



# School-related Stressors and Their Correlation with High School Students' Perceived Stress

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## Abstract

Over the last few years, stress has been an overwhelming topic in modern times. Students and regular individuals alike have seen significant increases in their perceived stress levels over the last decade. University students especially have seen a dramatic increase in their perceived stress levels according to prior research in the discipline. In this study, the researcher found the correlation between school-related stressors and high school students' perceived stress levels. Surveys were distributed to high school students in an anonymous high school in southern Tennessee. Responses to this survey were used in combination with Pearson's Correlation Coefficient equation in order to find the correlation between students' academic, extracurricular, social, and perceived stress and school-related stressors. After completing the equations, a positive correlation was found between the four stress variables and school stressors.

## Introduction

Stress has been a topic of much interest in the last few years, especially in the research world. This is because a correlation was found between high stress levels (specifically perceived stress levels) and poor mental and physical health. Students, of all demographics, have shown high levels of perceived stress according to recent studies. Specifically, university students have been found to have some of the highest average perceived stress levels (Gondo et al., 2023). There are many factors that can impact one's perceived stress levels, but one of the most significant from the current literature is academic factors.

According to lecturer-researcher at HZ University of Applied Sciences Sybren Slimmen, in his article "How stress-related factors affect mental wellbeing of university students: A cross-sectional study to explore the associations between stressors, perceived stress, and mental wellbeing", there is a correlation between poor mental wellbeing and over exposure to stress (Slimmen et al., 2022). Mental wellbeing is how an individual thinks, regulates emotions, and whether or not they can function properly. For students, mental wellbeing is highly important due to the fact that they must perform positively academically, and poor mental wellbeing's effects on cognition and emotional regulation can hinder this. Ben Pyykkonen, founder and current director of the Neurocognitive Function Lab at Wheaton College, said in "Cognitive Processes and the Impact of Stress upon Doctoral Students: Practical Applications for Doctoral Programs" that stress caused significantly reduced cognitive ability in doctoral students (Pyykkonen, 2021). Furthermore, when an individual has poor mental wellbeing, they can

struggle in building and maintaining relationships, some of these being relationships that could help them in their academics or help them cope with their stress.

## Lit Review

Stress is a feeling one gets when they are going through mental tension, often caused by a difficult situation, and how they respond to the stimuli. In recent years, it has been revealed that stress, especially in university students, has a multitude of negative mental and physical effects. These effects include, but are not limited to, cardio-pulmonary issues (Majeed et al., 2022), mental illnesses such as depression (Slimmen et al., 2022), and poor sleep (Abojedi et al., 2023). Long time research assistant at Imam Abdul Rahman bin Faisal University, Farrukh Majeed, stated in his article “Perceived stress and its effect on cardio-respiratory system in first year medical students” that cardio-pulmonary issues caused by stress result in significantly decreased heart and lung function (Majeed et al., 2022). This has been impacted by Covid-19 in recent years, with students showing higher stress levels than they did pre-Covid. According to Dimitrios Kavvadas, a researcher at the Aristotle University of Thessaloniki, in the article “Stress, Anxiety, and Depression Levels among University Students: Three Years from the Beginning of the Pandemic” (Kavvadas et al., 2023) and in “Anxiety, Stress Perception, and Coping Strategies among Students with COVID-19 Exposure” by assistant researcher at Medical University of Bialystok (Shpakou et al., 2023). Being overly stressed, as many students are, results in poor mental wellbeing which can further impact their social and academic lives, and even lead to suicidal thoughts. With a high level of stress, a student is more likely to have a decreased ability to perform academically, and can even get burned out which will result in the student no longer wanting to further pursue their academic career. In fact, according to “Learning burnout and its association with perceived stress, social support, and the Big Five personality traits in Chinese medical students during the COVID-19 pandemic: a cross-sectional study” by postdoctoral researcher at the University of Texas Southwestern Medical Center at Dallas, Simeng Wang and her team, “the current burnout rate among medical students is 44.2%” (Wang, 2022). This high level of burnout is a direct effect of the high level of perceived stress that medical students face.

Perceived stress is defined as the level of mental unwellness caused by a situation in an individual according to the creator of the Perceived Stress Scale Sheldon Cohen (Cohen, 1994). In previous studies, the Perceived Stress Scale, which is used to measure the degree to which situations an individual goes through is considered stressful, has been used in order to measure an individual's stress levels. From previous studies such as those aforementioned, there has been a significant correlation between poor student mental well-being and a high perceived stress level. In order to keep these pressures and mental strain bearable, it is important that individuals find ways to cope with their stress (e.g. social support, counseling, et cetera) in order to avoid the side effects that come with high stress levels. There are many factors that

contribute to one's perceived stress levels. These include academic, social, family, and many other factors that can contribute in different severities to an individual's perceived stress levels. Sybren Slimmen further notes, "In addition, perceived stress has been found to strongly correlate with female gender, family circumstances, lack of leisure or side-activities, financial situation, self-esteem, coping style and study satisfaction" (Slimmen et al., 2022). It is important that an individual tries to find coping strategies in order to help them limit the stress that they feel. Data from a group of researchers, the lead being researcher Dan Gondo, at the University of Lille found in "Student Stress and the Effects of Relaxation: A Study Conducted at the University of Lille in Northern France" that the stressful environment of a university student leads to symptoms such as: irregular heart beats, stomach aches, and insomnia. However, they found that relaxation and meditation techniques were the one of the most effective ways for a student to lower their perceived stress level (Gondo et al., 2023). In addition, Yang Gyeong Yoo a researcher from Kunsan National University found that common meditation practices resulted in student's perceived stress reduction and their mental wellbeing was recorded to be better in the article "Effects of an On-Campus Meditation Course on Depression, Anxiety, Stress, and Sleep Quality among South Korean Paramedic Students" (Yoo et al., 2023). Furthermore, according to senior lecturer at Teesside University, Mansoor Amhed Soomro, social support also had a significant impact on lowering student's perceived stress levels (Soomro et al, 2019). Social support is one of the best ways to combat stress for many individuals according to the current literature surrounding stress, and as seen in Yoo's and Gondo's sources it can be significantly boosted by meditation practices. Additionally, Anna Monistrol-Mula, a researcher at the Instituto de Investigación San Joan de Déu (IRSJD), found that people with social support felt 4.8-6.0 times less stressed than those without (Monistrol-Mula, 2022). Social support in a school environment can come from peers in the classroom, those in school extracurricular activities, et cetera. Wherever it comes from, it can greatly influence a student's perceived stress levels and help them to find themselves more able to properly operate in their daily life as their mental well being would be increased from the social support.

Factors that would normally not be considered, such as sleep quality, can also be significant contributors to one's perceived stress levels. Research director at Resilience Counseling Research & Consultation, Amjed Abojedi, found that 70% of university students slept inefficiently, and that 24% of this sleep variability is due to stress (Abojedi et al., 2023). Furthermore, it was found that high stress results in poor sleep, which can make it harder for a student to focus, further hindering their academics. Students need to be attentive in the classroom, so they cannot be lacking sleep, and the stress students face results in students struggling to focus on their academics in and out of the classroom (Soomro et al., 2019). Previous research has shown time and time again that university students suffer from extremely high levels of perceived stress. This perceived stress can come from a wide variety of factors, such as academic or social factors. As a student's perceived stress levels increase, their mental

wellbeing decreases. As a result of this, the student's academic life and overall quality of life sees a decrease. This results in poor academic performance, poor social life, and mental illnesses that could lead to burn out or something such as depression developing. Preventative measures can be taken against stress, such as social support, which can help a student feel less stressed and avoid all of the negative consequences that come with stress.

The purpose of this study will be to find the correlation between high school students', grades 10-12, perceived stress levels and the school-related stressors that surround them. This is for multiple reasons; firstly, the literature revolving around student stress did not have much specific correlational research, and none at all that was found on high school students. Additionally, the results of this paper may be used in future studies in order to attempt to limit the amount of perceived stress that students feel, or to find coping strategies for the common high perceived stress levels of students. As a result, the researcher's gap is the focus on high school students. The research question for this study is "To what extent do school-related stressors impact the perceived stress levels of high school students grades 10-12?"

## Methodology

### Study Design

This study aims to discover the correlation between stressors that are commonly found inside of a high school (referred to as "school-related stressors") and the perceived stress levels of students ranging from tenth through twelfth grade. The goal is to identify the correlation between students' perceived stress levels and the school-related stressors that are around them everyday as they attempt to further pursue their education. Theoretically, if these stressors are able to be identified, preventative measures can be taken in order to decrease student stress and improve their academic performance.

A quantitative correlational study was conducted. Oftentimes, correlational research involves investigating one or more variables and the extent to which it relates to another variable, in turn finding a numeric relationship between the two variables. The research question outlines the two primary variables: perceived stress levels and school-related stressors (academic, social, extracurricular). Both of these variables are measured using numerical data; which resulted in quantitative research. Due to this, a survey was distributed. Prior research in this field have shown that surveys are the most effective way to find quantitative correlational research (Zhu et al., 2020; Yao et al., 2010; Lai et al., 2023).

Furthermore, correlation does not imply causation relationships. The research question takes this into consideration and instead looks at the link between stressors and the levels of high school students' (grades 10-12) perceived stress levels. Other social science studies, especially psychological ones, use correlational research often, making it the most reliable choice for this study.

## Participants

This study consisted of high school students, ranging from 10th grade through 12th grade, chosen from a suburban high school in Tennessee. 32 responses were given, with 29 sophomores (91%), 2 juniors (6%), and 1 senior (3%). All participants listed their classes, extracurricular activities, and described their social life inside of school. Furthermore, participants evaluated their social, academic, and extracurricular lives on a 1-10 scale. These factors were measured to find correlation with perceived stress levels.

## Procedure

Before data collection began, the researcher obtained informed consent from an administrator of a suburban high school in southern Tennessee (see Appendix A). After discussion with the administrator about the survey, the survey (administered via Google Forms) was made into QR codes. These QR codes were printed out and placed around the high school. Students then scanned the QR codes at their own will and during their own time. The participants were informed that their responses were entirely anonymous and that survey participation was not required. The survey began with the Perceived Stress Scale (14 question scale). The PSS-14 was chosen for this because of other similar studies, such as “Assessment of perceived stress and association with sleep quality and attributed stressors among 1st-year medical students: A cross-sectional study from Karwar, Karnataka, India” by family doctor Clevin Rashmi Rebello (Rebello et al, 2018), in which researchers have shown this scale is the best way to measure correlation between stressors and perceived stress. This was then followed by open ended questions about extracurricular activities, academics, and students’ social life (see Appendix C). There were no incentives to participate in the survey. There were 32 responses at the end of the data collection period.

## Measures

Perceived Stress Scale-14. After beginning the survey and agreeing to the terms of the survey, participants were asked to complete a modified version of Cohen’s Perceived Stress Scale (PSS) (Cohen et al., 1994). This scale is used to measure the extent to which an individual views their life as unpredictable, uncontrollable, or overloaded. These three variables make up an individual’s perceived stress, which is the degree to which an individual feels “stressed” (a sum of the aforementioned factors). It does this by asking how often an individual is experiencing these feelings. The version of the PSS that participants used consisted of 14 questions that were adjusted to be better suited to the research question (see Appendix C). These questions asked about how well students felt they could keep up, control themselves and their surroundings, how school impacts their mentality, and how their school environment impacts how stressed the participants feel. Responses to these questions were measured on a 5-point likert scale. This ranged from 0 (never) through 4 (very often). These responses were then added up according to Carnegie Mellon University’s scoring and reverse scoring of the

questions on the survey. (University, C. M., 2015). The higher the total number from an individual's response; the higher their perceived stress is. Items 4, 5, 6, 7, 9, 10, and 13 use reverse scoring. This means that responding to these questions with 4 would result in 0 points; and responding 0 would result in 4 points towards the total. Other items on the scale are given the same amount of points as the number selected.

**Open-ended Questions.** After the completion of the modified PSS-14, participants are asked to complete eight open-ended questions. The questions include, but are not limited to: "What classes were you taking last semester?", "What extracurricular activities are you involved in?", and "On a scale of 1-10, how would you say your social life is at school and why?" (see Appendix C). Furthermore, participants are asked to elaborate on their responses to these questions. These questions focus on three main categories: academics, social life, and extracurricular activities. Using the responses to these questions, and the totals from the PSS-14, the researcher found the correlation coefficient in order to determine the strength of the correlation between each stressor being measured (academic, social, and extracurricular) and the participants' perceived stress levels.

## Results

### Statistics

The statistics regarding perceived stress levels and the three key variables (academic, social, extracurricular) are provided below in Table 1. Perceived stress levels in participants was near the middle of the scale, which is relatively average. The mean score from participants was roughly 32/56. However, the responses did range greatly, from 17 to 51. Of the key variables, the highest reported was academic stress (M=6.917), and the lowest reported variable was extracurricular stress (stress resulting from extracurricular activities) (M=3.52). It was seen in many cases that extracurricular activities actually reduced participants' stress levels, as was said by participants in response to the latter half of the question "On a scale of 1-10, how stressed do these extracurricular activities make you feel (and why?)"

Table 1

*Important Information for Perceived Stress and Key Variables*

| Variable               | Mean  | Median | Standard Deviation | Range |
|------------------------|-------|--------|--------------------|-------|
| Perceived Stress (/56) | 31.97 | 33     | 5.249              | 17-51 |
| Social Stress (/10)    | 6.13  | 7      | 2.389              | 1-9   |

|                              |       |   |      |      |
|------------------------------|-------|---|------|------|
| Academic Stress (/10)        | 6.917 | 7 | 2.17 | 2-10 |
| Extracurricular Stress (/10) | 3.52  | 2 | 2.6  | 1-10 |

### Testing Hypothesis

Pearson's correlation coefficient ( $r$ ) is a measure between the significance that two variables have on one another. This is measured from 0 to 1 for positive correlation, and from 0 to -1 in order to show negative correlation. Measured in this study were the participants' perceived stress and the "key variables" (academic stress, social stress, and extracurricular stress). In order to use the Pearson correlation coefficient, a few conditions need to be met. Firstly, variables need to be measured on a consistent scale. Two, the variables must be paired. This means that each participant had two values per variable which were used in the correlation coefficient formula. Third, there must be ZERO outliers. Lastly, variables should form a relatively straight line on a scatter plot. All four of these conditions were verified prior to usage of Pearson's formula.

Pearson's correlation coefficient for each of the key variables are listed in Table 2 below. All of the variables ended up being positive. For the social and extracurricular variables, correlation was moderate (S  $r = .408$ ) (E  $r = .422$ ). These were expected to be the two least correlated variables of the three, and in fact the correlation between these and perceived stress is more significant than the researcher predicted. The correlation coefficient for the academic variable, on the other hand, was significant (A  $r = .551$ ). These values represent that, while not as significant as academic variables, social and extracurriculars still play a relatively important role in the participants' perceived stress levels. Additionally, this data demonstrates that academic stress makes up a majority of high school students' perceived stress.

Table 2  
*Correlations between Variables and Perceived Stress*

| Variables | Correlation Coefficient ( $R$ ) |
|-----------|---------------------------------|
|-----------|---------------------------------|

|                        |      |
|------------------------|------|
| Academic Stress        | .551 |
| Social Stress          | .408 |
| Extracurricular Stress | .422 |

*Note: Pearson's Coefficient Formula:  $r = \frac{n * (\sum(X,Y) - (\sum(X) * \sum(Y)))}{\sqrt{n * \sum(X^2) - \sum(X)^2} * (n * \sum(Y^2) - \sum(Y)^2)}$*

## Discussion

This study's purpose was to find the extent to which (if any at all) school-related variables impacted the perceived stress levels of high school students from grades 10-12. This ended up changing after the data was collected, as only 3 non sophomore students responded to the survey. As a result, that portion of the study was removed and the correlation between grade and perceived stress was unable to be determined. Furthermore, this also made it impossible to determine the relationship between stress and the individual classes an individual is taking. Before the researcher began the study, a hypothesis was created that academic stress would have the largest impact on perceived stress in students, and this was proven correct. This fits along with previous research in the field. According to medical doctor at HELIOS Kliniken, Julian A Friedrich, Ph D. students, because of the academic stress put on them from their studies, students are 6 times more likely to suffer from some form of mental illness or extreme stress (Friedrich et al., 2023).

There was a moderate correlation between perceived stress and social factors (S r = .408). This was not surprising to the researcher, as social support has been used as a stress mediator in previous studies on student perceived stress. A professor of clinical psychology at Central South University, Shuqiao Yao, found in his study titled: "Coping and Involuntary Responses to Stress in Chinese University Students: Psychometric Properties of the Responses to Stress Questionnaire." that Chinese students saw decreased levels of perceived stress after implementing social support into their daily lives (Yao et al., 2010). Social support's relationship with stress has been studied deeply, and is a consistent limiter of stress in students. In the survey done by the researcher of this current paper, it was found that participants that rated their social life highly (generally around 7 or higher) said that their social lives did not negatively impact their stress, and in some cases it helped their stress. On the other hand, students that graded themselves on the lower end of the scale said that their social life was a factor in their stress level. Many participants responded to the question "Does this (the participant's social life) impact how stressed you feel? If so, how?" with answers similar to "I think it does impact my stress as (it has) me feeling as I need to keep an image up" (From participant 20). Additionally, there was a similar moderate relationship regarding students' extracurricular activities (E r = .422). For the most part, participants had a good relationship with their



extracurricular activities, with many people saying things such as “they (extracurriculars) are things I look forward to”. With extracurricular activities, these are often things that the student chooses to do, which is why it did not surprise the researcher to see these responses. There were some cases, however, in which participants said their extracurriculars did cause them stress. This is normally with more competitive extracurriculars, as they require more of a time dedication. Multiple participants said that the time dedication to their extracurricular caused them stress as it did not allow them to complete the things they need to, such as their homework. Responses such as “its a lot of work and there are many hour(s) of practice” were common answers from participants that said they felt stress from their extracurricular activities. Some participants that were involved in sports also said that the pressure of winning also caused them increased stress.

Finally, there was a significant correlation between perceived stress and stress from academics ( $r = .551$ ). In a majority of cases, students said that their academics caused them a large portion of their stress. This can be seen in the nearly 7/10 mean score that participants rated their academic stress. Participants said that the majority of their academic stress comes from homework followed by tests. Participant 18 said “school is the worst stress factor in anyone(’s) life(.) There is too much pressure put on teenagers just to (probably wind) up in the same city doing something they don’t like”. This is one of the more extreme answers the researcher received, but it does show the negative mental effects that some students go through due to academic stress. Of course not all students feel this way, and the data the researcher gathered supports this. There were a few participants that said they do not go through too much academic stress, but about 90% of students said they do undergo a lot of academic stress. While the mindset held by this quoted participant may not be everyone, most students still view their academic lives negatively. Also, many participants, such as this one, had a bleak outlook on their schooling. This is caused by too much stress coming to these students from their academics.

### Limitations

There were multiple limitations in this study. Firstly, the sample size ( $N = 32$ ) was relatively small. As a result, some math equations to determine closer relationships between perceived stress and key variables could not be performed. In addition to this, of the 32 participants that responded to the researcher, 29 of them were sophomores. Due to this, the data collected was not able to include a section in which grade is associated with perceived stress levels.

Furthermore, perceived stress is a subjective measure, so while it can be measured consistently with a scale such as the PSS-14, there is still potential variance in people’s responses. In essence, two participants that score a 34 on the PSS-14 may be under different levels of stress, as they may not agree on the meaning of the responses options (in which respondents graded their stress by answering each question 0-4). Plus, the researcher could

not gather GPA, as the selected high school does not tell students their GPA, but their letter grade instead. Because of this, a correlation could not be found between GPA and perceived stress of an individual.

Lastly, the researcher did not ask participants for gender. This could be a factor of the students stress, and the correlation could have been measured between this, perceived stress, and key variables.

### Implications and Future Studies

Although there were some limitations to this study, it still provided useful information for the field. Firstly, this study demonstrates the perceived stress levels of high school students, expanding on the depth of information on university students, and adding key missing information for the high school demographic. When compared to previous studies (Slimmen et al., 2022), this study keeps trends that have been seen in university students. Therefore, it can be assumed that high levels of stress stemming from school happens at some point before high school, and continues to impact students into their secondary education.

There is research that still needs to be done in the future. To begin with, this same study needs to be conducted on an entire high school (grades 9-12) with an adequate number of responses to find the correlation between perceived stress, key variables, and grade level. This applies to middle school too, as both studies would allow for more knowledge on students' stress. Furthermore, a relationship between perceived stress, key variables, and GPA should be found. Lastly, the relationship between gender, perceived stress, and the key variables should be addressed.

In conclusion, high school students undergo a high level of stress, especially for their age. This can be damaging to their mental and physical well-being, resulting in them becoming worse students, along with a multitude of other issues. It is important to continue researching this topic, as these students are the next generation. If they have to go through an extreme amount of stress, it is likely that many of them will result in other options, such as dropping out of school. This will cause issues for the workforce, as today's students are tomorrow's workers. Therefore, research must continue to be conducted, and school administrators must do their best to reduce the amount of stress students experience.

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Appendix B. Survey Consent Form

Appendix C. Survey

## Appendices

Appendix A.

Blank Copy of Administrator Informed Consent to Participate in a Research

Note. Crossed out is the researcher's personally identifiable information to remain anonymity.

Administrator Informed Consent to Participate in a Research

East Hamilton High School

2015 Ooltewah-Ringgold Rd

Ooltewah, TN. 37363

Title of Research Project: School-related Stress and Its Relationship with High School Students

Name of Principal Investigator: Zachary Loftus

Phone Number of Principal Investigator: (850) 273-3662

**PURPOSE AND BACKGROUND:** Junior AP Research student Zachary Loftus is conducting research on the relationship between school-related stressors and high school students' stress level. The purpose of your participation in this research is to help the researcher find participants for surveys in order to more clearly assess data. East Hamilton High School was selected as a participant in this study because it fit the criteria necessary for the study.

**PROCEDURES:** If you agree for East Hamilton High School to participate in this research study, the following will occur: QR codes will be posted throughout the school and students will be asked to scan them. Behind the code is a survey containing a modified Perceived Stress Scale that they will fill out. Findings from this study will be used in a presentation and a paper for AP Research. Additionally, there is a chance that the paper may be published. However, all information will stay anonymous.

**RISKS:** It could trigger bad memories or remind a participant of prior traumatic experiences.

**CONFIDENTIALITY:** The records from this study will be kept as confidential as possible. No individual identities will be used in any reports or publications resulting from the study. All survey responses will be given codes and stored separately from any names or other direct identification of participants. Research information will be kept in locked files at all times. Only the researcher will have access to the files and the survey answers, no others will see names or other identifying information as they will not have access to that particular file. After the study is completed all data and Informed Consent forms from the study will be provided to the instructor of record where they will be kept in a safe and secure location for seven years, then properly destroyed.

**BENEFITS OF PARTICIPATION:** There will be no direct benefit to you or East Hamilton High School from participating in this research study. The anticipated benefit of your and East Hamilton High School's participation in this study is that this study is expected to help widen the understanding of high school student's perceptions of stress, which could become beneficial for counselors and other faculty at schools.



Name (printed): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Appendix B.

Survey Consent Form

Note. Crossed out is the researcher's personally identifiable information to remain anonymity.

East Hamilton High School

Title of the Study: School-related Stress and Its Relationship with High School Students

Researcher Name(s): Zachary Loftus (zackvadder@gmail.com)

The general purpose of this research is to find a relationship between school-related stress and high schoolers. Participants in this study will be asked to complete a survey. Findings from this study will be used in an AP Research paper and presentation. This paper could be published to an academic journal.

I hereby give my consent to participate in this research study. I acknowledge that the researcher has provided me with:

- A. An explanation of the study's general purpose and procedure.
- B. Answers to any questions I have asked about the study procedure.

I understand that:

- A. My participation in this study will take approximately 5 minutes.
- B. The probability and magnitude of harm/discomfort anticipated as a result of participating in this study are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.
- C. The potential benefits of this study include the widening of the knowledge of how high schoolers perceive stress.
- D. I will not be compensated for participating in this study.
- E. My participation is voluntary, and I may withdraw my consent and discontinue participation in the study at any time. My refusal to participate will not result in any penalty or disadvantage.
- F. Some aspects of the study purpose/procedure may be withheld from me until its end. What the investigators hope to learn from this study, the specific nature of and reasons for the procedure employed, and those aspects of my behavior that have been recorded for measurement purposes will all be fully explained to me at the end of the study. After the study's purpose and procedure have been fully explained to me, I may, for any reason, choose to withhold use of any data provided by my participation, without penalty. [If you have explained the full and true purpose of the study and its procedures to participants above, you may omit Part F of the consent form.]
- G. My responses in this study will be kept confidential, to the extent permitted by law. The data will be stored in a password protected computer, will be available to the researcher, and research reports will only present findings on a group basis, without any personally identifying information.

Name (printed): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Appendix C. Survey

### INSTRUCTIONS

The questions in this scale ask you about your feelings and thoughts during the last school semester. In each case, you will be asked to indicate your response by selecting the circle representing HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

Never 0, Almost Never 1, Sometimes 2, Fairly Often 3, Very Often 4

School-related is referring to any factors that can be associated with school. These can include, but are not limited to, one's academics, one's school-offered clubs or sports, the people that surround an individual at school, and more.

1. In the last semester, how often have you been upset because of something that happened unexpectedly at school (this includes after-school sports and other school-offered extracurriculars)?

0 1 2 3 4

2. In the last semester, how often have you felt that you were unable to control the important things in your school life (grades, social life, ect)?

0 1 2 3 4

3. In the last semester, how often have you felt nervous or "stressed" due to school?

0 1 2 3 4

4. In the last semester, how often have you dealt successfully with day to day problems and annoyances that root from school (peers, keeping up grades, performing in sports, ect)?

0 1 2 3 4

5. In the last semester, how often have you felt that you were effectively coping with important changes that were occurring in your school life?

0 1 2 3 4

6. In the last semester, how often have you felt confident about your ability to handle your school-related problems?

0 1 2 3 4

7. In the last semester, how often have you felt that things were going your way in regards to your school life (academics and extracurriculars)?

0 1 2 3 4



8. In the last semester, how often have you found that you could not cope with all the things that you had to do for school?

0 1 2 3 4

9. In the last semester, how often have you been able to control irritations in your school life?

0 1 2 3 4

10. In the last semester, how often have you felt that you were on top of things at school?

0 1 2 3 4

11. In the last semester, how often have you been angered because of things that happened that were outside of your control in the school environment?

0 1 2 3 4

12. In the last semester, how often have you found yourself thinking about things that you have to accomplish in school (academic, social, extracurricular)?

0 1 2 3 4

13. In the last semester, how often have you been able to control the way you spend your time while being a student? (this question is not just referring to time spent at school it also includes time spent outside of school spent doing things like schoolwork)

0 1 2 3 4

14. In the last semester, how often have you felt school-related difficulties piling up so high that you could not overcome them?

0 1 2 3 4

Sum Items: 1, 2, 3, 4R, 5R, 6R, 7R, 8, 9R, 10R, 11, 12, 13R, 14

R = (reverse scored)

What classes were you taking last semester? (list all. does not have to be in any particular order)

What was your average letter grade for those classes?

On a scale of 1-10, how stressed did your academics alone make you feel last semester? Furthermore, what is the one thing in your academic life that is stressing you out the most? (eg. homework, projects, tests, ect.)

What extracurricular activities are you involved in? (list all)

On a scale of 1-10, how stressed do these extracurricular activities make you feel (and why?)

On a scale of 1-10, how would you say your social life is at school and why?

Does this impact how stressed you feel?

What grade are you in?

Source: University, C. M. (2015, January 13). Perceived stress - the Common Cold Project - Carnegie Mellon University. Perceived Stress - The Common Cold Project - Carnegie Mellon University.

<https://www.cmu.edu/common-cold-project/measures-by-study/psychological-and-social-constructs/stress-measures/perceived-stress.html>