What Counts When it Comes to School Enjoyment and Aspiration in the Middle Grades

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Abstract

Young adolescents, and the middle level educators who work with them, face many exciting but demanding challenges during this key period of development. According to stage-environment fit theory, the degree to which middle grades students perceive a good fit between their school environment and their needs impacts their academic and life outcomes. The authors endeavored to build on middle level research by studying the extent to which students' needs are supported by school environment factors and how this “fit” relates to two academic outcome variables: school enjoyment and aspiration. The sample consisted of middle grades students ($N = 1,027$) between the ages of 10 and 14. Hierarchical logistic regression analyses were conducted. After controlling for age, ethnicity, and gender, four subscales (Social Skills Needs, Mental Health Needs, Academic and Career Needs, and School Support) were entered as potential predictors. Both models were significant and accounted for ~20% of the variance. This study suggests that middle level educators, counselors, and administrators may benefit from considering ways to enhance the match between students’ and the middle grades’ learning environment, especially by considering non-academic factors as a way to provide indirect, but powerful, support for academic and life success.

Keywords: school counseling, needs assessments, academic aspiration, school enjoyment, school support

Young adolescents, and the middle level school professionals who work with them, face many exciting but demanding challenges during this key period of development. During early adolescence, middle level students rapidly gain the cognitive, physical, emotional, and social skills necessary to become autonomous and fully developed persons (Santrock, 2012; Steinberg, 2008), and they often explore their worlds in new and exciting ways filled with both opportunity and risk.
Young adolescents show a fierce sense of independence as they simultaneously seek meaningful adult relationships; they are increasing in cognitive capability, but often have trouble organizing or articulating their thoughts; and they can be motivated by true goodness, but at the same time they are capable of unusual cruelty and judgment against others (San Antonio, 2006). This demanding developmental period is further complicated by the transition from elementary school to a middle level school, which can be a time of considerable uncertainty and change (Eccles et al., 1993; Parker & Neuharth-Pritchett, 2009). It is important for educators to help middle level students through this critical time in their lives. Young adolescents’ outcomes in the middle grades often predict negative high school and later life outcomes such as academic performance, drop-out rates, and a range of behavior problems or psychopathology (Henry, Knight, & Thornberry, 2012; Redd, Brooks, & McGarvey, 2001; Steinberg, 2008). Despite knowing that success in the middle grades predicts these important academic and life outcomes, we still know relatively little about the unique needs of young adolescents and how middle level schools can more adequately meet such needs.

Stage-Environment Fit Theory

One way to examine the unique needs of middle level students is through the stage-environment fit theory (Gutman & Eccles, 2007). Scientific literature related to stage-environment fit theory suggests that school social context has a tremendous influence on the outcomes of young adolescents. According to this theory, there is a strong tension between the developmental needs of adolescents and their social context, and this tension is particularly salient because both the developmental needs and the social contexts of young adolescents are in great transition during this stage (Eccles et al., 1993). Additionally, stage-environment fit theory suggests that a lack of fit between developmental needs and social context can have a detrimental effect on adolescent outcomes (Gutman & Eccles, 2007). Such negative effects could include poor academic outcomes, social-emotional or mental health issues, and risk behaviors including substance abuse and sexual risk.

Of particular concern to middle level educators are findings from stage-environment fit studies suggesting that middle level students may experience a worse fit between their developmental needs and their environments than elementary or high school students (Eccles et al., 1993; Roesser, 2005). Young adolescents are at a stage in which they need positive, warm relationships, yet they often transition into middle grades organizational structures that make it more difficult to establish and maintain these types of relationships. Likewise, school curricula may become less experiential and more skill-and-drill oriented at the middle level, despite the fact that early adolescent brain development demands experiential and emotional learning (Wallis & Dell, 2004).

Middle level schools are in an excellent position to help support their students. Well-prepared middle level faculty and staff, armed with data-informed tools and knowledge, can be highly effective in creating developmentally positive environments for young adolescents. Thus, identifying ways to improve the fit between middle level students and their school environment becomes a very important part of supporting our students’ positive academic and life outcomes. In the present study, our research led us to consider school environment factors in relation to the needs of students. Further, we looked at the extent to which those needs are supported and how this “fit” impacts two specific academic outcomes: school enjoyment and academic aspiration.

School Enjoyment

For the purpose of this study, we defined “school enjoyment” as a positive emotional connection to school. Specifically, students who exhibit school enjoyment indicate they “like school.” Even though it may seem intuitive that enjoying school should have a positive impact on academic outcomes, there has been limited research in this area to date (Ainley & Ainley, 2011; Smith, Smith, Gilmore, & Jameson, 2012). Instead of examining the merits of school enjoyment as its own distinct construct, researchers more often use it as an indicator for a more general construct, such as school adjustment, leading to a lack of focus specifically on enjoyment (e.g., Boulou, Chau, Whitehand, Amataya, & Murray, 2009; Kingery, Erdley, & Marshall, 2011). Additionally, enjoyment is often examined in the context of a single subject (e.g., math or science) rather than in the context of a student’s overall school experience (Ainley & Ainley, 2011).

While the extent to which a student likes a particular school subject is important, some researchers, including those conducting the present study, have found value in investigating students’ attitudes toward school in general. This position is well justified by self-determination theory, which asserts that activities a person enjoys (including attending school or learning) are more intrinsically motivating than those activities the person does not enjoy (Ryan & Deci, 2000).
Although we understand the potential theoretical and common-sense contributions of school enjoyment, variables related to how much students enjoy school have been too often overlooked by educational researchers studying student motivation and academic performance, as well as professional educators and policymakers looking to improve student outcomes.

Counter to this trend, researchers in the United Kingdom have begun to acknowledge and study the importance of school enjoyment. Policy initiatives in the United Kingdom have even followed suit in recent years with Britain’s Every Child Matters, asserting that school should be a place each young person “enjoys and achieves” (Department for Education and Skills, 2003). Gorard and See (2011) observed that in the United Kingdom, both practitioners and policymakers had acknowledged enjoyment of learning as a major aim, one worth monitoring and acting upon when necessary.

School enjoyment may be particularly important in the United States, considering that even though high school graduation rates have improved during the past two decades, they remain lower than rates in many other countries in international comparisons (National Institute for Educational Statistics, 2012). Although high school dropout has been linked with a host of issues on both individual and societal levels, one advantage of considering factors related to school enjoyment is that existing research suggests the impact of school enjoyment is robust, even among students from disadvantaged backgrounds or living in challenging circumstances (Gorard & See, 2011). These findings provide a reasonable argument that school enjoyment may be an important target for intervention, as it may be more easily influenced than other factors more firmly fixed to student background or individual characteristics such as socioeconomic status, parental education level, ethnicity, or gender (Bradley & Renzulli, 2011; Vecchione, Alessandri, & Marsicano, 2014).

While school enjoyment has not been studied often, there seems to be growing support for its practical utility. Emerging research seems to suggest that students who enjoy school will be more motivated and will aspire to continue formal schooling. Both of these aims represent positive academic outcomes that middle grades professionals hope to promote among their students.

**Academic Aspiration**

For the purpose of this study, we defined “academic aspiration” as the extent to which students describe wanting to continue their formal education. As early as 1959, educational researchers began considering the importance of academic aspiration (Worell, 1959). Since then, aspiration has been studied at the elementary, middle, secondary, and post-secondary levels of education. Developmental researchers like Allport (1961) and Erikson (1964) have emphasized an individual’s need for purpose in life in order to guide his or her identity or behavior. Existing research presents aspiration as an important indicator of positive academic and life trajectories. Researchers have linked academic aspirations to longer term academic outcomes, such as graduation or college completion (Redd et al., 2001), as well as better health outcomes over time, such as abstaining from sexual intercourse for longer (Manlove et al., 2001). Researchers have found differences in academic aspiration based on such factors as race/ethnicity, socioeconomic status, and gender (Cunningham, Erisman & Looney, 2007). Further, researchers have found that both prior academic achievement and parental involvement have an impact on a student’s aspirations (Hill et al., 2004; Schneider & Stevenson, 1999).

In the United States, students’ aspirations to attend college and graduate school have been on the rise, doubling between 1980 and 2002. Of K–12 students surveyed in 2002, 80% reported that they aspired to earn a college degree or higher (Fox, Connolly, & Snyder, 2005), but little research helps confidently identify the sources of this tide change. Moreover, although many researchers have identified mechanisms to promote higher academic aspirations among students, educators have struggled to consistently translate the findings into practice, often due to the influence of powerful factors outside of schools. Further, and of particular relevance to this study, few researchers have examined the relationship between school environment fit and academic aspiration (McCollum & Yoder, 2011). Clearly, educators who understand which factors within the school support the development of students’ academic aspirations will be better able to help students develop their full potential.

**The Current Study**

According to stage-environment fit theory, the degree to which middle grades students perceive a good fit between their school environment and their needs impacts their academic outcomes and other adjustment outcomes (Eccles et al., 1993; Roeser, 2005). Theoretically, students who report a better “fit” or having their needs well met in school should
be more likely to report liking school and having higher academic aspirations. The following research questions guided this study:

1. Which elements of the school environment do middle level students report as meeting or failing to meet their individual needs?
2. What is the relationship between middle level students’ perceptions of need fulfillment and school enjoyment?
3. What is the relationship between middle level students’ perceptions of need fulfillment and academic aspirations?
4. What is the relationship between middle level students’ school enjoyment and academic aspirations?

Method

Participants
We collected the data reported in this article as part of a statewide effort to assess student needs at the middle level. An online survey was administered in a single day at each site by the school counselor during the fall semester of 2013. After we eliminated invalid survey responses, a total of 1,027 student datasets were included in the analyses. Participants were middle level students between the ages of 10 and 14, and were in grades five (n = 224; 21.8%), six (n = 368; 35.8%), seven (n = 220; 21.4%), and eight (n = 215; 20.9%). The sample was 50.7% female and primarily Caucasian (76%), with 10% mixed race, 9.7% Black/African American, and 3% other. Participants were drawn from four middle level schools located in four rural counties. We present the individual demographics and school profiles in Tables 1 and 2.

Measures

Demographics. We collected demographic information in addition to the survey. Students reported their age, gender, ethnicity, and grade level. We collected school level demographics from online resources available at the West Virginia Department of Education (http://wvde.state.wv.us/).

Counselor needs assessment. The research team cooperated with the West Virginia State Department of Education to create a survey instrument based on the American School Counselor Association (ASCA) (1997) National Standards that would assess students’ needs at school. The instrument contained 41 items that used a 5-point Likert-type scale. For the purposes of this study, a team of school counselors identified four main areas in which the items seemed to group. We employed a principal components factor analysis in order to statistically support these four identified subcategories. Through these processes, we identified four subscales: Social Skills Needs, Mental Health Needs, Academic and Career Needs, and Perceived School Support. The survey instrument is available online at http://wvde.state.wv.us/forms/counseling-assessment/?level=m.

Analysis

Measurement analysis. Prior to this study, the practice-based Counselor Needs Assessment instrument had not been fully validated within the scientific literature. Therefore, as part of our research-practice partnership, we elected to conduct preliminary tests designed to examine the efficacy of the instrument. These tests and their results suggest the utility of the measure and are discussed in greater detail in the sections below.

Factor analysis. The Counselor Needs measure included 41 total items, but this analysis only sought to determine the factor structure within the 34 items relevant to the four subscales identified by school

Table 1
Student Level Demographics

| Grade | Female | Male | White/ Caucasian | Mixed race | Black/African American | Total students per grade |
|-------|--------|------|------------------|------------|------------------------|-------------------------|
| 5     | 104 (46%) | 120 (54%) | 167 (75%) | 26 (12%) | 23 (10%) | 224 |
| 6     | 194 (53%) | 174 (47%) | 247 (67%) | 49 (13%) | 47 (13%) | 368 |
| 7     | 113 (51%) | 107 (49%) | 183 (83%) | 18 (8%) | 12 (6%) | 220 |
| 8     | 110 (51%) | 105 (49%) | 184 (86%) | 10 (5%) | 18 (8%) | 215 |
counseling professionals. First, we checked assumptions to determine whether the data were appropriate for factor analysis. Bartlett’s test of sphericity was met ($X^2(561) = 17,497.90, p < .001$). Additionally, the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = .952) indicated data met this assumption. After checking assumptions, we conducted a principle components analysis using Oblimin rotation. Analysis of the scree plot supported a four factor structure. Simple structure was evident in examination of the structure and pattern matrices. See Table 3 for further details on this analysis.

Reliability analysis. We used the Cronbach’s alpha test to analyze reliability statistics. The Social Skills Needs subscale included 11 items (Cronbach’s $\alpha = .91$). Items on this subscale captured perceived needs in the area of social skills of the student. Sample items included “Making friends,” and “Fitting in at school.” The Mental Health Needs subscale indicated the extent to which students felt they needed support with personal or emotional concerns. This subscale included seven items (Cronbach’s $\alpha = .82$), such as “Grief over the loss of a loved one” and “Feeling suicidal.” The Academic and Career Concerns subscale included 10 items (Cronbach’s $\alpha = .92$) and addressed study skills, preparation, and understanding testing. Sample items included “Improving study skills” and “Being more organized.” Finally, the School Support subscale included six items (Cronbach’s $\alpha = .81$) that identified how supported a student felt by school staff, particularly counselors. Sample items include “I feel comfortable going to see my counselor to get help with personal concerns” and “My teachers are willing to help me when I have questions.” The overall internal reliability for the entire instrument was high (Cronbach’s $\alpha = .93$).

Analysis of the research questions. We employed several analytical approaches to answer our four research questions, including univariate, descriptive analysis; a chi-squared test of independence; and hierarchical logistic regression. We conducted hierarchical logistic regression analyses for both school outcome variables: school enjoyment and academic aspiration. We conducted a power analysis using the following criteria: $\alpha = .05$, power level = .80. With these criteria, our sample must be 300 for a medium effect size in logistic regression (Hseih, Block, & Larsen, 1998). Therefore, the sample size of 1,027 was determined to be adequate. We checked the assumption of linearity using the Box-Tidwell procedure; all continuous independent variables were linearly related to the logit of the dependent variables (Laerd Statistics, 2015). We controlled for gender, ethnicity, and age in step one for each of the two logistic regression models. We then included the Counselor Needs subscales in the second step.

Results

Middle Level Students’ Perceptions of Need Fulfillment

We examined univariate statistics associated with each study variable. Participant means suggest high levels of school aspiration ($M = 4.28, SD = 1.18$) and moderate levels of mental health needs ($M = 2.27, SD = 0.92$), social skills needs ($M = 2.35, SD = 0.99$), academic and career needs ($M = 2.81, SD = 0.93$), school support ($M = 2.53, SD = 0.88$), and school enjoyment ($M = 3.25, SD = 1.42$) in this sample.

School Enjoyment

After controlling for age, ethnicity, and gender, the four subscales (Social Skills Needs, Mental Health Needs, Academic and Career Needs, and School Support) were entered as potential predictors of students’ school enjoyment (as measured by the dichotomized item, “I like coming to school”). The binary logistic regression model was statistically significant, $\chi^2(7) = 165.13, p < .01$. The model explained 20% of the variance (Nagelkerke $R^2$) in
Table 3  
*Factor Analysis Structure Matrix*

| Item                                           | Academic | Mental health | Social skills | School support |
|------------------------------------------------|----------|---------------|---------------|----------------|
| Making friends                                 | 0.01     | -0.09         | -0.89         | 0.00           |
| Fitting in at school                          | 0.02     | -0.05         | -0.81         | -0.04          |
| Dealing with peer pressure                    | 0.03     | 0.15          | -0.57         | 0.00           |
| Improving communication                       | 0.11     | -0.05         | -0.75         | 0.00           |
| Getting involved in school activities         | 0.15     | 0.04          | -0.60         | 0.02           |
| Dating or relationship issues                 | 0.00     | 0.29          | -0.40         | -0.03          |
| Concerns about alcohol . . . or drug use      | 0.06     | 0.39          | -0.23         | 0.03           |
| Helping myself (expressing . . .)             | 0.06     | 0.12          | -0.66         | 0.03           |
| Handling teasing or being bullied             | -0.04    | 0.31          | -0.51         | 0.08           |
| Getting along w/other students . . .          | 0.12     | 0.04          | -0.68         | 0.01           |
| Getting along better with family . . .        | 0.18     | 0.12          | -0.53         | 0.02           |
| Feeling sad or depressed                      | -0.02    | 0.74          | -0.09         | -0.02          |
| Feeling suicidal                               | -0.11    | 0.67          | -0.13         | -0.09          |
| Grief over the loss of a loved one            | 0.11     | 0.63          | 0.05          | 0.05           |
| Parental divorce or separation                | 0.01     | 0.66          | 0.02          | 0.05           |
| Dealing with anger                            | 0.19     | 0.58          | -0.06         | -0.06          |
| Feeling stressed                              | 0.14     | 0.64          | -0.02         | 0.00           |
| Skills for resolving conflicts                | 0.16     | 0.32          | -0.34         | 0.00           |
| Being more organized                          | 0.72     | -0.02         | -0.01         | -0.04          |
| Managing my time better                       | 0.77     | 0.03          | 0.01          | -0.03          |
| Improving study skills                        | 0.83     | 0.06          | 0.09          | -0.05          |
| Reducing test anxiety                         | 0.71     | 0.17          | 0.11          | 0.02           |
| Improving test-taking skills                  | 0.78     | 0.05          | 0.02          | 0.00           |
| Understanding test scores . . .               | 0.65     | 0.01          | -0.20         | 0.04           |
| Understanding . . . best career options       | 0.64     | -0.04         | -0.18         | 0.05           |
| Planning options after high school            | 0.62     | -0.07         | -0.17         | 0.03           |
| Understanding my learning style . . .          | 0.74     | -0.01         | -0.16         | 0.01           |
| Understanding grad . . . requirements         | 0.70     | -0.07         | -0.11         | 0.05           |

(Continued)
school enjoyment and correctly classified 65.2% of cases. As shown in Table 4, two of the four independent variables were statistically significant, with higher levels of school support and lower mental health-related needs being associated with students who reported liking school. Students who perceived high levels of school support were 2.51 times more likely to indicate school enjoyment, while students who reported lower mental health needs were 0.79 times more likely to report liking school. Additionally, even when controlling for gender during step one, gender remained significant in step two of the model. In step two, females were 0.74 times more likely to enjoy school than boys.

**Academic Aspiration**

After controlling for age, ethnicity, and gender, the four subscales (Social Skills Needs, Mental Health Needs, Academic and Career Needs, and School Support) were entered as potential predictors of a student’s academic aspiration as measured by the dichotomized item, “I will continue my education after high school.” The logistic regression model was statistically significant, \( \chi^2 (7) = 140.60, p < .01 \). The model explained 21% (Nagelkerke \( R^2 \)) of the variance in academic aspiration and correctly classified 82.6% of cases. As shown in Table 5, three of the four independent variables were statistically significant with higher levels of school support, higher academic and career needs, and lower mental health needs being associated with students aspiring to post-secondary education. Students who reported higher levels of perceived school support were 2.43 times more likely to indicate that they aspired to continue their education past high school. Students with lower mental health needs were 0.79 times more likely to report academic aspiration. Interestingly, those students reporting higher needs for academic and career counseling were 1.26 times more likely to have high academic aspirations. Additionally, even when controlling for gender during step one, gender remained significant in step two of the model. In step two, females were 0.38 times more likely to aspire to post-secondary education than males.

**School Enjoyment and Academic Aspiration**

The relationship between school enjoyment and academic aspiration was tested using a chi-squared test of independence. School enjoyment was significantly related to academic aspiration (\( \chi^2 (1) = 49.1, p < .01 \)). The strength of this significant relationship was tested using Cramér’s phi, which revealed a moderate relationship at .22 (\( p < .01 \)). In general, as school enjoyment increased, so did academic aspiration.
Discussion

The Association for Middle Level Education (AMLE) emphasizes the importance of creating developmentally responsive schools that maintain cultures that are “safe, inclusive, and supportive of all” and offer “comprehensive guidance and support services that meet the needs of young adolescents” (AMLE, 2010, p. 21). In the current study, we examined middle level students’ perceptions of how well their school met their needs (conceptualized in this study as a proxy for stage-environment fit) and student self-reports of whether or not they enjoyed school and aspired to complete post-secondary education. As we hypothesized, students who reported that their needs were being met in school were more likely to also report enjoying school and aspiring to pursue non-compulsory post-secondary education. This finding was especially true for students who reported high levels of school support, which we conceptualized in terms of teacher and guidance counselor interest, concern, and willingness to provide assistance. Although existing studies have examined the importance of teacher quality, school

Table 4
Logistic Regression Predicting School Enjoyment

|                  | B    | SE  | Wald | p     | Odds ratio |
|------------------|------|-----|------|-------|------------|
| Age              | -.13 | .06 | 4.48 | .03   | 0.88       |
| Gender           | -.31 | .14 | 5.05 | .02   | 0.74       |
| Ethnicity        | .16  | .16 | 0.97 | .32   | 1.18       |
| Mental Health Needs | -.23 | .10 | 5.47 | .02   | 0.79       |
| Social Skills Needs | .19  | .11 | 3.30 | .07   | 1.21       |
| Academic/Career Needs | -.10 | .09 | 1.20 | .27   | 0.90       |
| Perceived School Support | .92  | .09 | 114.67 | .00 | 2.51       |

Note. The dependent variable in this analysis is School Enjoyment, coded so that 0 = does not enjoy school and 1 = enjoys school. The independent variable Gender was coded so that 0 = male and 1 = female. Ethnicity was coded so that 0 = Non-white race and 1 = White race.

Table 5
Logistic Regression Predicting Academic Aspiration

|                  | B    | SE  | Wald | p     | Odds ratio |
|------------------|------|-----|------|-------|------------|
| Age              | .11  | .08 | 2.03 | .15   | 1.11       |
| Gender           | -.98 | .18 | 29.62| .00   | .38        |
| Ethnicity        | .10  | .20 | 0.23 | .63   | 1.10       |
| Mental Health Needs | -.24 | .12 | 3.97 | .05   | .79        |
| Social Skills Needs | -.22 | .13 | 2.99 | .08   | .80        |
| Academic/Career Needs | .23  | .11 | 4.33 | .04   | 1.26       |
| Perceived School Support | .89  | .10 | 86.86| .00   | 2.43       |

Note. The dependent variable in this analysis is academic aspiration, coded so that 0 = does not plan to continue education after high school and 1 = plans to continue education after high school. The independent variable gender was coded so that 0 = male and 1 = female. Ethnicity was coded so that 0 = non-White race and 1 = White race.
safety, peer relationships, and family support when establishing a positive school environment and promoting successful academic outcomes, we have extended this research by investigating the impact of student perceptions of need satisfaction and the role of stage-environment fit.

Needs for School Support
We identified school support as the most important predictor of both school enjoyment and academic aspiration. This finding is consistent with past research showing that students (especially those making transitions during early adolescence) benefit from knowing there is an adult in school who cares about their personal wellbeing and who is committed to their academic success (Newman, Lohman, Newman, Myers, & Smith, 2000). Additionally, Keifer, Ellerbrock, and Alley (2014) underscored the value of building relationships that are perceived by middle level students as high in care, as students who feel adults in school care for them are more likely to report a range of positive student outcomes. Finally, Gorard and See (2011) suggested that supportive student-teacher relationships may be a potential source of enjoyment available to middle level students.

This study supported both assertions, as students who felt supported in their schools were more likely to report enjoying school and aspiring to additional schooling. Specifically, for this study, school support was conceptualized as feeling as though teachers and guidance counselors were interested, concerned, and willing to help. In this case, the extent to which students felt comfortable seeking support and felt confident they would receive support and care from relevant adults was strongly associated with these desired outcomes. The current finding adds further support to the argument that caring, engaged, developmentally responsive adults in schools are essential to creating environments in which students are most likely to achieve academic and life success.

Needs for School Mental Health Services
Mental health needs was the second best predictor of school enjoyment and the third best predictor of academic aspirations. Specifically, students who reported lower concerns related to drugs and alcohol; depression and suicide; or anger, grief, and life stress were more likely to enjoy school and aspire to post-secondary education. This finding is supported by the National Association of School Psychologists and the ASCA, which have both firmly stated that supporting the mental health needs of students at school is a key to school success (Cowan, Vaillancourt, Rossen, & Pollitt, 2013). Additionally, many studies suggest that children with unmet mental health problems are also likely to have lower levels of educational achievement (Stagman & Cooper, 2010; Stevenson, 2010). This finding is critically important for middle level educators as approximately half of all chronic mental health conditions begin by the middle grades (Kessler et al., 2007). These sentiments are also echoed by Mann, Kristjansson, Sigfusdottir, and Smith (2014), who found that middle level students, as compared to high school and college students, were more vulnerable to mental health issues such as depression, anger, and anxiety, thus making the middle level years crucial for mental health support.

Our current findings further confirm the work described above by suggesting the importance of creating a middle level environment that supports the mental, emotional, and social wellbeing of students, and in which students in need of mental health services are identified and supported as they receive care and assistance. Additionally, the current study demonstrates important links between mental health needs and both school enjoyment and academic aspiration. The findings suggest that creating and maintaining a healthy school environment is likely to provide benefits related to student mental health outcomes and to have an important role in promoting conditions that support successful academic outcomes, such as creating an enjoyable school environment likely to encourage post-secondary academic aspirations.

Needs for Academic and Career Assistance
Academic and career needs were a significant predictor of academic aspiration. Students who felt well supported academically were more likely to plan on continuing their education past high school. This finding is supported by other research suggesting college readiness may be influenced more by student levels of academic achievement in eighth grade than by their level of academic achievement in twelfth grade (ACT, 2008). Additionally, students who receive adequate academic skills support during the middle grades are likely to have better college outcomes than students who do not receive this assistance.

The findings from our study support these assertions and further suggest the role that school enjoyment may play in the process of supporting post-secondary aspirations. Reinforcing the need for middle level academic and career assistance is important as this has become both a
policy priority and an intervention priority for many national and state-funded organizations that have identified middle levels as the place to begin talking to students about college plans (ACT, 2004).

Gender
Although we initially included gender as a control variable in step one of the analysis, it continued to demonstrate a significant influence on both school enjoyment and academic aspirations in step two. Our findings suggest female middle level students are more likely to enjoy school and aspire to post-secondary education than male students. Although researchers have historically reported that males were more likely to enjoy school (Hirsch & Rapkin, 1987), recent trends demonstrate that females are more likely to have more positive academic outcomes in both the middle grades and high school than boys (Shapiro et al., 2015). Further, existing research suggests males may place less importance on academic success than females (Berndt & Miller, 1990) because they assume they will be able to obtain high paying jobs in fields like mining or skilled machine work without doing well or continuing in school (Diprete & Buchman, 2013). This trend is troubling because current economic conditions in the United States suggest that post-secondary education is important for employment in high paying jobs.

In the current study, females were also more likely to aspire to continuing education after high school than males. Although gender was not a primary focus in our work, our findings suggest that males were less likely to enjoy school and aspire to post-secondary education than females. This confirmation is important as it provides further impetus to more actively investigate ways to reimagine schooling for males and develop models that support higher levels of school enjoyment, engagement in learning, and academic aspiration. As such, gender differences as they relate to school enjoyment, aspiration, and stage-environment fit should be investigated in future studies.

School Enjoyment and Academic Aspirations
Finally, our results supported Csikszentmihalyi’s (1997) hypothesis that enjoying school may also enhance academic aspiration. Although the relationship between school enjoyment and academic aspiration in this study was moderate, the findings were parallel to the finding that disliking school is related to high school dropout (Boulton et al., 2009), and suggest the need for future research in this area.

Although our current findings and previous research considered the value of school enjoyment and academic aspiration independent of one another, a better understanding of their relationship to each other seems like a worthwhile goal for middle level researchers. It seems reasonable to assume that students who enjoy school would aspire to continue spending time in an academic environment, whereas students who do not enjoy school would be less inclined to do so. This may be especially important in the middle grades because we know that early adolescence is a time when individuals’ social, academic, and behavioral skills and goals are particularly malleable. As a result, middle level students are more likely to be responsive to intervention (Goldstein & Brooks, 2012) and be successfully redirected away from potentially negative trajectories (Estell et al., 2007). As others have noted, the middle grades may be “the last best time to intervene” (North Carolina Department of Public Instruction, 2004; Steinberg, 2014). Ultimately, these findings may help middle level education professionals more accurately determine the value of our students enjoying school and more accurately prioritize this outcome when structuring the school environment and planning each school day.

Limitations
While there is value in the findings of the current study, there are some limitations as well. The sample, although representative of the rural Appalachian population, was relatively homogeneous and inhibits any extensive generalization. Furthermore, data were collected with students nested inside schools, while data analysis was conducted at the individual student level. This is a limitation that should be corrected as more schools are included in future phases of the study. Also, logistic regression analyses were performed predicting an outcome variable measured by only a single item. Although there is merit to the present research study and its questions, future research should look at such academic outcomes as school enjoyment and academic aspiration using more robust measurement and analysis. Additionally, although we conducted a rigorous evaluation of the Counselor Needs Assessment instrument and provided some preliminary validation of this tool, this instrument should be more comprehensively validated as a part of future studies. As such, findings should be interpreted cautiously until additional studies have replicated these outcomes using more rigorously validated instrumentation.
Conclusion

According to the AMLE, the “distinctive nature of young adolescents [should] be the foundation upon which all decisions about school organization, policies, curriculum, instruction, and assessment are made” (AMEL, 2010, p. 13). This study provides preliminary evidence supporting stage-environment fit theory and suggests students will be more likely to demonstrate positive adjustment outcomes when the middle level school environment adequately matches their needs. Specifically, our findings indicate that the fit between students’ needs and their school environment made a substantial difference regarding whether or not they enjoyed school and wanted to pursue future educational opportunities.

Because the middle level school environment is such a powerful influence on the developmental trajectory of young adolescents, it is critically important for middle level educators to consider the match between their schools and the unique needs of individual students. Although young adolescents share many common developmental needs, this study suggests that middle level educators, counselors, and administrators would benefit from measuring and considering ways to enhance the match between their actual students and the specific learning environment they offer. Further, these findings support considering non-academic factors (those factors that extend beyond frequently measured teaching and learning factors) as a means to provide indirect but powerful ways to support academic and life success. This is a particularly timely finding as legislators may create opportunities in the Elementary and Secondary Education Act (ESEA) for schools to expand considerations related to school environment and fit as legitimate priorities by including these variables in its evaluation of what makes a successful school, much as the United Kingdom has done by prioritizing school enjoyment.

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