contexts have implications for parental health. Parenthood is delayed until later ages, and is increasingly decoupled from marriage. The median percentage of births to unmarried women throughout the world has risen from 7.1% in the 1970s to 33.8% in the first decade of the twenty-first century (United Nations, 2011). In the United States, 40% of all births in 2009 were to unmarried women, but nearly 60% of those nonmarital births occurred in cohabiting unions (Child Trends, 2013). These percentages are higher in much of Western Europe (Kiernan, 2001).

Recognizing the shifting and diversifying contexts of childbearing, scholars are now investigating the health consequences of these new family forms, and sources of heterogeneity therein. We summarize recent research on the health consequences of nonmarital and Multipartner Fertility (MPF) and the extent to which the health consequences of parenthood vary by birth timing.

Nonmarital fertility

Nonmarital fertility is considered an important social problem among many researchers and policy makers, because it is consistently associated with poorer health and increased mortality risk among women in the United States (Williams *et al.*, 2011), Great Britain (Whitehead, Burstro, and Diderichsen, 2000), Norway (Elstad, 1996), Finland (Martikainen, 1995), and Sweden (Whitehead *et al.*, 2000). However, most scholars concur that nonmarital fertility does not necessarily have direct harmful effects on health. Rather, unmarried women face a host of other adversities that place them at risk of health problems, including poverty (Johnson and Favreault, 2004), and chronic strain and psychological distress (Barrett and Turner, 2005), relative to married mothers.

The strength of the association between nonmarital childbearing and health varies widely across contexts and demographic subgroups. A particularly important

contextual factor is whether the birth occurred in a cohabiting union. Most studies show that unmarried cohabiting mothers and fathers have more mental health problems (DeKlyen *et al.*, 2006) than their married counterparts, but fewer problems than those who are no longer romantically involved with the other parent. It is unknown whether this association persists over time, for physical health outcomes, or beyond the United States.

The magnitude of the association between nonmarital fertility and maternal health also varies by race and ethnicity, reflecting differential access to health-enhancing resources. For example, Williams *et al.* (2011) found that nonmarital fertility is linked to poorer long-term health outcomes for black and white, but not Hispanic women. However, scholars are only beginning to identify the mechanisms through which nonmarital fertility affects women's health, or how these patterns might differ by race/ethnicity and international context. Researchers also know little about the ways that nonmarital fertility affects the health of men, particularly those who are involved in their children's lives and who father children with multiple partners (Guzzo and Furstenberg, 2007). These are important avenues for future research.

Multipartner fertility (MPF)

MPF – having biological children with more than one partner – is an increasingly common context of parenthood. In the United States, roughly one-fifth of women who have completed their childbearing have had children with more than one partner (Dorius, 2012), although this proportion is considerably higher among unmarried versus currently married women (Carlson and Furstenberg, 2006). Rates of MPF are lower in European countries where cohabiting unions are more stable and enduring (Lappegård and Rønsen, 2011).

MPF is increasingly experienced in the context of nonmarital fertility rather than remarriage following divorce or widowhood (Guzzo and Furstenberg, 2007). Scholars have hypothesized that strains and role ambiguity associated with child-rearing across households may undermine health, although little research has yet been done here. Research in this area is nascent and much remains to be investigated about the potential effect of MPF on physical health and, whether it varies across race/ethnic, class, and international contexts.

Birth timing

The health effects of parenthood also vary based on the age at which one becomes a parent. US studies indicate that, at least up until about age 30, earlier ages at first birth are associated with worse health outcomes including mental health (Mirowsky and Ross, 2002), mortality (Mirowsky, 2002), and indices of health problems (including self-assessed health) (Mirowsky, 2002). Research on European populations shows consistent and similar patterns (Grundy and Tomassini, 2005).

Although the teen birthrate in the United States has declined in recent years, approximately 8.4% of all births and 21% of first births in 2011 occurred to women aged 19 or younger – a higher rate than in any other developed country (Hamilton,

Martin, and Ventura, 2012). However, most studies show that teenage and young adult mothers do not typically fare worse than other women with respect to depressive symptoms after social selection factors are adjusted (Mollborn and Morningstar, 2009). It is important to note, though, that a focus on the immediate consequences of teen childbearing may obscure long-term causal effects that accumulate over the life course – a factor that may be especially relevant for research predicting physical health consequences of teen childbearing because chronic conditions linked to stress may take decades to emerge (Lynch and Smith, 2005).

Conclusion and Future Directions

The health implications of one's family statuses vary based on structural, processual, and contextual aspects of the relationship; the nature and timing of family transitions; and other resources and relationships prior to, during, and after that transition. Recent studies also identify specific aspects of interpersonal interactions that affect child and adult health. This is an important line of inquiry, because relationship dynamics are potentially modifiable factors. Although public policy initiatives in the early twenty-first century encouraged *marriage*, current programs have the more realistic goal of encouraging *healthy relationships*. Such programs include parent education, conflict resolution, communication, health behaviors, and financial literacy modules (Halford, Markman, and Stanley, 2008). Although these programs cannot ameliorate a root cause of unhealthy relationships – economic adversity – they may provide at least some benefits for child and adult health.

Directions for future research

We expect that scholars will make even further advances in the study of families and health by using cutting-edge quantitative research methods (*dyadic- and family-level analyses* and *behavioral genetics approaches*) and relying on *qualitative methods* to investigate in depth the distinctive ways that families affect health in underresearched subpopulations. We highlight what we see as the most promising avenues for researchers in the coming decade.

Dyadic- and family-level analyses. One of the most ironic limitations of studies on “families” and health is that most focus on *one individual* within the larger family network. This limitation is due, in part, to traditional models of data collection in which one person answers survey questions on his or her own union and parental statuses, relationship quality, and own health as well as the health of one's spouse or a child. Such studies cannot adequately capture the complexities of family life – including the possibility that two romantic partners, siblings, or coparents experience their relationship (and its health consequences) in very different ways.

Dyadic data analysis enables researchers to use data from multiple reporters within a family to estimate how much each person's outcome is associated with both own and partner characteristics. This approach enables researchers to explore, for example, how both spouses' reports of marital conflict are associated with each

spouse's health behaviors (Sandberg *et al.*, 2009). We suspect that these pathbreaking studies and methods will set the stage for further family-level explorations in the coming decade.

Behavioral genetics approaches. Researchers have long attempted to understand the relative contributions of genetic versus social influences on health. In the last decade, scientific knowledge and available data have become sufficiently sophisticated to accurately identify specific gene/environment interactions that affect health. A promising development is the identification of specific genetic polymorphisms (i.e., genetic variations that produce different outcomes within the same species) that affect health risks both directly and in conjunction with family process and structure indicators. For example, Guo, Roettger, and Cai (2008) found that specific polymorphisms predicted adolescent delinquency net of confounding variables, but not among adolescents who shared daily meals with their parents. These provocative findings suggest that family processes may limit (or facilitate) the extent to which a genetic propensity for a particular condition is expressed. Future studies of genetics and environment may reveal both those individuals at greatest genetic risk of health problems, as well as the family processes that protect against or exacerbate these risks.

Qualitative methods to study underresearched population. Social scientists have made important strides in documenting population-level relationships between family characteristics and child and adult health outcomes. However, we are only beginning to discover whether such population-level patterns hold in ethnic communities, among recent immigrants, and among same-sex couples. Qualitative studies provide insights into the ways that the cultural views and practices of ethnic families affect health and health behaviors. For example, gendered cultural views such as “machismo” (i.e., men's adherence to traditionally masculine, high-risk behaviors) and “marianismo” (i.e., women's self-sacrifice for spouse and children) in Latino families affect both family relations and health practices (Cianelli, Ferrer, and McElmurry, 2008). We are optimistic that future research blending qualitative and quantitative research will better illuminate the ways that cultural context shapes the relationship between family and health, broadly defined.

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