

Families and Health: A Review

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Introduction

Social scientists interested in individuals' health (and health inequalities) may take two—complementary—general perspectives: a *life-course* perspective (e.g., Kuh et al. 2003) and a *contextual* perspective (in which relevant social contexts may be defined at very different levels of aggregation, ranging from personal social networks to welfare states; e.g., Deindl et al. 2016). Arguably, the *family context* not only constitutes a core element of most individuals' social network structure, it also accompanies the individual across the entire life-course. Understanding the role of family in shaping individuals' health thus seems an important task, one which has received considerable attention in various social science disciplines (for recent reviews see Arránz Becker et al. 2017; Carr et al. 2014; Rapp and Klein 2015).

In this review, we basically follow the World Health Organization's definition of *health* as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”, that is, health is conceptualized as a multidimensional outcome with objective and subjective components. The role of *family* in health is considered from the adult's perspective [focusing on partnership (Section “[Partnership and Adult Health](#)”) and parenthood (Section “[Parenthood and Adult Health](#)”)] as well as from the child's perspective [focusing on the consequences of parental separation and divorce (Section “[Family Structure and Child](#)”)]

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Well-Being”)]. We also review findings from research addressing the association of childhood circumstances (Section “[Childhood Circumstances and Later Life Health](#)”) and intergenerational family relations (Section “[Intergenerational Family Relations and Health](#)”) with health. This chapter concludes with a brief outlook on directions for future research (Section “[Conclusions and Future Directions](#)”). While our primary interest is on universal relationships between individuals’ family context (histories, respectively) and different health outcomes, we are well aware of possible cross-national variations. Because in many cases the empirical evidence available is predominantly based on studies from the United States, we explicitly seek to include an overview of European research.

Partnership and Adult Health

Marriage has long been suggested to have a *protective effect* on health (including survival; for reviews see Koball et al. 2010; Rendall et al. 2011). Such a causal effect is said to result from both economic advantages and social support inherent in a marriage. Men in particular are purported to enjoy health benefits, as they tend to engage in healthier and less risky behaviors once married (e.g. drinking less alcohol and driving more carefully). However, caution is necessary: *First*, married people may overestimate their health, and the protective effect that marriage accords may diminish at the most severe levels of health (Zheng and Thomas 2013). *Second*, even more importantly, selection effects are likely to play a role here, as better health may affect one’s chances to get (and remain) married. Healthier individuals may be more likely to possess characteristics such as a higher socio-economic status or greater physical attractiveness, making them more desirable (and more stable) marriage partners than those in poor health.

Even if selection is accounted for, a salutary effect of being married for a variety of physical and mental health outcomes has been demonstrated repeatedly (but see Kalmijn 2017). More recently, effects of changes in marital status and the consideration of *marital biographies* have received growing attention (e.g., Dupre and Meadows 2007; Hughes and Waite 2009). One important finding from this research is that dimensions of health which develop rather slowly, such as chronic conditions or mobility limitations, tend to be more strongly affected by marital history (pointing to the importance of time spent in a specific status), whereas others, such as depressive symptoms, seem to react more sensitively to current marital status.

Divorce has long been suggested to bring about negative short- and long-term effects on health, even among those who remarried (e.g., Lorenz et al. 2006). A recent European study, however, provides evidence for heterogeneous (that is, gendered) effects of union dissolution on self-assessed health: While for men separation more

often leads to increases rather than decreases in health, women fare worse more often than well just after union dissolution (Monden and Uunk 2013). Gendered social pathways also seem to exist, if the reverse causal relationship is considered: Karraker and Latham (2015) found that only wives' onset of serious physical illness is associated with an elevated risk of divorce. There appear to be no gender differences, though, if the relationship between *widowhood* and health (specifically depression) is considered (e.g., Sasson and Umberson 2014; Schaan 2013). Across marital groups, the continuously married are better off compared to the widowed, whereas early (long-term) widowhood is associated with worse outcomes than late widowhood. Moreover, individuals reporting higher *marital quality* at baseline experience larger increases in the number of symptoms of depression after having entered widowhood than those with lower marital quality (see Walker and Luszcz 2009, for a review).

Along the same lines, Hank and Wagner (2013) found that having a partner does not contribute to greater psychological well-being per se: Only those reporting satisfaction with the extent of reciprocity in their relationship report lower numbers of depression symptoms than their unmarried counterparts. There is also evidence that marital strain accelerates the typical decline in self-rated health occurring over the life-course. This adverse effect has been shown to be similarly strong in men and women and to be greater at older ages (Umberson et al. 2006; also see Xu et al. 2016). Staying unhappily married may even be more detrimental to health than divorcing, as people in low-quality marriages were found to exhibit lower levels of overall well-being, largely independent of whether they remain unmarried or remarry (see Hawkins and Booth 2005).

Effects of marriage (marital history) on *mortality* have been investigated in the US (e.g., Henretta 2010; Rendall et al. 2011) as well as in a variety of European settings (e.g., Blomgren et al. 2012; Brockmann and Klein 2004). There is a consistent survival advantage of being married over unmarried both for women and—particularly—for men. Little evidence, however, is found for mortality differences between never-married, divorced/separated, and widowed statuses (see Shor et al. 2012a, b, for recent meta-analyses). Into an individual's current status, the marital biography has also been shown to be relevant: For example, multiple transitions into and out of marriage as well as a lower proportion of adult life spent married have been found to be associated with a higher hazard of dying after age 50 (also if current marital status is controlled for), even though the relationship tends to weaken at older ages.

Finally, although there appears to be some universality in the marriage-health-nexus reported above, it still seems important to situate marriage cohorts in their specific historical social contexts (cf. Newton et al. 2014; Schaan 2013). This also includes accounting properly for the growing complexity of *relationship* histories, that is, considering marriage alone is no longer sufficient to understand how living with (or without) a partner affects health (e.g., Schneider et al. 2014).

Parenthood and Adult Health¹

Closely intertwined with individuals' partnership histories (and their association with adult health) is the reproductive history and the parenthood-health-nexus (cf. O'Flaherty et al. 2016; Kravdal et al. 2012). Two causal mechanisms have been suggested to drive the relationship between individuals' fertility and later life health outcomes including survival (see, for example, Grundy and Tomassini 2005; Mirowsky 2005; Henretta 2007). *First*, there is evidence for biological effects, that is, direct long-term physiological and psychological implications of women's reproductive history on particular diseases. Most notably, breast cancer as well as other cancers of the female reproductive system were shown to be associated with pregnancy, childbirth, and lactation (see Grundy and Kravdal 2010, for a recent analysis).

Second, childbearing has been proposed to be related to a variety of social factors that might have both positive and negative effects on women's and men's health in later years. Specifically, differences in socio-economic status, social relationships, and health behaviors across the life-course have been put forward as being potentially relevant in this regard (e.g., Grundy and Tomassini 2005; Henretta 2007; Kendig et al. 2007). Having children may lead to economic strain, and particularly early as well as non-marital childbearing are likely to be related to lower socio-economic status and poorer family functioning over the life course (cf. Mirowsky and Ross 2002; Koropeckyj-Cox et al. 2007). There also is considerable potential for role overload and stresses related to raising children, particularly among lone parents. This, however, is contrasted by potentially health enhancing aspects of parenthood, such as greater opportunities for community participation and social support by children in later life. Moreover, parenthood may be associated with incentives—and social pressures—to adopt healthier behaviors (e.g., Fletcher 2012; Perales et al. 2015). The net effect of these factors not only varies according to individuals' socio-economic circumstances, but also with particular fertility pathways (e.g. the timing of births).

The relative importance of these biological and social mechanisms in determining the childbearing-health-nexus is still poorly understood (cf. Grundy and Read 2015). Causal analysis is further complicated by a range of possible *selection effects*, that is, by factors affecting both fertility and health. For example, individuals with a poor initial health endowment may not only be less fecund than their healthier counterparts, but they are also less likely to marry; i.e., their opportunities to become a parent and to enjoy the health benefits of marriage are reduced as well (see Section “Partnership and Adult Health” for details).

Although there is empirical evidence for a differential effect of childbearing (particularly timing of births) on specific *physical health outcomes*, such as diabetes, cardiovascular disease, or cancer (e.g., Alonzo 2002; Henretta 2007), many studies have used composite health indices or other general health measures, such as individuals' self-rated health (e.g., Hank 2010; Mirowsky 2005; Sudha et al.

¹This section draws heavily on Hank (2010: 277–278).

2006). Findings suggest that high parity (six or more children), early first birth, and the experience of infant death or pregnancy loss are associated with worse self-reported health at older ages. Early childbearing also bears a clear positive correlation with the prevalence of limitations in activities of daily living, whereas no significant effects of high parity were found. Looking at the presence of limiting long term illness, Grundy and Tomassini (2005) reported higher risks among older women with five or more children and those who had a teenage birth. Controlling for parity, mothers with short birth intervals were more likely to experience long term illness, whereas those who had a late birth (at age 40 or later) exhibited a reduced risk. Mirowsky (2005), however, reported a steep increase in later life general health problems among women who delayed their first birth beyond age 40.

Unlike other major social roles, a clear relationship between parenthood and *psychological well-being* (depression) could not be identified by previous research (e.g. Evenson and Simon 2005; Hank and Wagner 2013; Kruk and Reinhold 2014). Some studies suggest that older childless men and women exhibit lower levels of depressive symptoms than parents, particularly if they are compared to those who had their first child early (e.g. Henretta et al. 2008) or whose relationship with their offspring is of poor quality (e.g. Koropecky-Cox 2002). More recently, however, Huijts et al. (2013) found that being childless is associated with worse psychological well-being for men (but not for women). Also, Grundy et al. (2017) showed that in Eastern, but not Western, European countries childlessness and having one compared with two children were associated with more depressive symptoms.

Studies dealing with individuals' childbearing histories and *mortality* (for reviews see Högnäs et al. 2017; Hurt et al. 2006) generally suggest that early childbearing tends to be associated with a higher hazard of dying, whereas late children enhance women's longevity (e.g., Doblhammer 2000; Mirowsky 2005; Henretta 2007).² Grundy and Kravdal (2008), however, reported a positive association between earlier parenthood and later mortality as well as a reverse association with late age at last birth in Norway (with similar results for both men and women). Moreover, the authors found an overall negative association between higher parity and mortality, which is only partially consistent with Doblhammer (2000), for example, who showed for England/Wales and Austria that childless women *and* those with three or more children experienced excess mortality (also see Grundy and Tomassini 2005). Henretta (2007), however, did not find evidence for an effect of the number of children ever born on mortality. It seems important to keep in mind that even if the influence of reproductive history on longevity is statistically significant, it generally "is small compared to differences in longevity stemming from environmental factors such as level of education or family status" (Doblhammer 2000: 175; also see Hurt et al. 2006).

Recent evidence indicates that the fertility-health-nexus described above might vary across different *societal contexts* (e.g., Grundy 2009; Grundy and Foverskov 2016; Hank 2010). Along these lines, Grundy and Kravdal (2008) suggested that

²See Christiansen (2014) for an investigation of the association between *grandparenthood* and mortality.

‘family friendly’ policies—such as generous parental leave regulations (cf. Aitken et al. 2015; also see Guertzgen and Hank 2018)—may have resulted in long-term health benefits for parents.

Family Structure and Child Well-Being

In addition to child maltreatment (see Greenfield 2010; Oswald et al. 2010; Prosser and Corso 2007 for reviews), parental separation and divorce have been identified as major family-related threats to children’s health or—more generally—well-being. Following Moore et al. (2014), four dimensions of child well-being may be distinguished: (a) *Physical well-being* refers to children’s overall physical health. (b) *Psychological well-being* reflects how children think about themselves, their future, and how they manage their emotions and situational demands. Specific aspects of psychological well-being include internalizing and externalizing behavioral problems, prosocial behavior and depression, perception of stress, self-worth, perceived autonomy, and participation. (c) *Social well-being* is related to how comfortable children are with social relationships. Of foremost importance are parent-child relationships (involving both biological and step relations), especially positive communication and other elements of good relationship climate. It also includes, however, the quality of peer relations. (d) *Cognitive and educational well-being* encompasses children’s learning abilities and their utilization of educational opportunities, which also bear a close association with (long-term) health outcomes. Increasingly, the focus has expanded from a deficit-oriented approach—involving, for example, deprivation, risk behaviors, and the absence of health—to positive quality of life outcomes from the child’s perspective.

Empirical studies—primarily from the US—generally indicate that children with separated or divorced parents tend to score worse than children who live with both biological parents on measures of a range of behavioral, emotional, social, or cognitive outcomes (for overviews see Amato 2010; Jeynes 2006; Sweeney 2010) and the resulting inequalities have been shown to—potentially—last through adulthood (Kalmijn 2008, 2013; Klaus et al. 2012; Steinbach 2013). Because the majority of theoretical approaches employed to explain the differences in child well-being among nuclear, single-parent, and separated/divorced families rely at least in part upon concepts of stress, coping, risk and resilience, Amato (2000: 1271) suggested an integrating ‘*divorce-stress-adjustment perspective*’. From this perspective (which can easily be extended to include separation), the parents’ divorce is not a singular event but rather a long-term developmental process that begins when the parents are still married and ends usually years after the legal act. In the underlying explanatory model of the divorce-stress-adjustment perspective, the divorce decree itself has minimal direct effects on children’s well-being but the stressors and strains that accompany the divorce can indeed increase the likelihood of psychological, behavioral, and health problems for children. However, many factors moderate children’s reactions and the speed of their adjustment to parental divorce.

The well-being of children with separated or divorced parents is at threat from *stressors* affecting parents and children (e.g., Amato 2010). Separated parents may experience stress from a decline of emotional support, increased frequency of conflict with the ex-partner or financial insecurity. Any number of other typical sources of parental stress can arise, such as multiple family transitions after the separation or divorce, a change of domicile, or a new job. For children, the decline of parental support and guidance, the reduction or the loss of contact with one parent, continuing conflicts between parents or economic decline can cause stress that undermines well-being. Other typical sources of post-separation stress also threaten children's well-being: a change of schools, a change of home, loss of friends, or the addition of a new stepparent.

Protective factors also influence separation and divorce outcomes. The action both of stressors and protective factors helps explain why children's reactions to separation and divorce are highly variable. Moreover, studies often use the selection perspective, which hypothesizes that some individuals carry traits that increase the likelihood that they will end up divorced or as single parents, to augment the divorce-stress-adjustment perspective (e.g., Amato 2000; Sweeney 2010). The well-being of children living in single-parent and stepfamilies is protected by factors that include available resources (individual, interpersonal, structural), the subjective meaning and normative connotation of separation and divorce as well as socio-demographic characteristics including the child's gender, the number of biological and stepsiblings, and the age of the child both at the time of parental separation and at the time when the stepfamily is established (e.g., Booth et al. 2010; Pryor 2008; Rodgers and Rose 2002; Turunen 2013). Other factors, for example a high degree of co-parenting among the adults involved or children's participation in decision making, can also serve to reduce post-separation stress and increase child well-being.

Finally, increasing attention has been paid to *residence and custody arrangements* among separated families and to the stressors and protective factors associated with them. In many cases, a separation or divorce leads to a significant reduction or loss of father-child contact (e.g., Smyth et al. 2004; Swiss and Le Bourdais 2009). This may reduce stress if it eliminates family conflict. Yet the loss of contact is also associated with a reduction of children's resources. Because paternal involvement in parenting has strongly increased overall during recent years (Williams 2008), fathers now more commonly maintain contact with their children after separation (Westphal et al. 2014). The number of working mothers who divide parenting responsibilities with the father, both before and after separation, has also increased. Together, these trends are leading to an increased number of post-separation, multi-household family structures, which bring about challenges of various kinds for all family members and are thus also likely to affect individuals' health and well-being.

Childhood Circumstances and Later Life Health

Next to the effects of family structure on child well-being described in the previous section, various aspects of individuals' childhood circumstances have been suggested to exhibit a lasting impact on adult health. On the one hand, adverse *macro-level* conditions during childhood, reflected by, for example, high infant mortality rates or economic recession seem to matter for later life health and mortality (e.g., Delaney et al. 2011; van den Berg et al. 2009). On the other hand, *micro-level* conditions closely related to the individual's family background—particularly early health and parental socio-economic status (SES)—have been shown to be important.³

These factors may affect later health directly or indirectly. On one hand, early nutritional deprivation, for example, might directly initiate negative health trajectories during the individual's childhood, which may persist or even aggravate during the ageing process, independent of adult SES ('latency model'; e.g., Huang et al. 2011; Zhang et al. 2008). On the other hand, poor health and economic deprivation in childhood might impact later life health indirectly through impaired adult socioeconomic attainment ('pathway model'; e.g., Case et al. 2005; Haas 2008).

Next to showing a consistently negative correlation between low early-life SES and self-rated health in adulthood, studies also revealed a significant relationship between *childhood SES* and older adults' risk of suffering from functional limitations (e.g., Haas 2008; Huang et al. 2011; Wen and Gu 2011), cognitive impairment (e.g., Wen and Gu 2011; Zhang et al. 2008), as well as chronic conditions and depressive symptoms (e.g., Luo and Waite 2005; Pavea and Latham 2016). Along the same lines, poor *childhood health* was shown to have long-term negative effects on, for example, individuals' functional status (e.g., Haas 2008; Huang et al. 2011) and chronic health conditions (e.g., Blackwell et al. 2001; Haas 2007). Despite being correlated with each other, early health and SES also appear to bear independent associations with adult health. Research by Case et al. (2005), for example, indicated that even if parents' income, education, and social class are controlled for, adults who suffered from poor childhood health exhibit significantly worse health outcomes than adults who did not experience poor health during their childhood (also see Blackwell et al. 2001; Haas 2007).

Intergenerational Family Relations and Health

Intergenerational family relations might impact individuals' health just as health might affect intergenerational relationships in the family. In the following, we consider both causal directions as well as different dimensions of 'intergenerational

³See Brandt et al. (2012) for a more comprehensive overview of the related literature and a joint empirical consideration of (contemporary) contextual and life-course (childhood) factors impacting later life health.

solidarity' (e.g., Bengtson and Roberts 1991) and well-being (physical and psychological health); also see Steinbach and Hank (2015).

The family social network constitutes, on the one hand, an important resource to protect individuals' health by, for example, reducing psychosocial stress and increasing one's overall well-being (e.g., Antonucci et al. 2007; Franks et al. 1992). Low relationship quality between parents and adult children (e.g., An and Cooney 2006; Koropecj-Cox 2002) or burdens associated with providing care to kin (e.g., Call et al. 1999; Sherwood et al. 2005), on the other hand, have been shown to result in health deterioration, especially if psychological well-being is considered. The individual's trust in the family network as a potential source of support and the emotional stability of family relations appear to be particularly important here. Some evidence suggests that the subjective perception of support might even be more relevant for individuals' health than the actual support one has (or has not) received (e.g., Antonucci 2001).

Whereas emotional closeness and relationship quality strongly influence the well-being of parents and adult children (e.g., Merz et al. 2009a, b), geographic proximity and frequency of contact appear to be unrelated to older parents' life satisfaction—at least if the exchange of instrumental support is controlled for (see Lowenstein et al. 2007). This latter finding underlines the importance of distinguishing between emotional support (including closeness and relationship quality) on the one hand, and instrumental support on the other hand. The former not only seems to be more beneficial for both generations in the family, but receipt of the latter may even reduce one's well-being (e.g., Merz and Consedine 2009; Merz et al. 2009b; also see Bordone 2015). This kind of adverse effect seems most likely in situations characterized by a strong imbalance in the exchange of intergenerational support (e.g., Lowenstein et al. 2007; Pillemer et al. 2007).

A large and growing number of empirical studies assess the impact of family relations on health beyond the parent-child-relationship, taking a three-generational perspective. Their results suggest a positive relationship between caring for one's grandchildren and a variety of physical and psychological health outcomes (Arpino and Bordone 2014; Di Gessa et al. 2016a, b; Hughes et al. 2007; Mahne and Huxhold 2015). Moreover, focusing on the role of the relationship to grandparents in the well-being of adolescent and young adult grandchildren, Ruiz and Silverstein (2007) showed that grandchildren benefit from a close relationship to their grandparents as well, especially if they are living in a non-traditional family context. This result is corroborated by a more general finding suggesting that grandparents are more likely to step in and provide help, if the middle generation's resources are limited, making grandparents support an all the more important resource for (grand-)children's health (e.g., Arránz Becker and Steinbach 2012; McIlvane et al. 2007).

Health, however, is not only affected by characteristics of intergenerational family relations, but is also a determinant of the latter. Good health may be an important resource to provide intergenerational support, whereas poor health might often trigger the need to establish an exchange of instrumental and/or financial support between generations in a family. It is therefore surprising that so far only

relatively little empirical research has been conducted yet addressing this causal direction of the intergenerational relations and health nexus. Health outcomes are often merely treated as control variables in multivariate models, without much theoretical or thorough empirical consideration of possible underlying mechanisms. Longitudinal analyses in particular are missing—despite the obvious relevance of the question as to which extent changes in the individual’s health status might affect various dimensions of intergenerational relationships.

Cross-sectional findings suggests that good (poor) health in both the parents’ and the children’s generation is positively (negatively) associated with reports of relationship quality (e.g., Rossi and Rossi 1990; Steinbach and Kopp 2010; Szydlik 2000). A longitudinal study by Merz et al. (2009a) supports the notion that the observed cross-sectional associations indeed reflect a causal effect of health on the intergenerational relationship. Stress has been put forward as a possible explanation for this: Health deterioration causes stress in parents and children, which eventually affects relationship quality in negative ways. Whereas changes in parents’ health status appear to be unrelated to the frequency of contact with adult children (Ward et al. 2014), studies have found the expected changes in instrumental support: Those in poorer health—especially parents—are more likely to receive and less likely to provide help (e.g., Chan and Ermisch 2012; also see Ogg and Renaut 2013). Both parents and children are sensitive to the other generation’s needs and variations across the life course (cf. Grundy 2005).

Conclusions and Future Directions

The evidence reviewed in the previous sections suggests that family matters greatly—and in various ways—for individuals’ health across the entire life-course: from early childhood, through adulthood, to very old-age. Our review has also shown that the investigation of the multifaceted family-health-nexus is a flourishing field for empirical research in various social science disciplines (sociology, social epidemiology, demography, etc.). The increasing availability of high-quality international data sets providing detailed information on individuals’ social (i.e. family) and health circumstances has spawned a plethora of studies beyond the US context. Even if many of the associations reported above appear to be fairly universal, it is still seems useful to corroborate these findings in a variety of societal settings. Europe—with its diversity of welfare, family, and other kinds of ‘regimes’—has been fairly well-covered to date (except for many Eastern European countries) and our knowledge about the interrelationship between families and health in Asia (especially China) is also growing rapidly.

We conclude our review of the current state of the art with a (selective) outlook on what we consider to be some promising—and necessary—issues for future research:

- Partnership biographies and family structures have become increasingly complex. Empirical analyses should thus not only consider individuals' legal marital status and biological children, but they also need to account more generally for partnership or relationship status (e.g., Schneider et al. 2014) as well as for 'social' parenthood (e.g., Kravdal et al. 2012).
- Further investigations of biological risks (such as cardiovascular risk) and their associations with family circumstances (such as marital biography or marital quality; e.g., Liu and Waite 2014; McFarland et al. 2013) are likely to improve our understanding of the pathways to disease and disability.
- Although there is some evidence for spouses' concordance in health and well-being (see Walker and Luszcz 2009, for a review), relatively little attention has been paid so far to the various pathways through which other family members' health might be consequential for one's own health (e.g., Roth et al. 2015; Valle et al. 2013) or for other important outcomes, such as economic well-being (e.g., Heflin and Chiteji 2014).
- Last but not least, population aging draws our attention to the role of family ties in older people's health (e.g., Ryan and Willits 2007; Waite and Das 2010). This, however, should not ignore that the foundations for 'successful aging' are laid out very early in life and that family background (e.g. parental socio-economic status) is a crucial factor (e.g., Brandt et al. 2012; Schaan 2014).

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