

**Relationships between Risk Factors, Perceptions of School Membership and Academic and Behavioral Engagement of Students Who Attend an Alternative School for Behavioral and Emotional Challenges**

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The purpose of this study was to investigate the relationships between the perceptions of school membership, risk factors, and behavioral and academic engagement among a sample of alternative school students. The study subjects were 48 7<sup>th</sup>-9<sup>th</sup> graders who were at high risk for school failure because of their serious and chronic behavioral and academic problems. All subjects had an Individualized Education Plan (IEP).

A 25 item school membership questionnaire adapted from existing school membership surveys was used to assess students' perceived school membership. The study participants reported a moderately positive school membership score. The findings indicated that commonly known risk factors, such as being a male, minority, low SES, no participation in extracurricular activities, and a history of involvement with the juvenile justice system did not negatively affect study participants' perceptions of school membership. The relationships between students' school outcomes and the risk variables were also analyzed. The findings indicated that the above mentioned risk variables did not result in significantly negative effects on school outcomes (GPA, number of missed school days, hours spent for in-school suspension, and days spent for out-of school suspension). Instead, academic and behavioral school outcome variables were found to be closely related with each other, and also with some demographic factors, including race/ethnicity and grade levels. Implications for planning academic and behavioral interventions for students with emotional and behavioral challenges are discussed.

*Keywords: (at-risk, alternative school, school membership, emotional and behavioral challenges, academic engagement, Individualized Education Plan )*

Alternative schools have long been regarded as the last resort for students who are at risk of dropping out, due to serious academic and behavior problems (Arnové & Strout, 1980; Aron, 2006). Although there is no uniform definition of the risks that place students at a higher probability of school failure, such as dropping out, prior studies (Alexander, Entwisle & Kabbani, 2001; Audas & Willms, 2001; Bost & Riccomini, 2006; Christenson & Thurlow, 2004; Christenson, Sinclair, Lehr & Godbar, 2001; Janosz, Archambault, Morizot & Pagani, 2008) have reported a variety of factors that are related to disengagement from school. They are: (a) school variables (e.g., grade retention, school absence and tardiness, disciplinary referrals); (b) social deviance (e.g., substance abuse, pregnancy or early parenthood, criminal justice system involvement); (c) family background (e.g., low family income, history of abuse or neglect, homelessness); and (d) demographic characteristics (e.g., being a male, having a disability, being a member of a minority group). Undoubtedly, alternative schools serve students who struggle with many of these risk factors in much higher rates than the typical public schools do. It is evidenced by a significant increase in the number of alternative schools over the past decades, largely in response to traditional public schools' failure in engaging these struggling and challenging learners (Carver, Lewis & Tice, 2010; Foley & Pang, 2006; Lehr, Tan & Ysseldyke, 2009). The U.S. Department of Education reported that during the 2000-2001 school year 39% of public school districts administered at least one alternative program for at-risk youths. In the 2007-2008 school year this rate increased to 64% (Carver, Lewis & Tice, 2010).

Alternative schools are commonly characterized by flexible structure and

schedules, smaller student- to- teacher ratio, and an availability of extensive social services and support programs (Jolivet, McDaniel, Sprague, Swain-Bradway & Ennis, 2012). These characteristics make alternative schools appear to be well positioned to serve students with complex, academic, behavioral, and emotional challenges. To date, however, there is empirically very little we know about how the unique educational environments of alternative schools foster at-risk students' school engagement.

School engagement connotes both psychological and behavioral attributes (Finn, 1993; Fredricks, Blumenfeld & Paris, 2004; Anderson, Christenson, Sinclair & Lehr, 2004). Cognitive and psychological engagement includes indicators, such as identification with school, sense of belongingness and connection, and relationships with peers and teachers (Christenson & Thurlow, 2004). Academic and behavioral engagement is manifested by observable indicators such as attendance, grades, and disciplinary history (Christenson & Thurlow, 2004). Several studies reported close associations of psychological school engagement and academic, (O'Donnell, Hawkins & Abbott, 1995; Reyes, Brackett, Rivers, White & Salovey, 2012) and behavioral school engagement (Cernkovich & Giordano, 1979; Henry, Thornberry & Huizinga, 2009; Liska & Reed, 1985; Simons-Morton, Crump, Haynie & Saylor, 1999). To be sure, students who are at risk of dropping out often display low levels of school membership and have trouble with the basic elements of school participation, including regularly attending classes and following basic codes of conduct (Fredricks et al., 2004).

Educators don't have control over predisposing risk conditions, such as neighborhood characteristics, family

condition, and child's gender/temperament. On the other hand, they can manipulate school-related factors that encourage student engagement (Waxman et al., 2002). School engagement has been reported as the single most crucial variable that impacts students' decisions to remain or exit school (Audas et al., 2001; Fredricks et al., 2004; Janosz et al., 2008). Several studies (Jennings & Greenberg, 2009; Pianta, La Paro & Hamre, 2008; Reyes et al., 2012) reported that fostering positive emotional climate in school lead to students' academic success. Schools can create a positive emotional climate for learning by expressing warmth toward, respect for, and interest in students and by encouraging their cooperation with one another (Reyes et al., 2012).

The tremendous increase in the number of alternative education programs strongly suggests the need for high standards for the students served in these settings in order to ensure quality school experiences. With relatively smaller school sizes and more social services available, alternative schools in general are expected to provide a more engaging educational atmosphere for students who are at risk of early school exit for various academic, emotional, and behavioral difficulties (Cox, 1999). However, effectiveness of alternative education programs on at-risk students' psychological and behavioral engagement is unknown. In this connection, this study was designed as a descriptive and quantitative research project to investigate (a) the degree of psychological school engagement perceived by at-risk students who attend an alternative school and (b) how these perceptions correlated with students' social/status risk factors and academic and behavioral school engagement.

## **Method**

### **Participants**

The setting for this study was a public special purpose alternative school. The school was located in a Midwestern city with a metropolitan population of approximately 230,000; it served students in grades 5-12 who had emotional, behavioral and academic problems. All enrollees had an IEP and each pupil had been referred by their home school for alternative school placement because of serious learning, emotional or behavioral issues.

All 7, 8, and 9<sup>th</sup> grade students (N=83) enrolled at the school were invited to participate in this study. Parents of 51 students (61.4%) returned the signed informed parental consent forms to approve their children's participation in the study. Two students whose parents consented to study participation opted not to participate, and one student left school prior to the completion of the study. The primary disabilities of participating students (N=48) included: Emotional Disturbance (n=33, 69%); Other Health Impairment (Attention Deficit Hyperactivity Disorder) (n=8, 17%); Learning Disability (n=4, 8%), Autism (n=1, 2%), Traumatic Brain Injury (n=1, 2%), and Mental Retardation (n=1, 2%).

The majority of the study participants were white (n=25, 50%) and male (n=41, 85.4%). Participants were primarily from families of low socio-economic status. Over three quarters (n= 37, 77.1%) of the study participants qualified for meal assistance, including free lunch (n=32, 66.7%) and reduced-price lunch (n=5, 10.4%). Participants' gender and race/ethnicity are shown in Table 1.

### **Procedures**

School records for each of the 48 participants, including students' IEP's, grade point average (GPA) and current academic year discipline referrals and records, were individually reviewed by the senior author. Students' IEP's provided demographic

information, educational and clinical diagnostic information, and education objectives. The senior author also conducted individual interviews with each student's school advisors to confirm the reliability of the information identified in student's records and to solicit additional information.

A copy of the *Student Membership Survey*, a cover letter explaining the purpose of the study and a student assent form was given to each of the 48 participants whose parents or guardians consented to their child being a part of the study. The surveys were distributed by the students' advisors and participants were directed to complete the scale at home. Students returned the completed survey to their school advisors. Subsequent to submitting their completed survey each student was given a small bag of snacks as a token of appreciation.

### Measures

**Risk factors.** Based on the literature and factors that were most relevant to the research site, the following were selected as risk factors for the present study: (a) male gender; (b) minority group membership (Black, Hispanic or American Indian); (c) free or reduced lunch eligibility; (d) lack of participation in extracurricular activities at school; and (e) a history of involvement with the juvenile justice system. None of the potential participants had been retained since the 3rd grade, had a history of being pregnant, or was homeless. No objective or confirmed data were available on students' substance abuse history or history of abuse/neglect. Thus these risk factors were not considered in this study.

**Psychological school engagement.** Self-identified perceptions of school membership, acceptance and value of schooling were targeted for measurement. For purposes of this study, the school engagement was evaluated using the *Student Membership Survey*. This instrument was

based on items from the *Identification with School Questionnaire* (ISQ) and the *Psychological Sense of School Membership Scale* (PSSM). Both scales have been widely used to measure students' school membership (Booker, 2007; Morrison, Cosden, O'Farrell & Campos, 2003; Pittman & Richmond, 2007); the statistical reliability and validity of both measures are supported in the research literature (Goodenow, 1993; Hagborg, 1994; Hagborg, 1998; Kenny & Bledsoe, 2005; Kenny, Blustein, Chaves, Grossman & Gallagher, 2003; McKay, 2007; Voelkl, 1996; Voelkl & Frone, 2000). Students with higher scores on these measures, in contrast to low-scoring learners displayed more positive self-concept, greater school satisfaction and school commitment, better academic motivation and performance, more positive relationships with teachers and peers, and experienced lower social-emotional distress.

The PSSM and ISQ were combined to create a single measure that was maximally utilitarian and functional relative to the objectives of the present study. The 18-item Likert-formatted PSSM is designed to measure three factors: *belonging* (e.g., "I am included in a lot of activities at this school."), *rejection* (e.g., "It is hard for people like me to be accepted here."), and *acceptance* (e.g., "I can really be myself at this school.") (Hagborg, 1994). The ISQ, a 16 item self report Likert-type scale, measures two primary factors: *feelings of belongingness* (e.g., "I feel like a real part of this school."); and *feeling of valuing school and school related outcomes* (e.g., "School is useful to get a good job," "Most of the things we learn in school are useless (reverse scored).

Seven non-redundant items from the ISQ (one "belonging" and six "valuing" items) were combined with the PSSM as the measure for this study. These 7 items

provided additional important information relative to the objectives of the present study by adding elements not present in the PSSM (Voelkl, 1996). *Feeling of valuing school* was regarded as a critical component that affects students' commitment to school (Voelkl, 1996) and has been proven to have a positive correlation with school participation and academic achievement (Voelkl, 1997). The PSSM and ISQ have strong psychometric properties relative to construct validity and predictive value (Kenny et al., 2005; Kenny, et al., 2003; Voelkl, 1997). However, Voelkl (1996) reported that a one-dimensional scale may better reflect the degree to which students identify with school than do separate measures of belonging and valuing. Thus, adding items with strong psychometric credentials that address specific areas of interest relative to the interests of particular studies does not affect the integrity, reliability or validity of the measure. It is also significant to note that such amendments have also been used in other studies of school membership (Libbey, 2004). In fact, selected items from the PSSM and ISQ can be traced across many different measures (Brown & Evans, 2002; Moody & Bearman, 2002; Samdal, Nutbeam, Wold, & Kannas, 1998; Simon2-Morton & Crump, 2002).

The range of possible response for each item of the *School Membership Survey* was 1 to 5. High scores on this measure represented a higher perceived degree or sense of school membership among students while low scores represented a lesser degree of school membership. The internal consistency reliability across the 25 items of the scale was .90. The internal consistency reliability for the 'belonging' subscale items (1-19) was .87 and .80 for the 'valuing' subscale (item 20-15).

**Behavioral and academic school engagement.** Behavioral engagement outcomes were measured by the number of missed school days, incidences of tardiness, hours spent for in-school suspension, days spent for out-of school suspension, and GPA.

**Demographic information.** Demographic information that was entered in the data analysis includes the students' grade level, number of hours each student attended the alternative school per day (ranging from 1-7), and length of time each student had attended the alternative school. School attendance and frequency of disciplinary referrals were selected as the risk-related behavioral engagement outcomes for this study. Accordingly, these salient school performance and behavioral variables were monitored relative to their relationship with identified risk factors.

#### **Data Analysis**

Two primary research questions were addressed in this study: (1) What were the school membership perceptions of the alternative school students who participated in the study; and (2) how these perceptions correlated with students' social /status risk factors and academic and behavioral school engagement.

To explore research question one, means and standard deviations analyses were used to describe participants' school membership perceptions, as measured by the *Student Membership Survey*. Surveys that included unanswered items were few in number and randomly distributed and were treated with pairwise deletion using SPSS statistical software. One-way Analysis of Variance (ANOVA), independent sample *t*-tests, and Cohen's *d* effect size estimates were also calculated to investigate whether there were differences in school membership perception scores across the different student sub-groups. Sub-groups were defined by student gender, grade level,

race/ethnicity, free/reduce lunch eligibility, involvement in extracurricular activity, and history of involvement with the juvenile justice system.

Research question two was addressed by the following steps. First, effects of the risk factors on students' academic and behavioral engagement outcomes were examined using one sample *t*-tests, one way ANOVA, and Cohen's *d* effect size estimates. Next, correlation analyses were conducted to explore the relationships among all study variables.

## Results

### Degree of Psychological School Engagement Perceived by At-risk Students in Alternative School

Study participants reported a moderately positive school membership mean score of 3.63 (SD = .71) on a scale ranging from "1 = not at all true" to "5 = completely true." Higher scores on this measure represented perceptions of higher degrees of school membership.

### Effects of Risk Factors on Psychological School Engagement

Findings indicated that commonly known risk factors, including being a male, minority, having a low SES ranking, not participating in extracurricular activities, and having a history of involvement with the juvenile justice system, did not have statistically significant effects on students' perception of school membership. Overall results by gender and school membership revealed no statistically significant differences between female and male students ( $t(46) = -.01, p = .996$ . Cohen's  $d = -.00$ ). The Levene's test for homogeneity of equal variances ( $p = .58$ ) showed that the assumption of equality of variance between the two groups (male and female students) was not violated despite the different sample sizes. Male students (M= 3.63, SD = .74)

reported an almost identical average score on the *School Membership Survey* as female students (M= 3.63, SD = .62).

No statistically significant differences in the mean scores for school membership were found across the three grade levels ( $F(2, 45) = .33, p = .72$ ). The effect size estimates were considered small for the effect of grade level on students' school membership scores (Cohen's  $d$  for mean differences between grade 7-8= .27; 8-9 = -.23; 7-9= .09). The mean school membership score for each grade was 7 (M = 3.74, SD =1.02), 8 (M = 3.52, SD =.57), and 9 (M = 3.66, SD = .65).

White students reported a slightly higher average score (M = 3.74, SD =.69) when compared to their minority counterparts. The effect size estimates were moderate to large in size for mean differences in school membership scores for several of the group comparisons (Cohen's  $d$  for White vs. Black = -.03; White vs. Hispanic = .83; White –American Indian = .51; Black vs. Hispanic= .89; Black vs. American Indian = .56; Hispanic vs. American Indian = -.33). Black (M = 3.76, SD =.62) and White (M = 3.74, SD =.69) students reported higher school membership scores than American Indian (M = 3.36, SD = .79) and Hispanic (M = 3.08, SD = .89) students. However, it is significant to note that the number of American Indian and Hispanic students was relatively small.

Interestingly students who were eligible for free lunch reported higher average scores (M = 3.74, SD = .69) on the *School Membership Survey* than their counterparts. The effect size estimates showed moderate to large differences in the school membership scores for some of the sub group comparisons (Cohen's  $d = .61$  [Full vs. Reduced priced]; -.83 [Reduced priced vs. Free]; .26 [Free vs. Full priced]). Students who were eligible for reduced

priced lunch reported the lowest mean score ( $M = 3.09$ ,  $SD = .86$ ) on the school membership scale compared to those who were eligible for free lunch ( $M = 3.74$ ,  $SD = .69$ ) and when compared to those students who were not eligible for any lunch assistance ( $M = 3.56$ ,  $SD = .67$ ).

Students who were participating in extracurricular activities (e.g., student council, team sports, ROTC, etc) reported a slightly higher mean school membership score ( $M = 3.79$ ,  $SD = .76$ ) than non-participating students ( $M = 3.57$ ,  $SD = .70$ ). Students who had a history of involvement with the Juvenile Justice Systems also reported a higher mean score ( $M = 3.78$ ,  $SD = .60$ ) on the *School Membership Survey* than those who did not ( $M = 3.60$ ,  $SD = .75$ ).

### **Effects of Risk Factors on Behavioral and Academic School Engagement**

Student subjects' average GPA was 2.66 ( $SD = .88$ ), based on a 4.0 scale. Students missed an average of 5.73 ( $SD = 5.27$ ) school days during approximately a 4 month period during the spring semester. Tardiness was a common problem students displayed at the alternative school. On average, approximately 2 ( $SD = 3.73$ ) incidences of tardiness per student were reported over a 4 month period during the spring semester. Frequent in-school and out-of school suspensions were reported for the study participants as well. On average, students spent approximately 5 ( $SD = 6.60$ ) hours out of class for in-school suspension and 1 ( $SD = 1.47$ ) day for out-of suspension for the same period of time.

The findings from the data analyses indicated that the risk variables used in the study (i.e., male, minority, low SES, no participation in extracurricular activities, and history of involvement with the juvenile justice system) did not result in statistically significant negative effects on GPA, number of missed school days, hours spent for in-

school suspension, and days spent for out-of school suspension. However, medium to large effect sizes were reported for Hispanic and American Indian students in all outcome areas, including GPA, number of missed school days, incidences of tardiness, hours of in-school suspension, and days spent for out of school suspension.

On average, Hispanic students reported the lowest GPA ( $M = 2.38$ ,  $SD = 1.22$ ); and American Indian students missed the most school days ( $M = 9$ ,  $SD = 11.31$ ). However, American Indian students reported fewer incidences of tardiness ( $M = .00$ ,  $SD = .00$ ), hours of in-school suspension ( $M = 1.50$ ,  $SD = 2.12$ ), and days for out of school suspension ( $M = .00$ ,  $SD = .00$ ) compared to other race/ethnicity groups.

Being eligible for reduced priced lunch also correlated with medium to large effect sizes for GPA and in-school and out-of school suspension. Students who were eligible for reduced priced lunch ( $N = 5$ ) reported a higher average GPA ( $M = 3.10$ ,  $SD = .66$ ), spent less time in in-school ( $M = 2.20$ ,  $SD = 3.35$ ) and out-of school suspension than their peers ( $M = .40$ ,  $SD = .55$ ).

### **Relationships among Study Variables**

Grade level played a significant role in students' performance. Incidences of tardiness was least likely to be reported among the 8<sup>th</sup> graders ( $M = .50$ ,  $SD = .89$ ). Seventh graders reported the least number of in-school suspensions ( $M = 3.27$ ,  $SD = 3.00$ ) and the most out-of school suspensions ( $M = 1.64$ ,  $SD = 1.57$ ). Correlation analyses (see Table 2) revealed that the higher the student grade level the less amount of time was reported for out-of-school suspension ( $r = -.29$ ,  $p = .05$ ).

In-school-suspension was a common event across grade levels at this school; however, the most out-of-school

suspensions were reported among the 7<sup>th</sup> graders. Not surprisingly, the type of behaviors that caused out-of school suspension were generally more serious (e.g., assault, vandalism) and aggressive in nature when contrasted with behaviors that resulted in-school-suspension.

Statistically significant correlations were found between the outcome variables of GPA, number of missed school days, number of in-school and out-of-school suspension, and number of tardiness reports. Students who had higher GPA's, as might be logically predicted, missed fewer school days ( $r = -.48, p = .00$ ); had fewer incidences of tardiness ( $r = -.30, p = .04$ ); and spent fewer hours in in-school suspension ( $r = -.44, p = .00$ ). The number of missed school days and incidences of tardiness showed a statistically significant correlation ( $r = .38, p = .01$ ). That is, students who missed more school days also reported more incidences of tardiness. Lastly, students who stayed in this school the longest seemed to be in upper grade levels ( $r = .34, p = .02$ ), enroll in more classes ( $r = .29, p = .05$ ), and participate in more extracurricular activities ( $r = .35, p = .01$ ).

## Discussion

Although there is no norm groups against which the current study results could be compared, the average school membership score from this study was higher than average school membership scores reported in similar studies. Uwah, McMahon, and Furlow (2008) reported an average PSSM score of 3.10 (SD = .42) for a sample of 40 high risk 9<sup>th</sup> and 10<sup>th</sup> grade African American students. Hagborg (1998) reported a mean PSSM score of 3.57 (SD = .81) for 120 typical middle school students. Average PSSM scores reported by Goodeow (1993) for multi- ethnic junior high school students in an urban area were also in the

lower range of 3.09 (SD = .61) to 3.11 (SD = .70). The relatively positive school membership perceptions of the students who participated in this study may have been due to the unique educational environment of the alternative school. Teachers at this school seemed to have a good understanding of their students' home, school and social life struggles; and faculty members seemed to be well equipped to deal with students' disruptive behaviors. They maintained a close relationship with a residential clinic for students with mental health issues and organized classes with head teachers who were trained in managing different types of challenging behaviors (e.g., withdrawal type vs. aggressive/conduct disorder type). These accommodations may have caused students to feel more connected and welcome in school.

Although the difference was not statistically significant, the higher average school membership score by students who had a history of involvement with the juvenile justice system was intriguing. This is particularly the case when one considers this data relative to findings reported by other researchers. Hirschfield (2009) reported that early arrest increases the probability of early school exit. However, Unruh, Gau, and Waintrup (2009) found in their study with 320 youths who had been formerly incarcerated and possessed a mental health and/or special education diagnosis that participants who received community integration intervention were less likely to reoffend. These results point to the importance of post-incarceration intervention for students who have a history of involvement with the legal system. Since alternative schools are sometimes the last educational option for youth offenders, it is critical that these education programs be equipped to deal with the unique needs of these vulnerable youths. It was beyond the



scope of the current study to investigate specific educational programs the school was providing for youth offenders. Nevertheless, these positive school membership findings suggest that there is hope for educational programs that address the unique needs of learners who are youth offenders.

Mixed results were reported for minority students and those who came from low socio-economic status families. Hispanic students reported lower school membership scores and GPA while American Indian students showed relatively lower school membership results and attendance. On the other hand, American Indian students reported fewer incidences of tardiness, hours of in-school suspension and out-of school suspension. Despite their lower school membership scores, students who were eligible for reduced priced lunch showed higher GPA and in-school and out-of school suspension. Hispanic students showed somewhat consistent results on their school membership and school performance, and correlation analyses showed a statistically significant correlation between school membership and Hispanic origin ( $r = -.32, p = .03$ ). However, this result should be considered with caution due to the small sample number of Hispanic students who were included in the study. Also, the factors that negatively affected Hispanic students' perception of school membership and school outcomes were not clear based on the methodology and data of this study. The study results related to American Indian students also should be considered with caution since there were only two of these individuals among the study subjects. Despite of relatively large effect sizes the school performance, outcomes of American Indian students in this study cannot be assumed to represent American Indian students in general.

Kaufman, Jase, Vaughan, Reynolds, Di Donato, Bernard and Hernandez-Brereton (2010) reported that types of disciplinary referrals differ in accordance with students' grade levels. Students in younger grades (k-6) are more likely to have referrals for aggression (e.g., fighting, physical and verbal threats, bullying); middle school 7-8<sup>th</sup> graders for disrespect (e.g., use of profanity, disruptive behavior, disrespect, lying); and students in high school (9-12<sup>th</sup> grade) for attendance problems (skipping class, leaving the building without permission). Additionally, Seals and Young (2003) reported that more bullying was observed in 7<sup>th</sup> grade than in 8<sup>th</sup> grade. The present study results regarding school suspension appear to support the findings of both Kaufman et al. (2010) and Seal and Young (2003). This finding suggests the need to develop interventions that focus on different types of behaviors relative to students' chronological age and developmental stages.

Previous studies have generally supported a link between lower than average academic performance and SES (Caldas & Bankston, 1997; Gentry, Gable, & Rizza, 2002; Ma, 2000; Okpala, Smith, Jones, & Ellis, 2000; Osterman, 2000). It is interesting that the results from the current study did not concord with the findings from previous studies. Although it is difficult to understand the reasons for this finding, our speculations are: (a) it may have been by chance given a small sample size of this study; or (b) the influence of some of the most salient characteristics of the participating students, such as their disability and the school-related difficulties may have outweighed the influence of other risk factors such as gender, economic problems and so forth.

Overall, psychological school engagement, measured by a school

membership scale did not appear to have a statistically significant effect on students' academic and behavioral school engagement. That is, GPA, attendance, tardiness, and suspension results did not show statistically significant correlations with school membership scores. Instead, the correlation analysis (see Table 2) reveals that the academic and behavioral variables were strongly correlated with each other. The current study result does not fully accord with the previous findings on school membership. Using a sample of 58,000 students from 132 schools, Anderman (2002) revealed that perceptions of belonging to a school were significantly related to students' GPA and absenteeism. Similarly Goodenow (1993) reported from her study with 454 6<sup>th</sup>-8<sup>th</sup> grade students who attended a typical school that school membership was significantly related to academic achievement as measured by class grades. Goodenow (1993) also reported that absences and tardiness had relatively weak, albeit statistically significant correlations with school membership. The different results from the current study may be due to our smaller sample size and/or different student characteristics. Again, these results may also speak to the strength of variables such as disability and a history of behavior and emotional difficulty when compared to students' perceptions of being a meaningful part of a school community.

Several limitations of this study must be considered. First, the sample used for this study was fairly small (N=48), and was taken from a single school. Therefore, findings should not be generalized to all students with disabilities or those who attend alternative schools. In addition, since the subjects were composed of volunteers, it is possible that the outcomes only represented students who had more supports from parents or those who were more motivated

to participate in school-related activities. Another limitation of this study is the disproportionate sizes of groups that were used for statistical comparisons. Statistical homogeneity of the variances were addressed in the analysis, however markedly smaller sample sizes for the female students, students who were eligible for reduced priced lunch, extracurricular activity participants, students from certain minority groups, and those who had a history of involvement with the criminal justice systems should be noted and thus findings related to these variables need to be considered. Thirdly, the survey instrument had no norm groups with which to compare data from the present study. Although the survey instrument used for this study was based on already existing instruments, the adapted survey had not been tested on the general student population. Therefore, the positive survey result should be considered with caution. Finally, this study was descriptive and cross-sectional rather than experimental and longitudinal. Longitudinal research that follows two groups of typical students and high risk students over extended years would provide much richer information on how students' school membership is affected by different variables and how these factors influence school outcomes.

### **Conclusions and Implications**

The findings from the current study have important implications for the education of chronically struggling learners, particularly those with emotional and behavioral disorders who receive their education in alternative settings. Our study participants reported moderately positive psychological school engagement. However, psychological engagement did not independently seem to produce positive changes in students' school performance.

Although students may be aware of the importance of education and feel connected to school, they may still skip classes or display tardiness to avoid challenging academic tasks. These patterns will likely negatively affect academic achievement and overall school and post-school outcomes. To bring visible changes in school outcomes of chronically struggling learners, strong evidence-based strategies (e.g., positive behavior support programs, validated instructional methods) should be in place to augment the supportive and caring atmosphere of schools, including alternative settings.

The study subjects for this investigation had complex social and academic problems, and a chronic history of being unresponsive to typical academic and/or behavioral interventions. In this connection and context, the relatively positive school membership results found in this study suggest that alternative school settings may be able to play an important role in improving students' attitudes, self-esteem, and bringing about other important school-related outcomes. An additional finding of this study suggests that the longer students attended the alternative school the more likely they were to participate in extracurricular activities and advance to the next grade levels. These results are clearly positive; however, they raise more questions than provide answers to basic questions. For instance, it is unclear what particular aspects of alternative schools are most aligned with students' feeling connected; to what extent alternative school programs have long term positive effects on at-risk students' school completion; and which components of an alternative program have the greatest positive impact on students' school and post-school outcomes. Beyond question, more controlled, future studies are needed to

answer these and other basic questions related to alternative schools.

This study has implications for behavior management of at-risk students. The study results indicated that lower rates of out-of-school suspension were reported as student's grade level increased. Younger alternative school learners in the school tended to receive the most out-of-school consequences, as a result of aggression, vandalism and other serious problems. In contrast, upper grade level students had fewer of these problems. When compared to their younger peers, these older learners engaged in behaviors that resulted in in-school-suspensions, such as skipping school. These age-related tendencies, especially those that involve acts of aggression, that cause damage to the community, and that involve the juvenile justice system call for strategic and clearly focused and coordinated support programs. Clearly, it is critical for schools and communities to work together on coordinated violence prevention and behavior management efforts when students are relatively young and still in school. For students who are challenged with serious behavior problems, we recommend a consistent and holistic approach, one that includes family outreach, vocational training, counseling, peer supports, after school programs, and evidence-based academic interventions. We also think it is essential that alternative school leaders strive to create policies that enable students to remain in school. That is, rather than expelling or suspending students from coming on school grounds for behavior problems, we strongly advocate for keeping them on the school grounds and in structured programs whenever possible.

This study contributes to the sparse research on alternative schools and at risk students. Without a doubt more broad based research is required to further investigate

variables that affect at-risk students' school outcomes. Larger sample sizes with proportionate gender, race, SES, and grade compositions are needed to validate and expand on the current study findings. Comparison studies with typical students will also help clarify the influence of various factors on students' school engagement.

### References

- Alexander, K. L., Entwisle, D. R., & Kabbani, N. S. (2001). The dropout process in life course perspective: Early risk factors at home and school. *Teachers College Record*, 103(5), 760-822.
- Anderman, E. M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology*, 94(4), 795-809.
- Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check and connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology*, 42, 95-113.
- Arnone, R. F., & Strout, T. (1980). Alternative schools for disruptive youth. *Educational Forum*, 44, 453-471.
- Aron, L. (2006). *An Overview of Alternative Education*. Washington, D. C.: Urban Institute.
- Audas, R., & Willms, D. (2001). *Engagement and dropping out of school: A life-course perspective*, Quebec, Canada: Applied Research Branch.
- Booker, K.C. (2007). Likeness, comfort, and tolerance: Examining African American adolescents' sense of school belonging. *The Urban Review*, 39(3), 301-317.
- Bratti (2007). Parents' income and children's school drop-out at 16 in England and Wales: evidence from the 1970 British Cohort Study. *Review of Economic of the Household*, 5(1), 15-40.
- Brown, R. & Evans, W. P. (2002). Extracurricular activity and ethnicity: creating greater school connection among diverse student populations. *Urban Education*, 37(1):41-58.
- Caldas, S. J., & Bankston III, C. (1997). Effect of school population socioeconomic status on individual academic achievement. *The Journal of Educational Research*, 90(5), 269-277.
- Carver, P. R., Lewis, L., & Tice, P. (2010). *Alternative schools and programs for public school students at risk of educational failure: 2007-08 (NCES 2010-026)*. Washington, DC: Government Printing Office, U. S. Department of Education, National Center for Educational Statistics.
- Cernkovich, S. A., & Giordano, P. C. (1979). Delinquency, opportunity, and gender. *Journal of Criminal Law and Criminology*, 70, 145-151.
- Christenson, S. L., Sinclair, M. F., Lehr, C. A., & Godber, Y. (2001). Promoting successful school completion: Critical conceptual and methodological guidelines. *School Psychology Quarterly*, 16(4), 468-484.
- Christenson, S. L., & Thurlow, M. L. (2004). School dropouts: Prevention considerations, interventions, and challenges. *Current Directions on Psychological Science*, 13(1), 36-39.
- Croninger, R. G., & Lee, V. E. (2001). Social capital and dropping out of high school: Benefits to at-risk students of teachers' support and guidance. *Teachers College Record*, 103(4), 548-581.
- Daniel, S. S., Walsh, A. K., Goldston, D. B., Arnold, E. M., Reboussin, B. A., & Wood, F. B. (2006). Suicidality, school dropout, and reading problems among

- adolescents. *Journal of Learning Disabilities*, 29(6), 507-514.
- Englund, M. M., Egeland, B., & Collins, W. A. (2008). Exceptions to high school dropout predictions in a low-income sample: Do adults make a difference? *Journal of Social Issues*, 64(1), 77-94.
- Finn, J. D. (1993). *School Engagement and Students at Risk*. Washington, DC: National Center for Education Statistics.
- Foley, R. M., & Pang, L. (2006). Alternative education programs: program and student characteristics. *The High School Journal*, 89(3), 10-21.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
- General Accounting Office (GAO) (2003). *Special Education: Clearer Guidance Would Enhance Implementation of Federal Disciplinary Provisions*. Washington D. C. GAO-03-550.
- Gentry, M., Gable, R. K., & Rizza, R. K. (2002). Students' perceptions of classroom activities: Are there grade-level and gender differences? *Journal of Educational Psychology*, 94, 539-544.
- Gold, M., & Mann, D. W. (1984). *Expelled to a friendlier place: A study of effective alternative schools*. Ann Arbor, MI: University of Michigan Press.
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in Schools*, 30, 79-90.
- Griffith, J. (1999). The school leadership/school climate relation: Identification of school configurations associated with change in principals. *Educational Administration Quarterly*, 35(2), 267-291.
- Hagborg (1994). An exploration of school membership among middle- and high school students. *Journal of Psychoeducational Assessment*, 12, 312-323.
- Hagborg, W. J. (1998). An investigation of a brief measure of school membership. *Adolescence*, 33(130), 461-468.
- Henry, K. L., Thornberry, T. P., & Huizinga, D. H. (2009). A discrete-time survival analysis of the relationship between truancy and the onset of marijuana use. *Journal of Studies on Alcohol and Drugs*, 70, 5-15.
- Hirschfield, H. (2009). Another way out: The impact of juvenile arrests on high school dropout. *Sociology of Education*, 82(4), 368-393.
- Individuals with Disabilities Education Act Amendments of 1997, 20 U.S.C. § 1440.
- Janosz, M., Archambault, I., Morizot, J., & Pagani, L. S. (2008). School engagement trajectories and their differential predictive relations to dropout. *Journal of Social Issues*, 64(1), 21-40.
- Jimerson, S., Egeland, B., Sroufe, L. A., & Carlson, B. (2000). A prospective longitudinal study of high school dropouts examining multiple predictors across development. *Journal of School Psychology*, 38(6), 525-549.
- Jolivet, K., McDaniel, S. C., Sprague, J., Swain-Bradway, J., & Ennis, R. P. (2012). Embedding the positive behavioral interventions and supports framework into the complex array of practices within alternative education settings: decision-making process. *Assessment for Effective Intervention*, 20(10), 1-15.
- Kaufman, J. S., Jase, S. S., Vaughan, E. L., Reynolds, J. S., Di Donato, J., Bernard, S. N., & Hernandez-Brereton, M. (2010). Patterns in office referrals data by grade, race/ethnicity, and gender. *Journal of*

- Positive Behavior Interventions*. 12(1), 44-54.
- Kearney, C. (2008). School absenteeism and school refusal behavior in youth: A contemporary review. *Clinical Psychology Review*, 28(3), 451-471.
- Kenny, M. E., & Bledsoe, M. (2005). Contributions of the relational context to career adaptability among urban adolescents. *Journal of Vocational Behavior*, 66(2005), 257-272.
- Kenny, M. E., Blustein, D. L., Chaves, A., Grossman, J. M., & Gallagher, L. A. (2003). The role of perceived barriers and relational support in the educational and vocational lives of urban high school students. *Journal of Counseling Psychology*, 50(2), 142-155.
- Kenny, M. E., Blustein, D. L., Haase, R. F., Jackson, J., & Perry, J. C. (2006). Setting the stage: Career development and the student engagement process. *Journal of Counseling Psychology*, 53(2), 272-279.
- Lehr, C. A., Lanners, E. J., & Lange, C. M. (2003). Alternative Schools: Policy and legislation across the U. S. (Research Report 1). Minneapolis, MN: University of Minnesota, Institute on Community Integration.
- Lehr, C. A., Tan, C. S., & Ysseldyke, J. (2009). Alternative Schools: A Synthesis of State-Level Policy and Research. *Remedial and Special Education*, 30 (1), 19-32.
- Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health*, 74(7), 274-283.
- Liska, A. E., & Reed, M. D. (1985). Ties to Conventional Institutions and Delinquency: Estimating Reciprocal Effects. *American Sociological Review*. 50,547-560.
- Ma, X. (2000). Socioeconomic gaps in academic achievement with schools: Are they consistent across subject areas? *Educational Research & Evaluation*, 6(4), 337- 355.
- McKay, E. A. (2007) Psychological sense of school membership mediates the relationship between attachment and academic motivation in adolescents. Central Connecticut State University.
- Morrison, G. M., Cosden, M. A., O'Farrell, S. L., & Campos, E. (2003). Changes in Latino students' perceptions of school belonging over time: Impact of language proficiency, self-perceptions and teacher evaluations. *The California School Psychologist*, 8, 87-98.
- Nash, J. K. (2002). Neighborhood effects on sense of school coherence and educational behavior in students at-risk of school failure. *Children & Schools*, 24(2), 73- 89.
- Nichols, S. L., & Good, T. L. (1998) Students' perceptions of fairness in school settings: a gender analysis. *Teachers College Record*, 100(2), 369-401.
- O'Donnell, J., Hawkins, J. D., & Abbott, R. D. (1995). Predicting serious delinquency and substance use among aggressive boys. *Journal of Consulting and Clinical Psychology*, 63, 529 – 537.
- Okpala, C. O., Smith, F., Jones, E., & Ellis, R. (2000). A clear link between school and teacher characteristics, student demographics, and student achievement. *Education*, 120(3), 487- 494.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367.
- Pittman, L. D., & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *The Journal of*

- Experimental Education*, 75(4), 270-290.
- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom Emotional Climate, Student Engagement, and Academic Achievement. *Journal of Educational Psychology*. Advance online publication. doi: 10.1037/a0027268
- Samdal, O., Nutbeam, D., Wold, B. & Kannas, L. (1998). Achieving health and educational goals through schools- a study of the importance of the school climate and the students' satisfaction with school. *Health Education Research*, 13(3):383-397.
- Seals, D., & Young, J. (2003). Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence*, 38(152), 735- 747.
- Simons-Morton B.G., & Crump A.D. (2002). The association of parental involvement and social competence with school adjustment and engagement among sixth graders. *Journal of School Health*, 73(3):121-126.
- Simons-Morton, B. G., Crump, A. D., Haynie, D. L., & Saylor, K. E. (1999). Student-school bonding and adolescent problem behavior. *Health Education Research*, 14, 99-107.
- Uwah, C., McMahon, G. H., & Furlow C. F. (2008). School belonging, educational aspirations, and academic self-efficacy among African American male high school students: Implications for school counselors. *Professional School Counseling*, 11(5), 296- 305.
- Van Akers, R. (2007). Antisocial, aggressive, and violent behavior in children and adolescents within alternative education settings: Prevention and intervention. *Preventing School Failure*, 51 (2), 5-12.
- Voelkl, K. E. (1996). Measuring students' identification with school. *Educational and Psychological Measurement*, 56(5), 760-770.
- Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, 105(3), 294-318.
- Voelkl, K E., & Frone, M. R. (2000). Predictors of substance use at school among high school students. *Journal of Educational Psychology*, 92, 583- 592.
- Waxman, H. C., Gray, P. P., & Padron, Y. N. (2002). Resiliency among students at risk of failure. In S. Stringfield, & D. Land (Eds.) *Educating at risk students* (pp.29-48). Chicago: National Society for the Study of Education.