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When is received social support related to perceived support and well-being? When it is needed

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ABSTRACT

How do perceptions of being supported relate to the amount of social support received? Received and perceived support have generally been found to be only moderately related. Previous research has however focused on the amount of support received regardless of whether it was needed. We hypothesized that a measure of support received when needed would predict perceived support and well-being better than would an unqualified measure of received support. Study 1 found that correlations between received support and perceived support measures were, on average, twice as high when received support was measured as the proportion of times support was received when needed (average $r = .54$) than when it was measured as the number of times support was received (average $r = .28$). Similar results were found for correlations between received support and mental health which rose from $r = .04$ to $r = .31$ when need for support was considered. Study 2 replicated the strong relationship between support received when needed and both perceived support and mental health. Received support measures should be adapted to take the need for support into consideration in future investigation of these relationships. Social support interventions may only be beneficial if the recipient's support needs are not already being met.

1. Introduction

This paper is concerned with the relationship between received and perceived support and with the relationship between both received and perceived support and well-being. We operationalise received and perceived support as they are most commonly measured: received support as the quantity of supportive behaviors received by an individual (Haber, Cohen, Lucas, & Baltes, 2007) and perceived support as both the satisfaction with support and the availability of it (Sarason, Sarason, & Pierce, 1990).

There has been much interest in the relationship between received and perceived support because of the strong and well documented link between social support and health; people who are more socially integrated tend to be healthier, both physically and mentally, than those who are more socially isolated (Barrera, 1986; House, Landis, & Umberson, 1988; Uchino, 2009). A number of theories have been put forward to account for this, the most dominant being stress buffering theory (cf. Barrera, 1986; Cohen & Wills, 1985; Cutrona & Russell, 1990; Thoits, 1986). The theory proposes that social support acts as a buffer that protects people against the physical and mental effects of stress caused from experiences such as illness or other life events. It suggests that the relationship between received and perceived support should be relatively strong and that both positive perceptions of support and receipt of support should lead to stress-buffering effects (Haber et al., 2007; Lakey & Cohen, 2000). However, the relationship between received and perceived support, although significant, has been consistently found to be relatively mild. For example, a meta-analysis of 23 studies found the average correlation between perceived and received support to be $r = .35$, $p < .001$ (Haber et al., 2007). Furthermore, whereas perceived support is consistently associated with positive health outcomes (e.g., Barrera, 2000; Holt-Lunstad, Smith, & Layton, 2010; Uchino, 2004, 2009; Uchino, Bowen, Carlisle, & Birmingham, 2012), the relationship between received support and health has been shown to be very inconsistent with non-significant and even negative associations often being found (Bolger & Amarel, 2007; Uchino, 2009). It is therefore unsurprising that interventions that have been developed based on this theory, under the assumption that increasing received support will lead to better health, have provided mixed results (Barrera, Glasgow, McKay, Boles, & Feil, 2002).

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Many studies and evaluations of the relationships between received support, perceived support and health use measures of received support such as the Inventory of Socially Supportive Behaviors (ISSB; Barrera, Sandler, & Ramsay, 1981), which is the most widely used and well-validated measure of received support (Gottlieb & Bergen, 2010; Haber et al., 2007), but which only measures the amount of support received. This has meant that factors relating to the support received that may affect this relationship (such as whether it was needed or the quality of it) have been largely unexplored. Here we propose and test the hypothesis that the relationship between received and perceived support is affected by the need for support. Specifically, we hypothesize that people's perceptions of the support they receive are based not on the number of times they receive support but on the number of times they have received it relative to the number of times they have needed it. We also hypothesize that received and perceived support will be positively correlated only up until the point where support needs are met. Beyond this (i.e., when people experience an oversupply of support), we expect that the relationship may break down (i.e., become absent or even negative) and we therefore propose that previous tests of the strength of the received–perceived support relationship may be inaccurate if the need for support has not been controlled for.

Although these hypotheses appear not to have been tested in the context of the received–perceived support relationship, there is some evidence to suggest that the relationship between received support and health may be stronger when the need for support is taken into account for the reasons outlined above. Studies have shown that both an under- (Jou & Fukada, 2002) and over-supply (Reynolds & Perrin, 2004) of support can lead to negative health outcomes. Therefore, analyses that fail to take the need for support into account may produce weaker correlations between received support and health because any positive effects of receiving additional support when it is needed may be counteracted by reduced, absent or even negative effects of receiving support when it is not. Wolff, Schmiedek, Brose, and Lindenberger (2013) found support for this hypothesis and demonstrated how taking the need for support into account improved the strength of the relationship between received support and health. They found no significant relationship between the amount of support received and either physical health or emotional well-being, but obtained a significant, quadratic relationship between these two outcomes and the balance of received and needed support (i.e., the difference in the number of times support is needed and actually received).

The primary aim of the current study is therefore to investigate whether the received–perceived support relationship is stronger when the need for support is taken into account as appears to be the case with regard to the relationship between received support and health. It is possible that previous findings of weak relationships between received support and both perceived support and health have been due to a common cause – namely the way received support has been measured. We also aim to provide more evidence that the relationship between received support and health is also stronger when the need for support is considered.

2. Study 1

In Study 1 we directly compare the relationships between received support, support received when needed, perceived support and health. Based on previous findings we hypothesized that there would be a significant but mild correlation between received and perceived support and that this relationship would strengthen when the need for support is taken into account. Due to previous inconsistent findings we were unsure as to whether or not a significant correlation between received support and health would be found but we expected a significant, positive correlation between these constructs when the need for support is taken into account. We further investigated differences in the strength of the relationships between received support, support received when needed, perceived support and health using regression analyses. This allowed for us to determine whether our measure of support received when needed (described below) predicted perceived support and health outcomes over and above received support alone. We hypothesized that our measure of support received when needed would be a much stronger predictor of perceived support and health outcome measures than received support.

2.1. Method

2.1.1. Participants

The 198 participants had a mean age of 32.4 years (SD = 12.8, range: 18–65 years), were predominantly White (76%) and 47.5% were male. Participants were mainly college educated (69%), were all resident in the U.S., and completed the study from 41 different states. Sample size calculations were based on detecting the weakest effect, i.e., the correlation between received and perceived support, which a meta-analysis identified to be $r = .35$ on average (Haber et al., 2007). Calculations showed that at least 121 participants would be needed to have a 99% chance of detecting a correlation of .35 and that for multiple regressions with 4 predictor variables at least 174 participants would be needed to have a 99% chance of detecting a medium sized effect (a correlation of .35 indicates a medium sized effect; Cohen, 1988).

2.1.2. Procedure

Participants were recruited online through Amazon Mechanical Turk (www.mturk.com) – an online crowdsourcing platform where "workers" choose tasks to complete in exchange for money or Amazon vouchers. Mechanical Turk workers have been shown to produce high quality data in psychological experiments (Buhrmester, Kwang, & Gosling, 2011) and to be more representative of the U.S. population than university undergraduates typically used in psychological research as well as other internet samples in general (Paolacci, Chandler, & Ipeirotis, 2010). Mechanical Turk has also been found to be a reliable source of experimental data specifically in the area of judgment and decision-making (Paolacci et al., 2010). Participants were asked to complete an online questionnaire that comprised questions on needed support, received support, perceived support, mental and physical health and demographic questions (age, gender, level of education and ethnicity). They received $1.00 on completion of the study which took 15–20 min to complete; this payment was in line with typical Mechanical Turk payments. As no standardized measures of support received when needed could be found, two specific supportive behaviors (having someone listen to you talk about your private feelings and having someone pitch into help you do something) each representing a different type of support (emotional support and tangible assistance, respectively) were chosen from the ISSB as the focus of the study. Participants were asked the following:

2.1.2.1. Needed and received support. Participants were asked the following questions about their need and receipt of emotional support: "In a typical month, how many times [do you need]/[does] someone to listen to you talk about your private feelings?", and tangible support: "In a typical month, how many times [do you need]/[does] someone to pitch into help you do something that needs to be done?".

2.1.2.2. Perceived support. As we had asked participants about their receipt of two specific supportive behaviors we also asked about their perceptions relating specifically to these behaviors. We asked participants to rate on six-point scales how satisfied they were