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A Prospective Study of Differential Sources of School-Related Social Support and Adolescents' Global Life Satisfaction

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A Prospective Study of Differential Sources of School-Related Social
Support and Adolescents' Global Life Satisfaction

by

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Bachelor of Arts
Washington University in St. Louis, 2011

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DEDICATION

I would like to dedicate this to all my family and friends without whom I would not be where I am today. I would especially like to thank my mom for always believing in me, no matter what path I have taken and my dad for always pushing me to excel at whatever I try to do.

ACKNOWLEDGEMENTS

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ABSTRACT

This study examined the cross-sectional and prospective relationships between three sources of school-related social support (parent involvement, peer support for learning, and teacher-student relationships) and early adolescents' global life satisfaction. The participants were 597 middle school students from one large school in the Southeastern United States who completed measures of school social climate and life satisfaction on two occasions, five months apart. The results revealed that school-related experiences in terms of social support for learning contributed substantial amounts of variance to individual differences in adolescents' satisfaction with their lives as a whole. Cross-sectional multiple regression analyses of the differential contributions of the sources of support demonstrated that family and peer support for learning contributed statistically significant, unique variance to global life satisfaction reports. Prospective multiple regression analyses demonstrated that only family support for learning continued to contribute statistically significant, unique variance to the global life satisfaction reports at Time 2. The results suggest that school-related experiences, especially family-school interactions spill over into adolescents' *overall* evaluations of their lives at a time when direct parental involvement in schooling and adolescents' global life satisfaction is generally declining. Recommendations for future research and educational policies and practices are discussed.

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CHAPTER 1

PREFACE

The current study investigates the impact of school-related social support on students' global life satisfaction. In a shift away from previous approaches to student mental health, the present study takes a positive psychological approach to student well-being. The introduction examines the current state of the research on students' life satisfaction, including significant correlates, antecedents, and impacts on student functioning. It will conclude with relevant research that will explain how the current study adds to this growing body of knowledge. The methods section will provide a detailed description of the students surveyed and the measures used. The results section will detail what the analyses revealed. Finally the discussion will summarize the findings from the current study, place its findings within the current literature, and suggest future directions for further research.

CHAPTER 2

A Prospective Study of Differential Sources of School-Related Social Support and Adolescents' Global Life Satisfaction¹

¹ Siddall, J., Huebner, E. S., & Jiang, X. (2013). A Prospective Study of Differential Sources of School-Related Social Support and Adolescent Global Life Satisfaction. *American Journal of Orthopsychiatry*, 83(1), 107-114.

INTRODUCTION

The study of positive psychological development is a relatively new area of inquiry in the psychological and educational literatures. Although a large body of research has focused on the impact of negative factors such as psychopathology, poor school achievement, risk behaviors, and unsafe school environments on a host of academic and psychological outcomes, these approaches are limited in their ability to understand *optimal* human development. In recognition of this problem, a growing body of literature has begun to focus on positive aspects of psychological functioning such as life satisfaction, positive character traits, and positive institutions (Seligman & Csikszentmihalyi, 2000). This approach attempts to provide a more comprehensive view of adult and youth functioning by differentiating the presence of more optimal levels of functioning. For example, measuring subjective well-being (e.g., life satisfaction) in addition to psychological distress has been shown to provide a more comprehensive and meaningful picture of an individual's overall level of functioning (Antaramian, Huebner, Hills, & Valois, 2010; Suldo & Schaffer, 2008). Therefore, in order to provide a more balanced understanding of human development, positive psychological research attempts to empirically derive the antecedents, determinants, and consequences of positive well-being.

Although definitions of positive well-being have been controversial, life satisfaction is widely agreed upon as one major component (Diener, 1984, 2000). Life satisfaction studies focus on how and why people experience their lives in positive ways.

One commonly used definition of global life satisfaction in the literature, provided by Andrews and Withey (1976), is “a global assessment of a person’s quality of life according to his own chosen criteria” (p. 478). Life satisfaction is considered the cognitive component of subjective well-being, with the other two components being positive and negative affect (Pavot & Diener, 1993). Research on global life satisfaction (and positive affect) with adults has shown that it predicts a wide range of positive outcomes in adulthood, such as comfortable incomes, high quality interpersonal relationships, superior mental health, and a longer life (Lyubomirsky, King, & Diener, 2005). Such findings indicate that life satisfaction is an extremely important aspect of overall adaptation.

In addition to findings that high levels of global life satisfaction can predict positive life outcomes, research has also shown that low levels of global life satisfaction are also associated with negative life outcomes. Lower levels of global life satisfaction have been linked with several negative intrapersonal and interpersonal outcomes. For instance, Frisch, Cornell, Villanueva, and Retzlaff (1992) found significant negative correlations between global life satisfaction reports and measures of general psychopathology, anxiety, and depression in a non-clinical sample of adults. Low levels of life satisfaction have also identified college students at risk for interpersonal rejection (Furr & Funder, 1998), and school dropout (Frisch et al. 2005).

Recent research has found that not only is global life satisfaction an important predictor of life outcomes in adults, but it is also important in predicting the life outcomes and overall functioning of adolescents. For instance, Suldo and Huebner (2006) found that students who had very high (top 10%) life satisfaction scored higher across

numerous scales of adaptive psychosocial functioning and had lower levels of emotional and behavioral issues when compared to peers with average and very low levels of life satisfaction. In addition, Suldo and Huebner (2004a) found that after adolescents experienced significant life stressors, those with high global life satisfaction were significantly less likely to exhibit future externalizing behaviors. In longitudinal analyses, global life satisfaction reports have been found to be significant predictors of future internalizing and externalizing behaviors (Haranin, Huebner, & Suldo, 2007), peer relational victimization (Martin, Huebner, & Valois, 2008), and disengagement from schooling (Lewis, Huebner, Malone, & Valois, 2011). A comprehensive review of the literature by Proctor, Linley, and Maltby (2009) demonstrated that adolescents with higher levels of life satisfaction display higher levels of self-esteem, peer relations, social acceptance, academic achievement, and academic aspirations than peers with lower levels of life satisfaction. Much more research needs to be conducted, but the evidence to date suggests that global life satisfaction is crucial in the adaptation of children as well as adults.

Although more research is needed on the consequences of individual differences in adolescents' global life satisfaction, researchers have begun to investigate its antecedents and correlates. Similar to the early work done with adults, research with adolescents reveals that, contrary to expectations, associations between global life satisfaction reports and demographic variables (e.g., gender, socioeconomic status (SES), parental marital status) have been modest (Gilman & Huebner, 2003; Proctor, Linley & Maltby, 2009). Alternatively, personality and cognitive characteristics more strongly relate to students' overall life satisfaction. One of the most significant and consistent

correlates among adolescents is global self-esteem, with correlations ranging from .40-.60 in US samples (Huebner, 1991; Dew & Huebner, 1994; Gilman, Huebner, & Laughlin, 2000). Several studies have also found self-efficacy to be a robust correlate of life satisfaction (Suldo & Shaffer, 2007; Leung, McBride-Chang, and Lai, 2004; Natvig, Albrektsen, & Qvarnstrøm, 2003). For another example, the personality characteristic of neuroticism moderately relates to adolescents' global life satisfaction reports as well (Fogle, Huebner, & Laughlin, 2002). Furthermore, in addition to personality and cognitive characteristics, the quality of children's environmental conditions and experiences relates moderately to adolescents' life satisfaction. A growing body of research has shown that situational factors such as neighborhood, major life events, and family experiences are all important contributors to adolescents' life satisfaction (Huebner, et al. 2004). For example, Ash and Huebner (2001) observed that adolescents' life satisfaction levels significantly related to both daily, chronic stressors (e.g., neighborhood experiences) and how frequently adolescents experience positive and/or negative major, acute life events (e.g., the death of a loved one or winning an award). Research has also demonstrated that students who bully/ are bullied show lower levels of life satisfaction compared with their peers who are not involved in bullying (Flaspohler et al., 2009). Although early research supports the importance of various environmental factors, little is known about specific features of adolescents' environments that contribute to their overall life satisfaction.

Of most importance to this study, research on the environmental correlates of youth's global life satisfaction indicates that high quality social relationships are the strongest correlate of youth life satisfaction. The existing research has demonstrated that

positive parent-child relationships are more strongly associated with adolescents' global life satisfaction than peer relationships, although the latter are also significantly related to life satisfaction (Huebner, 1991; Man, 1991). Furthermore, research by Dew and Huebner (1994) indicated that parent-child relationships were a stronger predictor of global life satisfaction than adolescents' perceptions of their physical appearance and academic self-concept. The importance of parent-child relationships on adolescents' global life satisfaction has also been found in cross-cultural studies with French, Chinese, and Australian samples (Leung & Leung, 1992; Petito & Cummins, 2000; Sastre & Ferriere, 2000; Shek, 1997).

To date, the majority of life satisfaction studies involving adolescent students has focused on identifying *non-school* environmental factors (e.g., family, peer, and self-related) associated with positive levels of global life satisfaction (Huebner, Suldo, & Gilman, 2006). For instance, Stewart and Suldo (2011) investigated several sources of social support, including general parental support and support from teachers, classmates, close friends, and school. They found that general parental support and support from classmates were both unique predictors of middle school students' life satisfaction, with parental support being the most significant predictor.

While some research has been done on the relationship between general social support and life satisfaction in adolescents, scant attention has been paid to the role of *school-related* social support and global life satisfaction. However, a number of studies have investigated school and general social support and adolescents' school satisfaction. School satisfaction has been defined as students' satisfaction with their overall school experiences (Huebner, 1994) and because of the amount of time students spend in school,

it has been found that school satisfaction is closely related to students' overall life satisfaction (Huebner et al., 1998; Zullig, Huebner, and Patton, 2011). In examining the relationship between social support and school satisfaction, DeSantis King, Huebner, Suldo, and Valois (2006) found that support from teachers, parents, and peers all contributed unique variance to the prediction of adolescents' school satisfaction. However, teacher support contributed the most unique variance. A number of studies have replicated the finding of the central importance of teacher support to adolescents' school satisfaction (e.g., Casas, Baltatescu, Bertran, Gonzales, & Hatos, in press; Kim & Kim, in press; Ito & Smith, 2006). Although school satisfaction is significantly related to adolescents' life satisfaction, there is a clear distinction between school and global life satisfaction. Reports of satisfaction with school experiences represent a more circumscribed evaluation of well-being compared to global life satisfaction reports, which reflect a more pervasive evaluation of well-being. This has been demonstrated in cross-cultural research conducted by Park and Huebner (2005), which revealed that the magnitude of the relationships between school and global life satisfaction differed substantially between US and Korean students, with a much weaker association observed among the US students. Such a finding suggests that the contribution of school satisfaction to global life satisfaction may be much greater for some students than others.

A handful of subsequent studies have explored the relationships between school-related social support and adolescents' global life satisfaction judgments. Suldo, Shaffer, and Riley (2008) administered surveys to 321 US high school students, including measures of school climate (which included school-related social support) and global life satisfaction. The school climate measure examined six different dimensions: order and

discipline, student interpersonal relations, student-teacher relations, parental involvement, sharing of resources, and building appearance and upkeep. Suldo et al. (2008) found that of the school climate dimensions, only the school-related social support variables of teacher-student relations and parental involvement were unique predictors of students' global life satisfaction. In a subsequent study, Suldo, Thalji-Raitano, Hasemeyer, Gelley, and Hoy (2012) found that, among middle school students, four different dimensions of school social climate (student interpersonal relations, student-teacher relations, order and discipline, and parent involvement in schooling) were all unique predictors of life satisfaction. A similar study conducted among high school students by Suldo, McMahan, Chappel, and Loker (2012) also found peer interpersonal relations and parent involvement to be unique predictors of students' global life satisfaction. Danielson, Samdal, Hetland, and Wold (2009) also conducted a study where they administered surveys, including measures of school social support and global life satisfaction, to 1,736 13-year-old and 1,622 15-year-old Norwegian students. Of the school-related social support variables, only parental support and peer support showed significant direct effects on students' global life satisfaction. Danielson et al. (2009) postulated that one possible reason for the effects of both parental and peer support, but not teacher support on adolescents' overall life satisfaction was that support provided by parents and peers likely extends beyond the school day and into home and leisure activities as well, exerting a more pervasive influence on global life satisfaction.

Although these previous studies provide sound preliminary evidence for a robust relationship between school-related parental social support and students' global life satisfaction, they differ in their conclusions regarding teacher-student relationships and

peer support for learning. The differences could reflect methodological limitations (e.g., use of different measures of school-related social support) or the differences could reflect age/grade and/or cultural differences between the older adolescent US sample versus the younger Norwegian sample. Further research is needed to investigate these differences. For example, age grade/differences in levels of global life satisfaction have been shown in favor of high (vs. middle) school students (Goldbeck et al. 2007; Suldo & Huebner, 2004b), perhaps reflecting the well-documented academic and psychosocial challenges of adolescents' transition to middle school (Eccles et al. 1993).

One major limitation of all studies investigating the relationship between school-related social support and adolescents' global life satisfaction is that, to date, they have all been cross-sectional in nature. Therefore, the ability to derive causal inferences is limited. The current study addressed this gap by providing cross-sectional and prospective analyses of the relationships between school-related social support at Time 1 and students' global life satisfaction during this significant transition time (i.e., middle school) for students. Based on previous findings by Suldo, Shaffer, and Riley (2008), Suldo, Thalji-Raitano, Hasemeyer, Gelley, and Hoy (2012), and Danielson et al. (2009), we hypothesized that school-related social support would be significantly related to early adolescents' global life satisfaction at both Time 1 and Time 2. More specifically, based on the Danielson et al. (2009) study, we also predicted that family and peer support for learning at Time 1 would significantly predict students' global life satisfaction at Time 1. Furthermore, based on the extensive literature regarding the link between parental social support and global life satisfaction (Danielson et al., 2009; Dew & Huebner, 1994; Man, 1991; Suldo & Huebner, 2004; Suldo, Shaffer, & Riley, 2008), we hypothesized that

family support for learning would continue to significantly predict adolescents' global life satisfaction at Time 2 (controlling for global life satisfaction reports at Time 1).

METHOD

Participants

A survey investigating students' school social climate, student engagement, and global life satisfaction was administered by school officials to students at a large middle school in the Southeastern United States in both Fall 2008, and five months later in Spring 2009. These archival data were subsequently made available for analyses for the current research. This data set has also been used in previous research (e.g., Lewis, Huebner, Malone, & Valois, 2010), but these analyses are new.

A total of 864 7th (50.7%) and 8th (49.3%) grade students completed the survey in the fall of 2008 of which 779 (90.2% of the original sample) subsequently completed surveys in the spring of 2009. Of the 779 students who completed surveys at Time 2, 597 students had complete data for all of the variables examined and were subsequently analyzed in the current study. The mean age of the sample was 12.69 ($SD = .67$) at Time 1 and 13.08 ($SD = .77$) at Time 2. Based on the Time 1 data, the ethnic/racial composition of the sample was 61.5% Caucasian, 25.8% African American, 3.4% Asian American or Pacific Islander, 1.5% Hispanic or Latino, 1% Native American, and 6.9% identified as "other". Free and reduced lunch was used as a measure of socioeconomic status. 19.9% of students were receiving free and reduced lunch at Time 1 while 17.9% were receiving free and reduced lunch at Time 2. Demographic data are presented in Table 2.1.

Table 2.1 Demographic Statistics.

Demographic Variable	Frequency (Percent)
Grade	
7th	293 (49.1%)
8th	304 (50.9%)
Gender	
Male	285 (47.7%)
Female	312 (52.3%)
Race	
White	367 (61.5%)
African American	154 (25.8%)
Asian	20 (3.4%)
Hispanic/Latino	9 (1.5%)
Native American	6 (1.0%)
Other	41 (6.9%)

Measures

Students' Life Satisfaction Scale (SLSS; Huebner, 1991). The SLSS is a 7-item self-report measure of students' global life satisfaction, or their evaluation of their lives as a whole, over and above that of specific domains (e.g., family, school, peers). Students responded on a six-point Likert scale ranging from 1= *Strongly Disagree* to 6= *Strongly Agree*. Higher scores on the scale thus represented higher levels of life satisfaction. The SLSS has been used successfully with children between the ages of 8-18 (see Huebner & Hills, in press, for a review). The SLSS demonstrates a unidimensional factor structure and adequate 2-week test-retest reliability ($r = .74$) and internal consistency ($\alpha = .82$).

Student Engagement Inventory (SEI; Appleton, Christenson, Kim, & Reschly, 2006). The SEI is designed to assess facilitators (e.g., school-related social support) and indicators of student engagement. The SEI is a self-report instrument that contains 33 items. Students respond to all items on a four-point Likert scale ranging from 1= *Strongly Disagree* to 4= *Strongly Agree*. Accordingly, higher scores indicate higher levels of social support and engagement at school. The SEI demonstrates acceptable psychometric properties, including factorial invariance across adolescence (Betts, Appleton, Reschly, Christenson, & Huebner, 2010).

For the purpose of this study, we used the following three subscales assessing social facilitators of student engagement, that is, school-related sources of social support. To measure teacher-student relationships, we used the Teacher-Student Relationships subscale of the SEI, which consists of nine items designed to measure students' judgments about the nature of student-teacher relationships at their school (e.g., "At my school, teachers care about students"). Appleton et al. (2006) found adequate internal consistency ($\alpha = .88$) for the Teacher-Student Relationship subscale.

Peer support for learning was assessed using the Peer Support for Learning subscale of the SEI. This subscale consists of six questions designed to measure the extent to which each student perceives their learning is supported by their peers (e.g., “Other students at school care about me”). Appleton et al. (2006) found adequate internal consistency ($\alpha = .82$) for the Peer Support for Learning subscale.

Family support for learning was assessed using the Family Support for Learning subscale of the SEI. This subscale consists of four items measuring the level of family support, specifically in the school context (i.e. “When I have problems at school my family/guardian(s) are willing to help me”). Appleton et al. (2006) found adequate internal consistency ($\alpha = .76$) for the Family Support for Learning subscale.

Procedures

In the fall (Time 1), passive consent forms were made available by the school to all parents asking permission for their child to participate in two waves of data collection (N = 1,044). From the first wave of data, 12 parents denied consent, one teacher failed to participate (N = 25), and 79 students were absent on the day the survey was administered; therefore, these students were not included in the participant pool. Special education students were also not included in the data collection (N = 39). Furthermore, four students were removed from the Time 1 sample because they did not have enough identifying information to track them at Time 2. After eliminating all of the students missing Time 1 or Time 2 data, the final sample included 597 students, or 57% of the total school population.

At both Time 1 and Time 2, teachers administered surveys during their homeroom period to groups of 15-28 students. Teachers read scripted directions instructing students

to complete the entire survey packet, informing them of their right to withdraw at any time, and informing them that their responses would be kept confidential. Students began by completing a brief series of demographic questions (e.g., age). Data on race, gender, SES (measured using free or reduced lunch rate), and special education status were derived from school records. The youth completed the measure of global life satisfaction first with the other measures being presented in a counterbalanced order. This specific order was used because previous research has found that presenting domain-specific questions (e.g., school experiences) first may influence how a person subsequently rates their global life satisfaction (Diener & Fujita, 1995).

RESULTS

Descriptive Statistics

Prior to conducting regression analyses, histograms were plotted to test the normality of each criterion variable. All variables were within acceptable limits of normality.

Table 2.2 presents the means (M) and standard deviations (SD) for all variables assessed at Time 1 and Time 2. The mean for global life satisfaction was 4.50 ($SD = 1.00$) at Time 1 and 4.28 ($SD = 0.60$) at Time 2. The Time 1 and Time 2 responses are consistent with a “Mildly Agree” response to positive life satisfaction. These results are comparable to mean ratings of life satisfaction that have been reported in previous studies with different adolescent samples (Huebner, 1991; McCullough, Huebner, & Laughlin, 2000; Suldo & Huebner, 2006).

The effects of demographics (sex, race, grade, and SES) on school-related social support variables at Time 1 and global life satisfaction at Time 1 and Time 2 were assessed by comparing scale means using F tests in order to determine which demographic variables to include in the full regression model.

With respect to adolescents’ global life satisfaction reports, a significant difference between races was observed at Time 1, $F(5, 591) = 4.18$. Follow-up analyses using Tukey’s HSD revealed no significant differences in Time 1 global life satisfaction scores among race groups, with the exception being a significant difference between the Caucasian group ($M = 4.59, SD = 0.79$) and the “Other” race group ($M = 3.93, SD =$

Table 2.2 Descriptive Statistics.

Variables	Mean	SD
Family Support for Learning	3.57	0.55
Teacher-Student Relationship	2.94	0.66
Peer Support for Learning	3.30	0.58
Life Satisfaction Time 1	4.48	1.00
Life Satisfaction Time 2	4.28	0.60

0.99). A significant difference was also found between the two SES groups ($F(1,595) = 19.37$), with the high SES group having higher mean life satisfaction ($M = 4.56$, $SD = 0.96$) than the low SES group ($M = 4.12$, $SD = 1.05$). No demographic variables showed significant differences at Time 2.

Social Support Variables

In the Family Support for Learning subscale, the difference between 7th and 8th grade students was significant ($F(1,595) = 8.01$), with Grade 7 scores ($M = 3.64$, $SD = 0.47$) significantly higher than Grade 8 scores ($M = 3.51$, $SD = 0.62$). There was also a significant difference in Family Social Support scores between the two SES groups ($F(1,595) = 9.60$) with the high SES group on average scoring higher ($M = 3.61$, $SD = 0.52$) than the low SES group ($M = 3.43$, $SD = 0.65$).

Significant differences in Peer Support for Learning were observed for gender ($F(1,595) = 16.72$), with female students reporting significantly higher scores ($M = 3.38$, $SD = 0.50$) than male students ($M = 3.19$, $SD = 0.65$). The demographic variables showed no significant differences on the Teacher-student relationship subscale.

Zero-Order Correlations

Table 2.3 presents the intercorrelations between the predictor and criterion variables. All of the variables were found to have significant positive correlations ($p < .01$). All of the school-related social support variables at Time 1 were significantly correlated with global life satisfaction at Time 1 and Time 2.

Multiple Regression Analyses

Two sets of hierarchical regression models were tested to examine the relationships between the three school-related social support variables and global life

Table 2.3 Intercorrelations among Predictor and Criterion Variables.

Variables	1	2	3	4	5
1. Life Satisfaction Time 1	-				
2. Life Satisfaction Time 2	.38**	-			
3. Family Support Time 1	.49**	.37**	-		
4. Teacher-Student Time 1	.34**	.22**	.49**	-	
5. Peer Support Time 1	.43**	.20**	.43**	.46**	-

Note. ** $p < .01$

satisfaction at two different points in time. The first hierarchical regression model analyzed the data only at Time 1. The model contained two steps in order to determine whether the Family Support for Learning, Peer Support for Learning, and Teacher-Student Relationships subscales at Time 1 were able to predict Time 1 global life satisfaction, controlling for demographic variables. This regression model is presented in Table 2.4. Results revealed that the addition of the social support variables added significant predictive power over and above that predicted by the demographic variables ($\Delta F(7, 589) = 89.32$, $\Delta R\text{-square} = 0.30$, $p < .01$). Moreover, the Peer Support for Learning ($\beta = .274$, $p < .01$) and Family Support for Learning subscales ($\beta = .335$, $p < .01$) were both found to significantly predict global life satisfaction at Time 1, but not Teacher-Student Relationships ($\beta = .063$).

To assess whether Family Support for Learning, Peer Support for Learning, and Teacher-Student Relationships at Time 1 significantly predicted life satisfaction at Time 2, a separate hierarchical regression analysis was conducted (see Table 2.5). Results show that after controlling for relevant demographic variables and life satisfaction at Time 1, the addition of the social support variables added significant predictive power to the model ($\Delta F(8, 588) = 12.45$, $\Delta R\text{-square} = 0.05$, $p < .01$). Results also revealed that Family Support for Learning was the only significant predictor of Time 2 life satisfaction scores ($\beta = .258$, $p < .01$).

Table 2.4 Regression Analyses Predicting Time 1 Life Satisfaction from Time 1 Social Support.

Step & Variable	<i>B</i>	<i>SEB</i>	β	R^2	ΔR^2	ΔF
Time 1 LS						
Step 1- Demographics				.051	.051	7.93*
Gender	-.159	.080	-.080*			
Grade	.081	.080	.040			
Race	-.219	.085	-.107**			
SES	-.381	.104	-.153**			
Step 2 - Social Support				.348	.297	89.32*
Teacher-Student Relationship	.095	.061	.063			
Peer Support for Learning	.467	.067	.274**			
Family Support for Learning	.604	.072	.335**			

Note: n = 597, LS= Life Satisfaction, * $p < .05$ ** $p < .01$

Table 2.5 Regression Analyses Predicting Time 2 Life Satisfaction from Time 1 Social Support.

Step & Variable	<i>B</i>	<i>SEB</i>	β	<i>R</i> ²	ΔR^2	ΔF
Step 1				.005	.005	.718
Gender	-.045	.050	-.037			
Grade	.040	.049	.034			
Race	.042	.053	.034			
SES	-.071	.064	-.047			
Step 2				.151	.146	101.87**
Life Satisfaction Time 1	.237	.023	.393**			
Step 3				.202	.051	12.45**
Teacher-Student Relationship	.022	.041	.024			
Peer Support for Learning	-.030	.047	-.030			
Family Support for Learning	.281	.051	.258**			

Note. *N* = 597, ** *p* < .01

CHAPTER 3
DISCUSSION

Global life satisfaction is a key indicator and determinant of positive youth development in a variety of contexts, including school performance and behavior. Nevertheless, global life satisfaction decreases during adolescence (Goldbeck et al. 2007; Suldo & Huebner, 2004b). The reason for this decline is unclear. Although a variety of determinants of individual differences in adolescents' global life satisfaction judgments have been proposed, studies of school-related determinants have been sparse, especially experimental or longitudinal studies (Huebner & Gilman, 2003; Proctor, Linley, & Maltby, 2009). The primary purpose of this study was thus to conduct cross-sectional and prospective analyses of the relationship between *school-related* social support variables and global life satisfaction in adolescents.

Cross-sectional analyses revealed that school social support variables, as a group, were significant contributors to students' global life satisfaction at Time 1, accounting for 30% of the total variance. More specifically, the analyses revealed that at Time 1, both family support for learning and peer support for learning were statistically significant contributors to adolescents' overall life satisfaction. Thus, the findings suggest that the more supported that students feel with respect to their schooling, the higher their levels of life satisfaction as a whole, not just their satisfaction within their schooling. As noted previously, this distinction is important because adolescents' global satisfaction reports represent a different, more pervasive evaluation of the quality of one's life compared to school satisfaction report.

These findings are consistent with the previous cross-sectional research conducted by Danielson et al. (2009), which found peer and parent support to be much more highly related to adolescent students' global life satisfaction than teacher support. The findings

also support cross-sectional results obtained by Suldo, Shaffer, and Riley (2008) in which family support served as a major contributor to adolescents' global life satisfaction, but differed in that the current analyses showed peer support to be more important than teacher support to students' life satisfaction.

Prospective analyses revealed that school-related social climate also significantly predicted adolescents' global life satisfaction at Time 2, even when controlling for life satisfaction at Time 1. In total, the school-related social support variables accounted for significant (i.e., 5%) variance in the life satisfaction scores at Time 2, controlling for Time 1 life satisfaction scores. Moreover, the prospective analyses examining the differential importance of the various social support variables to life satisfaction further revealed that the effect was mainly driven by family support for learning. This finding indicates that parental involvement in the adolescents' school experiences is not only a correlate of adolescents' global life satisfaction, but is also a key school-related *determinant* of their life satisfaction. Apparently, the importance of family support for learning is salient even for students during early adolescence, when they are beginning to strive for increasing autonomy from their parents (Steinberg, 1990).

The findings of this study are significant when taking an ecological, systems approach to development, such as that proposed by Bronfenbrenner (1979). The findings were consistent with such multisystemic models in that multiple proximal (e.g., peers) correlates of adolescents' global life satisfaction were identified. Previous studies have examined the relationship between the general quality of family relationships and adolescents' global life satisfaction (Dew & Huebner, 1994; Huebner, 1991; Man, 1991),

but this study is among the first to address the differential importance of family, peer, and teacher support, specifically within the context of schooling.

The transition to middle school has long been recognized as a particularly challenging time, which may be due to a poor fit between the developmental needs of young adolescents and the nature of the school environment (Eccles et al., 1993). According to Bronfenbrenner's (1979) theory, the proximal factors within the immediate environment of the school (child characteristics, teacher-student relationships, and peer interactions) are more influential determinants of student outcomes than the more distal factors (e.g., family-school interactions). Furthermore, some school professionals may assume that students' experiences in the school context do not generalize to their lives more pervasively - that what happens at school stays at school. The current research challenges this notion by providing evidence that school-based social support has a substantial impact on students' lives, that is, on their satisfaction with life *as a whole*.

Thus, school improvement efforts cannot stop at the school door, focusing only on what happens within the classroom and school. Phillips (1993) summarized nearly two decades ago, "The convergence of the interests and synergistic actions of multiple constituencies and systems is an implicit principle of all successful school intervention programs" (p. 217). The findings of this study provide a strong demonstration that school-related social factors, especially family support for learning, matter to adolescents' *overall* life satisfaction. As suggested by Danielson et al. (2009), perhaps the strong role of families is due to their ability to exert influence across home, school, and neighborhood activities. It is interesting that middle school students' perceived parental support remains crucial to their overall life satisfaction at the very time when many

parents become less directly involved in their students' school experiences (Chavkin & Williams, 1988; Dornbusch & Glasgow, 1996; Epstein, 1986).

This study had a number of important limitations. One major limitation was that the sample was composed of mainly Caucasian students from a single school in a Southern state. Additional research needs to be conducted with a variety of populations and in different parts of the country and other nations in order to evaluate the generalizability of the results. Second, although this study was able to measure student perceptions of school climate and well-being, it was not able to link the study variables to particular parenting behaviors at the secondary school level (e.g., monitoring homework completion, attendance at school events) that may mediate the relationship between school-related social support and global life satisfaction. Further research should delineate the specific psychosocial mechanisms which account for the linkages between school-related social support and adolescents' global life satisfaction. Third, the analyses were conducted solely with self-report measures, introducing method variance. Future research would benefit from multi-method assessments of the relevant variables.

Although this study had limitations, it extended beyond previous studies in this area by addressing the relationship between school-related social support and global life satisfaction from a two-wave prospective perspective. To date, studies of associations between adolescents' school social experiences and global life satisfaction have been limited to cross-sectional analyses (e.g., Danielson et al.; 2009; Suldo, Schaffer, & Riley, 2008), which do not shed light on the directionality of effects. This study thus makes an important contribution to the literature by bolstering the inference that school social support, especially family support for learning, plays a causal role in changes in global

life satisfaction across time, specifically during the same school year. Nevertheless, the derivation of causal inferences from this study should be done cautiously. Although a two-wave study establishes temporal precedence, it is also possible that a third variable accounts for any observed relationships between school-related social support and adolescents' life satisfaction.

The use of a relatively short time interval was also a strength relative to some longer-term longitudinal studies. Compared to more trait-like variables (e.g., personality traits), global life satisfaction represents a variable that may show fluctuations across shorter periods of time. For example, the 5-month stability coefficient in this study was .38, suggesting that adolescents' judgments of their life satisfaction can differ from semester to semester during a school year. Given individuals' tendencies to adapt (i.e., return to baseline levels of life satisfaction) to many life experiences (Diener, Lucas, & Scollon, 2006), the use of a five-month time frame likely provides a more optimal interval for examining causal processes than a longer-term interval (Cohen, Cohen, West, & Aiken, 2003).

This research has implications for both researchers and school professionals. Given the recent calls for a science and practice of positive psychology in schools and other institutions relevant to children (e.g., Seligman & Csikszentmihalyi, 2000), this research suggests that there are benefits to using measures of social climate as well as life satisfaction in comprehensive assessments of students' school experiences to monitor and support positive student well-being on an individual, group, or school-wide level. Including measures of school social support and life satisfaction may not constitute a *comprehensive* system for monitoring students' school experiences (Huebner et al.,

2009), but they may help lay the foundation for monitoring systems that track social assets and risk factors and other key variables related to youth well-being.

School-related social support is a potentially alterable variable, which could thus serve as a central component of school programs and policies designed to maintain positive student well-being, including global life satisfaction. Recommended practices for promoting greater parent and family involvement in schooling can be found in Esler, Godber, and Christenson (2008). Broad school-wide recommendations include (1) advertising school-family partnerships as a priority in the school and (2) educating school personnel and families concerning the processes of developing positive school-family partnerships. Recommendations at the individual level include (1) working with school personnel so that the target child is well known by at least one staff member, (2) working with families and targeted school personnel to ensure consistent two-way communication, (3) facilitating trust between families and school personnel through creating ongoing interactions, and (4) for children with special needs, emphasizing that the development, implementation, and monitoring of individualized educational programs is an ongoing group process, including school personnel and the family in decision making.

Finally, the findings of this study yield social and educational policy implications. The findings identify important variables that help shape adolescents' sense of overall life satisfaction and thus should provide direction to state and national policy makers who would seek to make students' global psychological well-being a priority in schools. For example, policy makers can support policies at the micro-, macro, and mesosystemic levels that are "family friendly" with respect to parental involvement in their children's

schooling. Specific recommendations for national policies for families based on well-being research can be found in Layard (2005). To summarize, promoting high levels of parent involvement in their adolescents' schooling appears uniquely important for facilitating optimal levels of adolescents' overall life satisfaction, which in turn facilitates school success.

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