Trials, Tribulations, and Transitions: Investigating Adolescents’ Perceptions of Academic-Related Problems

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Investigating Adolescents’ Perceptions of Academic-Related Problems

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Abstract

The majority of our pre-adulthood lives are spent in school; education is a salient part of a child's life. The current study aims to investigate adolescents’ perceptions of the academic challenges they face, and to determine if responses differ according to their age and gender. Adolescents ages 12 through 18 ($N = 297$) were asked to self-report a problem that they are currently facing. These problems were coded as academic or non-academic. This open-ended prompt resulted in 25% of participants reporting an academic problem, which alludes to the importance of academics in these participants' lives overall. The academic problems were further coded into seven sub-categories, such as GPA-Related Problems or College-Related Problems. Significant differences were found for the ages of participants reporting academic versus non-academic as their current problem. Significant age and gender differences were also found for the type of academic problem reported. Importantly, some reported problems did not differ by age (Transitional Stress, Academic-Related Anxiety, Problems Relating to GPA) or by gender (Specific Teacher/Class Problems, Difficult Schoolwork, Academic-Related Anxiety, General School Problems). These academic problems are assumed to occur equivalently across ages and/or genders. The data and results present an interesting display of adolescents' perceived academic problems, from finishing middle school all the way through preparing to graduate high school and enter college. It is important to investigate adolescents’ perceptions of their own academic challenges in order to look for ways to improve their education and general well-being, and the education system.
Acknowledgement

I would like to thank my advisor Dr. Rhiannon Smith for accepting me to work with her Developmental Psychology study and for her guidance from the beginning to the end of my own research process. I would also like to thank the lab’s graduate assistants, Kaitlin Flannery and Janill Marquez, for their help and support. I would like to thank the University of Connecticut and the University of Connecticut Honors Program for the opportunity given to undergraduate students to participate in research.
Trials, Tribulations, and Transitions:

Investigating Adolescents’ Perceptions of Academic-Related Problems

The school environment is a salient aspect of adolescents’ lives. School can be enriching, enjoyable, and motivating for students, but it can also be a major stressor. It is logical that many of the most common stressors in adolescents' lives are academic and school-related, as students spend the majority of their days in school (Jones, 1993; Kouzma & Kennedy, 2004). Kouzma and Kennedy's (2004) study revealed that among high school seniors, the highest source of stress reported was school-related. Stress may be experienced differentially according to gender, as Jones’ (1993) study found that girls experience greater levels of academic stress than boys. School stress has been positively correlated with depressive symptoms and negatively correlated with life satisfaction (Moksnes, Lohre, Lillefjell, Byrne, & Haugan, 2014). Speaking again to the impact school has on adolescents’ well-being, it has been shown that students who perceive a more positive school climate self-report higher GPAs, regardless of their family structure (O’Malley, Voight, Renshaw, & Eklund, 2014). Clearly, then, the academic environment matters in terms of students’ academic achievement and mental health.

The current study examines adolescents’ self-reported academic-related problems, and tests age-related changes as well as gender differences. Examples of the types of academic-related problems considered in the current study include: school performance problems, difficulties with a specific teacher/class, and stress associated with school transitions, including the transition to college.
Literature Review

School Performance Problems

Many adolescents experience fear, worry, and apprehension related to school and academics, such as the pressure to perform well. This state is referred to as academic anxiety (McDonald, 2010). One form of academic anxiety is test anxiety, which is defined as:

...the set of phenomenological, physiological, and behavioral responses that accompany concern about possible negative consequences or failure on an exam or similar evaluative situation... Test anxious students are characterized by a particularly low threshold for anxiety in evaluative situations, tending to view evaluative situations, in general, and test situations in particular as personally threatening... Test-anxious behavior is typically evoked when a person believes that her or his intellectual, motivational, and social capabilities and capacities are taxed or exceeded by demands stemming from the test situation (Zeidner, 1998 pp. 17-18; Bradley, et al., 2007).

Test anxiety has been on the rise since the implementation of the No Child Left Behind Act, which places increased emphasis on students’ standardized test scores in determining funding for schools (Von Der Embse & Witmer, 2014). As such, the stakes for testing are higher, and this places more pressure on teachers and students alike.

Test anxiety has even been reported in children as young as seven years old (Connor, 2003; Putwain, 2008, Bradley, McCraty, Atkinson, Arguelles, Rees, & Tomasino, 2007; McDonald, 2001; Von Der Embse & Witmer, 2014). It is worrisome that test anxiety has been found to occur so early in students’ academic careers, and that levels of test anxiety and test anxiety’s impeding effects on test performance increase with age (Hill, 1980; Eccles, Lord & Midgley, 1991; McDonald, 2010). In addition, the negative association between test anxiety and test scores represents interference that calls into question the validity of test scores (Bradley et al., 2007). Bradley et al. studied the implementation of the TestEdge program, which improves students’ emotional management in order to reduce test anxiety and other related emotional
challenges to learning and test taking and found that the program helped to reduce test anxiety (2007).

**Teacher-Student Relations**

An important determinant in students’ well-being at school is the teacher-student relationship. In adolescence, the teacher-student relationship becomes important in promoting students’ engagement as relationships with adults outside of one’s parents become more meaningful to development (Upadaya & Salmela-Aro, 2013). Wang and Eccles (2012) studied adolescents’ supportive relationships and how they impacted their engagement with school. They found that supportive teacher relationships work to reduce common declines in school compliance, identification with school, and beliefs about the value of learning during high school. Further, teacher support had a greater impact on emotional and cognitive engagement with school than peer support did (Wang & Eccles, 2012). High engagement with school is positively associated with academic success whereas low school engagement is associated with depression and school burnout, and support from teachers is an important factor in the level of students’ engagement with school (Upadyaya & Salmela-Aro, 2013).

Middle school and high school students with higher life satisfaction are likely to have more positive attitudes toward school in general and their teachers, including reporting positive academic experiences, than students with average life satisfaction (Lewis, Huebner, Malone, & Valois, 2011; Gilman & Huebner, 2006; Gilman, Huebner, & Laughlin, 2000). Specifically, students with high life satisfaction were significantly more likely to report positive perceptions of their teachers than students with average life satisfaction (Gilman & Huebner, 2006). These findings indicate an association between teacher-student relationships and students’ appraisals of their lives inside and outside of school. Further, there is a bi-directional relationship between life
satisfaction and cognitive engagement (Noddings, 2003; Lewis et al., 2011). Students who had more positive emotions had greater cognitive and psychological engagement, including positive student-teacher relationships, while students with frequent negative emotions had lower engagement levels (Reschly, Huebner, Appleton, & Antaramian, 2008; Lewis et al., 2011). Reschly et al., (2008) found that teacher-student relationships were a significant mediator in this relationship between positive affect and engagement with school.

When teachers are not supportive, negative student outcomes may result. Students who move from high-efficacy teachers to low-efficacy teachers devalue their academic performance more than students who experience no change in teacher efficacy (Eccles et al., 1991). Students who perceived teachers to be non-supportive lowered their opinion of the value of the corresponding subject material taught (Eccles et al., 1991; Midgley, Feldlaufer, & Eccles, 1988). This indicates that the decline in motivation often seen as students move to higher grades in school may be related to negative student-teacher relationships (Eccles et al., 1991). Stressful teacher-student relationships have been reported to traumatize students, to cause students to negatively view course material, and to cause anxiety and withdrawal in students (Sava, 2002).

School Transitions

Middle School to High School Transition. School transitions are integral to American education and disruption can occur from entering into a larger and more diverse academic environment and from the new social structure (Blyth, Simmons, & Carlton-Ford, 1983). While students were the "top-dog" at their old school, moving to a new school means becoming the "bottom-dog" (at the bottom of the social structure) all over again (Blyth et al., 1983). In a school transition, similarities between the old and new school environment matter. It has been proposed
that the more discontinuous the two environments are, the more disruption will occur for the adolescent (Blyth et al., 1983; Benedict, 1938).

Many schools around the United States have become more focused on competition and comparing children to each other, rather than treating each child as an individual and taking into account the effort that they put in. As students move up in school, general trends lean toward increased teacher control and discipline, lower quality teacher-student relationships, less student autonomy, and increases in public evaluation of students’ work (Eccles & Midgley, 1988; Eccles, Lord, Midgley, 1981). The restrictions placed on students in school may have a negative impact as adolescents develop and strive for autonomy and independence, and search for their identities (Eccles & Midgley, 1988; Eccles et al., 1991). This disconnect between developmental needs and the school’s controlling environment may cause additional strain on students.

Some studies suggest that transitional stress is felt differentially by boys and girls, with girls experiencing it more often due to the transition's effect on social relations and the higher importance that girls prescribe to their social relations (Blyth et al., 1983; Simmons, Rosenberg, & Rosenberg, 1973; Douvan & Adelson, 1996). The timing of the transition matters as well. Theoretically, the older and more self-aware an adolescent is, the more prepared they will be to cope with an academic transition (Blythe et al, 1983). School transitions can induce adolescents to re-evaluate their concept of self (Eccles et al., 1984; Rosenberg 1979; Simmons et al. 1973; Simmons, Blyth, Van Cleave & Bush, 1979; Simmons & Rosenberg 1975). Stress relating to self-image has been found to be particularly salient during early adolescence, and this has been found especially for girls (Simmons et al., 1979).

A common trend throughout each school transition is that students move each time to a larger, more diverse, and less student-centered environment (Blyth et al, 1983). As grade
increases, control over students, lack of student independence, emphasis on ability rather than effort, and more formal teaching style all tend to increase (Eccles et al., 1984). The changing and more restrictive school focus can lead to decreased academic motivation in students (Eccles et al., 1984). Eccles et al. (1984) noted that "teacher control, comparative grading practices, competitive or individualistic goal structures, and homogeneous grouping practices are the norm in today's classroom and become increasingly prevalent as students progress to higher grades," and this observation continues to be true in most American schools today (p. 319).

Indeed, as students move up in school, academic challenges increase. When students lack the ability to cope with increased academic demands, it can result in stress and behavioral outcomes such as failing classes, decreasing academic motivation, or dropping out of school. A drop in grades moving from junior high to high school has been found to be predictive of later drop-out and school failure rates (Eccles et al., 1991, Simmons & Blythe, 1987).

Developmentally, interest in school and students’ intrinsic motivation to succeed in school have been found to decline as age increases (Epstein & MacPartland, 1976; Harter, 1981).

Just as schools promote comparison and grade more based on achievement than effort, focus on self-evaluation increases with age (Nicholls, 1980). Increased age is associated with decrease in confidence in one's intellectual abilities, particularly after failure (Parsons & Ruble, 1977). A finding regarding school transitions in early adolescence is that in the initial transition grade, (e.g., if middle school in a district begins with 7th grade, then 7th grade is the initial transition grade) academic and social self-concept may decline (Cole, Maxwell, Martin, Peeke, Serocynski, Tram, Hoffman, Ruiz, Jacquez, & Maschman, 2001). However, the decline is made up in an increase in academic and social self-concept after the beginning of the transition (Cole et al., 2001).
College Transition. Arguably the most difficult school transition in American education is the transition from high school to college. Post-secondary education brings about new responsibilities and freedoms, harder academics, requires more time-management skills, and involves an application process to be admitted that few high schools require. According to the National Center for Educational Statistics, in 2012 71.3% of females and 61.3% of males enrolled in college immediately after graduating high school (National Center for Educational Statistics, 2013). In Fall 2014, around 21 million students were expected to attend American colleges. This represents a 5.7 million increase since Fall 2000, and is expected to continue to increase through 2023, the highest projected date as of yet (National Center for Educational Statistics, 2013).

Students applying to college face a myriad of often unprecedented tasks and challenges. They must research colleges and combine personal best fit to financial need and parental input. They must take the College Entrance Examination Board Scholastic Aptitude Test and/or the College Entrance Examination Board Achievement Tests (Besserman, 1985). They have to prepare an application essay and complete application forms, many of which may require additional essays pertaining to the specific college. They have to cope with pressure from family and peers as they complete the process and compare themselves to peers' college acceptance results. Waiting for the decision also is a stressful time (Besserman, 1985). Once accepted, a college must be chosen, with financial and geographic considerations, considerations of the schools' academics, and personal fit all to be taken into account. Finally, there is stress over graduating from high school and embarking on a new, more challenging academic and social environment, and leaving one's family and friends from high school.
Perceived social support is one important factor in coping with the transition to college academics and social life (Taylor, Doane, & Eisenberg, 2014). During the transition to college, social support systems often shift, presenting an additional challenge (Taylor et al., 2014). Support does not have to come only from friends and family; it can also come from students’ teachers. Murray-Harvey’s (2010) study collected data on students’ social/emotional adjustment, academic achievement, and motivation as reported by both teachers and the students. Results found strong correlations for supportive relationships between teachers and students with students’ social/emotional adjustment and academic performance. Conversely, stressful relationships yielded a strong negative correlation with students’ social/emotional adjustment and academic performance (Murray-Harvey, 2010).

Besserman (1985) investigated the effects of family functioning and the college application process and found several dynamics to be associated with higher stress levels while a child in the family is applying to college: when the eldest child was the one applying to college, when the child had a high GPA, and when the student was rejected from many colleges (Besserman, 1985, pages ii-iii). Further, she found that levels of family cohesion were highly associated with mothers’ and students’ level of stress, and that simultaneously-occurring other important life changes were highly associated with fathers’ and students’ stress levels (Besserman, 1985, page iii). Lastly, parental role strain and marital strain were both associated with high family stress overall when a child was applying to college (Besserman, 1985). Clearly, the college transition is a strain for both students and their immediate family.

The Current Study

In the context of the challenges (academic and non-academic alike) adolescents face while growing up in the American school system, further information is needed in order to
continue to help alleviate students’ problems. This study aims to further understand adolescents’ problems by getting insight into their own perceptions of their academic problems. Through self-reporting of current problems they are experiencing, this study aims to analyze whether adolescents report academic problems and to further investigate the types of academic problems reported. This study tested three hypotheses. The first hypothesis states that as students increase in grade level, the incidence of reporting academic problems over non-academic problems will increase. The second hypothesis states that the type of academic problem reported will differ according to the participant's age. The last hypothesis states that the type of academic problem reported will differ according to the participant's gender.

**Method**

**Participants**

Participants were adolescents recruited in rural counties in the Northeast United States through flyers distributed online, at local businesses, and in nearby school districts. Teens were recruited as part of a larger study examining social processes in same-sex friendships and therefore were recruited as friendship dyads. Interested participants between the ages of 12 and 18 contacted researchers, who verified that the participating friends were unrelated, the same gender, and the same age (within one year.) Data collected for two 11-year-olds and one 19-year old was omitted from this study as they were out of the intended age range. Signed parental consent and participant assent were obtained for all participants.

This study considered both the sample as a whole and a subset of participants who reported academic-related problems, and therefore descriptives are provided for both the whole sample and the subset sample.
Participants’ socioeconomic status was calculated using the Four Factor Index of Social Status using their parents’ education and job information. (Hollingshead, 1975.) From the entire sample (N=297), N=255 socioeconomic statuses were calculable. 37.3% and 32.7% were at the top of the social strata, “medium business, minor professional, technical” and “major business and professional,” respectively. 9.7% were in the third strata, “skilled craftsmen, clerical, sales workers,” 4.3% were in the second strata, “machine operators, semiskilled workers,” and 1.0% were in the lowest strata, “unskilled laborers, menial service workers.” The mean and median for both the larger sample and sub-sample is the fourth social strata.

The sample that reported academic problems had the comparable socioeconomic status to the whole sample.

The final overall sample consisted of 297 participants with ages ranging from 12 to 18 years of age ($M=14.77, SD=1.85$). 176 (59.3%) of the participants were female, 121 (40.7%) were male. The final subset sample consisted of 75 participants with ages ranging from 12 to 18 years of age ($M=15.28, SD=1.81$). 42 (56%) of the participants were female, 33 (44%) were male.

**Procedure**

Each dyad consisted of two friends who come into the lab to participate together. The friends sat in separate rooms and filled out a packet of questionnaires, including the “problem generation” questionnaire. They also participated in additional tasks that are not relevant to the current study.

**Measures**
Problem generation. All participants filled out the “problem generation” questionnaire. Participants are asked to generate and write down a problem they are currently having. If they wrote down a problem related to anything happening in the moment, such as writing that they were bored or hungry, then they were instructed to generate a new problem about something they are facing in their life right now.

Coding. The responses to the problem generation questionnaire were coded in two ways. First binary codes were applied for those problems that were considered academic (1) compared to those that were non-academic (0). Seventy-five participants listed academic problems, which is 25% of the total number of problems reported. It is noteworthy that in an open-ended question, one-fourth of participants reported an academic problem.

Second, within those problems that were academic, the problems were further broken down into seven subcodes. The seven subcodes included: College Specific Problems, (e.g., “Picking a college”), Specific Teacher and Specific Class Problems, (e.g., “There is a mean teacher that I don’t want to have next year”), Problems Relating to GPA, (e.g., “My parents are unhappy with my grades”), Difficult Schoolwork, (e.g., “School is getting harder, and there is more work”) Academic-Related Anxiety, (e.g., “Anxiety over being a college freshman”), and Transitional Stress (e.g., “Going to a different high school than some of my friends”). Problems which did not fit into the other six subcodes were coded as General School Problems (e.g., “I hate homework and school projects”). Reported academic problems commonly overlapped, such as “Anxiety over being a college freshman,” which shows Academic-Related Anxiety, and a College Specific problem. This is coded as Academic-Related Anxiety because the primary focus of the problem is being anxious about starting college, not about college itself. Each problem was classified as the subcode to which it related most.
Results

Plan for Data Analysis

This research aims to: a) test for the association between age and whether reported problem was academic or non-academic b) test for the association between age and academic subcode reported of those who reported academic problems, c) test for the association between gender and whether reported problem was academic or non-academic, and d) test for the association between gender and academic subcode reported of those who reported academic problems. In order to achieve these aims, Chi-Squares and ANOVAs will be used.

Analyses Concerning Age

Age and reported problem type (Academic or Non-Academic). A Chi-Square was computed treating age as the independent variable (with each age 12 through 18 serving as a separate category) and the reported problem type (Academic or Non-Academic) as the dependent variable. A significant interaction was found between age and whether the problem reported was academic (coded as 1) or not (coded as 0), $\chi^2(6, N=297) = 15.18, p = .019$. This indicates that older participants have a higher likelihood of reporting an academic problem than younger participants. A positive, statistically significant Pearson’s Correlation between age and reported problem type $r(295) = .159, p = .006$, also supports this finding. Table 1 reports a percentage breakdown of reported problem type (Academic vs. Non-Academic) by age, and Figure 1 visually depicts the same information.

To look at the data differently, two age groups were created: a younger group (12-14 year olds), and an older group (15-18 year olds). A Chi-Square was calculated, and a significant interaction was found between grouped age and whether the reported problem was academic or
not, $\chi^2(1, N=297) = 4.22, p = .040$, indicating that the older group had a higher likelihood of reporting an academic problem than the younger group. A Pearson’s Correlation between grouped age and reported problem type yielded a positive, statistically significant correlation $r(295) = .119, p = .040$ which supports this finding. Figure 2 illustrates the percentage of academic versus non-academic problems by grouped age.

Both ways of examining the data show that age significantly correlates with type of problem reported. As age increases, so increases the likelihood of listing an academic problem.

**Age and academic subcodes.** Descriptive statistics of age and academic subcodes are presented in Table 2. A one-way ANOVA indicated that there was a significant difference in the mean age of at least one of the academic subcodes reported $F(6,68) = 4.207, p = .001, \eta^2 = .271$. A Tukey post-hoc test showed that there was a statistically significant difference in the mean age of participants reporting College Specific Problems and the mean age of those reporting Specific Teacher/Class Problems ($p = .001$). The mean age reporting College Specific Problems was 2.53 units higher than the mean age of Specific Teacher/Class Problems. This indicates that the mean age of participants reporting College Specific Problems is higher than the mean age of participants reporting Specific Teacher/Class Problems. There was also a statistically significant difference in the mean age of participants reporting College Specific Problems and the mean age of participants reporting General School Problems ($p = .047$). The mean age of College Specific Problems was 1.91 units higher than the mean age of General School Problems, which indicates that the mean age of participants reporting College Specific Problems was higher than the mean age of participants reporting General School Problems. Another statistically significant difference was found in the mean age of participants who reported College Specific Problems and the mean age of participants who reported with Difficult
Schoolwork as a Problem \( (p = .008) \) The mean difference in age between Difficult Schoolwork and College Specific Problems (2.68) indicates that the mean age reporting a College Specific Problem is older than the mean age reporting a Difficult Schoolwork Problem. Of note, the most age-specific type of academic problem is College Specific Problems. Clearly College Specific Problems are the driving force between these significant differences, which makes sense because older adolescents are more likely to be facing challenges such as applying to college than are younger adolescents.

For visual representation of the ages that endorsed each academic problem, refer to Figure 5. It is clear that mostly 17 and 18 year olds are endorsing College Specific Problems, and that ages 12-14 are not reporting College Specific concerns. 13 and 15 year olds appear to endorse Specific Teacher/Class Problems more than the other ages. At age 15 we see a spike in reporting GPA as a problem, and no 12, 13, or 14 year olds report GPA or grades as a problem at all. Difficult Schoolwork is perceived to be a problem mainly by 12 year olds and some 15 and 16 year olds. Participants’ reported Academic-Related anxiety peaks at ages 12, 14, and 17, centering around potential school transitions (into middle school, out of middle school, and out of high school). General School Problems were reported most by ages 13, 14, and 16.

A Chi-Square was calculated to compare age and which academic subcode was reported, and a significant interaction was found, \( \chi^2(36, N= 75) = 58.97, p = .009 \). A Pearson’s Correlation was calculated for age and which academic subcode was reported, and a significant negative correlation was found to have trending negative significance, \( r(73) = -.218, p = .061 \). These results indicate that age relates specifically to some academic problems, whereas other issues occur across all ages.
Figure 3 illustrates the frequency of each reported academic subcode by age. Table 3 reports the breakdown of each age’s reported academic problem, meaning that of those who reported an academic problem, the percent of each age that reported each problem is shown. Table 4 reports the breakdown of reported academic problems by age, meaning that for each academic subcode, the percentage of each age group who reported that subcode is listed. The information on Table 4 is also presented in Figure 6. Tables 3 and 4 differ in that table 3 depicts percentage of each age of the total age group that reported an academic problem that reports each problem, and table 4 depicts percentage of each age of the number of total reported problems for each subcode reported.

**Analyses Concerning Gender**

**Gender and reported problem type (Academic or Non-Academic).** Gender was coded nominally, girls coded as 1, and boys coded as 2. A Chi-Square was conducted to compare gender with whether the reported problem was academic or non-academic. No significant interaction was found, $\chi^2 (1, N = 297) = .44, p = .506$. A Pearson’s Correlation yielded no significant correlation between gender and whether an academic or non-academic problem was reported, $r(295) = .039, p = .508$. Those who report an academic or non-academic problem did not differ by gender. Table 5 reports percentages of reported problem type (academic vs. non-academic) by gender.

**Gender and academic subcodes.** A one-way ANOVA was calculated between gender and which academic subcode was reported, and it was found that at least one subcode differed significantly from the others by the gender of those who reported it $F(6,68) = 3.41, p = .005$. Tukey’s post-hoc test revealed several significant results. There was a statistically significant
difference in gender for College Specific problems (1.12 ± .332, p = .025) and problems relating to GPA (1.43 ± .408, p = .025) with a mean difference of -0.72, indicating more females listed College Specific Problems and more males had GPA Problems. There was a statistically significant difference in gender for College Specific Problems and Transitional Stress Problems, (1.75 ± .463, p = .030), and the mean difference of -0.63 indicates that more females had College Specific Problems and more males had Transitional Stress Problems.

A Chi-Square comparing gender and type of academic subcode reported found a significant interaction between the two, (6, N = 75) = 17.34, p = .008. A Pearson’s Correlation was calculated and yielded a significant positive correlation between gender and type of academic subcode reported, r(73) = .359, p = .002. These results indicate that gender relates to the type of academic problem experienced by adolescents. Table 6 presents a breakdown of each gender’s reported academic problem (for example, out of the total number of girls who reported an academic problem, the percent that reported a College Specific Problem is shown). Table 7 reports a breakdown of reported academic problems by gender (for example, out of those who reported College Specific Problems, what percent were girls and what percent were boys). For a visual depiction of the information presented in table 7, refer to both Figure 4 and Figure 7.

Discussion

The purpose of this study was to investigate adolescents' reported problems, to compare the prevalence of reporting academic problems versus non-academic problems, and to compare the specific types of academic problems reported by age and gender of participants. An open-ended prompt was given to participants asking them to report a current problem in their life. 25% of adolescents reported an academic problem. The large percentage of students reporting an academic problem is important to note because it gives weight to the importance students place...
on school, and the stressors school can bring about. Students spend the majority of their waking hours at school, and thus school inevitably has a large impact on development. There are many other problems that can be occurring in their life (peer relationships, issues with parents, financial troubles, health problems, self-esteem issues, and more), but nonetheless 1/4 of participants reported a problem that was primarily academic in nature.

Support was found for the first hypothesis that older participants would have a higher likelihood of reporting an academic problem than younger participants. This held true when ages were treated as individual groups, ages 12 through 18, and as grouped ages, ages 12-15 and ages 16-18. As such, it can be inferred that academic problems increase with age and grade in school. As adolescents get older and move to higher grades in school, classes and material often increase in difficulty. As age increases greater importance is placed on student's achievement, while outside of school new responsibilities are thrown their way: responsibilities such as holding one's first job, learning to drive, juggling extracurricular activities, helping out around the house, and more.

The second hypothesis, that different ages will report different academic problems, was partially supported. The mean age of adolescents reporting specific academic problems differed for some academic subcodes (College Specific Problems differed from Specific Teacher/Class Problems, General School Problems, and Difficult Schoolwork Problems). It appears that some academic problems are specific to age and grade in school, but others occur throughout one's education (Problems Relating to GPA, Academic-Related Anxiety, and Transitional Stress).

The third hypothesis, that the type of academic problem reported will differ according to the participant's gender, was partially supported. Girls were significantly more likely to report College Specific Problems, whereas boys were significantly more likely to report GPA Related
Problems and Transitional Stress problems. Girls and boys were equally likely to report the remaining academic problems (Specific Teacher/Class Problems, Difficult Schoolwork Problems, Academic-Related Anxiety, and General School Problems). Girls and boys were equally likely to report an academic problem versus a non-academic problem.

**School-Performance Problems**

The current study found academic-related anxiety to occur throughout all ages and across both genders (e.g. “Stress with school and it is still summer,” “Anxiety over being a college freshman”). This points to the seriousness of the issue of academic-related anxiety. As seen from the first academic-related anxiety problem example, some data collection took place over the summer. It is important to recognize that academic problems and academic-related anxiety were reported even when students were away from school on summer break. On a broader level, the fact that given an open-ended prompt so many participants listed an academic problem points to the prevalence of academic anxiety. A certain level of anxiety can be assumed when something is labeled as a “problem,” as these students have done in their reporting. Academic anxiety can result in decreases in motivation and academic achievement. Related to school-performance problems, this study found that boys were significantly more likely to report problems relating to grade point average than girls were (e.g. “My parents are unhappy with my grades”).

**Teacher-Student Relations**

Specific Teacher/Class Problems differed significantly by the age of the participants reporting them, with younger ages reporting Specific Teacher/Class Problems more often than older ages. (e.g. “There is a mean teacher I don’t want to have next year;” “Computer science class is not going as well as I’d hoped;” “Struggling in biology”). Students can become disengaged with class material and can devalue the subject when they have negative
relationships with the teacher for that class (Eccles et al., 1991; Midgley et al., 1988; Wang & Eccles, 2012). Relationships with teachers and experience with class subjects early in one’s academic career can set students up for success or failure in regard to the value they ascribe to that subject matter and the engagement they will maintain with it.

**College Specific Problems and Related Problems**

Specific Teacher/Class Problems, GPA-Related Problems, Transitional Stress Problems, and Difficult Schoolwork Problems all have the potential to relate to underlying pre-college anxiety. Notably, college specific problems were endorsed by older ages (15-18), and not at all by the younger ages (12-14) (e.g. “I don’t know where I want to go for college”). The incidence of reporting college specific problems increased as age increased, with the exception of age 18. This is likely because few participants were 18. Further, all but one of the 18 year old participants that reported an academic stressor reported a problem directly relating to college. Some were coded as Transitional Stress instead of College Specific Problems, but they were specifically speaking to the stress of transitioning to college (e.g. “Leaving for college and separating from people”). Therefore, it is safe to assume that college increasingly becomes a salient problem for adolescents as they get closer to the age of applying and attending college, specifically from the beginning of high school (age 15) and onward.

The results of this study indicate that college, and the stress that accompanies applying to college, fuels many adolescents' academic problems both directly and indirectly. College Specific Problems appear to be the driving force behind many of the study’s significant findings. In addition, many problems reported relate to college problems. Concerns about GPA began to occur at age 15, and was not reported at all by ages 12 through 14. This may be because at age 15 one is usually in the ninth grade, and this is often the first grade in which GPA is reported to
colleges when applying years later. If students aged 12 through 14 even have a GPA, it matters for placement in high school classes, but not for college.

Likewise, 13 and 15 year olds both reported Specific Teacher/Class problems the most. A difficult teacher or class that you are struggling in can result in a bad grade, which will lower one's GPA. 15 year olds are likely concerned about the specific teacher or class's difficulty on their overall grade point average. Similarly, difficult schoolwork as endorsed by high-school age adolescents may relate to concerns about one's grades and the ability to successfully tackle their workload. As discussed earlier, many Transitional Stress Problems reported were specific to the college transition.

**Transitional Stress**

In general, it is important to recognize that transitions between schools (elementary to middle school or junior high, middle school or junior high to secondary school or high school, and secondary or high school to post-secondary school or college) can be a stressful time for students before, during, and after the transition. Anxiety about the impending transition, dealing with the changes that occur during the transition, and coping with the transition's stress and the student's new social, academic, and emotional circumstances can prove difficult. This study supports the contention that academic transitional stress occurs throughout adolescence.

Previous theory has proposed that as adolescents exit puberty, they are better equipped to cope with transitional changes and thus will feel less stress (Blythe et al., 1983). However, this study found transitional stress reported by all ages except ages 15 and 17, and overall no age was more likely to report a transitional stress than any other. Many 15 year olds who reported an academic problem reported a Specific Teacher/Class Problem (e.g. “Accounting is very difficult”). 15 year olds are in the beginning of high school (grade nine or ten), and as such are
taking classes they have probably never taken before. Further, the difficulty of their classes has likely increased from middle school to high school. Thus, many of the Specific Teacher/Class Problems reported by 15 year olds a likely related to their transition into high school. The majority of their reported problems for 17 year olds were college related (e.g. “Picking a college”). As upperclassman, 17 year olds are likely well-transitioned into high school. Because at age 17 many students are directly immersed in the college application process, they may not be as concerned with the transition to college as they are with applying and being accepted to college and finally choosing which college to attend.

It is important to note that transitional stress may be prompting non-academic problems as well as academic problems. In the current study, participants who were 14 years old had the second highest percentage reporting a non-academic problem, with 86.2% reporting a non-academic problem, and 13.8% reporting an academic problem. Age 14 is the age at which many transition from junior high or middle school to freshman year of high school. High school life may bring about many non-academic additional stressors, which may account for fewer academic problems reported at this transition.

Social support has been found to help cope with transitional stress (Taylor et al., 2014). It has been suggested that transitional stress is felt more often by girls (Blythe et al., 1983; Simmons et al, 1973; Douvan & Adelson, 1996), but the current study found that boys are significantly more likely to report experiencing transitional stress than girls are. Girls are more likely to seek out social support than boys are (Taylor et al., 2014), and this may explain the significant finding that boys are more likely than girls to report Transitional Stress Problems. By not reaching out to their social network, boys' ability to cope with transitional stress may be lesser than girls'. Further, girls tend to report their relationships with teachers as more supportive
than boys do, and this perception may also lead to harder transitions and more anxiety for boys (Murray-Harvey, 2010).

Limitations and Future Directions

A limitation of the current study is that participants were not asked to report their current grade in school. As such, inferences had to be made on their grade based on their age and type of problem reported. Another limitation is that data was not collected for participants’ GPA. It would be useful to compare students’ GPA, and to see if increases or decreases in GPA related to the likelihood of reporting academic problems. A final limitation is that problems were not double-coded, but instead coded to the problem type they related to most. Double-coding the problems may reveal more significant results, since there would be larger numbers in each category. Despite these limitations, this study contributes to current knowledge about adolescents’ experiences with their school environment and academics alike.

Clearly, transitional stress occurs throughout one’s education, all the way through secondary education and beyond to post-secondary education, and that it is an issue for many adolescents today. It is important that further research investigates adolescents’ perceptions of their academic problems and stressors, because their perception of the issues is what will impact their mental health. Developing coping strategies for academic transitions may be a first step. Workshops to prepare students for what to expect in each new school setting may be helpful. Setting up academic resources within schools to help students master increased academic workloads may be another beneficial option. Working with teachers to create more supportive student-teacher relationships is another avenue to bettering students’ experiences at school and with their academics. The goal here is not to eliminate academic anxiety, because a certain level
of stress can be motivating and helpful. What is important is to alleviate anxiety that reaches levels that are debilitating and harmful to adolescents’ mental health.

It is clear that the academic problems investigated in this study are interrelated. In general, any report of an academic-related problem speaks to the existence of academic-related anxiety. Transitional stress often overlaps with college specific concerns. Issues concerning GPA can be fueled by academic anxiety, problems with difficult school work, problems with a specific class or teacher, and concerns over GPA in relation of applying to college. Future research should focus on problems that appear to have far-reaching impact across students and other academic-problems (Academic-Related Anxiety, Transitional Stress, and College Specific Problems), in the hope that any gains made in research will benefit more individuals and school systems overall.
References


Table 1  
*Percentages of Reported Problem Type (Academic vs. Non-Academic) By Age*

<table>
<thead>
<tr>
<th></th>
<th>Non-Academic Problem N(%)</th>
<th>Academic Problem N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 12</td>
<td>43 (89.6%)</td>
<td>5 (10.4%)</td>
</tr>
<tr>
<td>Age 13</td>
<td>30 (68.2%)</td>
<td>14 (31.8%)</td>
</tr>
<tr>
<td>Age 14</td>
<td>25 (86.2%)</td>
<td>4 (13.8%)</td>
</tr>
<tr>
<td>Age 15</td>
<td>47 (75.8%)</td>
<td>15 (24.2%)</td>
</tr>
<tr>
<td>Age 16</td>
<td>40 (75.5%)</td>
<td>13 (24.5%)</td>
</tr>
<tr>
<td>Age 17</td>
<td>25 (59.5%)</td>
<td>17 (40.5%)</td>
</tr>
<tr>
<td>Age 18</td>
<td>12 (63.2%)</td>
<td>7 (36.8%)</td>
</tr>
</tbody>
</table>
Table 2
**Descriptive Statistics of Ages Reporting each Academic Subcode**

<table>
<thead>
<tr>
<th>Academic Subcode</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Specific</td>
<td>16.82</td>
<td>.809</td>
<td>17</td>
</tr>
<tr>
<td>Specific Teacher/Class</td>
<td>14.47</td>
<td>1.467</td>
<td>19</td>
</tr>
<tr>
<td>GPA</td>
<td>15.83</td>
<td>.983</td>
<td>6</td>
</tr>
<tr>
<td>Difficult Schoolwork</td>
<td>14.14</td>
<td>1.773</td>
<td>7</td>
</tr>
<tr>
<td>Academic-Related Anxiety</td>
<td>15.00</td>
<td>2.082</td>
<td>7</td>
</tr>
<tr>
<td>General School Problems</td>
<td>14.91</td>
<td>1.814</td>
<td>11</td>
</tr>
<tr>
<td>Transitional Stress</td>
<td>15.28</td>
<td>2.550</td>
<td>8</td>
</tr>
</tbody>
</table>
### Table 3
**Number Reporting Academic Subtype Problem and Percentages Within Age**

<table>
<thead>
<tr>
<th></th>
<th>College Specific N (%)</th>
<th>Specific Teacher/Class N (%)</th>
<th>GPA N (%)</th>
<th>Difficult Schoolwork N (%)</th>
<th>Academic Related Anxiety N (%)</th>
<th>General School Problems N (%)</th>
<th>Transitional Stress N (%)</th>
<th>Total N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0 (0.0%)</td>
<td>1 (20.0%)</td>
<td>0 (0.0%)</td>
<td>2 (40.0%)</td>
<td>1 (20.0%)</td>
<td>0 (0.0%)</td>
<td>1 (20.0%)</td>
<td>5 (100%)</td>
</tr>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>6 (42.9%)</td>
<td>0 (0.0%)</td>
<td>1 (7.1%)</td>
<td>1 (7.1%)</td>
<td>4 (28.6%)</td>
<td>2 (14.3%)</td>
<td>14 (100%)</td>
</tr>
<tr>
<td>14</td>
<td>0 (0.0%)</td>
<td>1 (25.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (25.0%)</td>
<td>1 (25.0%)</td>
<td>1 (25.0%)</td>
<td>4 (100%)</td>
</tr>
<tr>
<td>15</td>
<td>1 (6.7%)</td>
<td>7 (46.7%)</td>
<td>3 (20.0%)</td>
<td>2 (13.3%)</td>
<td>1 (6.7%)</td>
<td>1 (6.7%)</td>
<td>0 (0.0%)</td>
<td>15 (100%)</td>
</tr>
<tr>
<td>16</td>
<td>4 (30.8%)</td>
<td>2 (15.4%)</td>
<td>1 (7.7%)</td>
<td>2 (15.4%)</td>
<td>0 (0.0%)</td>
<td>3 (23.1%)</td>
<td>1 (7.7%)</td>
<td>13 (100%)</td>
</tr>
<tr>
<td>17</td>
<td>9 (52.9%)</td>
<td>2 (11.8%)</td>
<td>2 (11.8%)</td>
<td>0 (0.0%)</td>
<td>3 (17.6%)</td>
<td>1 (5.9%)</td>
<td>0 (0.0%)</td>
<td>17 (100%)</td>
</tr>
<tr>
<td>18</td>
<td>3 (42.9%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (14.3%)</td>
<td>3 (42.9%)</td>
<td>7 (100%)</td>
</tr>
</tbody>
</table>

**Notes.** Numbers in each row represent the number of times each academic problem was reported by each age, and the percentages represent the corresponding percentage of each age that reported each problem type. For example, 1 twelve year old reported a Specific Teacher/Class Problem, and since 5 total twelve year olds that reported an academic problem, 20% of twelve year olds reported a Specific Teacher/Class Problem.
### Table 4

**Number Reporting Academic Subtype Problem and Percentages Across Ages**

<table>
<thead>
<tr>
<th>Percentage of Each Age Represented within Academic Subcodes N(%)</th>
<th>College Specific</th>
<th>Specific Teacher/Class</th>
<th>GPA</th>
<th>Difficult Schoolwork</th>
<th>Academic Related Anxiety</th>
<th>General School Problems</th>
<th>Transitional Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 12</td>
<td>0 (0.0%)</td>
<td>1 (5.3%)</td>
<td>0 (0.0%)</td>
<td>2 (28.6%)</td>
<td>1 (14.3%)</td>
<td>0 (0.0%)</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Age 13</td>
<td>0 (0.0%)</td>
<td>6 (31.6%)</td>
<td>0 (0.0%)</td>
<td>1 (14.3%)</td>
<td>1 (14.3%)</td>
<td>4 (36.4%)</td>
<td>2 (25.0%)</td>
</tr>
<tr>
<td>Age 14</td>
<td>0 (0.0%)</td>
<td>1 (5.3%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (14.3%)</td>
<td>1 (9.1%)</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Age 15</td>
<td>1 (5.9%)</td>
<td>7 (36.8%)</td>
<td>3 (50.0%)</td>
<td>2 (28.6%)</td>
<td>1 (14.3%)</td>
<td>1 (9.1%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Age 16</td>
<td>4 (23.5%)</td>
<td>2 (10.5%)</td>
<td>1 (16.7%)</td>
<td>2 (28.6%)</td>
<td>0 (0.0%)</td>
<td>3 (27.3%)</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Age 17</td>
<td>9 (52.9%)</td>
<td>2 (10.5%)</td>
<td>2 (33.3%)</td>
<td>0 (0.0%)</td>
<td>3 (42.9%)</td>
<td>1 (9.1%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Age 18</td>
<td>3 (17.6%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (9.1%)</td>
<td>3 (37.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>17 (100%)</td>
<td>19 (100%)</td>
<td>6 (100%)</td>
<td>7 (100%)</td>
<td>7 (100%)</td>
<td>11 (100%)</td>
<td>8 (100%)</td>
</tr>
</tbody>
</table>

Notes. Numbers in each column represent the number of times each academic problem was reported by each age, and percentages represent the percent of each academic problem represented by each age group (out of the total number who reported each academic problem type, regardless of age). For example, 1 twelve year old reported a Specific Teacher/Class Problem, and since 19 total participants reported a Specific Teacher/Class Problem, 5.3% of those who reported a Specific Teacher/Class Problem were twelve years old.
Table 5  
*Percentages of Reported Problem Type (Academic vs. Non-Academic) By Gender*

<table>
<thead>
<tr>
<th></th>
<th>Non-Academic Problem</th>
<th>Academic Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>134 (76.1%)</td>
<td>42 (23.9%)</td>
</tr>
<tr>
<td>Boys</td>
<td>88 (72.7%)</td>
<td>33 (27.3%)</td>
</tr>
</tbody>
</table>
Table 6
Breakdown of Each Gender’s Reported Academic Problem

<table>
<thead>
<tr>
<th></th>
<th>CS</th>
<th>STC</th>
<th>GPA</th>
<th>DSK</th>
<th>ARA</th>
<th>GSP</th>
<th>TS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>15(35.7%)</td>
<td>12(28.6%)</td>
<td>1(2.4%)</td>
<td>3(7.1%)</td>
<td>5(11.9%)</td>
<td>4(9.5%)</td>
<td>2(4.8%)</td>
<td>42(100%)</td>
</tr>
<tr>
<td>Boys</td>
<td>2(6.1%)</td>
<td>7(21.2%)</td>
<td>5(15.2%)</td>
<td>4(12.1%)</td>
<td>2(6.1%)</td>
<td>7(21.2%)</td>
<td>6(18.2%)</td>
<td>33(100%)</td>
</tr>
</tbody>
</table>

Note: Rows depict number of girls and boys reporting each academic problem, and percentages reflect the percent of girls and boys (of total percent of girls and boys that reported an academic problem) reporting each academic problem. For example, 15 girls reported a College Specific problem, and since 42 girls total reported an academic problem, 35.7% of girls reported a College Specific problem.

CS = College Specific, STC = Specific Teacher/Class, GPA = GPA, DSK = Difficult Schoolwork, ARA = Academic Related Anxiety, GSP = General School Problems, TS = Transitional Stress
Table 7
Breakdown of Reported Academic Problems by Gender

<table>
<thead>
<tr>
<th>Subcode</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Specific</td>
<td>15</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>GPA</td>
<td>12</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Difficult Schoolwork</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Academic Related Anxiety</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>General School Problems</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Transitional Stress</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Columns depict the number of boys and girls reporting each academic subcode, and percentages depict the percentage of boys and girls that reported each academic subcode (out of the number of respondents who reported each academic subcode.) For example, 15 girls reported a College Specific problem, and since 17 total participants reported a College Specific problem, 88.2% of those who reported a College Specific problem were girls.
Figure 1. Breakdown of reported problem type (Academic vs. Non-Academic) by age.
Figure 2. Breakdown of reported problem type (Academic vs. Non-Academic) by grouped age.
Figure 3. Percentage of academic problems listed by age.

*Note:* Each bar represents the percent of participants in that age group who listed each academic problem type. Thus, each group of bars per age group adds up to 100% of the age group that listed an academic problem.
**Figure 4.** Academic Problem breakdown by gender.

*Note:* Percent of boys and girls listing each academic problem.
Figure 5. Percent within age group listing each academic subcode as a problem.
College Specific Problems

Specific Teacher/Class Problems

GPA Problems

Difficult Schoolwork

Academic-Related Anxiety

General School

Transitional Stress

Figure 6: Number within each age group listing each academic subcode as a problem.
College Specific Problems

Specific Teacher/Class Problem

GPA Related Problem

Difficult Schoolwork Problem

Academic-Related Anxiety

General School Problem

Transitional Stress

*Figure 7:* Percent of boys and girls listing each academic problem.