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# What a lifespan approach might tell us about why distinct measures of social support have differential links to physical health

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ABSTRACT

Social support has been reliably related to physical health outcomes. However, an examination of mediators of such links has been slowed by the lack of understanding regarding two complex and related questions: what is social support and what phase of the disease process does it impact? In this paper, I argue for the importance of a lifespan perspective that takes into account distinct antecedent processes and mechanisms that are related to measures of support over time. This view makes clear the need to distinguish measures of perceived and received support and its links to more specific aspects of disease (e.g., acute, chronic, disease incidence). The implications of these theoretical arguments for research on social support and physical health are discussed.

**KEY WORDS:** health psychology • lifespan • physical health • perceived support • psychosocial risk factors • received support • social support

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Social support has been reliably related to lower rates of morbidity and mortality (see reviews by Berkman, Glass, Brissette, & Seeman, 2000; Cohen, 1988; House, Landis, & Umberson, 1988; Uchino, 2004). Based on this epidemiological evidence, one of the most pressing issues is to elucidate potential mechanisms that might inform existing models and strengthen support interventions (Berkman et al., 2000). However, the search for such mechanisms has been slowed by the complexity of two underappreciated and related questions – what is social support and at what phase of the disease process does it matter? The later question is important because morbidity and mortality from disease can be broadly categorized as acute (e.g., infectious) or chronic. Chronic diseases develop more slowly over time and are the leading causes of morbidity and mortality in industrialized countries. The prototypical chronic disease is coronary artery disease because the beginnings of atherosclerosis (e.g., plaque) can be seen in children and develops slowly over time; ultimately cumulating in clinical symptoms for older adults (e.g., chest pain). This distinction between acute and chronic conditions is informative because psychosocial processes such as social support would need to be relatively stable over time in order for it to influence the development of such chronic diseases. On the other hand, more acute conditions could be related to either stable or stronger fluctuating factors that then influence susceptibility to disease.

The first question of “what is social support” may be better understood by examining the main support measures utilized in epidemiological work: general perceived support and received support. Perceived support refers to one’s potential access to social support, whereas received support refers to the reported receipt of support resources usually during a specific time frame (Dunkel-Schetter & Bennett, 1990). These two dimensions do not appear to be interchangeable as beneficial effects of perceived support may be obtained in the absence of any actual support being provided (Cohen, 1988). In fact, the separability of perceived and received support is well-documented (Wills & Shinar, 2000). Of particular importance is that these measures of support are also associated with different physical health outcomes. There is consistent evidence linking general perceived social support with reduced disease development (i.e., incidence) and mortality, especially from cardiovascular disease (e.g., Orth-Gomér, Rosengren, & Wilhelmsen, 1993).<sup>1</sup> However, measures of received support have been quite variable in their links to physical health (Uchino, 2004). In fact, a number of studies find it to be associated with higher mortality rates, an effect that does not appear to simply reflect higher levels of support mobilization for those most unhealthy to begin with (e.g., Forster & Stoller, 1992; Sabin, 1993).

Potential reasons for these differential findings with perceived and received support are unresolved (Wills & Shinar, 2000) and reflect the lack of conceptual development regarding what these measures of support reflect (Dunkel-Schetter & Bennett, 1990). However, one important reason is that they have different origins (or antecedent processes) that make them separable and predictably associated with differing outcomes. As argued by Sarason and colleagues (1986), general measures of perceived support may

have their origins in early familial transactions. Familial transactions include processes such as caring, affection, and positive involvement that set the basis for supportive relational schemas (also see Flaherty & Richman, 1986). Consistent with this perspective, perceived support is typically stable over time (despite changes in social circumstances) and linked to reports of parental support and warmth (Sarason et al., 1986; Shaw et al., 2004).

In contrast to perceived support, I argue that received support is less likely to represent early familial processes but a situational factor that is sought or provided in response to stress (Barrera, 2000).<sup>2</sup> This argument, of course, is a relative one but consistent with various coping models that include support seeking as a potential resource (Carver et al., 1989; Thoits, 1986). Importantly, this conceptualization makes clear that received support is one of many coping options that is available to the individual and whose effectiveness may depend heavily on the context (e.g., characteristics of the stressor, Berg & Upchurch, 2007). These issues are elaborated below.

### **The developmental antecedents of perceived support**

The full implications of these distinctions become evident from a lifespan perspective. If perceived support develops in the context of early, supportive familial interactions, the question at hand becomes much broader. What else *co-develops* in the context of such supportive familial environments (Shaw et al., 2004)? One possibility is that perceived support may then be related to personality processes, such as attachment style, optimism, and hostility; a premise that is consistent with the literature (Anders & Tucker, 2000; Gallo & Smith, 1999). It is important to note that these personality factors have established links to physical health outcomes and appear to have significant interpersonal origins (Gallo & Smith, 1999).

The early family environment also influences a broad array of psychosocial processes relevant to physical health (Repetti, Taylor, & Seeman, 2002). For instance, low family support has been related to poorer coping strategies in children (Hardy et al., 1993). Such early familial processes also influence the development of basic social competencies that are important for the formation of supportive social networks (Sarason, Sarason, Hacker, & Basham, 1985). In fact, links are also evident between perceived support and feelings of control, self-efficacy, and self-esteem (e.g., Shaw et al., 2004; Symister & Friend, 2003). These associations are important because these psychological factors appear to have influences on physical health in their own right (Shaw et al., 2004).

An important question is what are the implications of this lifespan view for the support and health link? One important possibility is that individuals with positive early family environments (e.g., parental support, less conflict) develop “positive psychosocial profiles” (e.g., perceived support, self-esteem, control) and thus can cope more effectively, flexibly, and proactively with life stressors. That is, they have choices and a broader skill/coping set that can be used to manage and anticipate the challenges in life. In fact, perceived

social support appears to be related to greater proactive coping (Aspinwall & Taylor, 1997) and existing longitudinal studies tend to find support to be related to lower stress exposure (e.g., Russell & Cutrona, 1991). This lifespan view also addresses the second question of importance in social support and health work by making salient the phase of the disease process that should be impacted by perceived support. That is, due to its early family origins, stability, and association with other positive profiles, perceived support should be more strongly linked to lower chronic disease development (i.e., incidence) than measures of received support. In addition, given these characteristics of perceived support it may also influence lower susceptibility to acute diseases and a more positive course for diagnosed chronic diseases more generally (Uchino, 2004).

### **The situational nature of received support**

An important aspect of this view of received support based on the broader coping literature is that not all forms of coping are beneficial and its effectiveness may depend heavily on the context (Berg & Upchurch, 2007). Such a view may help explain why measures of received support are sometimes related to negative physical health outcomes. For instance, Horowitz and colleagues (2000) argue that the person seeking support has a goal and more beneficial influences might be obtained if the support provider is able to understand such goals and the appropriate response (e.g., action-facilitating support for agentic problems). Of particular importance is that the lifespan literature on the well-being of older adults also suggests variability in outcomes associated with received support (Liang, Krause, & Bennett, 2001). These data are important because the aging adult faces a number of biological challenges, including declines in functional health status. Thus older adults may have to rely on received support (especially tangible support) as a coping mechanism more than younger individuals (van Tilburg, 1998).

One important issue is that if there are circumstances under which received support is less effective, why do such negative effects sometime occur? There are a number of explanations currently being evaluated (see Uchino, 2004). One potential explanation is that the co-existence of conflict in relationships may reduce the efficacy of received support (Holt-Lunstad, Uchino, Smith, & Hicks, 2007). This is important because for the older adult, close familial (involuntary) ties are typically maintained whereas more peripheral ties are less prevalent (Antonucci & Akiyama, 1987; Carstensen et al., 1999). These involuntary relationships are difficult to terminate and can be a source of conflict for older adults (Krause & Rook, 2003).

Received support also may not be beneficial because it is associated with a drop in self-esteem or threat to one's sense of independence which in turn offset any benefits of received support (Bolger & Amarel, 2007). Consistent with this view, the communication of inefficacy may be one mediator of negative influences of received support (Bolger & Amarel, 2007). In fact, these dependency issues may be particularly salient and important in older

adult populations (Baltes, 1995). The older adult faces a number of age-related challenges that may threaten their sense of independence and control and the manner in which support is provided may become a further threat (Baltes, 1995; Martire & Schulz, 2007).

The health implications of viewing received support as more of a situational factor is that the antecedent conditions and mediators may differ substantially from perceived support. The stressor context should play a more focal role in the effectiveness of coping options, only one of which includes receiving support as there may be other problem and emotion-focused coping strategies available (Carver et al., 1989). These factors may then influence psychological processes such as one's sense of esteem/control in a positive or negative manner depending on the context. It is important to point out that in this view of received support the psychological processes of self-esteem and control are viewed as mediators (not part of a positive profile) of associations with health outcomes. Thus, the influence of received support on chronic disease development should be attenuated because (a) of the variability associated with the effectiveness of received support and (b) it is just one of many coping options. It is more likely that received support would primarily influence acute disease susceptibility and the course of diagnosed chronic disease. However, these association can be either positive or negative (i.e., healthy or unhealthy) depending on contextual processes (e.g., match to type of stress).

### **Future research implications**

There are a number of important research implications based on this lifespan perspective of support. First, the typical approach in support and health work has been to measure either perceived or received support and examine its association to health outcomes (Uchino, 2004). There is very little research that examines both perceived and received support perhaps due to the overlap that is assumed in such measures. Nevertheless, a lifespan view makes clear that these are not redundant constructs. One interesting question that arises here is what are the consequences of receiving support for individuals who are low versus high in perceived support (i.e., interactions between perceived and received support)? One interesting possibility is given their more positive interpersonal schemas, individuals high in perceived support may be receptive and hence benefit more from received support. In comparison, the present analysis suggests an alternative prediction. That is, because of the co-development of other positive psychosocial factors (e.g., self-esteem), when support is simply provided, individuals high in support may not benefit because it is deemed unnecessary (discounted) or could threaten their sense of esteem or control. This interpretation is consistent with one of the few studies that tested this "interaction" between perceived and received support (Sarason & Sarason, 1986).

The present analysis would also predict at what phase in the support process such null or negative influences for received support would occur

for individuals high in perceived support. More specifically, received support is likely to be beneficial after individuals high in perceived support have decided, and hence are receptive, to seek support (although it is still possible that unhelpful support might be provided). Bolger and Amarel (2007) have distinguished between anterogatory (prior to seeking support; e.g., appraisal) and postrogatory (after decision to seek support) processes. The anterogatory processes for individuals high in perceived support make them more effective at avoiding and coping with stress and hence less likely to rely on received support. As noted earlier, in the absence of seeking support it may be discounted or conflict with the self-esteem of individuals high in perceived support. This “moderational” prediction may explain part of the inconsistencies found in studies of received support and health.

The framework proposed in this paper also suggests alternative analytical approaches to examining epidemiological links between social support and physical health. One important implication is that perceived support may simply be one part of a psychosocial profile that co-develops in the context of positive, early familial relationships. The identification of such positive profiles can be performed via a number of established analytical procedures including cluster, factor, and /or latent profile analyses (e.g., Gallo & Smith, 1999). These profile scores can then be used in the prediction of physical health outcomes and compared with the more traditional approach of examining perceived support as the main predictors of health outcomes. More generally, the present framework makes salient the need to examine multiple psychosocial risk factors in combination (see Williams, Barefoot, & Schneiderman, 2003; Gallo & Smith, 1999), rather than the more traditional approach of focusing on single risk factor models. The later approach is more tractable, but ignores considerable research on how these factors may co-develop and have significant early family origins (Repetti et al., 2002; Shaw et al., 2004).

An approach that is also gaining in popularity is to examine psychological factors (e.g., esteem, control) as potential mediators of links between social support and health. This approach is especially evident in work examining links between social support and mental health outcomes (e.g., Symister & Friend, 2003). However, the salient question that arises from this conceptual perspective is whether self-esteem is a partial mediator or part of a positive profile (with reciprocal links / overlapping variance) that includes perceived support (e.g., Holahan & Holahan, 1987). Future research will be needed that can simultaneously examine alternative models (e.g., meditational, profile). Nevertheless, the present analysis suggest that different processes are salient when examining measures of received support, compared to perceived support.<sup>3</sup>

A lifespan perspective also highlights the need to better understand the stage of disease potentially impacted by social support. Evidence is consistent with the role of perceived support in the development and course of cardiovascular disease, as well as susceptibility to infectious illnesses (Berkman et al., 2000; Uchino, 2004). The present framework makes unique predictions about the relative role of perceived and received support on

chronic disease development. However, I know of no research examining links between received support and the development of cardiovascular disease, even in more chronically stressed populations. More generally, most research on social support and health (including my own) has typically examined either perceived or received support, with little theoretical justification for its use to specific stages of disease. Epidemiological and clinical/laboratory work (e.g., imaging of subclinical cardiovascular disease) is needed to test these predictions regarding the stage of disease impacted by distinct measures of support.

I have also focused on general perceived support given the use of these measures in prior epidemiological work. However, there are other measurement approaches that are important to consider such as relationship-specific measures of perceived support. Research by Lakey and colleagues (1996) suggest that these measures are related, but distinct from general perceptions of support (also see Pierce, Sarason, & Sarason, 1991). Moreover, relationships-specific assessments appear to more strongly reflect trait  $\times$  situational influences (Lakey et al., 1996). Thus, according to the arguments in this paper, such measures may have more general influences on health outcomes (i.e., both acute/chronic disease incidence and its course) if it is a developmentally important relationship. Consistent with this possibility, studies that focus on the quality of marital relationships suggest more general links to disease development and its clinical course (Kiecolt-Glaser & Newton, 2001). It should be noted that support processes are only one aspect of marital quality so future research will be necessary to provide a stronger test of these predictions.

The present framework also has novel intervention implications. It is clear that most social support interventions focus on individuals who are most at-risk or who already have psychological, behavioral, or medical problems. An alternative way of thinking about support interventions is as a form of primary prevention that focuses on healthy individuals (Kaplan, 2000). Given that many chronic diseases have a long-term etiology and develop over decades (e.g., coronary artery disease), primary prevention efforts in social support interventions may be particularly important to consider. For instance, given the developmental antecedents of perceived support, it is clear that early familial interventions are an important starting point. Such interventions have mostly been conducted in at-risk populations and show promise in fostering more positive child outcomes (Alexander, Sexton, & Robbins, 2002). This perspective on perceived support also raises the interesting possibility that social support interventions may be usefully applied early in children and adolescents so that they can co-develop positive profiles that then place them on healthier trajectories (e.g., Eggert, Thompson, Herting, Nicholas, & Dicker, 1994). Importantly, the present framework makes salient the potential for a lifespan perspective to help organize the voluminous literature linking perceived and received social support to physical health, elucidate potential mechanisms, as well as highlight potential differing entry points for intervention.

## NOTES

1. In this paper I focus on general perceptions of perceived support in contrast to relationship-specific measures of perceived support. The epidemiological literature has mostly utilized such general measures so such a focus is necessary. However, I will return to this issue later in the paper.
2. It is important to note that most received support measures do not differentiate whether it was sought or simply provided by others during stress. Theoretically, both types of received support may be helpful or harmful depending on the context (see below). However, different processes are salient based on how it is received (e.g., self-esteem issues with support that is not directly sought; Bolger & Amarel, 2007).
3. However, there are situations in which one might find these psychological factors (e.g., self-esteem) to mediate links between perceived support and health. More specifically, situations allowing for greater reciprocal links between perceived and received support may result in such meditational effects (e.g., chronic disease patients or victims of natural disasters, Martire & Schulz, 2007; Norris & Kaniasty, 1996). Such situations allow for greater opportunities for each construct to influence the other (e.g., whether high perceived support actually materializes).

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