Chapter 1
Social Relationships and Social Support

R. Jay Turner, J. Blake Turner and William Beardall Hale

As has been frequently noted, the sociology of mental health as a field of study appears to have been initially motivated by observations that mental illnesses and psychological distress are differentially distributed in the population. Numerous studies on the occurrence and prevalence of mental health problems, and on virtually all somatic diseases that have been examined, have shown reliable associations with such factors as low socioeconomic position, gender and marital status. The increasingly documented generality of these relationships across acute and chronic diseases and disorders alike argues strongly that the causal factors involved must also be quite general in nature.

Nearly four decades ago Cassel (1974, 1976) described this generality in terms of a complete absence of etiologic specificity. He argued that the social environment must function to enhance or lower susceptibility to all forms of illness in general, with the type of disorder that eventuates being determined on other grounds. At about the same time, Syme and Berkman (1976) published their interpretation of the pervasiveness of the social class-illness relationship as indicating class differences in general vulnerability. Despite a massive amount of subsequent evidence supporting these claims, most subsequent sociological research on health has focused on factors associated with specific individual disorders.

As Link and Phelan (1995: 88) have noted, "Since only one manifestation of the social cause is measured in such studies, the full impact of the social cause

R.J. Turner (✉) · W.B. Hale
Vanderbilt University, Nashville, USA
e-mail: r.jay.turner@vanderbilt.edu

W.B. Hale
e-mail: William.b.hale@vanderbilt.edu

J.B. Turner
Columbia University, New York, USA
e-mail: turnerb@nyspi.columbia.edu

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goes unrecorded." Their now classic work on "Social Conditions as Fundamental Causes of Disease" (Link and Phelan 1995) along with the persuasive admonitions of Aneshensel (1992, 2005), Aneshensel et al. (1991) serve as reminders that the factors underlying the generality of observed social status-health linkages must also be quite general in nature.

The present chapter is centrally informed by the assumption that the social environment matters for health because it influences one's general vulnerability. Our focus is on the hypothesis that social support and social connectedness represent core determinants of such general vulnerability.

To summarize, the role and significance of social support and social connectedness are here considered from a perspective composed of three assumptions: (1) social factors must act to raise or lower risk for all forms of disease and disorder; (2) the generality of observed connections between social statuses and health suggest the likelihood that the influential mechanisms involved must also be quite general in nature; and (3) there are good grounds for proposing that social support/social connectedness represents such a general and influential factor.

The ancestry of social support research is often traced to Durkheim's ([1897] 1951) treatise and empirical assessment of the role of social involvement in the prevention of suicide. However, the well-documented boom in social support research (e.g. House et al. 1988b; Vaux 1988; Veil and Baumann 1992) followed, and was importantly stimulated by, the publication of seminal articles by Cassel (1976) and Cobb (1976). These papers introduced a hypothesis and assembled preliminary supporting evidence that the availability and quality of social relationships may act to buffer the impact of exposure to life stress. In other words, the impact of stress may be greater among those who lack social ties compared to those who have supportive relationships with others. It should be noted, however, that the health benefits of social support have also often been considered in terms of its direct and mediating effects as well as in terms of its targeted role in reducing the noxious effects of life stress (Thoits 2011).

1.1 Concepts of Social Support

"Social support" has diverse meanings. It has been variously described in such terms as social bonds, social networks, meaningful social contact, availability of confidants, and human companionship as well as social support (Turner 1983). Although these concepts are hardly identical, all are reasonably captured by one or more aspects of dictionary definitions that define support as to "keep from failing or giving way, give courage, confidence, or power of endurance to…supply with necessities…. Lend assistance or countenance to" (Oxford dictionary 1975: 850). Commensurately, *social support* involves the transference of these benefits through the presence and content of human relationships. Most conceptualizations share this clear focus on the relevance of human relationships for health—the significance of which seems difficult to overstate given accumulating evidence partially reviewed below.

Cobb (1976: 300), who provided perhaps the best known and most influential conceptualization of social support, viewed social support as comprised of information. Specifically, “information belonging to one or more of the following three classes: (1) information leading the subject to believe that he[/she] is cared for and loved; (2) information leading the subject to believe that he[/she] is esteemed and valued; and (3) information leading the subject to believe that he[/she] belongs to a network of communication and mutual obligation.” In other words, perceived social support refers to the clarity or certainty with which the individual experiences being loved, valued, and able to count on others should the need arise (Lakey and Scoboria 2005).

Perceived social support has been the most prominent conceptualization in social support research since its early beginnings. This focus is consistent with W.I. Thomas’s familiar admonition that situations that are defined as real are real in their consequences (Thomas and Thomas 1928). This classic perspective seems fully isomorphic with a core axiom of modern day social psychology that events and circumstances in the real world affect the individual only to the extent and in the form in which they are perceived. As Ausubel (1958: 277) long ago pointed out, “this does not imply that the perceived world is the real world but that perceptual reality is psychological reality and the actual (mediating) variable that influences behavior and development.”

Empirical support for the importance of perceived support followed. In an early comprehensive review of the social support literature, House (1981) noted that the bulk of evidence for the health benefits of social support came from studies focused on “emotional support”—his term for perceived support. He further acknowledged that emotional support was the common element across most conceptualizations, that it captured what most people meant when they spoke of someone being supportive and that, indeed, it seemed to be the most important dimension. Wethington and Kessler (1986: 85) went further, documenting not only that “perceptions of support availability are more important than actual support transactions but that the latter promotes psychological adjustment through the former, as much as by practical resolutions of situational demands.”

1.2 Social Support and Health

An ever-growing number of volumes and reviews document the apparent significance of perceived social support for emotional health and well-being (e.g., Brewin et al. 2000; Cohen and Syme 1985; Cohen and Willis 1985; Dean and Lin 1977; Gottlieb 1981; Kawachi and Berkman 2001; Kessler et al. 1985; Lakey and Cronin 2008; Lincoln 2000; Lincoln et al. 2005; Sarason and Sarason 1985; Sarason et al. 1990; Stice 2002; Turner 1983; Turner et al. 1983; Vaux 1988; Veil and Baumann 1992). Perhaps the largest portion of this substantial effort has addressed the hypothesis that low levels of social support increase risk for depression. Taking note of this hypothesis, Henderson (1992) identified and evaluated 35 separate studies that assessed this relationship. These studies used measures of depression that varied from brief

self-report inventories to standardized interviews based on accepted diagnostic criteria. Similarly, procedures for indexing social support differed widely, varying from a single item on the presence or absence of a confidant to sophisticated multi-item interviews or questionnaires. Despite such variable assessments of both social support and depression, Henderson observed remarkable consistency across studies. Virtually all reported a clear inverse association between social support and depression, with studies employing more brief measures of one or both variable demonstrating just as strong relationships as studies employing more elaborate methods. The conclusion seems well warranted that there is a robust and reliable relationship between social support and mental health status generally, and depression in particular.

A comparable literature is also now available attesting to the direct and stress moderating significance of social support in relation to physical health. Indeed, based on a careful review of prospective mortality studies, that included consideration of various alternative hypotheses, House et al. (1988a: 544) have concluded that "Social relationships have a predictive, arguably causal, association with health in their own right."

There is also specific and consistent evidence that lack of social support is a risk factor for coronary heart disease (CHD) onset and prognosis (Bunker et al. 2003), and is associated with reduced immunological function (Uchino et al. 1996; Cohen et al. 1997) In addition, findings have been reported suggesting that social support demonstrates a main effect with respect to blood pressure (Strogatz et al. 1997) and also buffers the impact of high stress on systolic blood pressure (Karlin et al. 2003; Berkman et al. 1993). These findings are consistent with the argument Rowe and Kahn (1987) proffered more than a quarter century ago that lack of social support may be associated with greater biological aging, and hence with increased susceptibility to the diseases of aging. Finally, social support, primarily in the form of supportive or positive family relations, has been shown by a number of investigators to be of significance for substance abuse and other problem behaviors (e.g. Jessor et al. 1995; Resnick et al. 1997; Wills et al. 1997).

This mass of evidence documenting the health significance of social support notwithstanding, it is clear that not all relationships, even those that are very close, are uniformly positive (e.g. Rook 2003; Robles and Kiecolt-Glaser 2003) and that negative aspects of relationships may be even more consequential than positive aspects, at least with respect to mental health outcomes (Finch et al. 1999; Rook 1984; Newsom et al. 2005). Evidence on adverse consequences of social relationships is considered below.

1.3 Main Versus Stress-Buffering Effects of Social Support

A substantial portion of the research on the mental health effects of social support has been associated with the hypothesis—strongly articulated in the influential papers by Cassel (1976) and Cobb (1976)—that social support acts to *buffer* the effects of life stress. As Cobb (1976) argued, social support facilitates coping with crises and adaptation to change. From this perspective, there will always be some

main effects simply because life is full of changes and crises, but it is in moderating the effects of the major transitions in life and of the unexpected crises that the major effects of social support should be found.

Henderson's (1992) review of 35 social support-depression studies revealed only four that did not report this kind of buffering or protective effect. However, it is also clear from Henderson's review, and from the wider literature, that a number of studies have found a low level of support to increase risk for depression, or for mental health problems generally, whether or not exposure to unusual stressors has also taken place. A more recent review concludes that the stress-buffering effects of social support are "less dramatic and consistent" than the direct effects of social support on mental health (Thoits 2011: 145). Whether these findings allow the conclusion that social support can be of importance in the absence of social stress cannot be easily answered. Antonovsky (1979: 77) long ago argued that "all of us… even in the most benign and sheltered environments, are fairly continuously exposed to what we define as stressors…. We are able to get low scores on stress experience [only] because we do not ask the right questions or do not ask patiently enough and not because there really are any low scorers." He insists that "even the most fortunate of people…know life as stressful to a considerable extent" (1979: 79). If this constancy-of-stress argument is accepted, both the main effects and interactive effects that have been observed would theoretically be interpretable in terms of the buffering hypothesis.

Commenting on the main effects versus buffering question, Berkman and Glass (2000) have suggested that different components of social support may exert different influences on mental health. Specifically, it may be that structural and objective aspects of social relationships, such as the number of friends an individual has or the frequency of contact with these friends, yield main effects. In contrast, they hypothesize that perceived social support is likely to operate through a stress-buffering mechanism. Thoits (2011) suggests that, while the general health benefits of social support may operate through many mechanisms, the effectiveness of the support as a stress-buffer requires actually received or enacted support and is based on very specific combinations of *type* of support and *source* of support. Specifically, *love, caring, sympathy and instrumental assistance* are hypothesized to be the most effective stress-buffers when coming from *significant others*, while *validation of feelings, advice, and role modeling* are most helpful coming from *similar others*—that is, those who have experienced or are experiencing a similar stressor.

At this point, available evidence continues to suggest that social support matters for mental health independent of stressor level. Although less consistently demonstrated in the literature, most research also suggests that support matters more under circumstances of elevated stress exposure.

1.4 The Causation-Selection Debate

Research on the social correlates of health is typically conducted with the expectation that there is an etiological message to be found within well demonstrated linkages. However, in the case of social support, as with other social variables, it has

been difficult to reach a clear conclusion about the nature of this message. Most of the studies reporting this relationship have been cross sectional in nature and thus have confronted the classic interpretive problem. Does perceived social support operate directly or indirectly to make depression or psychological distress less likely or less severe (social causation), or do high levels of distress or depression limit the likelihood that the individual will secure and maintain social relationships or experience the social support that is available (social selection)?

With respect to these particular alternatives, it now seems generally accepted that variations in risk for mental health problems are, to a substantial degree, socially influenced and are not wholly or even largely reducible to psychology or biology. There seem good grounds for the claim that stress research and the stress process model (Pearlin 1989; Pearlin et al. 1981; Avison et al. 2010), more than any other tradition, has demonstrated that inequalities in mental health arise out of social experiences that are importantly conditioned by the context within which lives are led (Pearlin 1989). Specifically, longitudinal studies in which prior symptoms or disorder are controlled have made it highly unlikely that the social support—distress relationship wholly or even largely reflects reverse causation (Aneshensel and Frerichs 1982; Coyne and Downey 1991; Kessler et al. 1985; Myers et al. 1972; Pearlin et al. 1981; Thoits 1995; Turner and Noh 1988).

A second form of social selection proposes that the observed social support-mental health connection may simply be an artifact derived from the personal inadequacies of persons who later become distressed or depressed—inadequacies that also limit one's ability to secure and maintain supportive relationships. That is, it is dispositional characteristics, as opposed to the nature of the social environment, that largely account for differences in perceived social support—characteristics that are also associated with increased risk for mental health problems.

In support of this contention, there is some evidence that perceived social support is fairly stable over time and associated more with personality characteristics than with variation in social interaction. Goodwin et al. (2004) found perceived social support to be more strongly related to stably held personal values than to social support actually received. Similarly, Cukrowicz et al. (2008) reported a strong correlation between personality characteristics that are negatively associated with depression and perceived social support. These findings are consistent with older research that demonstrated temporal and cross situational consistency in perceived social support (Sarason et al. 1990), and associations of these perceptions with personality characteristics such as social competence and personal control (e.g. Lakey and Cassady 1990).

Thus, at least part of the association between social support and mental health may be due to a linkage between personality characteristics and measures of both perceptions of social support and mental health. The question of how much of this association can be attributed to personality differences has been recently estimated by Turner et al. (2012) based on a large scale community based study ($n = 1,859$). Following Turner et al. (2004) they considered the personal attributes of mastery (Pearlin and Schooler 1978), self-esteem (Rosenberg 1979), mattering (Rosenberg and McCullough 1981), and emotional reliance (Hirschfeld et al. 1977). Having

confirmed within cross sectional analyses that each of the four resources or attributes significantly and independently predict depressive symptoms, perceived social support assessed 3 years later was regressed on these attributes with demographics held constant.

With the exception of emotional reliance, all four resources were significantly associated with subsequent perceptions of social support when considered separately, with just mattering independently predicting higher support when considered together. Collectively, the personal attributes considered accounted for 5.2 % of observed variation in subsequent perceptions of social support availability.

These findings are supportive of the contention that the tendency to believe or perceive others to be supportive is at least partially a reflection of relatively stable personal attributes (Sarason et al. 1990; Lakey and Cassady 1990). As Lakey and Dickinson (1994) have suggested, higher levels of these personal resources may well signal greater effectiveness in developing and maintaining supportive relationships and a tendency to interpret ambiguous actions and statements as supportive in nature.

Thus, these results might be seen as consistent with the contention that the apparent linkage between perceived social support and mental health may be partially, if not largely, artifactual in nature. However, the strength of the associations observed suggest that personal attributes condition perceived social support to only a very modest extent. In our view, these results do not materially challenge the view that the perceived availability of social support is largely a function of one's history of supportive and unsupportive experiences (Turner and Turner 1999) and that the persistently observed linkage between social support and mental health has both theoretical and practical meaning.

1.5 Social Status and Social Support

Thus, it follows that variations in the availability and experience of social support arise primarily out of life conditions, current and past (Pearlin 1989). To the extent that important differences in such conditions are defined by incumbency in a particular set of social groups and statuses, the hypothesis follows that observed relationships between these statuses and mental health may arise, at least in part, from associated differences in social support. We therefore review evidence describing how social support may link multiple core social statuses to mental health, including socioeconomic status (SES), race/ethnicity, and gender. Marital status is excluded from this effort based on the judgment that most available evidence on the association between marital status and social support may be of only historical interest. The dramatic transformation in marital patterns and living situations over the past dozen or so years requires a reexamination of the formal relational circumstances under which the experience of being supported by others is maximized and minimized.

1.5.1 Gender

Although a substantial number of studies have provided social support data by gender, the question of sex differences in level of support experienced remains a matter of some debate. More than two decades ago, Vaux (1988: 169) accomplished a rather complete review of available evidence and concluded that "empirical findings regarding gender differences in social support are mixed and inconsistent." However, others read essentially the same evidence as indicating a tendency for women to experience more supportive relationships than men (Flaherty and Richman 1986; Leavy 1983). More recently, analyzing data from a national probability sample, Umberson et al. (1996) found clear and dramatic gender differences in the number and quality of social relationships. Women reported greater formal and informal social integration and more support from their friends. In terms of familial support, women reported more support from their adult children while married men reported greater support from their spouses than married women. In general, the weight of the evidence appears to suggest that women are advantaged with respect to social support, variously conceived and measured (Matthews et al. 1999; Ross and Mirowsky 1989; Turner and Marino 1994).

Confidence in this conclusion is bolstered by substantial evidence of gender differences in the propensity to affiliate with others. Joiner (2011) has presented compelling analyses demonstrating that men, compared to women, are much less likely to maintain and/or replace personal and social relationships across the life course. His research reveals that a crucial consequence of this failure is a largely unacknowledged loneliness that dramatically increases risk for suicide and for premature death from other causes. Evidence has long been available indicating that, in stressful circumstances, women are more likely to provide support, and to both seek and secure support, primarily from other women (Belle 1987; Luckow et al. 1998; Schachter 1959). As Taylor et al. (2000: 418) have noted, "Adult women maintain more same-sex close relationships than do men, they mobilize more social support in times of stress than do men, they rely less heavily than do men on their spouses for social support, they turn to female friends more often, they report more benefits from contact with their female friends and relatives…and they provide more frequent and more effective social support to others than do men." There are likely a number of reasons for gender differences in the propensity to affiliate with others, including cultural and role prescriptions, as well as evolved biobehavioral responses (e.g., Taylor et al. 2000), but the overall evidence for greater social connectedness among women, particularly in times of stress, is clear.

While women experience higher levels of social support than men, there appears to be little in the way of gender differences in the strength of the association between social support and mental health (e.g. Umberson et al. 1996). Thus, social support differences cannot, in any straightforward way, assist our understanding of the tendency for women to experience higher levels of psychological distress and depression. Indeed, without the advantage of higher social support, women "would exhibit even higher levels of depression relative to men than they currently do (Umberson et al. 1996, p.854)." This may be in part because the larger social

networks of women render them more exposed to the adversities experienced by others (Kessler and McLeod 1984; Turner and Avison 1989). Furthermore, women are more likely than men to report becoming involved when network members experience a negative event (Wethington et al. 1987). Thus, when all aspects of social relationships are considered—the negative aspects as well as the supportive ones—the mental health advantage for women is likely to be attenuated.

1.5.2 Socioeconomic Status

To the extent that the structures and processes of social relationships vary in a systematic fashion across socioeconomic statuses, this variation may play a role in SES gradients in mental health. Here, as with the other social statuses considered, evidence bearing on this possibility, is sparse and variable. For example, the SES-social support relationship appears to vary depending on the source of support considered. Studies of adolescents and young adults indicate that SES is related to social support from family but not to support from friends (Gayman et al. 2010; Salonna et al. 2012; However, also see Huurre et al. 2007).

The operational definition of SES also can affect the results. While Ross and Mirowsky (1989) observed a positive association between education and social support, they also found that support and family income were entirely unrelated. More recently, Mickelson and Kubzansky (2003) found that education and income were independently and positively related to emotional support when different sources of support were combined, though the effects of income were observed primarily in terms of substantially diminished levels of support at the lowest levels. Research on education and social capital points to the possibility that education benefits support due in part to an enhancement of social language, and communication skills that are useful in social interactions (Glaeser et al. 2002).

Finally, the association of SES and social support is sometimes contingent on the group under study. For example, Beatty et al. (2011) assessed the developmental importance of childhood SES on adult experiences of social support. They found that supportive interactions, reported in real-time using electronic diaries, were positively associated with childhood SES, as were global perceptions of social support and reports of general network involvement. These associations remained when adult SES was controlled. They were observed, however, only for African-Americans; no effect of childhood SES among Whites was found.

Though the relationship of social support to SES is quite consistent in the literature, the extent to which support explains the SES gradient in well-being is less clear. For example, Turner and Marino (1994) indicated that social support differences explained only about 15 % of SES differences in depressive symptoms and virtually none of the observed SES variations in depressive disorders. Similar results were found for depressive symptoms more recently by Huurre et al. (2007). Thus, although childhood and adult SES appear to be important predictors of social support, the extent to which the accumulation of these resources explains SES differences in mental health is limited.

1.5.3 Race/Ethnicity

In terms of the distribution of social support across social statuses, race and ethnic groups have been comparatively understudied. Some evidence suggests that racial and ethnic minorities rely on informal sources of support, primarily family members, because of social barriers to access to other advantageous social connections (Landale et al. 2006). This tendency has been ascribed, in particular, to Latinos in the U.S. and the term *familism* has been applied to the close ties among members of large kin networks in the Latino community (Vega and Miranda 1985).

Using data from a large probability sample of Chicago residents, Almeida et al. (2009) examined the distribution of levels of perceived social support across race/ethnicity, nativity, and socioeconomic status. Latinos, and in particular Mexican-Americans, reported the highest levels of familial social support. Non-Latino Whites reported the lowest levels, with Blacks in the middle. Interestingly, the Latino advantage was attenuated with distance from circumstances characteristic of initial immigration. Specifically, the advantage largely disappeared among Latinos living in English-speaking households and the SES-familial social support gradient among Latinos was negative. That is, familial support decreased with increasing SES—a finding opposite to that observed for Blacks and non-Latino Whites. These findings are consistent with the familism hypothesis.

In contrast to familial social support, Latinos reported the lowest levels of friend support. Non-Latino whites reported the highest levels with Blacks again in the middle. A strong positive SES gradient with friend support existed across the race/ethnic groups, indicating that access to non-familial supportive networks is another resource accruing differentially to the socially advantaged (Almeida et al. 2009).

Some apparent race/ethnic differences in social support could actually be measurement artifacts. If questions asked about social support are interpreted differently across groups, or if there are cultural differences in the tendencies to endorse a social support item at similar levels of actual support, then biased estimates of race/ethnic differences could result. Sacco et al. (2011) assessed differential item functioning (DIF) across five race/ethnic groups in the US. DIF assesses differences across groups in the propensity to endorse particular items at the same levels of the underlying latent construct—in this case, social support. These researchers found DIF for every item in their perceived support measure, with Blacks and Hispanics responding differently from whites. However, it is important to note that these groups showed lower levels support relative to whites on the unadjusted measure, a finding opposite to those cited above. Thus, it appears that the presence of DIF across race/ethnic groups is, itself, likely to be very different depending on the social support measure used.

Overall, this research suggests that race and ethnicity are important factors in the distribution of social support, particularly in intersection with SES. Differences in social support across these groups are important considerations in the study of the epidemiology of mental health. Researchers should be mindful of the potential for cultural differences in response tendencies to questions about social support. Finally, more research examining the role of social support in race and ethnic differences in mental health is needed.

1.6 Further Considerations

1.6.1 Social Integration Versus Relationship Content

In a critical review of the social support literature published more than two decades ago, House et al. (1988a) emphasized the importance of assessing social integration (the existence and structure of social relationships) independent of relationship content (quality and valence of the relationships, reliability of support, etc.). Separate assessment of these two constructs facilitates an examination of the processes through which social relationships translate into the experience of social support, and the structural factors that influence these processes. They argue that the reviewed evidence supports the proposition that the presence of social relationships have important effects on health and well-being separately from, and irrespective of, the content of those relationships.

Recent findings on the issue are mixed. Analyzing data from large epidemiological surveys in the U.S. and Taiwan, Son et al. (2008) found that levels of social integration had substantially weaker associations with depression than did the presence of a close confidant. Falci and McNeely (2009), in contrast, found that network size was importantly related to depressive symptoms in adolescents independent of the presence of a confident. Interestingly, the relationship was not linear—social networks that were unusually large and unusually small were both related to elevated symptoms. Low perceptions of friend support partially explained the adverse effects of small networks but not of unusually large networks.

If the mere presence of social relationships enhances health and emotional well-being, irrespective of the supportive content of the relationships, then mechanisms for such an effect need to be considered and examined—mechanisms that do not involve cognitive appraisal or behavioral coping. For physical health, Umberson (1987) has suggested that social networks act to facilitate health-promoting behaviors (diet, exercise, etc.) through the instrumental assistance they provide and restrict noxious behaviors (smoking, drinking, etc.). Antonovsky (1979) has suggested a more general mechanism in which social integration is an important contributor to an individual's "sense of coherence." Sense of coherence, in Antonovsky's view, diminishes reactivity to stress and is an important component of psychological well-being in its own right. Finally, the direct neuroendocrine sequelae of contact with other human beings and the health consequences of these reactions is a growing area of investigation and one that clearly deserves attention (Kiecolt-Glaser et al. 2010).

1.6.2 Negative Aspects of Social Relationships

Researchers in the area of the sociology of mental health, particularly those working within the stress process paradigm, have generally considered the negative aspects of social relationships to be a component of stress exposure (Pearlin et al. 1981). In this conceptualization, exposure to social negativity—criticisms and/or unreasonable

expectations from socially significant others—is potentially moderated by social support and other personal resources (Thoits 2011). However, if we view social support as a factor on which we hope to intervene to improve population mental health, then it is important to be mindful of the potential adverse effects of social interactions.

The available evidence suggests that such adverse effects can be substantial (Lincoln 2000; Turner 1994). This may be especially true with respect to what Rook (2001) and others have referred to as negative social exchanges. Examples of such exchanges include "discouraging the expression of feelings, making critical remarks, invading another's privacy…(and) failing to provide promised help" (Lincoln 2000: 233). Not only does a significant amount of the extant literature suggest harmful effects from such negative exchanges (e.g., Finch et al. 1989; Lakey et al. 1994; Revenson et al. 1991; Ruehlman and Karoly 1991; Pagel et al. 1987), it suggests that these effects may be greater than the benefits to mental health provided by the social relationships (e.g., Lincoln 2000; Horwitz et al. 1998; Reinhardt 2001). Examining data from the National Comorbidity Study, Bertera (2005) found that social negativity was associated far more strongly with episodes of anxiety and mood disorders than was positive support. Given the cross sectional nature of these data and of most other studies reporting such effects, the possibility should be considered that the causation involved in observed negative interaction-distress relationships may well be more bi-directional in nature than is the case with positive interactions and perceptions, thereby inflating the magnitude of the negative interaction associations. Using data from a large survey of adults over the age of 50 in Great Britain, Stafford et al. (2011) found the adverse effects of negative social exchanges (in this case on levels of depressive symptoms) to be pervasive across social relationships. In their data, positive exchanges had beneficial effects when they involved spouses and children, but not when they came from other relatives or friends. The greater importance of negative interactions has also been reported based on a U.S. national sample of elderly African-Americans (Lincoln et al. 2010). In this study, emotional support was unrelated to the odds of a lifetime diagnosis of anxiety or depression. In contrast, negative interactions were strongly related to an increased likelihood of both disorders. However, since it is clear that disorder onsets occurred prior to the assessment of emotional support these findings may simply indicate that psychiatric disorders better predict subsequent negative interactions than they predict lower levels of perceived emotional support.

However, in their longitudinal study of older adults, Newsom et al. (2003) examined the association of positive and negative social exchanges to positive and negative affect, both cross-sectionally and longitudinally. Cross-sectionally, the associations were valence-specific—that is, negative social exchanges were associated with negative affect and positive social exchanges with positive affect. The longitudinal analysis provided a very different picture. Positive social exchanges were not related to subsequent changes in either outcome. In contrast, negative social exchanges were associated both with subsequent increases in negative affect and with subsequent reductions in positive affect.

August et al. (2007) examined the joint effects of negative social exchanges and stressful life events. Negative social exchanges were more strongly associated with emotional distress when they occurred in the context of a major stressful experience. The interesting exception was relationship loss. Negative social interaction actually showed reduced effects on emotional distress in the context of a relationship loss, a finding the investigators surmise was due to the reduced salience of negative interaction in the context of such a loss, or to a greater appreciation for remaining relationships that makes negative interactions less stressful.

Clearly more research capable of establishing time ordering and effectively ruling out major competing explanations is needed. However, from present knowledge, it seems clear that any attempt to understand the stress-buffering effects of social relationships, as opposed to perceived social support, will obtain misleading results if the adverse aspects of relationships are not considered in tandem.

1.6.3 Interventions and Levels of Analysis

Part of the attractiveness of social support to social researchers presumably derives from the view that it is amenable to intervention. Indeed, the dominant research question of the social support field, buffering versus main effects, has been motivated partly by the goal of identifying appropriate intervention targets based on need. But is the idea of targeted intervention the most useful one? Even if the preponderance of the individual-level influence of social support is due to stress buffering, the largest public mental health effects may be more likely to result from macrolevel changes addressed to the social integration of communities. By definition, macrolevel changes are, in Ryan's (1971) terminology, "universalistic" rather than "exceptionalistic". Exceptionalistic interventions can only benefit those who are specifically targeted. In contrast, the influence of macro-level dimensions of social contact (social integration, community-level social cohesion, and connectedness) on health and well-being tends to be discernible largely or wholly at an aggregate level of analysis. For example, commenting on the substantial differences in coronary heart disease (CHD) mortality and morbidity rates between Framingham, Massachusetts, and Reno, Nevada, Lynch (1977) attributed the contrast to the fact that Reno residents were predominately recent arrivals and had few ties to the community. Framingham's population consisted primarily of lifetime residents with strong community ties. However, it does not necessarily follow, as Lynch argued, that geographically mobile, less socially connected individuals have a greater risk of CHD. It may instead be that lack of social cohesion and connectedness at the community level has noxious effects on the community as a whole irrespective of individual social circumstances. Durkheim (1951) explained and understood his findings on the correlates of suicide risk at this level of analysis.

Umberson and Montez (2010) discuss the policy implications of our knowledge regarding the health benefits of social ties. Noting that positive marital interaction fosters health and well-being for children as well as for their parents, they

praise the Healthy Marriage Initiative which includes public awareness campaigns on healthy marriages and responsible parenting as well as educational and counseling services. Given that the health consequences of social isolation are well-documented and potentially severe, they advocate enhancement of the educational system so as to impart social-emotional skills and promote civic engagement. Recognizing that the burdens and negative features of social ties are not randomly distributed in the population, they argue for policies to assist caregivers. While ambitious, however, most of the policies suggested are essentially exceptionalistic, often involving identification of, and outreach to, socially isolated individuals in the community. Umberson and Montez (2010) correctly point out that very little is yet known about the ways in which the larger social context shapes social ties. Hence, social policies that might foster universalistic improvements in the quality of social life are not yet available.

It is possible, however, to examine the characteristics and social policies of societies doing very well in terms of emotional well-being. For example, large international surveys consistently place Denmark among the happiest countries in the world. That this is a country in which 92 % of the population belong to government–funded social clubs (Buettner 2010), at least suggests an avenue for a large scale policy intervention for the improvement of social ties and social integration.

1.7 Conclusions

Despite the huge body of research on social support, much remains to be learned about how and why social support matters for health and well-being, and about the circumstances and processes that promote and enhance its availability. Several conclusions, however, are warranted from available evidence.

1. The ever growing number of studies and reviews on the subject leave little doubt that social support is importantly associated with mental health status in general, and depression in particular.
2. Social support tends to matter for psychological distress and depression independent of stress level. However, it tends to matter more to both individuals and communities where stress exposure is relatively high.
3. Perceived availability of social support tends to be much more strongly related to psychological distress and depression than reports of support actually received.
4. An expanded focus on the mental health relevance of social ties and on ways to intervene to improve social support requires that we be mindful that social relationships have negative as well as positive components.
5. Levels of social support vary reliably with location in the social system as defined by SES, gender, race/ethnicity, and perhaps marital status. This suggests that the experience of being supported by others arises substantially out of social experience. Evidence indicating that social support explains status-based differences in mental health is more limited, however.

In summary, when considering the issue of social support and mental health, it is useful to acknowledge that most causes and effects in human affairs are likely to be reciprocal in nature. In the present case, evidence suggests that the perceived availability of social support has important consequences for distress and depression. At the same time, it is probable that one's mental health status and personality characteristics affect the availability of social support and the ability or tendency to experience the support that is available. Social support is important for mental health, but a variety of social and psychological conditions are important influences on social support. Additional research that clarifies the causal ordering of these relationships and their interrelated nature is critical for an understanding of the social bases of mental health.

References

Almeida, J., Johnson, R. M., Corliss, H. L., Molnar, B. E., & Azrael, D. (2009). Emotional distress among LGBT youth: The influence of perceived discrimination based on sexual orientation. *Journal of Youth and Adolescence, 38*(7), 1001–1014.

Aneshensel, C. S. (1992). Social stress: Theory and research. *Annual Review of Sociology, 18*, 15–38.

Aneshensel, C. S. (2005). Research in mental health: Social etiology versus social consequences. *Journal of Health and Social Behavior, 46*(3), 221–228.

Aneshensel, C. S., & Frerichs, R. R. (1982). Stress, support, and depression: A longitudinal causal model. *Journal of Community Psychology, 10*(4), 363–376.

Aneshensel, C. S., Rutter, C. M., & Lachenbruch, P. A. (1991). Social structure, stress, and mental health: Competing conceptual and analytic models. *American Sociological Review, 56*(2), 166–178.

Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey-Bass.

August, K. J., Rook, K. S., & Newsom, J. T. (2007). The joint effects of life stress and negative social exchanges on emotional distress. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 62*(5), S304–S314.

Ausubel, D. P. (1958). *Theory and problems of child development*. New York: Grune & Stratton.

Avison, W. R., Aneshensel, C. S., Schieman, S., & Wheaton, B. (2010). *Advances in the conceptualization of the stress process: Essays in honor of Leonard I*. New York: Springer.

Beatty, D. L., Kamarck, T. W., Matthews, K. A., & Shiffman, S. (2011). Childhood socioeconomic status is associated with psychosocial resources in African Americans: The Pittsburgh healthy heart project. *Health Psychology, 30*(4), 472–480.

Belle, D. (1987). Gender differences in the social moderators of stress. In R. C. Barnett, L. Biener, & G. K. Baruch (Eds.), *Gender and stress*. New York: Free Press.

Berkman, L. F., & Glass, T. A. (2000). Social integration, social networks, social support, and health. In L. F. Berkman & I. Kawachi (Eds.), *Social epidemiology* (pp. 137–173). New York: Oxford Press.

Berkman, L. F., Vaccarino, T. E., & Seeman, V. (1993). Gender differences in cardiovascular morbidity and mortality: The contribution of social networks and support. *Annals of Behavioral Medicine, 15*(2/3), 112–118.

Bertera, E. M. (2005). Mental health in U.S. adults: The role of positive social support and social negativity in personal relationships. *Journal of Social and Personal Relationships, 22*(1), 33–48.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68*(5), 748–766.

Buettner, D. (2010). *The blue zones: Lessons for living longer from the people who've lived the longest*. Washington, DC: National Geographic.

Bunker, S. J., Colquhoun, D. M., Esler, M. D., Hickie, I. B., David Hunt, V., Jelinek, M., et al. (2003). 'Stress' and coronary heart disease: Psychosocial risk factors. *Medical Journal of Australia, 178*(6), 272–276.

Cassel, J. (1974). An epidemiological perspective of psychosocial factors in disease etiology. *American Journal of Public Health, 64*(11), 1040.

Cassel, J. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104*(2), 107–123.

Cobb, S. (1976). Presidential Address-1976. Social support as a moderator of life stress. *Psychosomatic Medicine, 38*(5), 300–314.

Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M, Jr. (1997). Social ties and susceptibility to the common cold. *JAMA, 277*(24), 1940–1944.

Cohen, S., & Syme, S. L. (Eds.). (1985). *Social support and health*. New York: Academic Press.

Cohen, S., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310–357.

Coulson, J. (1975). In J. Coulson, D. Eagle, J. Hawkins & H. M. Petter (Eds.), *The Oxford illustrated dictionary* (2nd ed.). Oxford: Oxford University Press.

Coyne, J. C., & Downey, G. (1991). Social factors and psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 42*(1), 401–425.

Cukrowicz, K. C., Franzese, A. T., Thorp, S. R., Cheavens, J. S., & Lynch, T. R. (2008). Personality traits and perceived social support among depressed older adults. *Aging and Mental Health, 12*, 662–669.

Dean, A., & Lin, N. (1977). The stress-buffering role of social support: Problems and prospects for systematic investigation. *The Journal of Nervous and Mental Disease, 165*(6), 403–417.

Durkheim, É. (1951). *Suicide: A study in sociology* [1897]. New York: Simon & Schuster.

Falci, C., & McNeely, C. (2009). Too many friends: Social integration, network cohesion and adolescent depressive symptoms. *Social Forces, 87*, 2031–2061.

Finch, J. F., Okun, M. A., Barrera, M., Zautra, A. J., & Reich, J. W. (1989). Positive and negative social ties among older adults: Measurement models and the prediction of psychological distress and well-being. *American Journal of Community Psychology, 17*(5), 585–605.

Finch, J. F., Okun, M. A., Pool, G. J., & Ruehlman, L. S. (1999). A comparison of the influence of conflictual and supportive social interactions on psychological distress. *Journal of Personality, 67*(4), 581–621.

Flaherty, J. A., & Richman, J. A. (1986). Effects of childhood relationships on the adult's capacity to form social supports. *The American Journal of Psychiatry, 143*(7), 851–855.

Gayman, M. D., Turner, R. J., Cislo, A. M., & Eliassen, A. H. (2010). Early adolescent family experiences and perceived social support in young adulthood. *The Journal of Early Adolescence, 31*(6), 880–908.

Glaeser, E. L., Laibson, D., & Sacerdote, B. (2002). An economic approach to social capital. *The Economic Journal, 112*(483), F437–F458.

Goodwin, R., Costa, P., & Adonu, J. (2004). Social support and its consequences: 'Positive' and 'deficiency' values and their implications for support and self-esteem. *The British Journal of Social Psychology, 43*(Pt 3), 465–474.

Gottlieb, B. H. (1981). Social networks and social support in community mental health. In B. H. Gottlieb & B. Hills (Eds.), *Social networks and social support* (pp. 11–41). Beverley Hills, CA: Sage Publications.

Henderson, H. O. F. (1992). Social support and depression. In *The meaning and measurement of social support* (pp. 1–7). New York: Hemisphere.

Hirschfeld, R. M. A., Klerman, G. L., Gouch, H. G., Barrett, J., Korchin, S. J., & Chodoff, P. (1977). A measure of interpersonal dependency. *Journal of Personality Assessment, 41*(6), 610–618.

Horwitz, A. V., McLaughlin, J., & White, H. R. (1998). How the negative and positive aspects of partner relationships affect the mental health of young married people. *Journal of Health and Social Behavior, 39*(2), 124–136.

House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.
House, J. S., Landis, K. R., & Umberson, D. (1988a). Social relationships and health. *Science, 241*(4865), 540–545.
House, J. S., Umberson, D., & Landis, K. R. (1988b). Structures and processes of social support. *Annual Review of Sociology, 14*, 293–318.
Huurre, T., Eerola, M., Rahkonen, O., & Aro, H. (2007). Does social support affect the relationship between socioeconomic status and depression? A longitudinal study from adolescence to adulthood. *Journal of Affective Disorders, 100*(1–3), 55–64.
Jessor, R., Van Den Bos, J., Vanderryn, J., Costa, F. M., & Turbin, M. S. (1995). Protective factors in adolescent problem behavior: Moderator effects and developmental change. *Developmental Psychology, 31*(6), 923–933.
Joiner, T. E. (2011). *Lonely at the top*. New York: MacMillan.
Karlin, W. A., Brondolo, E., & Schwartz, J. (2003). Workplace social support and ambulatory cardiovascular activity in New York City traffic agents. *Psychosomatic Medicine, 65*(2), 167–176.
Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 78*(3), 458–467.
Kessler, R. C., & McLeod, J. D. (1984). Sex differences in vulnerability to undesirable life events. *American Sociological Review, 49*(5), 620–631.
Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 36*(1), 531.
Kiecolt-Glaser, J. K., Gouin, J.-P., & Hantsoo, L. (2010). Close relationships, inflammation, and health. *Neuroscience and Biobehavioral Reviews, 35*(1), 33–38.
Lakey, B., & Cassady, P. B. (1990). Cognitive processes in perceived social support. *Journal of Personality and Social Psychology, 59*(2), 337–343.
Lakey, B., Cronin, A. (2008). Low social support and major depression. In *Risk factors for depression* (pp. 385–408). San Diego, CA: Academic Press.
Lakey, B., & Dickinson, L. G. (1994). Antecedents of perceived support: Is perceived family environment generalized to new social relationships? *Cognitive Therapy and Research, 18*(1), 39–53.
Lakey, B., & Scoboria, A. (2005). The relative contribution of trait and social influences to the links among perceived social support, affect, and self-esteem. *Journal of Personality, 73*(2), 361–388.
Lakey, B., Tardiff, T. A., & Drew, J. B. (1994). Negative social interactions: Assessment and relations to social support, cognition, and psychological distress. *Journal of Social and Clinical Psychology, 13*(1), 42–62.
Landale, N. S., Oropesa, R. S., & Bradatan, C. (2006). Hispanic families in the United States: Family structure and process in an era of family change. In M. Tienda & F. Mitchell (Eds.), *Hispanics and the future of America*. Washington, DC: The National Academies Press.
Leavy, R. L. (1983). Social support and psychological disorder: A review. *Journal of Community Psychology, 11*, 3–21.
Lincoln, K. D. (2000). Social support, negative social interactions, and psychological well-being. *The Social Service Review, 74*(2), 231–252.
Lincoln, K. D., Chatters, L. M., & Taylor, R. J. (2005). Social support, traumatic events, and depressive symptoms among African Americans. *Journal of Marriage and the Family, 67*(3), 754–766.
Lincoln, K. D., Taylor, R. J., Bullard, M., Chatters, L. M., Woodward, A. T., Himle, J. A., et al. (2010). Emotional support, negative interaction and DSM IV lifetime disorders among older African Americans: Findings from the national survey of American life (NSAL). *International Journal of Geriatric Psychiatry, 25*(6), 612–621.
Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior, 35*, 80–94.
Luckow, A., Reifman, A., & McIntosh. D. N. (1998). Presented to the annual meeting of the American psychological association. San Francisco.
Lynch, J. J. (1977). *The broken heart*. New York: Basic Books.
Matthews, S., Stansfeld, S., & Power, C. (1999). Social support at age 33: The influence of gender, employment status and social class. *Social Science and Medicine, 49*(1), 133–142.

Mickelson, K. D., & Kubzansky, L. D. (2003). Social distribution of social support: The mediating role of life events. *American Journal of Community Psychology, 32*(3–4), 265–281.
Myers, J. K., Lindenthal, J. J., Pepper, M. P., & Ostrander, D. R. (1972). Life events and mental status: A longitudinal study. *Journal of Health and Social Behavior, 13*(4), 398–406.
Newsom, J. T., Nishishiba, M., Morgan, D. L., & Rook, K. S. (2003). The relative importance of three domains of positive and negative social exchanges: A longitudinal model with comparable measures. *Psychology and Aging, 18*(4), 746–754.
Newsom, J. T., Rook, K. S., Nishishiba, M., Sorkin, D. H., & Mahan, T. L. (2005). Understanding the relative importance of positive and negative social exchanges: Examining specific domains and appraisals. *The Journals of Gerontology. Series B. Psychological Sciences and Social Sciences, 60*(6), 304–312.
Pagel, M. D., Erdly, W. W., & Becker, J. (1987). Social networks: We get by with (and in spite of) a little help from our friends. *Journal of Personality and Social Psychology, 53*(4), 793–804.
Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior, 30*(3), 241–256.
Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior, 22*(4), 337–356.
Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*(1), 2–21.
Reinhardt, J. P. (2001). Effects of positive and negative support received and provided on adaptation to chronic visual impairment. *Applied Developmental Science, 5*(2), 76–85.
Resnick, M. D., et al. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *JAMA, 278*(10), 823–832.
Revenson, T. A., Schiaffino, K. M., Deborah Majerovitz, S., & Gibofsky, A. (1991). Social support as a double-edged sword: The relation of positive and problematic support to depression among rheumatoid arthritis patients. *Social Science & Medicine, 33*(7), 807–813.
Robles, T. F., & Kiecolt-Glaser, J. K. (2003). The physiology of marriage: Pathways to health. *Physiology & Behavior, 79*(3), 409–416.
Rook, K. S. (1984). The negative side if social interaction: Impact on psychological well -being. *Journal of Personality and Social Psychology, 46*, 1097–1108.
Rook, K. S. (2001). Emotional health and positive versus negative social exchanges: A daily diary analysis. *Applied Developmental Science, 5*(2), 86–97.
Rook, K. S. (2003). Exposure and reactivity to negative social exchanges: A preliminary investigation using daily diary data. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences, 58*(2), 100–111.
Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
Rosenberg, M., & McCullough, B. C. (1981). Mattering: Inferred significance and mental health among adolescents. *Research in Community & Mental Health*, 163–182.
Ross, C. E., & Mirowsky, J. (1989). Explaining the social patterns of depression: Control and problem solving–or support and talking? *Journal of Health and Social Behavior, 30*(2), 206–219.
Rowe, J. W., & Kahn, R. L. (1987). Human aging: Usual and successful. *Science, 237*(4811), 143–149.
Ruehlman, L. S., & Karoly, P. (1991). With a little flak from my friends: Development and preliminary validation of the test of negative social exchange (TENSE). *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3*(1), 97–104.
Ryan, W. (1971). *Blaming the victim*. New York: Pantheon.
Sacco, P., Casado, B. L., & Unick, G. J. (2011). Differential item functioning across race in aging research: An example using a social support measure. *Clinical Gerontologist, 34*(1), 57–70.
Salonna, F., Geckova, A. M., Zezula, I., Sleskova, M., Groothoff, J. W., Reijneveld, S. A., et al. (2012). Does social support mediate or moderate socioeconomic differences in self-rated health among adolescents? *International Journal of Public Health, 57*(3), 609–617.
Sarason, B. A., Pierce, G. R., & Sarason, I. G. (1990). Social support: The sense of acceptance and the role of relationships. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 97–128). New York: Wiley.

Sarason, I. G., & Sarason, B. R. (Eds.). (1985). *Social support: Theory, research and applications*. Boston: Martinus Nijhoff.

Schachter, S. (1959). *The psychology of affiliation: Experimental studies of the sources of gregariousness*. Stanford, CA: Stanford University Press.

Son, J., Lin, N., & George, L. K. (2008). Cross-national comparison of social support structures between Taiwan and the United States. *Journal of Health and Social Behavior, 49*(1), 104–117.

Stafford, M., McMunn, A., Zaninotto, P., & Nazroo, J. (2011). Positive and negative exchanges in social relationships as predictors of depression: Evidence from the English longitudinal study of aging. *Journal of Aging and Health, 23*(4), 607–628.

Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*(5), 825–848.

Strogatz, D. S., Croft, J. B., James, S. A., Keenan, N. L., Browning, S. R., Garrett, J. M., et al. (1997). Social support, stress, and blood pressure in black adults. *Epidemiology, 8*(5), 482–487.

Syme, S. L., & Berkman, L. F. (1976). Social class, susceptibility and sickness. *American Journal of Epidemiology, 104*(1), 1–8.

Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review, 107*(3), 411–429.

Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, 35*, 53–79.

Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, 52*(2), 145–161.

Thomas, W. I., & Thomas, D. S. T. (1928). *The child in America: Behavior problems and programs*. New York: Johnson Reprint Corp.

Turner, R. J. (1983). Direct, indirect and moderating effects of social support upon psychological distress and associated conditions. In H. B. Kaplan (Ed.), *Psychosocial stress: Trends in theory and research* (pp. 105–155). New York: Academic Press.

Turner, H. A. (1994). Gender and social support: Taking the bad with the good? *Sex Roles, 30*, 521–541.

Turner, R. J., & Avison, W. R. (1989). Gender and depression: Assessing exposure and vulnerability to life events in a chronically strained population. *The Journal of Nervous and Mental Disease, 177*(8), 443–455.

Turner, R. J., Brown, T. N., & Hale, W. B. (2012). Antecedents and consequence off personal resources: Evidence on the causation selection debate. Presented at the annual meeting of the American sociological Association, Denver.

Turner, R. J., Frankel, B. G., & Levin, D. M. (1983). Social support: Conceptualization, measurement, and implications for mental health. *Research in Community Mental Health, 3*, 67–111.

Turner, R. J., & Marino, F. (1994). Social support and social structure: A descriptive epidemiology. *Journal of Health and Social Behavior, 35*(3), 193–212.

Turner, R. J., & Noh, S. (1988). Physical disability and depression: A longitudinal analysis. *Journal of Health and Social Behavior, 29*(1), 23–37.

Turner, R. J., Taylor, J., & Van Gundy, K. (2004). Personal resources and depression in the transition to adulthood: Ethnic comparisons. *Journal of Health and Social Behavior, 45*(1), 34–52.

Turner, H. A., & Turner, R. J. (1999). Gender, social status, and emotional reliance. *Journal of Health and Social Behavior, 40*(4), 360–373.

Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K. (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin, 119*(3), 488–531.

Umberson, D. (1987). Family status and health behaviors: Social control as a dimension of social integration. *Journal of Health and Social Behavior, 28*(3), 306–319.

Umberson, D., Chen, M. D., House, J. S., Hopkins, K., & Slaten, E. (1996). The effect of social relationships on psychological well-being: Are men and women really so different? *American Sociological Review, 61*(5), 837–857.

Umberson, D., & Montez, J. K. (2010). Social relationships and health a flashpoint for health policy. *Journal of Health and Social Behavior, 51*(1 suppl), S54–S66.

Vaux, A. (1988). *Social support: Theory, research, and intervention*. New York: Praeger.

Vega, W. A., & Miranda, M. R. (1985). *Stress and Hispanic mental health*. Rockville, MD: National Institute of Public Health.

Veil, H. O. F., & Baumann, U. (1992). The many meanings of social support. In H. O. F. Veil & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 1–7). New York: Hemisphere.

Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social Behavior, 27*(1), 78–89.

Wethington, E., McLeod, J. D., & Kessler, R. C. (1987). The importance of life events for explaining sex differences in psychological distress. In R. C. Barnett, L. Biener, & G. K. Baruch (Eds.), *Gender*. New York: Free Press.

Wills, T. A., McNamara, G., Vaccaro, D., & Hirky, A. E. (1997). Escalated substance use: A longitudinal grouping analysis from early to muddle adolescence. In G. A. Marlatt & G. R. VandenBos (Eds.), *Addictive behaviors* (pp. 97–128). Washington D.C.: American Psychological Association.