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# Social Networks in Later Life: Weighing Positive and Negative Effects on Health and Well-Being

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## **Abstract**

Social networks provide a mix of positive and negative experiences. Network members can provide help in times of need and day-to-day companionship, but they can also behave in ways that are inconsiderate, hurtful, or intrusive. Researchers must grapple with these dualities in order to develop a comprehensive understanding of how social network ties affect health and wellbeing. This article provides an overview of research that has examined the health-related effects of positive and negative aspects of social network involvement. If focuses on later life, a time when risks for declining health and for the loss or disruption of social relationships increase.

#### Keywords

social networks; social exchanges; health; older adults

Compelling evidence indicates that social network involvement is linked to health and well-being across the lifespan (House, Landis, & Umberson, 1988), including later life (Krause, 2006). Yet social networks can be a source of mixed blessings. Social network members can facilitate adaptation to life stress, provide day-to-day companionship, and intervene to deter health-damaging behavior, but they can also let others down, provoke conflicts, and undermine others' goals (including their health goals). Both kinds of experiences need to be considered in efforts to develop a comprehensive understanding of how social networks affect health and well-being. This article provides an overview of research that has examined the health-related effects of positive and negative aspects of social network involvement, emphasizing later life because it is a time when risks for declining health and for the loss or disruption of social relationships increase.

## **Conceptual and Assessment Issues**

To study the dual aspects of social network involvement, researchers must identify reasonably comprehensive, but manageable, categories of positive and negative social exchanges for investigation. The most frequently studied category of positive interaction is social support, or the various kinds of aid and care that social network members provide in times of need. This emphasis on social support grew out of an early, and enduring, interest among researchers in the role that support might play in ameliorating the harmful effects of

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life stress (House et al., 1988). Social support warrants a prominent place in efforts to understand the health effects of social network involvement, but it should not eclipse investigation of other kinds of social interactions that also matter for health (House et al., 1988; Rook, August, & Sorkin, 2011). Everyday companionship experienced with network members may enhance mood and bolster feelings of self-worth, and network members' efforts to deter others' health-damaging behavior may protect health (Rook et al., 2011). Support, companionship, and control (or regulation) have been distinguished conceptually and empirically as three important categories of positive social exchanges that influence health and well-being in different ways (see Table 1, top panel).

Balancing this conceptualization of positive exchanges, researchers have proposed three parallel categories of negative social exchanges that also influence health and well-being in distinctive ways (e.g., Rook et al., 2011; Table 1, bottom panel). Social support failures occur when social network members do not provide needed help or provide miscalibrated or grudging help. Rejection or neglect occurs when network members exclude someone from social activities or ignore the person altogether. Misdirected social control or undermining occurs when network members interfere with others' health goals (for example, offering unhealthy foods to someone on a restricted diet; e.g., Henry, Rook, Stephens, & Franks, 2013) or encourage others to initiate an unsound health habit (such as smoking or drinking; e.g., Cruz, Emery, & Turkheimer, 2012).

The categories of positive and negative social exchanges shown in Table 1 may not be exhuastive, but distinguishing them has proven useful in studies of the health effects of social network involvement. For example, companionship sometimes exhibits stronger associations with psychological health than does social support (e.g., Newsom, Rook, Nishishiba, Sorkin, & Mahan, 2005; Rook et al., 2011). Studies often omit assessments of companionship, however, perhaps because it is such a commonplace feature of everyday life that it is easily overlooked; such an omission could lead researchers to underestimate the health benefits of positive exchanges (Rook, 1998). Similarly, social support and social control exhibit distinctive associations with health behaviors (e.g., Stephens et al., 2013), but social control is rarely assessed in studies of social network involvement and health. Efforts to understand the health effects of social networks would benefit from attention to a broader range of positive and negative social exchanges than has been customary.

Examining parallel categories of positive and negative social exchanges, using measures designed to be as comparable as possible, offers advantages, moreover, when the goal is to compare their effects (Rook, 1998). Assessing a narrow set of positive exchanges but a broad set of negative exchanges, for example, muddies the comparison. The time frames specified in measures of positive and negative exchanges should also be comparable to avoid biased comparisons. Positive exchanges are often assessed in terms of potential transactions (e.g., "Who could you turn to if you needed to discuss a personal problem?"), whereas negative exchanges are often assessed in terms of actual transactions (e.g., "Who let you down when you needed help in the past month?"); such asymmetries could distort conclusions about the health-related effects of positive versus negative exchanges. The extremity of the items used to assess the two kinds of exchanges should also be balanced to avoid comparing, for example, relatively extreme negative exchanges (e.g., ridicule) with

mild positive exchanges (e.g, problem-solving advice). Balanced assessments of comparably broad categories of positive and negative social exchanges are important to reduce potential sources of bias and to aid in the interpretation of research findings.

## **Evidence Linking Positive and Negative Social Exchanges to Health**

Many studies have examined either positive social exchanges or negative exchanges, but recognition of the importance of examining both kinds of exchanges is gaining momentum. It has fostered the emergence of a body of research that has examined both kinds of exchanges.

This research indicates that negative social interactions generally occur much less often than do positive interactions (see review by Rook, 1998). Similarly, social network members who function as sources of positive exchanges typically outnumber those who function as sources of negative exchanges or both types of exchanges (referred to as ambivalent social ties; e.g., Fingerman, Hay, & Birditt, 2004).

Even though negative exchanges generally occur infrequently, they exhibit strong associations with physical and psychological health when they do occur (and recur). In fact, the effects of negative exchanges often outweigh the effects of positive exchanges (see reviews by Brooks & Dunkel Schetter, 2011; Rook, 1998). For example, negative interaction, but not positive interaction, has been found in large prospective studies to predict allostatic load (dysregulation across multiple physiological systems that underlies many chronic diseases; Seeman, Gruenewald, Cohen, Williams, & Matthews, 2014), hypertension (Sneed & Cohen, 2014), incident coronary events (De Vogli, Chandola, & Marmot, 2007), and mortality due to stroke (Tanne, Goldbourt, & Medalie, 2004). Whether different kinds of negative interactions have specific health effects is not well understood, but they may evoke distinctive negative emotions (such as anger versus sadness) that, in turn, have distinctive health effects (Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002).

It is noteworthy that older adults' negative social exchanges, like their positive exchanges, tend to occur in their family relationships and friendships (e.g., Sorkin & Rook, 2004). Therefore, the detrimental effects of negative social exchanges and ambivalent network members cannot be atributed to older adults' relationships with noxious, but peripheral, individuals (such as acquaintances or coworkers). Ambivalent social ties, despite being a source of both positive and negative exchanges, also appear to have largely negative effects on health (Rook, Luong, Sorkin, Newsom, & Krause, 2012; Uchino et al. 2012).

Evidence of a disproportionate impact of negative social exchanges has emerged in carefully controlled studies using diverse methods and examining multiple facets of health, including psychological distress, self-rated health, disease and disability, cognitive functioning, and mortality (Rook, 1998, 2014). Many studies have examined large representative samples of older adults, often using longitudinal designs that allow for prospective analyses of health outcomes and transitions. These studies typically include controls for sociodemographic characteristics, health conditions, biological risk factors, and health behaviors. Some studies also control for depressive symptoms and traits such as neuroticism or hostility (e.g.,

DeVogli et al., 2007; Sneed & Cohen, 2014), making it unlikely that the effects of negative exchanges are an artifact of participants' mental health or personality characteristics.

Most studies have relied on participants' self-reports of the positive and negative exchanges they experienced, but older adults' self-reports of their social exchanges tend to be corroborated by reports of their close social network members (e.g., Vinokur & Vinokur-Kaplan, 1990). Additionally, laboratory studies of marital conflict discussions provide evidence derived from behavioral observations, rather than self-reports. Spouses' negative behaviors during such discussions tend to be more reliably related to cardiovascular reactivity than do their supportive behaviors (see review by Wright & Loving, 2011). Converging evidence from different streams of research increases confidence that social exchanges and health are causally related, although intervention studies that alter patterns of social interaction ultimately would provide the strongest evidence for causality (Cohen & Janicki-Deverts, 2009).

Not all studies have found the health-related effects of negative exchanges to outweigh those of positive exchanges (e.g, Ryan, Wan, & Smith, 2014; Walen & Lachman, 2000). On balance, though, the preponderance of evidence suggests that the health-related effects of negative social exchanges are at least as potent, and often more potent, than the effects of positive social exchanges (Rook, 1998).

## Stability of Negative Social Exchanges over Time

Some conflicts and disagreements with social network members may be relatively short-lived, but others persist over time, functioning as a source of chronic stress. For example, measures of the frequency of negative interactions assessed at two time points over a 6-year period were strongly correlated in a nationwide sample of older adults (Krause & Rook, 2003). Chronically high levels of negative social interaction over a 2-year period were related to worse self-rated health, more health conditions, and greater functional impairment in another large study of older adults (Newsom, Mahan, Rook, & Krause, 2008). More frequent negative interactions have been linked to poorer cortisol regulation (a physiological response to recurring stress that increases illness susceptibility), particularly among individuals with a history of persistent negative interactions spanning many years (Friedman, Karlamangla, Almeida, & Seeman, 2012). Mounting evidence suggests that chronic conflicts with others can disrupt cardiovascular, endocrine, and immune functioning (see reviews by Brooks & Dunkel-Schetter, 2011; Uchino, 2006; Wright & Loving, 2011). Thus, the cumulative physiological effects of persistent negative interactions are likely to take the greatest toll on older adults' health.

#### **Future Directions**

Tremendous strides have been made in efforts to conceptualize, measure, and evaluate the health-related effects of older adults' social exchanges, and to identify physiological mechanisms that may underlie these effects. Important questions remain, however.

#### **Joint Effects of Positive and Negative Social Exchanges**

Most studies conducted to date have examined the independent effects of positive and negative social exchanges. As a result, little is known about their possible joint effects. For example, can positive exchanges with friends help to reduce the adverse effects of upsetting exchanges with family members, or vice-versa? The few studies that have investigated such joint effects have yielded inconsistent findings (see reviews by Brooks & Dunkel Schetter, 2011; Fiori, Windsor, Pearson, & Crisp, 2012). Individual differences may influence who benefits from positive exchanges after a conflict, and their investigation might help to resolve inconsistent findings (Fiori et al., 2012). Additionally, the type or number positive exchanges needed to counteract a distressing negative exchange may vary across different categories of social interaction. For example, rejection may be a more painful experience, and therefore more difficult to counteract, than intrusive social control. Investigating such variations, and their underlying mechanisms (e.g., countervacting negative affect, bolstering self-esteem), would help to clarify when and why positive exchanges might offset the effects of negative exchanges.

Potential joint effects of positive and negative social exchanges could also be construed in terms of tensions or let-downs experienced with a social network member that detract from the ability to enjoy interactions with others (cf. Lapate et al., 2014). Hochschild (1978) observed long ago, in a study of older adults living in congregate housing, that residents whose family relationships were unsettled seemed to have difficulty deriving pleasure from interactions with fellow residents. Similarly, some evidence suggests that interventions designed to help lonely older adults make new friends may fail if problematic family relationships are not addressed first (Antonucci & Wong, 2010). Probing different forms of joint or contingent effects of positive and negative social exchanges is likely to have practical and theoretical importance.

#### Joint Effects of Specific Categories of Positive or Negative Social Exchanges

Specific categories of positive or negative social interaction might also have joint effects. For example, social network members' efforts to encourage a family member to change a risky health behavior often involve a shifting mix of social support and social control, but their joint effects have seldom been studied. Support that involves considerable tact and sensitivity may preserve goodwill in the relationship but may fail to foster improved health behavior. A shift to confrontation or pressure (social control) may succeed in prompting behavior change but may also kindle resentment or erode the family member's sense of self-efficacy (Rook et al., 2011). Alternatively, a prior history of supportive exchanges might make a network member's subsequent efforts to exert social control more tolerable and, perhaps, more effective (e.g., Khan, Stephens, Franks, Rook, & Salem, 2013). This example could be extended to develop and test predictions about possible joint effects and dynamics of other categories of social interaction.

#### Origins of Persistent Negative Exchanges

Perhaps the most urgent question for future research is why some older adults experience persistent negative exchanges with others. This complex question may defy simple answers, however, because negative exchanges are likely to have many different origins. For some

older adults, current life difficulties, such as serious financial burdens or deteriorating health, may create support needs that overwhelm the support-providing capacities of existing social network members, leading to strained relationships (Krause, Newsom, & Rook, 2008). For other older adults, intergenerational or cultural differences in expectations for support and companionship may precipitate misunderstandings (Pillemer et al. 2007; Treas & Mazumdar 2002). For still other older adults, adversity experienced early in life may foster attachment insecurities that create a predisposition to troubled relationships (Fagundes, Bennett, Derry, & Kiecolt-Glaser, 2011). Persistent negative interaction can also originate with others who are simply difficult to avoid and who engage in noxious or undermining behavior. Forging a strong knowledge base regarding the origins of persistent negative social exchanges will benefit from the development of conceptual frameworks and empirical strategies for integrating these diverse influences on older adults' social ties.

## Conclusion

Evidence from studies focused on age differences suggests that older adults have more satisfying social relationships and experience fewer interpersonal problems than younger groups (Charles & Carstensen, 2010). Such findings do not contradict other evidence indicating that some older adults experience disappointing or conflictual relationships with others that jeopardize their health. Researchers must grapple with these dualities in order to develop a comprehensive understanding of how social networks affect health and well-being in later life and to inform the design of interventions, when warranted, that seek to improve the quality of older adults' social relationships.

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Table 1

Conceptually Distinct Categories of Positive and Negative Social Network Exchanges that Affect Health and Well-Being

|          | Category                        | Network Members:   | Relevant Life Contexts  | Posited Outcomes   |
|----------|---------------------------------|--|---|--|
| Positive | Support                         | Provide aid and care in times of need  | <ul> <li>Stressful life circumstances create needs for support</li> <li>Declining health, disability, or other chronic stressors create needs for intensive, sustained support</li> <li>Loss, disruption of social networkties creates needs fee alternative sources of support</li> </ul>  | Reduced distress     More effective coping     but may also lead to     Feelings of indebtedness     Reduced sense of self-efficacy  |
|          | Companionship                   | Participate in enjoyable shared<br>activities  | • Desire to experience shared activities with others as a feature of everyday life • Minor stressors, daily hassles create needs for respite, diversion • Chronic stressors for which few problem-solving options exist create needs for respite, diversion   | Increased positive affect     Enhanced feelings of self-worth     Relief from distress associated with minor stressors/daily hassles     Intermittent relief distraction from distress associated with intractable chronic stressors |
|          | Control (Regulation)            | Exert influence to deter health-damaging behaviors   | Stressful life circumstances disrupt or erode self-control, prompting network members to engage in compensatory control to stabilize or improve health behaviors     Chronic illnesses that require adherence to a complex treatment regimen overwhelm self-control, prompting network members to engage in compensatory control to improve adherence | • Improved health behaviors and, in turn, better health outcomes but may also lead to • Feelings of constraint/resentment • Reduced sense of self-efficacy   |
| Negative | Support Failures                | Fail to provide needed support or provide miscalibrated or grudging support  | <ul> <li>Stressful life circumstances create (unmet) needs for support</li> <li>Declining health, disability, or other chronic stressors create (unmet) needs for sustained support</li> <li>Loss, disruption of social network ties create (unmet) needs for alternative sources of support</li> </ul>   | <ul> <li>Increased distress</li> <li>Less effective coping</li> <li>Reduced feelings of self-worth and self-efficacy</li> </ul>  |
|          | Rejection/Neglect               | Exclude person from enjoyable shared activities or ignore/ neglect person  | (Thwarted) desire to experience shared activities as a feature of everyday life     Minor stressors/daily hassles create (unmet) needs for respite, diversion     Chronic stressors for which few problem-solving options exist create (unmet) needs for respite/diversion  | Increased distress/despair     Reduced feelings of self-worth     Reduced self-control   |
|          | Misdirected Control/Undermining | Exert influence that<br>undermines sound health<br>practices or that encourages<br>initiation of unsound health<br>practices | Stressful life circumstances disrupt/erode self-control, increasing vulnerability to others' undermining of sound health practices     Desire for acceptance by others increases willingness to initiate unsound health practices encouraged by others  | Decline in sound health practices     Adoption of unsound health practices   |

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