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# SOCIAL SUPPORT: WHO AND WHAT TYPES MATTER FOR EARLY ADOLESCENTS' LIFE SATISFACTION

by

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#### **ABSTRACT**

Trends in current psychological research suggest an increasing interest in indicators of well-being in youth, such as life satisfaction (LS). Studies indicate a strong association between LS and social support from different sources within an early adolescent's social network. However, the unique contributions of specific types of supportive behaviors (within sources of social support) as they relate to development of early adolescent global LS have been largely overlooked. The current study sought to examine the unique contributions of social support types (emotional, appraisal, informational, instrumental) within three sources of support (parent, teacher, peer) to global LS in a sample of 1732 middle school students from four schools in a southeastern U.S. state. This study also investigated gender as a potential moderator between social support (sources and types within sources) and global LS. After controlling for age and socioeconomic status, multiple regression analyses demonstrated unique differences between social support types within sources for each social support source, apart from appraisal support, which was not found to be statistically significant within any source of support. Notably, no statistically significant interaction was demonstrated between gender and social support source or between gender and social support types within each source of social support. Such findings may positively inform social support interventions aimed at improving youth outcomes.

## TABLE OF CONTENTS

Abstract	iii
List of Tables	V
Chapter 1: Introduction	1
Chapter 2: Method	19
Chapter 3: Results	24
Chapter 4: Discussion	45
References	51

## LIST OF TABLES

Table 2.1 Descriptive Statistics of Sample	23
Table 3.1 Descriptive Statistics for Variables	28
Table 3.2 Correlations Between Life Satisfaction and Sources of Social Support	29
Table 3.3 Correlations Between Life Satisfaction and Types of Social Support	30
Table 3.4 Regression Analyses: Sources of Social Support	31
Table 3.5 Hierarchical Regression Analyses: Gender and Sources of Social Support	32
Table 3.6 Regression Analyses: Types of Social Support within Sources of Social Support	34
Table 3.7 Hierarchical Regression Analyses: Gender and Types of Parent Social Support	36
Table 3.8 Hierarchical Regression Analyses: Gender and Types of Teacher Social Support	39
Table 3.9 Hierarchical Regression Analyses: Gender and Types of Peer Social Support	42

#### CHAPTER 1

#### INTRODUCTION

Psychology has traditionally focused on the study and treatment of psychopathological dysfunctions. However, recent shifts in the field have led to increased interest in promotion of healthy states like happiness. Subjective well-being, or happiness, is a term coined by Diener (1984) defining happiness in a way that allows it to be empirically measured. Subjective well-being is informed by one's emotional and cognitive evaluations of her or his quality of life (Diener, Oishi & Lucas, 2003), or life satisfaction. Life satisfaction is one of the most commonly assessed components of subjective well-being as it tends to be the most stable component (Suldo, 2016, p. 30) and is a major predictor of well-being and youth happiness (Suldo, 2016, p. 5). Current literature has investigated some aspect of the association between social support and youth life satisfaction (e.g., sources of support), but has neglected to explore the contribution of distinct types of supportive behaviors (within sources of support) to life satisfaction in developing youth.

#### **Literature Review**

#### Life Satisfaction

Life satisfaction (LS) describes individuals' evaluations of their lives as a whole, rather than a momentary feeling of positive or negative affect, and is understood as the cognitive appraisal of the elements of one's life that one considers valuable (Diener,

1984). Factors that have been shown to influence LS include: race, education level, poverty, life events, and age; as these factors may include characteristics highly valued in society or impact the amount of favorable events one may experience (del Mar Salinas-Jiménez, Artes, & Salinas-Jiménez, 2001; Tay, Morrison, & Diener, 2014). Research conducted with adult populations indicates that high levels of global LS are predictive of positive life outcomes such as longevity (Gana, et al., 2016), physical health outcomes (Habibov & Afandi, 2016), income, psychological well-being, and high-quality interpersonal relationships (Lyubomirsky, King, & Diener, 2005). Additionally, low levels of global LS are associated with negative life outcomes. For example, Rissanen and colleagues (2013) found that low levels of LS are associated with adverse health outcomes (e.g., metabolic syndrome, cardiovascular risk factors, lower serum adiponectin levels, and poor sleep), health behaviors (e.g., smoking), and social factors (e.g., social support and marital status), with poor social support as the strongest correlate of low levels of global LS.

In recent years, research interest in global LS has expanded into studies emphasizing youth well-being. Findings indicate global LS as an important predictor of youth outcomes and functioning, in addition to known associations of global LS and outcomes in the adult literature. Global LS is a principal indicator of well-being in research on youth happiness (Suldo, 2016, p.5), correlating with school engagement and student academic performance (Lyons & Huebner, 2016), having a positive reciprocal causal relation with student GPA (Ng, Huebner, & Hills, 2015), and serving as a protective factor in the face of stressful life events (Suldo & Huebner, 2004). LS predicts

additional important outcomes among youth, including classroom behavior and mental health outcomes (Lyons, Otis, Huebner, & Hills, 2014).

#### Antecedents of Life Satisfaction in Youth

LS is associated with a range of identified antecedents that demonstrate positive and negative relationships in adolescents. These include such factors as personal characteristics (i.e., personality, self-esteem, locus of control), demographic differences (i.e., gender, age, race), and environmental experiences. For example, high levels of LS in youth are associated with extraversion, sense of purpose in life, and active coping (see Huebner, 2004 for a review).

#### Personal Characteristics

Personal characteristics are strongly associated with adolescent LS. Review of research reveals personality characteristics (temperament) as one of the strongest predictors of global LS. Suldo and colleagues (2015) found that adolescents' levels of Big Five personality factors accounted for approximately 47% of mean levels of global LS. Neuroticism (inversely) has emerged as the strongest predictor of global LS, with correlations in the .40-.60 range in adolescents in the US (Suldo, Minch, & Hearon, 2015; Weber & Huebner, 2015). Strong correlations (.40-.60) have also been indicated for the relation of global self-esteem and LS (Dew & Huebner, 1994; Gilman, Huebner, & Laughlin, 2000; Huebner, 1991b), and for internal locus of control and LS, with correlations in the .40-.50 range (Ash & Huebner, 2001; Dew & Huebner, 1994; Gilman, Huebner, & Laughlin, 2000).

#### Demographic Variables

Demographic variables explored in the literature on youth LS include: gender, age, socioeconomic status (SES), and race. Research reveals that associations between adolescent global LS and demographic variables within nations are modest at best. A pattern of invariant global LS has been demonstrated across age, gender, SES, and race (see Gilman & Huebner, 2003 or Huebner, 2004 for a review).

Specifically, studies assessing gender differences in mean levels of LS within US populations have demonstrated non-significant effects for gender. Huebner, Drane, and Valois (2000) investigated the association of demographic factors and LS for 5,545 adolescents in a southeastern US state, and no gender differences in LS were found. McCullough and Huebner (2003) also found that LS did not differ as a function of gender when examining LS in adolescents with learning disabilities and normally achieving adolescents. Huebner, Suldo, Valois, & Drane (2006) replicated similar results of non-significant effects for gender on LS with data collected from 2,987 adolescents. However, results did indicate statistically significant differences between grade levels, with sixth graders reporting higher global LS scores than seventh and eight graders, though the magnitudes of these differences were small (0.14 and 0.25, respectively).

Furthermore, studies assessing gender have also examined age and have demonstrated mixed results. Several studies have indicated no significant differences in global LS related to gender and age in high school-aged adolescents (Dew & Huebner, 1994; Huebner, Drane, & Valois, 2000), while others have indicated significant differences in global LS related to both variables in early adolescence. For example,

Gonzalez-Carrasco and colleagues (2017) found decreasing LS with increasing age in a sample of 940 Spanish adolescents aged 10 to 15 and Goldbeck and colleagues (2007) found a significant decrease in general LS between the ages of 11 and 16 years in a sample of 1,274 German adolescents. Additionally, both studies indicated higher mean scores reported by males.

Similar to gender, mixed results are also demonstrated regarding the relationship of SES and global LS in adolescents. Some studies indicate no differences across levels of SES, whereas some studies suggest small to moderate (Dew & Huebner, 1994) differences in LS where higher mean levels of LS are reported by youth of higher SES (see Gilman & Huebner, 2003 for a review). Notably, homeless youth report significantly lower LS than non-homeless (Bearsley & Cummins, 1999), suggesting that economic resources beyond basic needs may not significantly influence youth LS (Gilman & Huebner, 2003).

Non-significant differences have been replicated for adolescent LS across the literature regarding race (see Gilman & Huebner, 2003 or Huebner, 2004 for a review), though mixed findings are present. Several studies indicate moderate differences between African American and Caucasian youth, favoring Caucasians (Dew & Huebner, 1994; Terry & Huebner, 1995), though some findings in the literature also show no overall differences in LS (Huebner, Drane, & Valois, 2000). Notably, the relationship of SES and LS may be confounded with effects of SES and limitations of samples used across studies.

#### Environmental Experiences

Positive and negative experiences occurring as acute, chronic, or daily events influence reported levels of LS in adolescents. McCullough and colleagues (2000) assessed the relation of life events and LS and found positive daily experiences (r = .39)to be the most salient factor related to LS with negative daily events (r = -.34) and acute major events (positive or negative) showing modest correlations (r = .30; r = -.22, respectively). Thus, results also revealed the cumulative effects of daily experiences to be more influential than major life events (positive or negative). Furthermore, Ash and Huebner (2001) found similar results when they examined the influence of events within different environments (family, peer, school) on adolescent LS. Findings showed that chronic stressors from different environments are significantly correlated with LS. Positive experiences within the family environment have been shown to correlate more strongly with adolescent LS than positive experiences with peers (Dew & Huebner, 1994; Huebner, 1991a; Greenberg, Siegel, & Leitch, 1983; Ma & Huebner, 2008). Specifically, parent support is significantly related to adolescent global LS (Young, Miller, Norton, & Hill, 1995; Valois, Zullig, Huebner, & Drane, 2009).

Researchers have also investigated the relations between perceived social support and life satisfaction. Bramson, Chipuer, and Pretty (2005) examined the associations between life satisfaction and factors at an individual level (stress,), interactional level (social support), and community level (neighborhood belonging). They found social support to be the strongest predictor of life satisfaction across young adults with and without intellectual disability. Compas, Slavin, Wanger, and Vannatta (1986) found that satisfaction with perceived social support was significantly related to psychological

disorder in adolescence (e.g., depression, anxiety, somatization). Armsden and Greenberg (1987) found that perceived quality of parent and peer attachments were both significantly related to psychological well-being. Findings indicated that adolescents with securely attached relationships reported greater satisfaction with self, decreased internalizing problems (depression and anxiety), and increased likelihood of seeking social support.

Notably, gender differences in relations between attachment and global LS have been identified. For example, Huebner and Ma (2008) examined the association of parent and peer attachments and global LS of early adolescents and found that peer attachment partially mediated the relation between parent attachment and LS for females, but not respective male peers. Results suggest gender differences in peer attachments such that secure attachments with peers significantly contribute to global LS in early adolescent females. Such findings support the need for further investigation into gender as a possible moderator in the link between global LS and associated factors.

#### **Social Support**

Diener and Seligman (2002) found that the most significant factor shared by the 10% of students who reported the highest levels of happiness and fewest signs of psychopathology were good relationships with family and friends and greater time spent with them. The main-effect model hypothesizes that social support is beneficial for all youth, independent of risk for stress (Cohen & Wills, 1985; Cohen, 2004). The main-effect model posits that availability of social support is beneficial for psychological well-being as it provides information that work to reduce psychological problems (Cohen,

Gottlieb, & Underwood, 2001). Like life satisfaction, social support is linked to improved student functioning, is protective against adverse conditions (Malecki & Demaray, 2002), and is a significant predictor of life satisfaction in young adolescents (Stewart & Suldo, 2011).

#### **Correlates of Social Support**

Social support is positively linked to many outcomes in youth, such as academic adjustment (Malecki & Demaray, 2002; DuBois, Felner, Mearas, & Krier 1994) and psychosocial adjustment (DuBois, Felner, Brand, Adan, & Evans, 1992; Jackson & Warren, 2000). Additionally, social support is negatively associated with indicators of maladjustment, such as depression/anxiety (Compas, Slavin, Wagner, & Vannatta, 1986; Cutrona, 1989; Barrera & Garrison-Jones, 1992), problem behaviors (Barerra, Chassin, & Rogosch, 1993; Dubois, Felner, Meares, & Krier, 1994), and substance abuse (Windle & Miller-Tutzauer, 1992). Studies also suggest that youth who report less social support exhibit more externalizing problems (Hagen, Myers, & Mackintosh, 2005).

#### Age/Grade Level

Social support varies across development, often studied as differences across grade level or age. Younger children report greater frequency of social support than older children (Demaray & Malecki, 2002). Specifically, Demaray and Malecki (2002) found significant differences across grade level, such that younger children reported greater perceived social support from parents and teachers. Elementary school-aged children perceived greater social support from classmates than secondary-level (middle- and high-school) youth and perceived greater support from close friends than middle school-aged

youth. Additionally, females in middle and high school perceived greater support from close friends than males, though no significant differences between sexes were found among elementary-aged children. Lastly, Demaray and Malecki (2002) ascertained that younger males reported greater perceptions of close friend support than older males. Furthermore, Demaray and Malecki (2003) examined the relationship of social support importance and grade level and determined that elementary school-aged children reported higher importance ratings of social support than those in middle- and high-school, with middle school-aged youth also reporting higher importance ratings of social support than high school-aged youth. Overall, findings suggest younger children receive more social support, and suggest that youth require less social support across development as they become more self-reliant and independent in their abilities to access resources, and gain knowledge from their own past experiences.

#### Gender

Investigation on the relations between gender and social support demonstrate that middle and high school-aged female youth perceive greater social support than male counterparts (Demaray & Malecki, 2002; Mahon, Yarcheski, & Yarcheski, 1994; Rueger, Malecki, & Demaray, 2008), with no significant difference found for elementary-aged youth. Further investigation by Demaray and Malecki (2002) found that males and females did not report differences in levels of parent support, though females did report greater support from all other sources (teachers, classmates, close friends). Findings suggest a pattern of differences in support influenced by gender and grade level (developmental stage). Taken together, these findings have several implications for the relation between gender and social support. Gender differences in social support may

result as female youth might have greater awareness of social support resources available to them, in reality receive greater support than males, or that they value it more once they reach high school age.

SES

Socioeconomically disadvantaged youth experience deficits in social and community-level support that can impact availability and quality of resources that are protective against adverse events (Dubois, Felner, Brand, Adan & Evans, 1992; Decarlo, Wadsworth, & Stump, 2011). School-based social support has been found to be associated with positive academic and socioemotional outcomes in socioeconomically disadvantaged students (Dubois, Felner, Meares, & Krier, 1994; Dubois, Felner, Brand, Adan, & Evans, 1992), especially for students reporting relatively low family support. Whereas, ratings of social support from school personnel show little to no association with academic and socioemotional outcomes for students who do not experience poverty (Dubois, Felner, Meares, & Krier, 1994). Findings suggest that school-based support may be particularly salient for socioeconomically disadvantaged youth experiencing stressful events. Such youth are at risk for exposure to chronic daily stressors, acute stressful circumstances, and the effects of exposure to hazardous environmental conditions that can lead to elevated stress strongly associated with psychological problems (namely depression and anxiety) (DeCarlo, Wadsworth, & Stump, 2011; van Oort, Ende, Wadsworth, Verhulst, & Achenbach, 2011; Melchior, Chastang, Walburg, Arseneault, Galera, & Fombonne, 2010), behavior problems (Demaray & Malecki, 2002; van Oort, Ende, Wadsworht, Verhult, & Achenbach, 2011) and poor academic performance (Sheridan & McLaughlin, 2016; Hochschild, 2003; Reardon, Valentino, & Shores, 2013).

#### **Social Support Theory**

Several theories about social support have been developed. For example, Weiss's (1974) model describes six different "provisions" or social functions that can be received through relationships with others. Weiss suggests that all six provisions are necessary for an individual to feel adequately supported and effectively able to avoid loneliness. However, he posits that different provisions maybe more critical at different stages of development. Other theories vary in their conceptualizations of social support based on the context under which they examine the concept. Whereas some theories conceptualize social support as a range of interpersonal functions, others look at social support in the context of stressful life events or in respect to life satisfaction (regardless of stress level). In response to this theoretical diversity, Tardy's (1985) model argues that lack of consensus regarding the conceptualization and measurement of social support in the field inhibits the ability to make generalizations regarding support development and functioning. He proposed that a better definition of social support at the theoretical and operational levels would aid in resolving these issues.

Tardy (1985) conceptualizes five major components of social support: direction, disposition, description-evaluation, network, and content. Direction refers to whether one gives or receives support. Disposition refers to whether supportive behaviors are available versus actually performed. Description-evaluation describes how one evaluates or perceives the support received. The components of description-evaluation describe how one evaluates or perceives the support received. Network conveys the source of social support, including parents, friends, teachers, classmates, and school. Finally, content communicates the type of support behaviors present (i.e., emotional, appraisal,

informational, instrumental), which informed development of the measure (Child and Adolescent Social Support Scale) utilized in the current study.

Each source of social support (e.g., parents, friends, teachers, peers) can provide each type of support behaviors (i.e., emotional, appraisal, informational, instrumental). Emotional support includes caring behaviors from others. Appraisal support refers to feedback or evaluative information from others. Informational support refers to provision of needed information or advice. Lastly, instrumental support consists of resources provided by someone, such as time or money. The current study utilized Tardy's model in defining social support and conceptualized support as the perceived frequency of supportive behaviors experience by youth. The measure used in this study, Malecki and Demaray's (2002) Child and Adolescent Social Support Scale (CASSS), is a widely implemented measure used to assess the four types of support (emotional, appraisal, informational, instrumental) operationalized in Tardy's model.

#### Social Support Source and LS

Studies have been conducted on the connections between social support source (parent, teacher, and peer) and life satisfaction in early adolescence (middle school-level). Stewart and Suldo (2011) conducted a study investigating the relationship of social support source (parent, classmate, teacher), psychopathology, and LS in middle schoolaged youth. Findings revealed classmate and teacher support as statistically significant unique predictors of youth internalizing and externalizing symptoms (respectively), and also found parent support to be the strongest predictor of psychological wellness. Siddall and colleagues (2013) found family and peer support for learning to be statistically

significant contributors to early adolescent LS. Notably, the study by Siddall and colleagues (2013) focuses on support in the context of school while the current study emphasizes overall support, in the context of school and outside of school. Findings by Danielson et al. (2009) are consistent with those of Siddall and colleagues (2013) and also implicate greater association of parent and peer support with adolescent LS than teacher support. Additional findings from Siddall and colleagues (2013) found that at Time 2 (5 months later), family support continued to contribute statistically significant variance to LS. Results demonstrate the importance of parent support during adolescence, a stage in development in which youth autonomy from parents begins to increase.

#### **Social Support Type**

Studies to date have not examined the unique contributions of each type of support behavior (emotional, appraisal, informational, instrumental) within the sources of parent and peer support on youth global LS, but have done so exclusively for variables of adjustment (e.g., social skills, problem behaviors, academic competence, clinical maladjustment, emotional symptoms, personal adjustment, and school maladjustment). Malecki and Demaray (2003) found that all types of parent support were related to student adjustment, but no significant individual predictors were identified. Results suggest that parent support may be significantly associated with student well-being. As for teachers, the type of support most related to adjustment (social skills and academic competence) was emotional support, relative to other types. Interestingly, no individual type of peer or classmate support was found to significantly predict adjustment. Overall, different types of support within sources seem to be more related to certain outcomes in adjustment.

One study was identified from the literature that explored the relation of support type within source and subjective well-being (SWB), a construct highly related to youth global LS. Suldo et al. (2009) conducted a mixed methods study on the influence of perceived teacher support behaviors on SWB that revealed emotional support and informational support as unique predictors of SWB. Analysis of qualitative data within the Suldo et al. (2009) study showed that youth perceived teachers to be most supportive when they connected with students emotionally, demonstrate fairness, use a range of best-practice teaching strategies, acknowledge academic success, and encourage questions. Furthermore, Guess and McCane-Bowling (2016) further found that teacher support correlated significantly with LS in middle school-aged youth, with informational support as the most statistically significant unique predictor of LS variance.

#### **Rationale for Study**

Numerous studies have investigated the relations between social support source (parent, teacher, peer) and various indicators of ill-being and well-being in youth. Few studies have addressed types of support and LS in youth. Specifically, studies indicate unique contributions of parent and peer support to youth LS (Danielson, Samdal, Hetland & Wold, 2009). However, to the author's knowledge, no research has examined the associations between specific social support types (emotional, appraisal, informational, instrumental) within each source, as conceptualized in Tardy's (1985) theory of social support. This study seeks to contribute novel findings to the literature by examining the contributions of unique variance of the four social support types within each support source to global LS in youth.

Multiple factors including age, sex and SES influence perceived social support in youth. Younger children report greater frequency of support than older children.

Elementary school-aged youth have reported greater social support from all sources (parent, teacher, peer) than both middle and high school-aged youth (Demaray & Malecki, 2002). Gender differences in perceived support and attachment also emerge in middle school. Early adolescent females perceive greater support than males (Demaray & Malecki, 2002; Mahon, Yarcheski & Yarcheski, 1994; Rueger, Malecki & Demaray, 2008), and demonstrate differences in associations between attachment and global LS, as peer attachments partially mediate the relationship of parent attachment and LS in females and not in males (Huebner & Ma, 2008). Lastly, school-based social support is associated with positive outcomes in students of low socioeconomic standing compared with peers who do not experience poverty (Dubois, Felner, Meares & Krier, 1994; Dubois, Felner, Brand, Adan & Evans, 1992).

The current study accounted for demographic variables (age, gender, and SES) when analyzing contributions of unique variance in LS across sources of social support and support types within each source. Further investigation of student perceptions of sources and social support type within each source should aid in understanding the factors that influence individual differences in early adolescents' global LS reports as well as identification of the social support types most effective to address through interventions across the school and home settings (Demaray & Malecki, 2003). Potential gender moderation of the relation global LS and sources and/or types within sources of social support were also explored to further inform whether the relations are more salient to early adolescent males versus females.

#### **Research Question**

The purpose of this study was to examine the associations between early adolescents' global LS and the unique contributions of social support sources (parents, teachers, and peers) and types of social support (emotional, appraisal, informational, instrumental) within each source of support. To accomplish this goal, four research questions were identified.

1. What are the relative contributions of parent, teacher, and peer social support sources to the variance in global LS in early adolescents?

The literature on youth social support indicates that the importance of different sources of social support varies as a function of age. Research indicates that perceived parent social support is lower in early and middle adolescence when compared to childhood and late adolescence, and that during this time other sources of support (i.e., friends, romantic partners) increase in importance (Furman & Buhrmester, 1992). Importantly, despite decreases in perceived social support from parents in early and middle adolescence relative to childhood and adolescence, the literature supports that early and middle adolescents continue to perceive greater social support from parents when compared to teachers and peers age groups (Demaray & Malecki, 2002). Research conducted by Siddall and colleagues (2013) further informed the hypothesis that parent social support would account for the greatest variance in early adolescent global LS. It was further hypothesized that teacher and peer social support would also emerge as unique contributors of variance in global LS at this point in development based on

Furman and Buhrmester's (1992) theory as well as research conducted by Stewart and Suldo (2011) in addition to Malecki and Demaray (2002) that both found teacher and peer support to be statistically significant contributors to adolescent psychological well-being.

2. Does gender moderate associations between sources of social support (parent, teacher, peer) and global LS?

Gilligan's (1982) developmental theory of gender differences proposes that the sexes value or view relationships in different ways. Specifically, girls may invest greater time and effort into relationships than boys. Gilligan's theory also suggests that relationship development may be more salient to identity development in girls and may thus have a greater influence on well-being in girls than boys. Furthermore, findings by Demaray and Malecki (2002) revealed that boys and girls did not report differences in reports of parent support, but females reported greater support from teachers, classmates, and close friends. Thus, it was hypothesized that a stronger association between teacher and peer support and LS would be demonstrated for girls than for boys, as girls may invest greater interest in these relationships than boys or that these relationships may be more influential to development of LS in female students.

3. What are the relative contributions of the four identified types of social support (emotional, appraisal, informational, instrumental) within each source of social support (parent, teacher, peer) to variance in global LS?

The literature was limited regarding the relation of global LS to social support type within each source of support. Three studies of support type were identified in the literature. Based on findings by studies examining teacher support and support type in relation to youth adjustment (Malecki & Demaray, 2003), SWB (Suldo, Friedrich, White, Farmer, Minch, & Michalowski, 2009) and LS (Guess & McCane-Bowling, 2016), it was hypothesized that emotional and informational support would be unique predictors of global LS. Findings related to support types within parent and peer support were more limited. Malecki and Demaray (2003) found that all types of parent support predicted adjustment, but no significant individual predictors were identified, and no individual types of peer support were related to adjustment. Notably, studies relating social support type for parents or peers for either global LS or associated constructs, such as SWB, were not identified in the literature. Due to such limitations definitive hypotheses regarding support type within these sources were not identified.

4. Does gender moderate the associations between global LS and the four types of social support within each source?

Due to the exploratory nature of this question, specific hypotheses were not formulated.

#### CHAPTER 2

#### **METHOD**

#### **Participants**

The current study utilized an archival dataset collected by school personnel from four middle schools in a southeastern US state in the fall of 2015. This extant dataset has been used in previous research (e.g., Reckart, Huebner, Hills, & Valois, 2017), but these analyses are new. Data were collected as a part of a school-wide survey of school climate and student wellbeing. Demographic information was collected through self-report items included in the survey.

A total of 1710 sixth (28.1%), seventh (35.1%), and eighth (35.5%) grade students completed the survey (see Table 1). Mean sample age was 12.44 (SD = .98), representing a range from 11 to 15 years old. Ethnic or racial composition of the sample was 54.3% Caucasian, 22.6% African American, 1.4% Asian American or Pacific Islander, 8.0% Hispanic or Latino, and 1.6% Native American, and 2.0% identified as "other". Socioeconomic status (SES) was measured through self-report of receiving regular school lunch (higher SES) or free or reduced lunch (lower SES). Lower SES was reported by 38.2% of students. Descriptive statistics of the sample are presented in Table 2.1.

#### Procedures

School personnel administered the questionnaires during the students' class time. Teachers read scripted directions to students, which included instructions requesting the students to complete the survey packet in its entirety. Students were informed of their right to withdraw at any point, and that all responses would be kept confidential. Approval from the University of South Carolina Institutional Review Board was obtained. Researchers were only allowed to access the data after school personnel removed identifying information.

#### Measures

Brief Measure of Students' Life Satisfaction Scale (BMSLSS; Seligson, Huebner, & Valois, 2003). The BMSLSS was used to measure the general life satisfaction of each student. The BMSLSS is a self-report measure consisting of five items related to the areas of life most critical to youth development used to assess child and adolescent life satisfaction. This measure requires students to rate their satisfaction with family life, friendships, school experiences, self, and living environment (Seligson, Huebner, & Valois, 2003), to provide a comprehensive picture of student's overall wellbeing. The BMSLSS requires participants to respond to statements that evaluate these areas of their life using a 7-point scale, ranging from 1-terrible to 7-delighted. These ratings were used to create a mean score as a continuous measure of life satisfaction. The BMSLSS was adapted to address the same dimensions of life satisfaction measured in the longer version of the Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 1994), which is a widely accepted measure of child

and adolescent life satisfaction (Proctor, Linley, & Maltby, 2009). The BMSLSS Total score has demonstrated significant correlations with other validated measures of life satisfaction, such as the MSLSS total score (r = .66) and the SLSS total score (r = .62) (Seligson, Huebner, & Valois, 2003). The BMSLSS scale is appropriate for use with  $3^{\rm rd}$ -12<sup>th</sup> grade youth (Seligson, Huebner, & Valois, 2003; Seligson, Huebner, & Valois, 2005). In this study, the BMSLSS demonstrated acceptable reliability, with an alpha coefficient of 0.86, which indicates an acceptable level of internal consistency.

Children and Adolescent Social Support Scale (CASSS; Malecki, Demaray, Elliot, & Nolten, 1999). The CASSS is a 40-item multi-dimensional scale used to measure participant's perceived social support. The CASSS measures perceived social support from four sources: parents, teachers, classmates, and a close friend. The scale was modified for this study to only include the items assessing support from parents, teachers, and classmates. This scale also separates items for each source of support into four aspects of social support: appraisal, emotional, informational, and instrumental. The Malecki, Demaray, Elliot, & Nolten (1999) format of the CASSS requires participants to respond to statements that refer to the different types of support (appraisal, emotional, information, and instrumental) and has participants rate the perceived frequency of support using a 6-point Likert scale, ranging from 1-never to 6-always. These ratings were used to create frequency scores for: Parent Support, Teacher Support, and Classmate Support subscales. This study used Level 2 of the CASSS as it was most appropriate for use with 6<sup>th</sup>-12<sup>th</sup> grade youth. The CASSS has shown acceptable convergent validity when compared to other measures of youth social support such as the Social Support Scale for Children and the Social Skills Rating System (Malecki &

Demaray, 2002). Additionally, incremental fit indices of the CASSS demonstrated values greater than .90, which indicated support for its factor structure (Malecki & Demaray, 2002). In this study the CASSS demonstrated high reliability, with an alpha coefficient of 0.97.

Table 2.1: Descriptive Statistics of Sample

Demog	raphic Variables	n	%
Grade	6 <sup>th</sup>	489	28.2
	7 <sup>th</sup>	616	35.6
	8 <sup>th</sup>	626	36.2
Age	11	345	19.9
	12	543	31.4
	13	609	35.2
	14	212	12.2
	15	22	1.3
	14-15	234	13.5
Gender	Male	901	52.1
	Female	830	47.9
Race	Caucasian/Majority	952	55.0
	Minority	779	45.0
SES	Regular Lunch	1007	58.2
	Free & Reduced Lunch	724	41.8

Note: SES = socioeconomic status

#### CHAPTER 3

#### **RESULTS**

#### **Preliminary Analyses**

The data were assessed for possible violations of model assumptions. This examination revealed that missingness ranged from .2% to 11%, which can influence standard errors and tests of significance (Cohen, Cohen, West, & Aiken, 2003). Missing data were handled through multiple imputation using IBM SPSS Statistics Version 24. Multiple imputation was used to predict and replace missing values using existing values within the dataset. Forty new datasets were generated and one dataset was chosen for analyses using a random number generator.

The dataset included data from four separate schools. Thus, data were examined for clustering within schools. The intraclass correlation (ICC) for global LS was 0.01, suggesting variance within schools was larger than variance between schools. Findings indicate that clustering within schools would not downwardly bias the standard errors in the present study, and therefore a multi-level model was not used in further analyses.

#### **Descriptive Statistics**

Descriptive statistics for variables are presented in Table 3.1. The mean for global LS was 29.26 (SD = 5.93). The means for parent, teacher, and peer social support were 56.39, 55.83, and 49.07. These means suggest relatively high perceptions of support across all three sources of support. The means for emotional support, informational

support, appraisal support, and instrumental support were 40.90, 41.62, 38.86, and 39.91. These means indicate relatively high perceptions of support across all four types of social support.

Four one-way ANOVAs were conducted to test for differences in LS related to each demographic variable including: grade level, gender, and SES (based on lunch status; regular or reduced/free). Mean differences were found related to student grade level F(2, 1728) = 7.74, p < 0.01, such that sixth grade students (M = 29.83, SD = 5.78) were significantly different from eighth grade students (M = 28.48, SD = 5.91), p < 0.01. Comparisons between seventh grade students (M = 29.36, SD = 6.01) and all other students were not significant, p-values > 0.05. Gender did not demonstrate a significant relation with global LS. Mean differences were also found for student SES F(1, 1729) = 50.78, p < 0.01, such that students receiving free/reduced price lunch (M = 28.00, SD = 6.53) reported lower global LS than students receiving regular lunch (M = 30.03, SD = 5.30). Due to the significant relations between global LS and age/grade level and SES, age and SES were controlled for in further analyses.

#### Correlations

Pearson correlations were statistically significant for all variables (p < 0.05; see Tables 3.2 and 3.3). According to Cohen's criteria (1988), LS demonstrated a strong correlation with parent social support (r = .60, p < .01) and moderate correlations with peer social support (r = .45, p < .01), and teacher social support (r = .46, p < .01). LS also showed a strong correlation with emotional social support (r = .63, p < .01) and moderate

correlations with informational support (r = .58, p < .01), appraisal social support (r = .54, p < .01), and instrumental social support (r = .57, p < .01).

#### **Multiple Regression Analyses**

Multiple regression analyses were performed to assess the unique variance contributed by each social support source (parent, teacher, peer) to global LS. Analyses were run after controlling for statistically significant demographic variables (age and SES). Results indicated a significant positive relationship between social support source and global LS ( $R^2 = .432$ , F(5, 1725) = 387.75, p < .001). Each source of social support demonstrated a statistically significant unique relationship with global LS (see Table 3.4), with parent social support demonstrating the highest unique relation.

Gender was then assessed as a moderator between sources of social support and LS. The interaction terms for each source of social support did not demonstrate a statistically significant unique relationship with LS (see Table 3.5). Results indicated that gender did not moderate the effects of parent, teacher, or peer social support on youth LS. Parent, teacher, and peer social support predicted early adolescent global LS regardless of gender.

Regression analyses assessing social support types within parent social support revealed that emotional ( $\beta$  = .29, p < .01), informational ( $\beta$  = .12, p < .01), and instrumental ( $\beta$  = .20, p < .01) support significantly contributed unique variance in global LS. Appraisal support by parents was not found to be statistically significant. Regression analyses assessing social support types within teacher social support indicated that emotional ( $\beta$  = .21, p < .01) and informational ( $\beta$  = .13, p < .01) support significantly

26

contributed to unique variance in global LS. Appraisal and instrumental support by teachers were not statistically significant. Regression analyses assessing social support types within peer social support demonstrated that emotional ( $\beta$  = .27, p < .01), instrumental ( $\beta$  = .13, p < .01), and informational ( $\beta$  = .10, p < .05) support significantly contributed to unique variance in global LS. Appraisal support by peers was not statistically significant. See Table 3.6 for results.

Gender was assessed as a moderator between global LS and social support types within each source of social support. Twelve separate regressions were run; none of which revealed a statistically significant interaction between gender and social support type within each source of social support among the models analyzed. See Tables 3.7, 3.8, and 3.9 for results.

Table 3.1: Descriptive Statistics for Variables

Variables	M	SD
Life Satisfaction	29.26	5.93
Parent Social Support	56.39	13.81
Teacher Social Support	55.83	13.95
Peer Social Support	49.07	15.76
Emotional Social Support	40.90	9.23
Informational Social Support	41.62	9.16
Appraisal Social Support	38.86	9.79
Instrumental Social Support	39.91	9.65

Note: N = 1732.

Table 3.2: Correlations Between Life Satisfaction and Sources of Social Support

	1	2	3	4
1. Life Satisfaction	_	.604**	.452**	.462**
2. Parent Social Support		_	.477**	.468**
3. Teacher Social Support			-	.545**
4. Peer Social Support				-

Note: \* p < .05; \*\* p < .05

Table 3.3: Correlations Between Life Satisfaction and Types of Social Support

	1	2	3	4	5
1. Life Satisfaction	-	.624**	.586**	.542**	.570**
2. Emotional Social Support		-	.856**	.835**	.831**
3. Informational Social Support			-	.834**	.839**
4. Appraisal Social Support				-	.857**
5. Instrumental Social Support					-

Note: \* p < .05; \*\* p < .01

Table 3.4: Regression Analyses: Sources of Social Support

		Step 1			Step 2	
Variable	В	SE	ß	В	SE	ß
Age	881	.146	142**	289	.115	047*
Lunch	-1.882	.283	157**	-1.246	.221	104**
Parent Social Support				.187	.009	.434**
Teacher Social Support				.059	.010	.138**
Peer Social Support				.067	.008	.178**
$R^2$			.049			.432
$F$ for change in $R^2$			44.110**			387.751**

Note: \* p < .05; \*\* p < .01

 $\omega_{2}$ 

Table 3.5: Hierarchical Regression Analyses: Gender and Sources of Social Support

		Ste	p 1	Step	2	Ste	p 3	Ste	p 4
Model	Variable	SE	β	SE	β	SE	β	SE	β
1. Parent Support									
Step 1:	Age	.146	142**	.146	142**	.119	067**	.120	066**
	Lunch	.283	157**	.283	157**	.231	087**	.231	087**
Step 2:	Gender			.279	010	.226	001	.226	001
Step 3:	Parent Support					.008	.583**	.012	.568**
Step 4:	Interaction							.016	.021
2. Teacher									
Support									
Step 1:	Age	.146	142**	.146	142**	.133	063*	.133	063*

	Lunch	.283	157**	.283	157**	.254	158**	.254	158**
Step 2:	Gender			.279	010	.250	034	.250	034
Step 3:	Teacher Support					.009	.441**	.013	.430**
Step 4:	Interaction							.018	.016
3. Peer Support									
Step 1:	Age	.146	142**	.146	142**	.130	106**	.131	105**
	Lunch	.283	157**	.283	157**	.252	150**	.252	150**
Step 2:	Gender			.279	010	.248	022	.248	022
Step 3:	Peer Support					.008	.451	.011	.448**
Step 4:	Interaction							.016	.005

Note: \* p < .05; \*\* p < .01

Parent, Teacher, and Peer Social Support were centered at the mean

Table 3.6: Regression Analyses: Types of Social Support within Sources of Social Support

		S	tep 1	Ste	ep 2
Model	Variable	SE	β	SE	β
1. Parent Support					
Step 1:	Age	.146	142**	.119	071**
	Lunch	.283	157**	.230	088**
Step 2:	Emotional			.158	.292**
	Informational			.146	.121**
	Appraisal			.156	.036
	Instrumental			.146	.201**
2. Teacher Support					
Step 1:	Age	.146	142**	.133	060*
	Lunch	.283	157**	.254	159**
Step 2:	Emotional			.148	.215**
	Informational			.163	.133**
	Appraisal			.151	.081
	Instrumental			.151	.073

# 3. Peer Support

Step 1:	Age	.146	142**	.129	106**
	Lunch	.283	157**	.250	146**
Step 2:	Emotional			.148	.272**
	Informational			.142	.095*
	Appraisal			.134	.013
	Instrumental			.126	.134**

Note: \* p < .05; \*\* p < .01

36

Table 3.7: Hierarchical Regression Analyses: Gender and Types of Parent Social Support

		Ste	p 1	Ste	2	Step	3	Ste	p 4
Model	Variable	SE	β	SE	β	SE	β	SE	β
1. Emotional									
Step 1:	Age	.146	142**	.146	142**	.122	081**	.122	080**
	Lunch	.283	157**	.283	157**	.236	-1.09**	.236	109**
Step 2:	Gender			.279	010	.231	.006	.231	.007
Step 3:	Emotional					.090	.553**	.124	.523**
Step 4:	Interaction							.179	.044
2. Informational									
Step 1:	Age	.146	142**	.146	142**	.127	076**	.127	076**
	Lunch	.283	157**	.283	157**	.245	096**	.246	096**

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	Step 2:	Gender			.279	010	.240	.020	.240	.020
	Step 3:	Informational					.095	.508**	.135	.504**
	Step 4:	Interaction							.187	.005
	3. Appraisal									
	Step 1:	Age	.146	142**	.146	142**	.128	079**	.128	078**
		Lunch	.283	157**	.283	157**	.246	110**	.246	110**
37	Step 2:	Gender			.279	010	.241	018	.241	018
	Step 3:	Appraisal					.094	.496**	.131	.474**
	Step 4:	Interaction							.186	.032
	4. Instrumental									
	Step 1:	Age	.146	142**	.146	142**	.134	123**	.134	123**
		Lunch	.283	157**	.283	157**	.260	141**	.260	141**

 Step 2: Gender
 .279
 -.010
 .255
 -.015
 .269
 -.017

 Step 3: Instrumental
 .083
 .393\*\*
 .117
 .399\*\*

 Step 4: Interaction
 .166
 -.008

Note: \* p < .05; \*\* p < .01

Social Support variables were centered at the mean

With Bonferroni corrections (.05/12) p = .004

Table 3.8: Hierarchical Regression Analyses: Gender and Types of Teacher Social Support

		Ste	p 1	St	ep 2	Ste	ep 3	Ste	p 4
Model	Variable	SE	β	SE	β	SE	β	SE	β
1. Emotional									
Step 1:	Age	.146	142**	.146	142**	.135	069*	.135	069*
	Lunch	.283	157**	.283	156**	.258	154**	.258	154**
Step 2:	Gender			.279	010	.254	031	.254	031
Step 3:	Emotional					.097	.413**	.133	.391**
Step 4:	Interaction							.192	.033
2. Informational									
Step 1:	Age	.146	142**	.146	142**	.136	081**	.136	081**
	Lunch	.283	157**	.283	156**	.260	159**	.260	159**

Step	2:	Gender			.279	010	.256	023	.256	023
Step	3:	Informational					.103	.392**	.142	.396**
Step	4:	Interaction							.205	006
3. Appraisal										
Step	1:	Age	.146	142**	.146	142**	.137	093**	.137	090**
		Lunch	.283	157**	.283	156**	.263	165**	.263	165**
Step	2:	Gender			.279	010	.259	033	.259	033
Step	3:	Appraisal					.097	.369**	.131	.341**
Step	4:	Interaction							.192	.042
4. Instrumental	1									
Step	1:	Age	.146	142**	.146	142**	.138	083**	.138	082**
		Lunch	.283	157**	.283	156**	.263	153**	.263	153**

 Step 2: Gender
 .279
 -.010
 .260
 -.028
 .260
 -.028

 Step 3: Instrumental
 .096
 .366\*\*
 .132
 .350\*\*

 Step 4: Interaction
 .191
 .022

Note: \* p < .05; \*\* p < .01

Social Support variables were centered at the mean

With Bonferroni corrections (.05/12) p = .004

Table 3.9: Hierarchical Regression Analyses: Gender and Types of Peer Social Support

		Ste	ep 1	St	ep 2	Ste	ep 3	Ste	p 4
Model	Variable	SE	β	SE	β	SE	β	SE	β
1. Emotional									
Step 1:	Age	.146	142**	.146	142**	.131	108**	.131	107**
	Lunch	.283	157**	.283	156**	.253	146**	.253	146**
Step 2:	Gender			.279	010	.249	013	.249	013
Step 3:	Emotional					.092	.442**	.129	.425**
Step 4:	Interaction							.184	025
2. Informational									
Step 1:	Age	.146	142**	.146	142**	.134	113**	.134	113**
	Lunch	.283	157**	.283	156**	.259	156**	.259	155**

	Step 2:	Gender			.279	010	.255	030	.255	030
	Step 3:	Informational					.086	.398**	.121	.407**
	Step 4:	Interaction							.172	013
3. Apprai	sal									
	Step 1:	Age	.146	142**	.146	142**	.136	110**	.137	110**
		Lunch	.283	157**	.283	156**	.263	161**	.263	161**
	Step 2:	Gender			.279	010	.258	020	.259	020
	Step 3:	Appraisal					.083	.369**	.115	.364**
	Step 4:	Interaction							.167	.008
4. Instrun	nental									
	Step 1:	Age	.146	142**	.146	142**	.134	123**	.134	123**
		Lunch	.283	157**	.283	156**	.260	141**	.260	141**

 Step 2: Gender
 .279
 -.010
 .255
 -.015
 .255
 -.015

 Step 3: Instrumental
 .083
 .393\*\*
 .117
 .399\*\*

 Step 4: Interaction
 .166
 -.008

Note: \* p < .05; \*\* p < .01

Social Support variables were centered at the mean

With Bonferroni corrections (.05/12) p = .004

#### **CHAPTER 4**

#### DISCUSSION

The literature on youth well-being has demonstrated that global LS is a strong predictor of positive outcomes such as academic performance, classroom behavior, and mental health outcomes (see Huebner et al., 2014 for a review). Research has further indicated social support as highly important to development of well-being in youth. Specifically, Tardy's (1985) theory conceptualizing the major components of social support has informed many studies that have examined social support and well-being, often having examined the associations of well-being and different sources of support (i.e., parent, teacher, peer). However, scant research has examined the associations of social support and global LS in youth. Studies to date have not comprehensively examined the unique relative contributions of social support types (e.g., emotional, appraisal, informational, instrumental) within socials support sources as they relate to global LS. The present study thus examined the association between early adolescents' reports of global LS and the unique contributions of sources (i.e., parent, teacher, peer) and types of social support (i.e., emotional, appraisal, informational, instrumental) within social support sources (i.e., parent, teacher, peer). Furthermore, the study additionally explored gender as a potential moderator of the association between global LS and social support sources and types.

The study first examined the relative contributions of social support sources (parent, teacher, peer) to the variance in global LS in early adolescents. Results indicated

all three sources demonstrated statistically significant unique associations with global LS. Parent social support demonstrated the largest unique relation. This finding expands on previous research conducted by Siddall and colleagues (2013) that examined the effects of support for learning and indicated similar results for overall support in early adolescents. These findings also further elucidate the changes in relationships discussed in Furman and Buhrmester's (1992) theory that sources of support outside of parental support (i.e., peer support) also demonstrate importance in early adolescent development, though parent support remains the most salient contributor. Furthermore, Furman and Buhrmester's (1992) theory supports results from the current study where peers emerge as a more important source of social support than teachers. Furman and Buhrmester (1992) suggest that at this point in development the nature of student-teacher relations transform in secondary education, in which students now have multiple teachers and potentially less opportunity to form close bonds.

The study examined gender as a possible moderator of the effect of different sources and types of social support on levels of global LS. Findings did not indicate gender as a moderator in the relationship between social support sources (parent, teacher, peer) and global LS, nor in the relationship between social support types (emotional, informational, appraisal, and instrumental) within each source of social support and global LS. Such results notably indicate that positive association between sources and types of social support and global LS generalize across both genders in early adolescence.

Lastly, the study examined the relative contributions of the four types of social support (emotional, informational, appraisal, and instrumental) within each of the three sources of social support (parent, teacher, peer) to variance in early adolescent global LS

scores. The findings of the current study broaden the results of Malecki and Demaray's (2003) study that showed all types of parent support to predict adjustment, and show that support types within parent support are also predictive of early adolescent global LS. The current results indicated that parent emotional, instrumental, and informational support each provided unique contributions to variance in early adolescent global LS. Though, parent appraisal (i.e., evaluative feedback) did not contribute unique variance to global LS in early adolescents. This finding might be explained by Elkind's (1967) theory behind egocentrism in adolescence, which is described as a failure of adolescents to differentiate between concerns of others versus concerns of the self. It is thought that egocentrism emerges in early adolescence and describes beliefs that the self is special and invulnerable to harm. Such beliefs might account for the decrease in importance of appraisal support in early adolescents, as they are less concerned with the concerns of others at this point in development.

Results regarding teacher social support indicated emotional and informational support as having unique contributions to early adolescent global LS. However, teacher instrumental and appraisal support did not contribute unique variance to global LS. Findings suggest teachers should focus efforts on connecting with students in meaningful ways that convey respect and encourage trust so that students feel heard and comfortable in seeking advice, both academically and personally. Students may seek less instrumental support from teachers due to the nature of the personal advice they seek and context of their relationship within the school setting. Teachers may not be the most appropriate resource to provide access to materials that relate to concerns that are more personal in nature and less related to the school context. Regarding appraisal support, it is reasonable

to draw a similar conclusion from Elkind's (1967) theory of adolescent egocentrism, that early adolescents are less concerned with others' evaluations of their self.

It was also found that emotional, instrumental, and informational support from peers demonstrated unique contributions to early adolescent global LS. Though, appraisal support from peers also did not demonstrate unique variance in global LS. Notably, instrumental support was more important for peers and parents, but not for teachers. Again, this might be explained by the nature of the personal concerns that early adolescents demonstrate, and that parents and peers might be more appropriate sources for support for addressing such needs while teachers might be viewed as more appropriate sources providing academic resources. Appraisal support from peers was also not reported as uniquely important for early adolescent LS, which further supported that early adolescents may be more concerned with self-evaluations than evaluations by others in the context of appraisal support as measured by the CASSS.

## Limitations

The current study is subject to limitations. Although a reasonably large and diverse sample was used, the demographics of participants in this study do not accurately reflect the greater U.S. population. Thus, the generalizability of results should be considered with caution. Longitudinal data would also be preferred over the cross-sectional data that was collected, which would allow researchers to better explain the directionality of the relations between social support and global LS. Another limitation that should be considered is the self-report method of data collection in this study. Future

studies might benefit from use of multiple methods of assessment (i.e., parent and teacher report of youth LS levels).

## **Implications for Professionals and Future Directions**

This study contributes to the literature by demonstrating the differential importance of types of social support in addition to their sources in understanding the development of differences in early adolescent global LS. Such research on perceptions of social support should help in identification of specific supportive behaviors most effective to address in the implementation of interventions with early adolescents. Identification and improvement in the delivery of key social support behaviors within the school and home settings should likely foster better outcomes for youth. This study also supports that positive youth outcomes can be bolstered by incorporating support from multiple sources, as all three sources of social support (parent, teacher, peer) contributed to development of youth LS. Furthermore, as this study did not demonstrate differences in support types within sources as being moderated by gender, similar identified behaviors can be beneficial for both male and female youth.

As emotional support was indicated universally as the most important supportive behavior across sources, specific emotional support behaviors can be suggest to promote more positive outcomes in youth. Relationships within the school and home contexts should promote trust, empathy, and safety to successfully address you emotional needs. Additionally, youth should be supported in building meaningful and healthy relationships. Such relationships should naturally foster youth access to informational and instrumental support. Youth who are heard or feel that their needs can be expressed

should have greater opportunities for receiving helpful advice and appropriate resources when needed.

Though research into life satisfaction interventions for early adolescents is limited, such investigations into the specific types and sources of social support can help to inform more effective and developmentally appropriate interventions for youth. Furthermore, future studies should assess for changes in importance of specific social support behaviors within sources as they shift across developmental stages. Future studies should also account for other factors that influence the importance of different sources or types of social support (e.g., culture, geographic location, individual differences). Such data can provide additional meaningful information that may inform interventions targeted at youth LS.

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