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Article abstract

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Results: Controlling for age, gender, and victimization, the social support group was associated with each meaning making, regulatory, and interpersonal strength, and every indicator of current functioning except trauma symptoms. The Isolated group scored lowest on all measures and the Interconnected group scored highest on 19 of 20 measures. The mixed profile groups fell between these extremes. Notably, the Rebuffed group reported higher levels of some strengths and non-theistic spiritual well-being than the Tended group. The Tended group was never significantly higher than the Rebuffed group.

Implications: Individual skills and attitudes regarding helpseeking may be more impactful than social support provided by others. Rebuffed youth may be steeling themselves in other strengths when the social environment is not supportive.



Is it better to seek or to receive? A dual-factor model of social support

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Abstract

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Implications: Individual skills and attitudes regarding helpseeking may be more impactful than social support provided by others. Rebuffed youth may be steeling themselves in other strengths when the social environment is not supportive.

Keywords: Social support; resilience; social ecology; youth, social support seeking; social support received.

Introduction

Social support has been found to be an important protective factor in numerous studies on victimization, resilience, and many related phenomena in children and adolescents (Chu et al., 2010). In many studies, social support serves as a key indicator of the social ecology or the broader psychosocial context in which individuals cope with adversity. Better social support is associated with greater well-being and psychological adjustment (Chu et al., 2010). Social support research often relies on global measures of ratings of the perceptions of support that individuals perceive (e.g., Clara et al., 2003; Zimet et al., 1988). Although this has been useful for identifying the importance of social support in the social ecology, such global measures leave unanswered questions that could guide clinical practice. For example, these resources must be obtained in some way. Social support seeking is often studied separately from the amount of support available or offered, but they are logically related and understanding these interconnections is important for theory and intervention (Kim et al., 2008). The purpose of this study is to explore whether a dual-factor model of social support reveals that some patterns of seeking and receiving social support are more closely associated with other psychosocial strengths and indicators of well-being in a sample of youth from the southern United States.

Social support and the social ecology

The social ecology is comprised of families, peer networks, communities, and societies that all contribute to individual functioning (Bronfenbrenner, 1979; Kelly, 1968; Trickett et al., 1983). These elements of the social network can provide external resources to youth, for example via community resources such as clinics and support groups (Grych et al., 2015). Although the social ecology of youth has many elements, such as collective efficacy or parental involvement (Fritz et al., 2018; Sampson et al., 1997), social support is one of the most studied. Social support is often defined as the provision of tangible and intangible (i.e., psychological) resources with the goal of helping an individual, especially in times of stress (Chu et al., 2010). Most social support research has focused on people in the immediate social environment, especially family members, peers, and, in the cases of youth, caring adults such as teachers, coaches, or community group leaders (Chu et al., 2010; Turner et al., 2017; Zimet et al., 1988).

Most existing social support measures focus on assessments of these external resources, either by focusing on the number or helpfulness of individuals in one's social network, or the specific resources that an individual can access. One of the most commonly used measures is the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988), which assesses perceived social support from three key groups of people: family members, friends, and significant others. Although developed with adults, the MSPSS is commonly used with adolescents (e.g., Frison & Eggermont, 2015) and has been further adapted for youth to assess support from non-parental caring adults (Turner et al., 2017). Other widely used tools assess social support by asking respondents to identify the number of people who could provide certain types of support and their satisfaction with the support received (Sarason, et al., 1983) or by determining access to "support available if you need it" (Sherbourne & Stewart, 1991). However, from an ecological perspective, these measures of external resources only assess one side of an interpersonal transaction.

Social support seeking

Like all elements of the social ecology, social support requires an interaction between the individual and their social context (Chan et al., 2016). In the optimal scenario, someone in distress seeks assistance, and then members of their social network rally around them and provide tangible and intangible resources as needed. Seeking help after a traumatic experience — especially among friends and loved ones — is not rare (contrary to some stereotypes of passive victims) and has been reported by the majority of participants in several studies (e.g., Barrett & Pierre, 2011; Sullivan et al., 2010). Helpseeking is also common among youth (Bundock et al., 2020). The seek-and-receive model is implicit in the many prevention and intervention programs that attempt to increase helpseeking versus directly increasing social support. For example, encouraging helpseeking is the most common element in U.S. youth violence prevention programs, included in 88% of programs (Finkelhor et al., 2014). In contrast, only about 1 in 5 programs directly try to improve youth-parent communication (Finkelhor et al., 2014), which can improve helpseeking by making youth feel more comfortable disclosing to parents and parents feel better able to respond to disclosures. However, there is research documenting that this idealized pattern — individual seeks support and then support is provided — does not always occur (e.g., Foyne & Freyd, 2011).

Although many prevention and intervention programs recommend helpseeking unequivocally, and implicitly assume that all helpseeking will be met with useful responses, there is considerable evidence that is not always the case. System-induced trauma, one type of secondary trauma in which unhelpful responses from human service

professionals exacerbate a victim's problem, is unfortunately common (Connors-Burrow et al., 2013). In the sexual violence field, unhelpful and even traumatic responses from professionals are so common that the law enforcement and community responses are sometimes called "the second rape" (Campbell et al., 2001). Research on disclosures to peers and loved ones also finds many unhelpful responses, such as rejection, stigma, and victim blame (Foyne & Freyd, 2011). Much of this research has been done with adult victims, but one study of Belgian high school students found that students who sought but did not perceive social support on Facebook reported more depressed mood than other youth (Frison & Eggermont, 2015). It is also possible that the recipients of requests for help are unable to provide assistance. These deviations from the ideal pattern suggest that more attention needs to be paid to patterns of social support seeking and receiving, and to better recognize that seeking social support is not always successful.

A dual-factor model of social support

Although both social support receipt and social support seeking have been widely studied, little research has explored the interconnections of these two aspects of social support (Kim et al., 2008). Aside from the relatively small body of research on system-induced trauma, most research assumes that the two phenomena, seeking and receiving, are closely linked. In this study, we follow principles first developed for the dual-factor model for mental health. The dual-factor model of mental health has shown that two commonly studied indicators of psychological functioning, psychopathology and well-being, should not be seen as simply opposite poles of a single continuum. Rather, individuals might be high in well-being despite reporting high levels of psychological symptoms, or low in psychopathology and still low in well-being (Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008). This insight has contributed to a more nuanced understanding of mental health, as it has become recognized that individuals with these mixed profiles can be distinguished from those with consistent scores on both indicators (Antaramian et al., 2010; Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008).

We propose a similar dual-factor model of social support. This model recognizes that receiving high levels of social support is often due to high levels of seeking — a pattern that reflects high levels of interconnection between a youth and their social environment. Conversely, receiving low levels of support can be due to minimal efforts to get help when needed, reflecting social isolation during times of distress. However, seeking and receiving are conceptually distinct, and therefore two mixed profiles can also occur. One mixed profile is people who seek help but do not receive it, a Rebuffed group. As noted, this group has received some study, although primarily with a focus on openly negative and harmful responses (e.g., Campbell et al., 2001; Foyne & Freyd, 2011; Frison & Eggermont, 2015). Some members of this group might receive minimal assistance or no response. Although much of the research on negative responses to helpseeking has been conducted with adults, this profile seems potentially especially problematic for youth, who will have even less capacity than most adults to access needed resources on their own. The fourth profile has received little, if any study. These are individuals who may be offered considerable social support, despite few efforts to solicit it. This profile might be especially important for youth whose caregivers may try to tend to youths' needs regardless of whether youths do a good job of expressing those needs. We refer to this subgroup as Tended.

Seen through the lens of this dual-factor model of social support, many existing measures of social support produce ambiguous scores. For example, on the MSPSS (Zimet et al., 1988), one of the most commonly used measures of social support, a low score could indicate a problem with poor responses from one's social network, but it could also indicate a problem with helpseeking. Similarly, high scores do not indicate whether the support was sought or simply offered. Other measures have similar problems, for example documenting known available resources (as in Sherbourne & Stewart, 1991) could suggest lack of knowledge, low helpseeking, a poorly resourced community, or any combination of these. Other measures, such as the Child and Adolescent Social Support Scale (Malecki & Demaray, 2002) also focus on available resources, but do not assess helpseeking and are not always clear if support is offered in request for help with a problem, or if these are just generally available relational resources. Further, some items, such as when parents "politely point out my mistakes", may not be perceived as supportive. In terms of guiding prevention and intervention, the results of research with such measures cannot indicate whether it is more important that people seek help or that they be provided with external support.

Given the relative lack of knowledge on the ways that social support seeking and receiving can interact, especially among youth, more research on the relationship between these phenomena is warranted. To help understand the ways that these four groups — Interconnected, Isolated, Rebuffed, and Tended — function in the broader social ecology and can contribute to resilience, the associations of these profiles with other protective factors and indicators of current functioning are needed. The Resilience Portfolio Model (Grych et al., 2015; Hamby, Grych et al., 2018) classifies psychosocial strengths into three domains: regulatory (managing emotions and behaviors), meaning

making (connecting with something larger than oneself), and interpersonal (relationships with the broader social ecology). The Resilience Portfolio Model also points to the need to measure a range of possible outcomes, including psychological, physical, and spiritual well-being.

Current study

The current study examined seeking and receiving social support in a sample of youth from the southern U.S. We classified youth into four groups: Interconnected (high on social support seeking and receiving), Rebuffed (high on social support seeking, low on social support receiving), Tended (low on social support seeking, high on social support receiving), and Isolated (low on social support seeking and receiving) to determine whether these groups differed on 14 psychosocial strengths and six measures of psychological, physical, and spiritual functioning, after controlling for victimization, age, and gender. We predicted that being high on both types of social support (Interconnected) would be associated with higher scores on measures of functioning and highest scores on other psychosocial strengths, consistent with prior research and the Resilience Portfolio Model, while being low on both types (Isolated) would be associated with lower scores on indicators of strengths and well-being. Given the dearth of previous research on the impact of seeking versus receiving social support, we explored the associations of the two mixed profiles (Rebuffed and Tended) with our indicators of strengths and well-being.

Method

Participants

Participants were 440 youth from four states in the southern United States (AL, GA, MS, TN). The sample ranged from 10 to 21 years of age ($M = 16.38$, $SD = 3.04$), and was 61.1% female. Regarding race and ethnic identity, participants identified as 69.9% White or European American (non-Latino), 17.1% Black or African American (non-Latino), 5.6% multiracial, 3.9% Latino, 1.9% American Indian or Alaska Native (non-Latino), and 1.6% Asian (non-Latino). More than half of the sample (61%) lived in a rural area (27.4%) or small town (33.6%), with populations under 20,000. The remaining participants reported living in larger towns (14.1% in towns 20,000-100,000), smaller cities (15% in cities up to 300,000 people), and larger cities or suburbs (9.9%). Median household income for their counties of residence (2016 data, most recent available at time of data collection) was \$47,713.40 ($SD = 11,635.61$), 19% lower than the \$59,039 average for the U.S.

Procedure

Participants were recruited through youth-serving organizations in 2017 and 2018. The youth-serving organizations were recruited from the surrounding community through attending meetings at local health councils (county-level organizations of area non-profits and service agencies) and word-of-mouth. If an organization was interested in participating, they contacted us via email or telephone to organize an agreed upon time and place to complete the survey, typically during one of their regularly scheduled meetings. We collected data from fourteen youth-serving organizations. In compliance with requirements of our funding agency, stipends were offered to youth-serving organizations to support their programming, not individuals. Organizations received a stipend of \$20 per participant. The survey was administered as a computer-assisted self-interview, using the SNAP11 software platform on computer tablets. On average, the survey took approximately 22 minutes to complete. Informed consent, including parental consent for minors, was obtained for all participants. Inclusion criteria included being between 10 and 21 years of age, having parental consent for those under the age of 18, and ability to complete the survey in English. All procedures were IRB approved. The overall completion rate was 92%, which is an excellent result by current survey standards, with some survey completion rates often under 70% and sometimes under 50% (Abt SRBI, 2012; Galesic & Bosnjak, 2009).

Measures

Development and validation of measures. Measures were developed, refined and validated using a mixed-methods procedure (Hamby, Taylor, et al., 2018). One focus of the larger project was to develop and validate brief measures of strengths and well-being that are appropriate for use with youth. Validity was established with moderate correlations with related constructs and was consistent with previous work on resilience portfolio measures (Hamby, Grych, et al., 2018). Unless specified, response categories were on a 4-point Likert scale with 1 denoting “Not true about me” and 4 denoting “Mostly true about me.” Missing data (range 1-3.2%, average 1.1%) were imputed based on responses to other items on same scale. In all cases, higher scores represent higher levels of the construct. Further details on each measure are below.

Social support was measured with 11 items based on input during the qualitative phase of this study (Hamby, Taylor, et al., 2018). We conducted an exploratory factor analysis on these 11 items, using principal axis factoring for the extraction. Two factors were extracted. The first, which we labeled Social Support Seeking, accounted for 46.7% of the variance, had an eigenvalue of 5.14, and included six items that loaded above a cut-off of .4 or higher. The second, which we labeled Social Support Received, accounted for 14.5% of the variance, had an eigenvalue of 1.59, and included the other five items. See Table 1 for individual items and item loadings. The resulting *Social Support Seeking* scale (6 items, $\alpha = .89$) assesses youth’s efforts to attain help and attitudes toward asking for help. The *Social Support Received* scale (5 items, $\alpha = .80$) assesses help or encouragement provided by others in times of distress.

Table 1. Factor Analysis of Social Support Items

Item	Factor Loading		% endorsed “Mostly true”
	Social Support Received	Social Support Seeking	
Someone helped me get my mind off things.	.79		55.2
Someone comforted me.	.73		62.6
Someone was there for me when I was having a hard time.	.63		64.6
Someone gave me a place where I could get away for a while.	.62		42.0
Someone went with me to get some help.	.48		33.5
I feel better when I talk to people about what’s going on.		.80	56.6
It helps me to discuss ideas with someone when I have a problem.		.76	56.0
I talk to someone to help me solve problems.		.75	48.8
Talking it out with someone helps me when I’m upset.		.68	57.9
Talking to someone who has been through the same thing helps me.		.65	58.3
I ask people to help me make tough decisions.		.63	46.0
Eigenvalue	5.14	1.59	
% of variance	46.69	14.45	

These scores were used to create four social support groups, using a median split for each social support scale (up to and including 50th percentile = 0, over 50th percentile = 1), that incorporate youths’ individual helpseeking skills and attitudes (an asset) and the level of outside support offered (resources). The Interconnected group scored high on both seeking and receiving social support. The Tended group scored high on social support receiving, despite low scores on social support seeking. The Rebuffed group also had a mixed profile, with high social support seeking, but only low social support receiving. Finally, the Isolated group had low scores on both social support seeking and receiving. See Table 2 for a depiction of these groups and the percentages in each.

Table 2. Dual-Factor Model of Social Support with Percentage in Each Group in This Sample

Social Support Received	Social Support Seeking	
	Low Seeking	High Seeking
Low Received	Isolated 39% ($n = 172$)	Rebuffed 12% ($n = 53$)
High Received	Tended 16% ($n = 69$)	Interconnected 33% ($n = 146$)

Note. Total $n = 440$.

Regulatory strengths assess various aspects of self-control, especially when confronting difficulties. These scales were developed or adapted via the mixed-methods process described above (Hamby, Taylor, et al., 2018). The *Psychological Endurance Scale* is a simplified, 5-item version of a measure (Hamby, Grych, et al., 2018) to assess one's ability to persevere despite challenges ($\alpha = .69$). A sample item is "When hard times come around, I face them head-on". *Recovering Positive Affect* is 6 items ($\alpha = .81$) that assess the ability to return to a good mood after distress. A sample item is "I can cheer myself up after a bad day." *Self-reliance* measures the ability to cope by using one's own resources (3 items, $\alpha = .81$). A sample item is "I like to solve problems on my own". *Impulse Control* assesses behavioral self-regulation (5 items, $\alpha = .63$). A sample item is "I stop to think before I act".

Meaning making strengths assess ways that individuals seek fulfillment, often by connecting to something larger than themselves (Hamby, Taylor, et al., 2018). *Purpose* (6 items; $\alpha = .88$) involves feeling like one has a sense of meaning in life and a reason for living. Adapted for youth from a previous version (Hamby, Grych, et al., 2018). A sample item is: "My values give my life meaning". *Mattering* (5 items; $\alpha = .86$) measures the extent to which participants felt appreciated and valued by others. Sample item: "I feel appreciated by my family and friends". *Future Orientation* (6 items; $\alpha = .79$) measures the desire for self-improvement. Sample item: "The choices I make today are important for my future". *Relational Motivation* (3 items; $\alpha = .70$) refers to feeling inspired by important people in one's life. Sample item: "I want the people in my life to be proud of me". *Religious Meaning-making* (6 items; $\alpha = .94$) assesses individuals' engagement in faith and religious/spiritual practices and was adapted for youth from a previous version (Hamby, Grych, et al., 2018). Sample item: "When dealing with a problem, I ask others to pray for me".

Interpersonal strengths include the participants' relational skills and also indicators of support from their larger social environment. *Compassion* (Hamby, Grych, et al., 2018) measures how people engage with others in a caring and helpful way (4 items, $\alpha = .80$). A sample item is "When others feel sad, I try to comfort them". *Community Support* (Roberts et al., 2015) is six items that assess the degree to which one's neighbors get along and helps one another ($\alpha = .80$). A sample item is "People in my neighborhood offer help to one another". The remaining interpersonal scales were developed via the mixed-methods process described above and were designed to capture additional aspects of youths' social ecology (Hamby, Taylor, et al., 2018). *Group Connectedness* (6 items, $\alpha = .80$) assesses feelings of closeness and support from peer groups. A sample item is "I have belonged to a group or team with people who stand up for me". *School Climate* (6 items, $\alpha = .78$) measures characteristics of healthy school environments, such as "My school building is in good condition". *Teacher Engagement* (5 items, $\alpha = .86$) assesses youths' experiences with enthusiastic and caring teachers. A sample item is "I had a teacher who wanted me to do well in school".

Poly-victimization was assessed with the *Juvenile Victimization Questionnaire (JVQ)—Key Domains Short Form*, which includes 10 items assessing lifetime history of a range of interpersonal victimizations adapted from the full JVQ (Finkelhor et al., 2005; Hamby, Taylor, et al., 2018). A sample item is "During your childhood, did one of your parents threaten to hurt another parent and it seemed they might really get hurt?". Dichotomous items ("yes" or "no") were summed to create a total victimization score ($\alpha = .73$). The median number of victimizations reported by youth was 3, with a mean of $M = 3.40$ ($SD = 2.43$). More than 3 out of 4 youth in this sample (75.9%) reported two or more forms of victimization, and almost 9 in 10 (89.3%) youth reported at least one victimization.

Current Functioning. Several indicators were examined to assess current functioning. In order to assess multiple aspects of well-being, measures were adopted to assess psychological, physical, and spiritual well-being and functioning. *Trauma Symptoms* (8 items, $\alpha = .91$) assessed a range of feelings of dysphoria, anxiety, or guilt (Hamby, Taylor, et al., 2018). A sample item is "Feeling worried or anxious in the last month". Higher scores indicate more symptoms. *Health-related Quality of Life* (HRQOL; 5 items, $\alpha = .64$) is based on the CDC measure (Centers for Disease Control and Prevention, 2000), simplified and adapted to assess physical well-being (Banyard et al., 2017). Sample item: "During the last month, for about how many days did your health stop you from doing your usual activities, like going to school or spending time with friends?". Higher scores on this index indicate better health-related quality of life in the month prior to the survey. *Subjective Well-being* (7 items, $\alpha = .90$) assesses general life satisfaction from a strengths-based perspective, versus the absence of mental health symptoms (Hamby, Grych, et al., 2018). A sample item is "I feel really good about my life". Other measures of well-being were developed via the mixed methods process previously described (Hamby, Grych, et al., 2018). *Family Well-being* (7 items, $\alpha = .90$) assessed the subjective well-being of one's immediate family and other relatives who live with the child. Sample item: "My family is happy". *Spiritual Well-being* included both a *Theistic* subscale (5 items, $\alpha = .95$) and a *Non-theistic* subscale (5 items, $\alpha = .82$). The Theistic subscale assesses well-being from a sense of god or similar higher power. A sample item is: "I feel better when I talk to god or a

higher power". The Non-theistic subscale captures a similar sense of awe or well-being from less religious sources, such as connectedness to nature. A sample item is "I feel all living things are connected".

Data analysis

To facilitate comparisons across measures, all scale scores were standardized by being converted to Z-scores (mean converted to 0 with a standard deviation of 1). Descriptive statistics were used to characterize the sample. Analyses of covariance (ANCOVAs) were used to examine differences between the four social support groups, Interconnected, Rebuffed, Tended, and Isolated, followed by post-hoc comparisons of means. Age, gender, and poly-victimization were included as covariates, and the psychosocial strengths and indicators of current functioning were the dependent variables.

Results

Social support experiences

Many forms of social support were reported by substantial proportions of youth in this sample. The most highly endorsed item of the 11 items was "Someone was there for me when I was having a hard time", with 64% of the sample saying that was "mostly true" about them. The least endorsed item was also on the Social Support Received scale: "Someone went with me to get some help", which only 33.5% said was "mostly true." On the Social Support Seeking scale, the most highly endorsed item was "Talking to someone who has been through the same thing helps me", with 58% saying that was "mostly true." Other forms of social support seeking were less common, with fewer than half of youth saying that it was "mostly true" that they "ask people to help me make tough decisions" (46%) and "talk to someone to help me solve problems" (49%).

Four social support groups and other strengths

ANCOVAs revealed numerous significant differences in psychosocial strengths among the four social support groups, after controlling for age, gender, and poly-victimization.

Regulatory strengths. We first examined differences in individual regulatory strengths across the four social support groups: Interconnected, Rebuffed, Tended, and Isolated. There were significant differences for all four regulatory strengths, $p < .01$. See Table 3. For endurance and recovering positive affect, youth in the Interconnected and Rebuffed groups, which were similar to each other, had higher scores than youth in the Isolated and Tended groups. The Isolated and Tended groups were not significantly different from each other. For self-reliance, the pattern was similar, but the Rebuffed group was not different than any other. For impulse control, only the Interconnected group reported significantly higher impulse control than other groups. The pattern of scores was similar for all four variables, with the Isolated group showing the lowest score on all four strengths, and the Tended group the second lowest. The Interconnected group had the highest scores, except for Endurance, for which the Rebuffed group was slightly (but not significantly) higher. For all paired comparisons, $p < .05$.

The covariates were significant in some of these analyses. For age, older youth reported higher levels of endurance, $p < .05$, and impulse control, $p < .01$. For gender, male youth reported higher levels of endurance, $p < .05$, and recovering positive affect, $p = .001$. Regarding poly-victimization, lower levels of victimization were associated with better impulse control, $p < .001$, and recovering positive affect, $p < .001$.

Meaning making strengths. For meaning making strengths, there were significant differences across social support groups for all five meaning making strengths, $p < .001$. Also see Table 3. Comparisons of the means indicated that the Isolated group was significantly lower than the three other groups for every strength except for future orientation, which showed the same pattern found for endurance and recovering positive affect, with both the Isolated and Tended groups scoring significantly lower than the Interconnected and Rebuffed groups. For a sense of purpose and religious meaning making, Interconnected youth who both sought and received help reported significantly more meaning than other youth. However, for mattering and relational motivation, while Isolated youth reported the lowest scores, the other three groups were not significantly different from each other. All pairwise comparisons were significant, $p < .05$.

For the covariates, age was significant for future orientation, $p < .05$, and religious meaning making, $p < .01$, with participants reporting more future orientation and less religious meaning making as they age. Lower levels of

poly-victimization were significantly associated with higher levels of mattering, $p < .001$, purpose, $p < .001$, and relational motivation, $p = .01$.

Table 3. Means and Standard Errors for Psychosocial Strengths and Well-being as a Function of Social Support Group

	Isolated <i>M</i> (<i>SE</i>)	Tended <i>M</i> (<i>SE</i>)	Rebuffed <i>M</i> (<i>SE</i>)	Interconnected <i>M</i> (<i>SE</i>)	<i>F</i>	η^2
Regulatory Strengths						
Recovering Positive Affect	-.29 (.07) _a	-.19 (.11) _a	.14 (.13) _b	.38 (.08) _b	13.90 ***	.09
Endurance	-.28 (.08) _a	-.05 (.12) _a	.32 (.13) _b	.26 (.08) _b	9.74 ***	.06
Impulse Control	-.22 (.07) _a	-.02 (.11) _a	.07 (.13) _a	.26 (.08) _b	6.38 ***	.04
Self-reliance	-.20 (.08) _a	-.07 (.12) _a	.03 (.14) _{a,b}	.24 (.08) _b	5.14 **	.04
Meaning Making Strengths						
Mattering	-.45 (.07) _a	.17 (.10) _b	.17 (.12) _b	.39 (.07) _b	26.04 ***	.16
Purpose	-.42 (.07) _a	-.03 (.11) _b	.15 (.13) _b	.45 (.08) _c	23.47 ***	.14
Religious Meaning Making	-.33 (.07) _a	.04 (.12) _b	.00 (.13) _b	.37 (.08) _c	13.72 ***	.09
Future Orientation	-.31 (.07) _a	-.10 (.11) _a	.26 (.13) _b	.34 (.08) _b	13.37 ***	.09
Relational Motivation	-.34 (.07) _a	.04 (.12) _b	.20 (.13) _b	.31 (.08) _b	12.46 ***	.08
Interpersonal Strengths						
Teacher Engagement	-.43 (.07) _a	.19 (.11) _b	.14 (.13) _b	.35 (.08) _b	18.77 ***	.12
Compassion	-.36 (.07) _a	-.02 (.11) _b	.23 (.13) _{b,c}	.35 (.08) _c	15.81 ***	.10
School Climate	-.33 (.07) _a	.08 (.11) _b	.04 (.13) _b	.37 (.08) _c	14.88 ***	.10
Community Support	-.34 (.07) _a	.01 (.11) _b	.12 (.13) _{b,c}	.35 (.08) _c	13.52 ***	.09
Group Connectedness	-.30 (.08) _a	-.03 (.12) _b	.24 (.13) _{b,c}	.29 (.08) _c	10.57 ***	.07
Well-being Indicators						
Subjective Well-being	-.47 (.07) _a	.19 (.11) _b	.01 (.12) _b	.45 (.07) _c	28.22 ***	.17
Spiritual Well-being Non-theistic	-.42 (.07) _a	-.15 (.11) _b	.19 (.13) _c	.49 (.08) _d	24.87 ***	.15
Spiritual Well-being Theistic	-.41 (.07) _a	.11 (.11) _b	.04 (.13) _b	.40 (.08) _c	18.84 ***	.12
Family Well-being	-.29 (.07) _a	.08 (.11) _{b,c}	-.03 (.12) _{a,b}	.31 (.08) _c	11.77 ***	.08
Physical Well-being	-.21 (.07) _a	.11 (.11) _b	.03 (.13) _{a,b}	.17 (.08) _b	4.55 **	.03
Trauma Symptoms	-.06 (.07) _a	.10 (.11) _a	-.10 (.13) _a	.04 (.08) _a	.78	.01

Note. *** $p < .001$; ** $p < .01$. Means with different subscripts are significantly different from each other, $p < .05$. All means have been converted to z-scores (mean = 0; $SD = 1$), with higher scores indicating higher levels of each strength. Means and standard errors are adjusted for age, gender, and victimization history.

Interpersonal strengths. Each of the interpersonal strengths showed a similar pattern to regulatory and meaning making strengths, with the Isolated group reporting the lowest level of interpersonal strengths, the Interconnected group the highest, and the Rebuffed and Tended groups in the middle, with the Rebuffed group looking more similar to the Interconnected group than the Tended group. All five ANCOVAs for interpersonal strengths were significant, $p < .001$. See Table 3. For community support, compassion, and group connectedness, the Rebuffed group was statistically similar to the Interconnected group, while the Tended group was significantly lower (for pairwise comparisons, $p < .05$). This may suggest that youth who are not receiving social support may be seeking group connections or developing compassion for others to make up for that. For teacher engagement, the Isolated group was significantly lower than the other three, which were statistically similar to each other.

Age was a significant covariate for compassion, $p = .01$, and school climate, $p = .001$, with older participants reporting more compassion and greater school climate than younger participants. Gender was a significant covariate for compassion, $p < .001$, with females reporting higher compassion than males. Poly-victimization was also a significant covariate for community support, $p = .01$, and school climate, $p < .001$, with participants reporting higher scores when victimization was lower than when it was higher.

Four social support groups and current functioning

The social support groups varied on five out of six indicators of well-being, $p < .01$, except for trauma symptoms, which was not significant. Although the Rebuffed group, overall, reported doing better than the Tended group on all three domains of psychosocial strengths (regulatory, meaning making, and interpersonal), this pattern was not observed in well-being measures except for non-theistic spiritual well-being. Although both mixed groups again fell between the Isolated and Interconnected groups on all measures of functioning, for the most part scores were slightly (nonsignificantly) higher for the Tended group than the Rebuffed group. Somewhat surprisingly, there were no significant differences for trauma symptoms. Non-theistic spiritual well-being was the only variable for which all four groups were significantly different from each other. See Table 3.

Age was a significant covariate for trauma symptoms, $p < .05$, and spiritual well-being theistic, $p < .01$, with older participants reporting more trauma symptoms and less theistic well-being than younger participants. Gender was a significant covariate of physical well-being, $p < .05$, and trauma symptoms, $p < .05$, with males reporting better physical well-being than females and females reporting more trauma symptoms than males.

Poly-victimization was a significant covariate for subjective well-being, family well-being, and physical well-being (all at $p < .001$), with participants reporting higher well-being scores when poly-victimization was low than when reported victimization was high. Poly-victimization also showed a positive association with trauma symptoms ($p = .05$) and non-theistic spiritual well-being ($p < .05$).

Discussion

As far as we are aware, this study is the first to explore the impact of both seeking and receiving social support for youth, using a dual-factor approach. We examined four groups: Interconnected youth, who scored high on social support seeking and receiving; Isolated youth, who reported low on social support seeking and receiving; a Rebuffed group that reported high social support seeking but low receiving; and a Tended group that scored high on social support receiving despite low scores on social support seeking. This latter group, particularly relevant for youth who may have caregivers, teachers or other adults who are attempting to look out for them even if they do not easily express their needs, has received little prior research attention. Prior work on the dual-factor model of mental health revealed nuances not apparent by examining only psychopathology or well-being as separate constructs (Antaramian et al., 2010; Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008). Similarly, this dual-factor approach to social support can integrate findings from previously siloed bodies of work on social support and helpseeking, and provide insights that can better guide future research, prevention, and intervention.

Largely as predicted and consistent with the Resilience Portfolio Model and prior research (Chu et al., 2010; Grych et al., 2015), the Interconnected youth scored significantly higher than the Isolated group on every psychosocial strength and every indicator of current functioning except for trauma symptoms. The average difference between these two groups was .65 standard deviations (using z-scores). There was some variability in the patterns of significance in these groups compared to the two mixed profiles, but the Rebuffed and Tended groups generally fell between these two and were significantly different from both the Interconnected and Isolated groups on numerous variables, including purpose, religious meaning making, school climate, subjective well-being, family well-being, and theistic and non-theistic spiritual well-being.

Notably, the Rebuffed group reported higher levels of some psychosocial strengths than the Tended group, including recovering positive affect, endurance, and future orientation. The Rebuffed group also reported higher non-theistic spiritual well-being than the Tended group. The Tended group was never significantly higher than the Rebuffed group. Overall, the Rebuffed group was similar to the Interconnected group on most psychosocial strengths (statistically indistinguishable on 10 of 14). On average, the Rebuffed group was .19 standard deviations below the Interconnected group. In contrast, the Tended group was often lower than the Interconnected group (significantly lower on 11 of 14 strengths), averaging scores that were .34 standard deviations below the Interconnected group. However, although the differences did not achieve statistical significance, this pattern varied for most well-being variables (all except non-theistic spiritual well-being), with the Tended group reporting slightly but not statistically higher well-being than the Rebuffed group. Both the Tended and Rebuffed groups were significantly lower than the Interconnected group for three of the well-being variables: subjective well-being and both forms of spiritual well-being.

The Resilience Portfolio Model acknowledges that although denser and more diverse portfolios of strengths are good, not everyone has every asset or resource. Regarding the question of whether seeking or receiving support is better, these results suggest that individual skills and attitudes may be more helpful to youth than external offers of support. There is an old adage in psychotherapy that says, “Never work harder than your client”, and it is possible that offering social support when a youth has not sought help or may even resist acknowledging the need for help is counterproductive. This may be a particularly salient issue for youth who have less control over when and how they seek psychotherapy and other health care services. This remains an understudied phenomenon that needs more attention.

Another possibility is that Rebuffed youth are steeling themselves, that is trying to strengthen themselves or reduce their vulnerabilities (Rutter, 2012), in response to an environment that offers little support, whether due to lack of resources or due to neglectfulness or hostility. This is reflected in the nature of the strengths that most distinguished the Rebuffed and Tended groups. Higher future orientation may be due to motivation to escape a dysfunctional environment, and higher endurance could indicate youth toughening themselves to survive harsh circumstances. The steeling hypothesis is also supported by the somewhat different pattern observed in the well-being measures, which showed relatively little benefit to Rebuffed youth for their higher scores on numerous strengths, because their current well-being was more similar to the Tended group than the Interconnected group.

These results are largely consistent with other literature finding a positive association between social support and current functioning among youth (Chu et al., 2010). As has been noted (Chu et al., 2010), past research on social support, although consistent with an overall positive effect, has also been more mixed than many anticipated and the findings here suggest one explanation for that. Although prior research has studied different types of social support (degree of support from different sources and access to different types of resources), few have studied patterns of seeking and receiving, and we are aware of no other studies that have examined an equivalent to the Tended group in this study. Although prior research has studied the association between social support and other indicators of the social ecology (Turner et al., 2017), the results of this study suggest that links between social support and other strengths is not limited to environmental indicators such as school climate or community support, but extends to other domains of strengths. Results for the covariates were largely in line with prior research, with many factors improving with age (with the exception that religious ones generally decline during this developmental period), and more scattered results for gender differences (Hagler et al., 2016; Hamby et al., 2017). The finding that poly-victimization is inversely associated with many strengths and indicators of current functioning is consistent with prior research (e.g., Hamby, Grych, et al., 2018; Turner et al., 2017).

One question raised by these data is the extent to which a proclivity towards seeking social support should be conceived of as an individual strength versus an exclusively relational phenomenon. Many measures and models of social support focus on external resources, such as the size of social networks, the range of accessible resources, the amount of support provided, or satisfaction with provided support (Barrera, 1986; Sarason et al., 1983; Sherbourne & Stewart, 1991; Zimet et al., 1988), and do not emphasize what individuals do to foster social relationships or solicit assistance. It appears from these data that both are needed for optimum benefit, and that individual actions and attitudes may be more important to youth functioning than what is provided from the outside.

Strengths and limitations

The results of this study should be evaluated in consideration of the strengths and limitations of the project. This project expands research on social support by separating social support seeking from receiving and including a focus on youth who may receive high levels of support from others despite low levels of seeking. The project also expands the number of other characteristics and indicators of well-being that have been studied in relation to social support. Further, the study expands information on social support in predominantly low-income communities in the southern U.S. Nonetheless, it would be valuable to replicate these findings in other groups and in other regions of the country and the world. This was a cross-sectional study, which is an appropriate and cost-effective means of exploring new ideas, but the results would benefit from replication in a longitudinal study.

Research implications

This dual-factor model of social support is a promising approach for expanding our understanding about how to help youth who have experienced adversity. Future research can do more to explore why differences were found for some forms of well-being, such as subjective well-being and spiritual well-being, but not physical well-being or trauma symptoms. It would also be worth exploring in future studies with larger or more diverse samples whether the dual-factor model varies across age, racial and ethnic identity, gender, sexual orientation, or other characteristics. Future research could incorporate multiple informants or other data sources and adopt different sampling frames. It would also be useful to explore how the dual-factor model of social support might vary for formal versus informal helpseeking. Future research needs to do more than just examine different indicators of social support or the social ecology and study the ways that these various factors can combine to influence youths' well-being and resilience.

Implications for intervention and prevention

Parents, teachers, therapists, and others who work with adolescents who, for whatever reason, may be unable or unwilling to express their needs and seek support, may wonder whether it is better to guess those needs and try to meet them, or better to encourage youth to reach out and talk about their needs with others. The current study finds that strong social support seeking skills and attitudes are positively related to indicators of psychosocial strengths and current functioning, suggesting perhaps the latter strategy may yield longer-term benefits. The results of this study suggest that it is more important to encourage helpseeking and positive attitudes towards sharing, disclosure, and getting advice, than to just provide support to youth whether they want it or not. Of course, there are legal obligations to assist youth in some circumstances. Techniques such as motivational interviewing (Arkowitz et al., 2015), which emphasizes engaging clients, may be one evidence-based approach for working with youth who may need help (from an adult perspective) but have not sought it.

These data also indicate that both seeking and receiving social support are needed for the highest levels of functioning on a wide range of measures. Providers and communities need to ensure that when youth do seek social support, that they receive it, especially when families and peers may be unresponsive. Multidisciplinary approaches, such as children's advocacy centres, are one approach that is designed to improve the quality of response to victimization, but more research is needed on the elements that most improve the social ecology of youth (Elmqvist et al., 2015). A healthy social ecology means optimal functioning of individuals, families, and communities.

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Conflict of interest

The authors have no conflict of interest to disclose.

References

- Abt SRBI. (2012). *Second national survey children's exposure to violence (NatSCEV II): Methods report*. Retrieved from https://www.bjs.gov/content/pub/pdf/natscev2_mr.pdf
- Antaramian, S. P., Scott Huebner, E., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *American Journal of Orthopsychiatry*, 80(4), 462-472. <https://doi.org/10.1111/j.1939-0025.2010.01049.x>
- Arkowitz, H., Miller, W. R., & Rollnick, S. (2015). *Motivational interviewing in the treatment of psychological problems*. Guilford Press.
- Banyard, V., Hamby, S., & Grych, J. (2017). Health effects of adverse childhood events: Identifying promising protective factors at the intersection of mental and physical well-being. *Child Abuse & Neglect*, 65, 88-98. <https://doi.org/10.1016/j.chiabu.2017.01.011>
- Barrera, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology*, 14(4), 413-445. <https://doi.org/10.1007/BF00922627>
- Barrett, B. J., & Pierre, M. S. (2011). Variations in women's help seeking in response to intimate partner violence: Findings from a Canadian population-based study. *Violence Against Women*, 17(1), 47-70. <https://doi.org/10.1177/1077801210394273>

- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Bundock, K., Chan, C., & Hewitt, O. (2020). Adolescents' help-seeking behavior and intentions following adolescent dating violence: A systematic review. *Trauma, Violence, & Abuse, 21*(2), 350-366. <https://doi.org/10.1177/1524838018770412>
- Campbell, R., Wasco, S. M., Ahrens, C. E., Sefl, T., & Barnes, H. E. (2001). Preventing the "second rape" rape survivors' experiences with community service providers. *Journal of Interpersonal Violence, 16*(12), 1239-1259. <https://doi.org/10.1177/088626001016012002>
- Centers for Disease Control and Prevention. (2000). *Measuring health days: Population assessment of health-related quality of life*. CDC.
- Chan, W. Y., Hollingsworth, M. A., Espelage, D. L., & Mitchell, K. J. (2016). Preventing violence in context: The importance of culture for implementing systemic change. *Psychology of Violence, 6*(1), 22-26. <https://doi.org/10.1037/vio0000021>
- Chu, P. S., Saucier, D. A., & Hafner, E. (2010). Meta-analysis of the relationships between social support and well-being in children and adolescents. *Journal of Social and Clinical Psychology, 29*(6), 624-645. <https://doi.org/10.1521/jscp.2010.29.6.624>
- Clara, I. P., Cox, B. J., Enns, M. W., Murray, L. T., & Torgrud, L. J. (2003). Confirmatory factor analysis of the multidimensional scale of perceived social support in clinically distressed and student samples. *Journal of Personality Assessment, 81*(3), 265-270. https://doi.org/10.1207/S15327752JPA8103_09
- Conners-Burrow, N. A., Kramer, T. L., Sigel, B. A., Helpenstill, K., Sievers, C., & McKelvey, L. (2013). Trauma-informed care training in a child welfare system: Moving it to the front line. *Children and Youth Services Review, 35*(11), 1830-1835. <https://doi.org/10.1016/j.chidyouth.2013.08.013>
- Elmquist, J., Shorey, R. C., Febres, J., Zapor, H., Klostermann, K., Schratter, A., & Stuart, G. L. (2015). A review of children's advocacy centers' (CACs) response to cases of child maltreatment in the United States. *Aggression and Violent Behavior, 25*, 26-34. <https://doi.org/10.1016/j.avb.2015.07.002>
- Finkelhor, D., Hamby, S. L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: reliability, validity, and national norms. *Child Abuse & Neglect, 29*(4), 383-412. <https://doi.org/10.1016/j.chiabu.2004.11.001>
- Finkelhor, D., Vanderminden, J., Turner, H., Shattuck, A., & Hamby, S. (2014). Youth exposure to violence prevention programs in a national sample. *Child Abuse & Neglect, 38*(4), 677-686. <https://doi.org/10.1016/j.chiabu.2014.01.010>
- Foyne, M. M., & Freyd, J. J. (2011). The impact of skills training on responses to the disclosure of mistreatment. *Psychology of Violence, 7*(1), 66-77. <https://doi.org/10.1037/a0022021>
- Frison, E., & Eggermont, S. (2015). The impact of daily stress on adolescents' depressed mood: The role of social support seeking through Facebook. *Computers in Human Behavior, 44*, 315-325. <https://doi.org/10.1016/j.chb.2014.11.070>
- Fritz, J., de Graaff, A. M., Caisley, H., Van Harmelen, A.-L., & Wilkinson, P. O. (2018). A systematic review of amenable resilience factors that moderate and/or mediate the relationship between childhood adversity and mental health in young people. *Frontiers in Psychiatry, 9*(230). <https://doi.org/10.3389/fpsy.2018.00230>
- Galesic, M., & Bosnjak, M. (2009). Effects of questionnaire length on participation and indicators of response quality in a web survey. *Public Opinion Quarterly, 73*, 349-360. <https://doi.org/10.1093/poq/nfp031>
- Green Spoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research, 54*(1), 81-108. <https://doi.org/10.1023/A:1007219227883>
- Grych, J., Hamby, S., & Banyard, V. (2015). The resilience portfolio model: Understanding healthy adaptation in victims of violence. *Psychology of Violence, 5*(4), 343-354. <https://doi.org/10.1037/a0039671>
- Hagler, M., Grych, J., Banyard, V., & Hamby, S. (2016). The ups and downs of self-regulation: Tracing the patterns of regulatory abilities from adolescence to middle adulthood in a rural sample. *Journal of Rural Mental Health, 40*(3-4), 164-179. <https://doi.org/10.1037/rmh0000053>
- Hamby, S., Grych, J., & Banyard, V. (2018). Resilience portfolios and poly-strengths: Identifying protective factors associated with thriving after adversity. *Psychology of Violence, 8*(2), 172-183. <https://doi.org/10.1037/vio0000135>
- Hamby, S., Segura, A., Taylor, E., Grych, J., & Banyard, V. (2017). Meaning making in rural appalachia: Age and gender patterns in seven measures of meaning. *Journal of Happiness and Well-being, 5*(2), 168-186.
- Hamby, S., Taylor, E., Smith, A., & Blount, Z. (2018). *Resilience portfolio questionnaire manual: Scales for youth*. Sewanee, TN: Life Paths Research Center. <https://doi.org/10.13140/RG.2.2.27296.74243>
- Kelly, J. G. (1968). Towards an ecological conception of preventive interventions. In J. W. Carter (Ed.), *Research contributions from psychology to community mental health* (pp. 75-99). Behavioral Publications.
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist, 63*(6), 518. <https://doi.org/10.1037/0003-066X>

- Malecki, C. K., & Demaray, M. K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the Schools, 39*(1), 1-18. <https://doi.org/10.1002/pits.10004>
- Roberts, L. T., Hamby, S., Banyard, V. L., & Grych, J. (2015). Beyond collective efficacy: New brief measures to assess the outer layers of the social ecology. *American Journal of Psychology and Behavioral Sciences, 2*(2), 14-23.
- Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology, 24*(2), 335-344. <https://doi.org/10.1017/S0954579412000028>
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*(5328), 918-924. <https://doi.org/10.1126/science.277.5328.918>
- Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The social support questionnaire. *Journal of Personality and Social Psychology, 44*(1), 127-139. <https://doi.org/10.1037/0022-3514.44.1.127>
- Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine, 32*(6), 705-714. [https://doi.org/10.1016/0277-9536\(91\)90150-B](https://doi.org/10.1016/0277-9536(91)90150-B)
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review, 37*(1), 52-68. <https://doi.org/10.1080/02796015.2008.12087908>
- Sullivan, T. P., Schroeder, J. A., Dudley, D. N., & Dixon, J. M. (2010). Do differing types of victimization and coping strategies influence the type of social reactions experienced by current victims of intimate partner violence? *Violence Against Women, 16*(6), 638-657. <https://doi.org/10.1177/1077801210370027>
- Trickett, E., Kelly, J. G., & Vincent, T. (1983). The spirit of ecological inquiry in community research. In D. Klein & E. Susskind (Eds.), *Knowledge building in community psychology* (pp. 283-333). Praeger.
- Turner, H. A., Shattuck, A., Finkelhor, D., & Hamby, S. (2017). Effects of poly-victimization on adolescent social support, self-concept, and psychological distress. *Journal of Interpersonal Violence, 32*(5), 755-780. <https://doi.org/10.1177/0886260515586376>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52*(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2