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Angel Moore

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How Do Stress, Social Support, and Mental Health Relate in The Lives of College Students?

by

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A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of Honors Requirements

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ABSTRACT

Stress experienced in college can have considerable negative consequences upon those that experience it and do not properly cope. Perceived social support has repeatedly been found to act as buffer against these negative consequences and effects (Dwyer & Cummings, 2001). The present study sought to understand specific details surrounding the stress experienced by students, their current social support, and their mental health. Nine college student participants completed an interview about recent stress and measures related to social support and symptoms of mental health problems. Correlations among these factors revealed that overall social support is negatively associated with stress and mental health symptoms, though there was some variability, and that stress was positively associated with mental health symptoms.

Keywords: social support, stressful life events, mental health

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LIST OF ABBREVIATIONS

APA	American Psychiatric Association
DSM-5	Diagnostic and Statical Manual of Mental Disorders-fifth edition
MSPSS	Multidimensional Scale of Perceived Social Support (MSPSS)
PCSQ	Perceived Community Support Questionnaire
SLES	Stressful Life Events Schedule
SPSS	Statistical Package for the Social Sciences

CHAPTER I: INTRODUCTION

College, a large commitment in any student's life, brings about new demands and challenges that can prove to be stressful in the lives of students (Conley, Travers, & Bryant). Students face events and circumstances that can negatively impact their academic endeavors as well as their health (Sukup & Clayton, 2021). With their academics impacted, students may begin to experience academic stress, which has been related to issues such as depression and anxiety (Dwyer & Cummings, 2001). The harmful relationship between stress, health, and academic success is concerning, especially if students do not have resources that can help them de-stress or at least lessen the impact of their experienced stress. Social support, which can be defined by connections within a social network, has been found to help mitigate the effects of stress by acting as a buffer (Dwyer & Cummings, 2001).

The time spent in college is specifically stressful due to the unique stressors associated with college and emerging adulthood, as well as an increased risk for exposure to potentially traumatic events (Galatzer-Levy, Burton, Bonanno, 2012). More concerning, today's college students are facing increased stress along with increased difficulty coping (Galatzer-Levy et al, 2012; Sukup & Clayton, 2021). Often, students experience stress that is unrelated to courses, such as housing and financial complications and interpersonal conflicts. The stressors college students experience can have negative impacts on their quality of life, health, and academic success (Cohen & Wills, 1985; Sukup & Clayton, 2021). Stressful events have the potential to elicit a range of reactions and perceived stress from individuals due to subjective experiences of the events (Dwyer & Cummings, 2001). Social support, however, can act as a buffer against the negative

impact of stress and promote psychological well-being (Cohen & Wills, 1985; Dwyer & Cummings, 2001).

1. Stress in the Lives of College Students

1a. Impact. Stress has a negative impact on students' physical and mental health (Dwyer & Cummings, 2001; Krendl, 2021; Sukup & Clayton, 2021). Additionally, continual stress can lead to students becoming less successful in their academic endeavors (Sukup & Clayton, 2021). Common stressors in students' lives are feelings of loneliness, homesickness, interpersonal relationship conflicts, academic pressure, financial problems, and personal health (Acharya, Jin, & Collins, 2018; Conley, Travers, & Bryant, 2013). Some of these stressors are unique to college and early adulthood and are labeled as potentially traumatic events (Galatzer-Levy, Burton, & Bonanno, 2012).

1b. Resulting Symptoms & Associated Behaviors. Along with increased stress, today's college students are faced with increased difficulty coping (Galatzer-Levy et al, 2012; Sukup & Clayton, 2021). The stressors experienced by college students put them at an increased risk for mental health concerns, specifically depression (Acharya, Jin, & Collins, 2018; Oh, Leventhal, Tam et al 2021). Depression, anxiety, and suicidal ideation are recurring mental health concerns amongst American college students that may be associated with the typical stressors experienced that were discussed in the previous section (Acharya, Jin, & Collins, 2018). The common stressors associated with college and early adulthood and their association with depression is a well-researched topic (Acharya, Kin, & Collins, 2018).

2. Social Support

Social support can be defined as connections within a social network (Dwyer & Cummings, 2001). It can be received from friends, family, romantic partners, and the surrounding community. It is a resource which students can rely on, confide in, and/or receive help from (Zimet, Dahlem, Zimet & Farley, 1988).

2a. Social support as a buffer and resource. Social support can act as a buffer against the negative impact of stress and promote psychological well-being (Cohen & Wills, 1985; Dwyer & Cummings, 2001). However, social support has been operationalized differently across studies. This difference in the literature is not a major concern according to Cohen and Wills's (1985) meta-analysis that sought to understand if the overall benefit of social support was different from social support as a buffer against the negative effects of stress. Another study that views social support as a resource explained that social support provides a reservoir of resources outside of oneself and may be a central building block of health and well-being as it relates to self-identity (Hobfoll, Freedy, Lane, & Geller, 1990).

2b. Social support sources. Most literature surrounding social support only looks at the support given from three sources: friends, family, and romantic relationships. Community support in the lives of college students is an under-researched topic in psychology journals (Herrero & Gracia, 2007). Herrero and Gracia sought to fill this gap with their Perceived Community Support Questionnaire that includes three scales assessing social integration in the community, participation in the community, and use of community organizations.

The present study examines the relationship between perceived stress, social support from multiple sources, and mental health as reported by students at a university in the southern United States. It was hypothesized that all forms of social support will have negative correlations with stress levels of participants and mental health symptoms. Furthermore, positive correlations between experienced stress and mental health symptoms were expected.

CHAPTER II: METHODS

Participants

Participants were gathered from a population of students at a university in the southern U.S. Participants were gathered, after the university's IRB approved the study, through the university's SONA psychology participant system. Participants were awarded credits that could be used to fulfill course requirements and/or for extra credit.

Recruitment Process & Data Collection

All participants were recruited strictly through the university's psychology participant system. There were no further requirements that needed to be met by participants. Furthermore, there were no preferences for participants of a certain race/ethnicity, gender, or age. Data was collected through a Qualtrics survey and via a videoconference interview.

Measures

Stressful Life Events Schedule. Participants were provided with a list of potentially stressful events from the Stressful Life Events Schedule (SLES) (Williamson et al, 2003) and asked to indicate which events they experienced in the 6 months prior to their interview date. There was a total of 88 example events that were categorized by topic. (e.g., education, work, death, romantic relationships) with additional space where participants were prompted to add additional events that occurred for them that were not previously listed. Participants first indicated which stressful events have occurred and how stressful the event was at the time it occurred on a scale of not stressful (1) to very stressful (4). Further information was gathered during a semi-structured interview in which participants provided further information on the events they experienced (e.g.,

when the event occurred, who was involved, what the event entailed). The interviewer recorded the details of each event and ensured that it met criteria for inclusion in the study (e.g., occurred during the previous 6 months). The primary variables of interest from this measure were the event count (number of events reported) and weighted sum of stress experienced. The weighted sum was calculated from participants' reports of perceived stress from individual events, which are squared so that higher ratings are more heavily weighted, and then summed together.

Social Support. The Multidimensional Scale of Perceived Social Support (MSPSS) is a 12-item scale that measures perceived support from family, friends, and significant others (Zimet et al, 1988). The significance of support from each group was indicated on a 7-point Likert scale—1 = very strongly disagree, 7 = very strongly agree. Support scores were summed individually (by source) and together. Community support was measured on the 15-item Perceived Community Support Questionnaire (PCSQ; Herrero & Garcia, 2007); however, instead of using a 5-point scale like the original, statements were rated on a 7-point scale so that comparisons and averages between sources of social support could be analyzed more easily.

DSM-5-TR Self-Rated Level 1 Cross-Cutting Symptom Measure – Adult. To assess participants' recent mental states and emotions, the DSM-5-TR Self-Rated Level 1 Cross-Cutting Symptom Measure (American Psychiatric Association, 2014) was used. In particular, the frequency at which participants felt they had dealt with symptoms of depression, anxiety, anger, and suicidal ideation were points of interest for this study. This measure consists of 23 questions that apply to 13 different domains; however, only the domains previously mentioned were included in this study as they represent common

forms of mental health problems among college students. Participants reported on symptoms they had experienced during the two weeks prior to their interview date on a 5-point Likert scale (0 = None, Not at all, Slight, or Rare; 1 = Less than a day or two; 2 = Mild, Several days; 3 = Moderate, More than half the days; 4 = Severe, Nearly every day). To score relevant domains, scores from specific questions were summed according to measure instructions.

Procedure

Data were collected during a two-hour appointment in which participants filled out surveys online and were interviewed about stressful events in their lives. The appointment began with the researcher explaining the reason behind the study, the procedures, participants' right to privacy, and the risks and rewards associated with the study. After informed consent was obtained, the participants completed measures for a larger study, which includes the SLES, MSPSS, PCSQ and DSM-5-TR Self-Rated Level 1 Cross-Cutting Symptom Measure – Adult. Once participants completed the online questionnaire portion, the researcher proceeded to the SLES semi-structured interview. Events used in SLES are potentially traumatic, so participants were never required to provide more information than they were comfortable sharing.

Data analyses included an examination of descriptive data and two-tailed Pearson Correlations using the Statistical Package for the Social Sciences (SPSS). The primary variables of interest were SLES Event Count, SLES Weighted Sum, MPSS Social Support average, MSPSS Family, MSPSS Friends, MSPSS Significant Other, PSCQ (community social support), and Cross-Cutting symptom measure scores for Depression, Anger, Anxiety, and Suicidal Ideation.

CHAPTER III: RESULTS

Sample Means and Demographics

Nine participants completed this study. They were primarily female (88%) and mostly Black/African American and White/Caucasian (44% Black/African American; 44% White/Caucasian; 11% Multiracial). Means and standard deviations for variables of interest can be found below in Table 1.

Table 1 Descriptive Statistics

	Mean	Std. Deviation
Event Count	7.33	3.94
Weighted Sum	48.67	22.84
MSPSS Family	4.53	1.61
MSPSS Friends	5.42	1.01
MSPSS Sig. Other	6.47	0.83
PCSQ Organization	4.93	1.16
APA Depression Screen	2.22	2.28
APA Anger Screen	1.33	1.12
APA Anxiety Screen	4.44	2.24
APA Suicidal Screen	0.33	1

Participants had experienced significant stress in the six months leading up to their interview date, with an average of over seven stressful events. Participants that were involved in a serious romantic relationship reported the highest average of perceived support from their partner ($M = 6.47$, $SD = 0.83$). Social support perceived from friends ($M = 5.42$, $SD = 1.01$) averaged higher than from family ($M = 4.53$, $SD = 1.61$) and community ($M = 4.93$, $SD = 1.16$). Regarding mental health, participants reported relatively more symptoms of anxiety ($M = 4.44$, $SD = 2.24$) and depression ($M = 2.22$, $SD = 2.28$) than symptoms of anger ($M = 1.33$, $SD = 1.12$) and suicidal ideation ($M = .33$, $SD = 1$).

Correlations with Stress

Associations between variables of interest were assessed using bivariate correlations, the results of which can be found in Table 2.

Table 2 Stress with Social Support and Mental Health Correlations

	Event Count	Weighted Stress Sum
Social Support Average	-.17	-.38
MSPSS Family	-.28	-.21
MSPSS Friends	.13	-.23
MSPSS Significant Other	.20	.51
PCSQ Organization	.12	-.22
Depression	.63	.56
Anxiety	.38	.40
Suicidal Ideation	.54	.59
Anger	.57	.59

None of these associations were statistically significant with a sample size of nine participants, but correlations with a moderate ($>.3$) or large ($>.5$) effect size—as determined by a Pearson correlation—are indicated in bold in the table. DSM-5 Level 1 Cross-Cutting Symptom Measure scores for depression, $r(7) = .632$, $p = .068$, suicidal ideation, $r(7) = .54$, $p = .134$, and anger, $r(7) = .568$, $p = .111$, were strongly and positively correlated with number of stressful events reported during the previous six months (Event Count). Symptoms of anxiety and number of stressful events were moderately positively correlated, $r(7) = .378$, $p = .316$. Other correlations with number of stressful events were small in magnitude and not statistically significant.

The weighted sum of subjective stress experienced during the previous six months (Weighted Stress Sum) was negatively, moderately correlated with average level of social support across all sources, $r(7) = -.378$, $p = .315$. A large, positive correlation was found between social support from a significant other and weighted sum of stress, $r(6) = .513$, $p = .194$. The other correlations between weighted sum of stress and social support variables were small in magnitude and not statistically significant. For the Cross-Cutting measure scores, depression, $r(7) = .561$, $p = .116$, suicidal ideation, $r(7) = .596$, $p = .09$, and anger, $r(7) = .587$, $p = .096$, were strongly positively related to weighted sum of stress. Anxiety and weighted sum of stress were moderately positively correlated, $r(7) = .401$, $p = .285$.

Correlations with Social Support

Associations between variables of interest regarding social support variables and mental health were assessed using bivariate correlations, the results of which can be found in Table 3.

Table 3 Social Support and Mental Health Correlations

	Social Support Average	MSPSS Family	MSPSS Friends	MSPSS Significant Other	PCSQ Organization
Depression	-.35	-.72*	-.39	.67	.44
Anxiety	.16	-.26	-.67*	.84**	.61
Suicidal Ideation	-.58	-.65	.22	. ^{nc}	.02
Anger	-.15	-.42	-.69*	.79*	.35

Note. ^{nc} Unable to compute. * $p < .05$. ** $p < .01$.

The association between suicidal ideation and support from a significant other could not be computed due to no participants with a romantic partner endorsing any

suicidal ideation. In general, negative correlations were found between different types of social support and mental health symptoms. DSM-5 Level 1 Cross-Cutting Symptom Measure scores for depression, $r(7) = -.718, p = .029$, and anger, $r(7) = -.423, p = .257$, were found to have large, negative correlations with family social support. Anxiety, $r(7) = -.673, p = .047$, and anger, $r(7) = -.693, p = .038$ held large, negative correlations with social support from friends. Notably, positive correlations were found between Level 1 Cross-Cutting Symptoms of depression, anxiety, and anger with social support from significant other and community (PCSQ Organization).

CHAPTER IV: DISCUSSION

Understanding that the stressors college students experience can have negative impacts on their quality of life, health, and academic success (Cohen & Wills, 1985; Sukup & Clayton, 2021) is important to determine how social support can mitigate those negative impacts. This study aimed to examine associations among these variables in a sample of currently enrolled college students. While there were findings that were consistent with literature surrounding the benefits of social support, there were also findings that were not in line with previous literature. In relation to sample means across the APA DSM-5 Level 1 Cross-Cutting Symptom Measure, participants averaged depression and anxiety screening scores that would have prompted further investigation by a clinician in a therapy or diagnostic setting, per measure instructions. This suggests that today's students may be at risk for considerable negative mental health symptoms. Regarding social support sources, participants indicated that they typically received more support from friends than family. Those in relationships typically rated the support they receive from their partners to be the greatest out of all four sources.

With stress and trauma being a part of the diathesis-stress model of psychopathology (Accortt, Freeman, & Allen, 2008), the positive correlations between exposure to stressors in the past six months and symptoms of depression, anger, suicidal ideation, and anxiety are consistent with the literature as stress has been found to have a negative impact on students' physical and mental health (Dwyer & Cummings, 2001; Krendl, 2021; Sukup & Clayton, 2021). These findings suggest that students' stressors may be significant enough that they could be impacting students' mental health. The negative correlation between weighted stress sum, which is a measure of the participants'

perception of the impact of the stress, and average overall social support is also consistent with the literature as social support has been found to mitigate the effects of stress by acting as a buffer (Dwyer & Cummings, 2001).

Average overall social support was negatively correlated with symptoms of depression and suicidal ideation, supporting the author's first hypothesis and suggesting that social support could be a buffer against negative mental health symptoms and outcomes. Family and friends' social support was negatively correlated with depression, anger, and suicidal ideation, emphasizing the importance of having a support system during adulthood and supporting findings of relationships having been found between social support and increased mental well-being (Walen & Lachman, 2000). Depression, anxiety, and suicidal ideation are recurring mental health concerns amongst American college students that may be associated with the typical stressors experienced during their time of education (Acharya, Jin, & Collins, 2018). Understanding the role that social support may have in the response to stress could help prevent or lessen the impact of these problems.

Several correlations emerged that were unexpected. Namely, social support from romantic partners and community both had moderate to large positive correlations with depression, anxiety, and anger; these findings go against current literature. Currently, the idiosyncrasies in the data are thought to be in part due to the small sample size of the study ($n = 9$) and potentially overly acquiescent reporting from participants when rating social support received from romantic partners; from the eight participants involved in a serious romantic relationship, six participants rated their perceived support from their partner at the highest rating for each question. Additionally, community support also only

had eight participants as one participant reported they did not have a community they engaged with. A larger sample could clarify the nature of relationships between these sources of support and mental health symptoms.

Limitations

Limitations of this study are first and foremost that the results may not be generalizable given the sample size. Therefore, associations regarding the relationship between social support, stress, and poor mental health can only be said to describe the current sample. Also, as all data analysis provided are correlations, no inferences about cause and effect can be made. Regardless, these results may encourage deeper analysis into how increases or decreases in social support, from varying sources, impact students' mental health outcomes while enduring the stressors of adulthood and college.

Future Directions

The aim of this research was to further the current understanding of how social support impacts perceived stress and mental health outcomes in the lives of college students. Future directions of this research could include not only replicating the study on a much larger scale for more generalizable statical results, but also delving further into quality of social support as well as social strain coming from support sources. The results of this study could help universities better address the needs of their students by recognizing the need to screen for any potential deficits in social support levels and/or spikes in poor mental health among students. Universities could then create plans to increase students' support systems by advocating for student groups, community involvement, as well as parent involvement. More proactive advertising of student mental

health services would also be of benefit to students with low social support and poor mental health.

APPENDIX A: IRB APPROVAL LETTER

Office of
Research Integrity



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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 22-787
PROJECT TITLE: Stress & Behavior in College Students
SCHOOL/PROGRAM: Psychology
RESEARCHERS: PI: Nora Charles
Investigators: Charles, Nora-
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 21-Jun-2022 to 20-Jun-2023

Donald Sacco

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

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