

A Comparison of the Change in Grade-Point-Average from Eighth to Ninth Grade for
Students in General Education and Students with Disabilities

By

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A Thesis Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Education Specialist
School Psychology

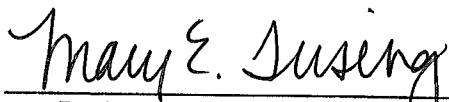
At

The University of Wisconsin - Eau Claire

December, 2014

Graduate Studies

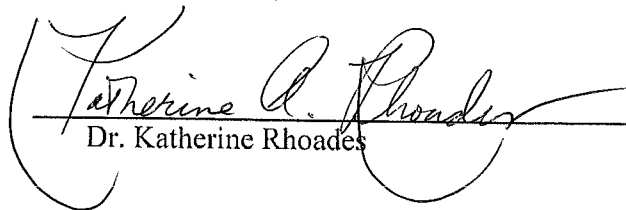
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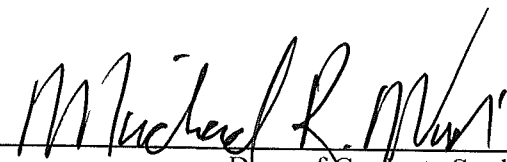
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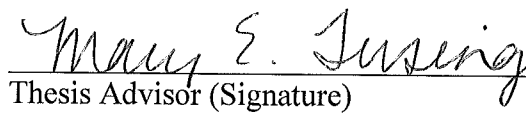
A Comparison of the Change in Grade-Point-Average from Eighth to Ninth Grade for
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By

Anthony George Mayer

The University of Wisconsin-Eau Claire, 2014
Under the Supervision of Mary Beth Tusing, Ph.D

Researchers over the past three decades have found that students experience a variety of challenges when transitioning from eighth to ninth grade. The challenges include decreases in grades, attendance, and self-esteem. However, there is little research regarding the transition to ninth grade for students with disabilities. This study was an archival review that examined the change in grade point average between eighth and tenth grade for students with disabilities and students in general education. The data indicated that regardless of educational classification, students experienced a decline in grade point from eighth to ninth grade that was almost fully overcome by tenth grade. No significant interactions were found between educational classification and semester grade point average or between semester grade point average and time of special education identification.


Thesis Advisor (Signature)

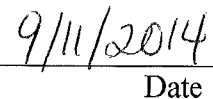

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INTRODUCTION

The transition from eighth grade to ninth grade can mark a critical juncture for students in the United States (Neild, 2010). Variables associated with successful and unsuccessful transition to ninth grade have been widely studied over the past three decades (Allensworth & Easton, 2005; Alspaugh, 1998; Balfanz, 2009; Barone, Aguirre-Deandreis, & Trickett, 1991; Blyth, Simmons, & Carlton-Ford, 1983; Isakson & Jarvis, 1998; Weiss & Bearman, 2007). Research suggests that the transition into high school is often difficult for many students, particularly those who were academically low-achieving during middle school (Langenkamp, 2010). However, there is limited research specifically investigating the impact of the transition to high school on students with learning disabilities or emotional/behavioral disabilities. Therefore, the current study attempted to replicate previous findings while also addressing gaps in the existing literature regarding the academic impact of the transition to high school on students with learning disabilities and emotional disabilities.

The transition into high school is vitally important, because ninth grade often sets the stage for whether a student will successfully graduate from high school (McCallumore & Sparapani, 2010). Ninth-grade students must pass courses in order to earn credits for the first time in their educational careers and the academic demands of high school coursework frequently surpass the expectations of the eighth-grade coursework (Letgers & Kerr, 2001). In addition ninth-grade students may experience a greater diversity of interpersonal interactions, a physically larger and more impersonal setting, and more academic competition than they had previously experienced (Eccles,

Midgley, & Adler, 1984). Further, ninth-grade students begin to have more individual choice of academic and extracurricular activities (Roderick & Camburn, 1999).

Despite the increased importance of earning passing grades in high school in order to graduate and the individualized choices in course selection, more students fail courses in ninth grade than any other grade (National High School Center, 2007). Letgers and Kerr (2001) found that most high school dropouts failed at least 25% of their ninth grade courses, compared to an 8% failure rate for non-dropouts. Statistics indicate that approximately one quarter of all high school dropouts are between 15 and 16 years of age (Kaufman, Alt & Chapman, 2004), the typical ages of ninth and tenth-grade students. Numerous factors related to school drop-out have been identified, including: academic underachievement, social and emotional problems, and difficulty making adjustments (Beck & Muia, 1980). The transition to ninth grade can be a precipitating factor in a student's decision to drop out of high school (Roderick & Camburn, 1999). More specifically, Balfanz (2009) reported that declining achievement and other difficulties during the transition to high school directly impacts the decision to drop out.

Since the mid-1980s there has been a growing body of research documenting the difficulties many students experience when they transition to high school (Allensworth & Easton, 2005; Alspaugh, 1998; Balfanz, 2009; Barone, et. al., 1991; Blythe, et. al., 1983; Isakson & Jarvis, 1998; Weiss & Bearman, 2007). The most frequently cited difficulties include declining grade-point-average, increased course failure, decreased school attendance, decreased school engagement, and increased behavioral referrals. While findings from multiple studies reveal that, in general, many students experience declining academic performance upon the transition to high school, there is some evidence

indicating that the decline is only temporary for average and high achieving students. However, the decline can be more persistent and long-lasting for students who are academically low-achieving during middle school (Langenkamp, 2010).

Students with learning disabilities and emotional/behavioral disabilities can be at significantly greater risk for more persistent academic difficulties than non-disabled peers and students with other categories of disability (Fraiser, 2007; National High School Center, 2007) due in part to their history of academic under-achievement and social difficulties. However, there are relatively few studies that have investigated how students with disabilities fare academically and behaviorally with the transition to ninth grade. In one of the few studies that explored this subject, Farmer and colleagues (2010) found that students with learning disabilities and emotional/behavioral disabilities achieve less and have more difficulty adjusting to high school than their non-disabled peers. Academic differences can include earning fewer credits, taking less rigorous courses, and earning lower overall grade-point-average.

Statement of the Problem

Despite the wealth of general information about the challenges associated with the transition from eighth to ninth grade, there is a gap in the literature regarding the impact of the transition to high school on students with disabilities. Most research surrounding the transition to high school has focused primarily on entire populations of students irrespective of disability status. In addition, research involving students with disabilities has focused on overall high school outcomes (e.g., total credits earned, overall grade-point-average) and adjustment rather than specifically examining the transition from eighth to ninth grade. More research examining the specific effects of transition to high

school on students with disabilities is needed including how time of disability identification may be associated with differential changes in grade point average. This is particularly important given the relationship between ninth-grade success and high school dropout rates.

It was hypothesized that students with learning disabilities and emotional/behavioral disabilities experience more academic challenges upon the transition to ninth-grade than non-disabled peers. Previous research has demonstrated that students who are low achieving during eighth grade and students with an accumulation of risk factors are most at risk to experience academic difficulty upon the transition to ninth grade. Students with learning disabilities and emotional/behavioral disabilities are more likely than their general education peers to be low achieving during eighth grade and to have multiple risk factors. Therefore, students with learning disabilities and emotional/behavioral disabilities are more likely to experience greater academic difficulty during the transition to ninth grade.

Purpose of the Study

The present study adds to the ninth-grade transition literature by examining the impact of transition to high school on the academic performance of students with learning disabilities and emotional/behavioral disabilities. In addition, the present study extended previous research to include an examination of student grades through tenth grade to determine if student grades rebound after the initial decline in ninth grade. Four questions were asked:

- 1) Do all students (i.e., students in general education and students with disabilities) experience a decline in grade point average following the transition to high school?
- 2) Do students with learning disabilities and emotional/behavioral disabilities experience a more significant decline in grade point average from eighth to ninth grade than general education peers?
- 3) Which group of students with disabilities (i.e., students with learning disabilities or students with emotional/behavioral disabilities) experiences a more significant decline in grade point average from eighth to ninth grade?
- 4) Is time of identification for special education (early or late) associated with differences in change in grade point average between eighth and ninth grade?

LITERATURE REVIEW

A positive ninth-grade experience is highly predictive of overall high school success (National High School Center, 2007), which is, in turn, predictive of more positive economic and social futures for students (National Center for Education Statistics, 2014). The transition from eighth grade to ninth grade is critical in setting students up for success in their first year of high school. Yet, there is little specific research on how the transition to ninth grade impacts students with learning disabilities and emotional/behavioral disabilities. The following chapter first summarizes available research on the transition of students with disabilities to ninth grade. The remainder of the chapter summarizes existing literature related to: a) the challenges of transitioning to ninth grade, b) the importance of ninth grade, and c) predicting ninth-grade success for students in general.

Students with Disabilities and Transition to Ninth Grade

Students with disabilities drop out of school at significantly higher rates than their general education peers (Fraiser, 2007; National High School Center, 2007). More than 15% of 15- to 16-year-olds with disabilities drop out each year (Fraiser, 2007) and a majority of these students are categorized as having a specific learning disability or an emotional/behavioral disability (National Center for Education Statistics, 1995). Dropout rates clearly suggest that students with learning disabilities and emotional/behavioral disabilities are a segment of the general school population for whom the transition to ninth grade is vital. However, very few studies have specifically examined the impact of the transition to ninth grade for students with disabilities.

The National Longitudinal Transition Study – 2 (NLTS2), an in-depth longitudinal study of students with disabilities, found that students with disabilities were more likely than their general education peers to experience academic problems during ninth and tenth grade as evidenced by lower grades and fewer earned credits. The representative sample used for the NLTS2 included approximately 12,000 students from over 500 school districts across the United States. The NLTS2 (2004) suggested that ninth grade is the year during which students with disabilities are most likely to enroll in general education classes. Therefore, many students with disabilities not only began attending a larger, more impersonal high school in ninth-grade, but they also began taking more rigorous classes for which they were often ill prepared.

Farmer and colleagues (2010) examined differences in high school adjustment indicators for students with learning disabilities, emotional/behavioral disabilities and general education students. Teacher ratings for more than 7000 students from rural and small town settings were collected. The rating scale assessed student popularity, athleticism, affiliation, academics, aggression, and internalization. Teachers reported that students with disabilities had significantly higher rates of academic, behavioral and social problems than their general education peers. Additionally, teachers also reported that students with disabilities had more difficulty adjusting to the academic and social demands of high school than their general education peers.

The grade level at which specific learning disabilities or emotional/behavioral disabilities are identified may be related to how students manage the transition to ninth grade. The existing literature, however, does not address the potential relationship between time of identification for special education and the transition to high school.

While there is some evidence that early intervention supports improved outcomes for students, more students are being identified for special education later in their educational career than ever before (Swanson, 2008). Yet, Reschley stated that learning disabilities and emotional/behavioral disabilities are more often identified in secondary schools than any other disability. Considering that the potential importance of early detection and intervention for students with disabilities, it is likely that students identified with disabilities later in their education would experience more significant challenge upon the transition to ninth grade.

The Challenges of Transition to Ninth Grade

Students report mixed feelings about the transition to ninth grade. They report both excitement about meeting new people and having more choices for academic classes and extra-curricular activities; however, they also report apprehension about getting lost in a larger school, having more challenging work, and being bullied by older students (Cognoto, 1999). The apprehensions students report about the transition to ninth grade are well founded. According to Akos and Galassi (2004) as many as 10% of students suffer serious problems after the transition to high school. The problems students experience include declining grades, poor attendance, and social/emotional/behavioral difficulties (Isakson & Jarvis, 1999).

Grades

Research has clearly demonstrated that student grades can decline significantly after the transition to ninth grade (Allensworth & Easton, 2005; Alspaugh, 1998; Balfanz, 2009; Barone, et. al., 1991; Blythe, et. al., 1983; Isakson & Jarvis, 1998; Weiss & Bearman, 2007). Barone and colleagues (1991) found that students experienced a

significant drop in GPA, from 2.58 to 2.1 between the second semester of eighth grade and the first semester of ninth grade. Similarly, Isakson and Jarvis (1998) found a significant decline in student grade point average between eighth grade and the first semester of ninth grade.

Researchers (Alspaugh, 1998; Blythe, et. al., 1983) have attempted to determine whether organizational structures within different school districts are associated with differences in student transition outcomes, particularly academic performance. Alspaugh (1998) studied three different feeder systems including: 1) districts with only one elementary school (K-8) and one high school (9-12); 2) one elementary school (K-5), one middle school (6-8), and one high school (9-12); and 3) two or three elementary schools (K-5), one middle school (6-8), and one high school (9-12). Alspaugh (1998) found that students experienced similar decline in ninth grade grades across all three organizational structures.

Blythe and colleagues (1983) also studied the impact of different feeder patterns to high school on ninth-grade transition; however, in their study all students were transitioning to the same high school. Similar to Alspaugh's findings, students in the Blythe study experienced declines in academic performance regardless of school structures prior to ninth grade. Weiss and Bearman (2007) also found that student grades declined in ninth grade even when students did not change buildings between eighth and ninth grade. Organizational structure and feeder patterns, therefore, do not seem to be related to differences in student performance between eighth and ninth grade.

Attendance

Declining grades in ninth grade have also been correlated with the presence of other negative factors such as declining attendance (Isakson & Jarvis, 1999). Overall, attendance rates also decrease upon transition into ninth grade (Nisivoccia, 1997; Reyes, Gillock, Kobus, & Sanchez, 2000). Blythe and colleagues (1983) found that absences increased from 8.63 days during the second semester of eighth grade to 10.28 days during the first semester of ninth grade. However, ninth grade students may initially demonstrate higher rates of attendance than they exhibited in eighth grade (Isakson and Jarvis, 1999). Isakson and Jarvis (1999) found that this attendance spike was only temporary and student attendance significantly drops shortly after the transition to ninth grade. Change in student attendance has been hypothesized to be associated with changes in the composition of students' peer groups and with corresponding changes in the normative climate of high school peer groups (Felner, Primavera, & Cauce, 1981).

Social/Emotional/Behavioral

For many students moving into ninth grade, social issues such as peer relationships, bullying, and getting lost can overshadow concerns about academics (Maute & Brough, 2002). Tilleczeck and Ferguson (2007) reviewed over 100 research articles and found that some students experience significant dips in their self-esteem, and behavioral functioning after beginning ninth grade that can lead to academic and social difficulties. These issues are important in and of themselves, but also because they are positively correlated with concurrent academic problems (McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008).

The class schedule and social conditions in most high schools can lead to feelings of alienation, loneliness, disconnection, and self-doubt for many ninth graders (Cooper & Liou, 2007; Epstein & MacIver, 1992). De Wit and colleagues (2011) investigated the relationship between the transition to ninth grade and student mental health difficulties, including decreased self-esteem. The researchers followed 2,612 students from twenty-three different high schools in Canada. Student mental health and self-esteem were assessed through a variety of rating scales that included the Rosenberg Self-Esteem Scale, the Center for Epidemiological Studies Depression Scale, and the Revised Social Anxiety Scale for Children. The researchers found that some students experienced pronounced decline in self-esteem and simultaneously experienced increases in symptoms of depression and anxiety. Decreased self-esteem and increased symptoms of depression were most strongly attributed to student perceptions of loss of peer support during ninth grade. In contrast, increased anxiety was found for students that perceived increased peer support in ninth grade.

McIntosh and colleagues (2008) explored the relationship between academic performance and behavioral functioning as they relate to student transition to ninth grade. The study included a sample of 330 students that made the transition from eighth to ninth grade. Disruptive behavior was measured through office disciplinary referrals, while academic performance was measured through grade point average. The researchers found that 35% of ninth graders experienced difficulties related to academic performance or behavioral functioning which was significantly higher than the percentage of students requiring support within the school district's elementary and middle schools.

Finally, the transition to ninth grade has also been associated with decreased learning efficacy for some students. As mentioned earlier, students frequently cite academic demands as a principal fear about the transition to ninth grade (Cognoto, 1999). Midgley and colleagues (2000) examined how school learning environments were related to motivation and students' beliefs about their own ability to learn during the transition to ninth grade. Students from four school districts in Michigan participated in the study through self-rating questionnaires. The researchers found that students were more likely to report significant decline in learning efficacy upon entering a ninth grade that emphasized competition between students and social comparison. In this type of learning environment students were also found to be more likely to avoid challenging academic work and procrastinate on their assignments, and less likely to ask for assistance.

Predicting Ninth Grade Success

The previous sections of this chapter outlined negative outcomes and challenges associated with the transition from eighth to ninth grade. Despite the many challenges identified, a majority of students still manage to navigate their first year of high school successfully. So, while understanding the potential areas where students may struggle when transitioning to ninth grade, it is equally important to identify variables associated with ninth-grade success. Research on variables associated with ninth-grade success have also explored factors including attendance, academic preparation, interpersonal relationships, and the cumulative effects of multiple stressors.

Attendance and Academic Performance

Strong academic skills are positively associated with ninth-grade performance. The relationship, though, is not as straightforward as one might expect, as attendance and peer

relationships also appear to play a role (Weiss & Bearman, 2007). According to Jerald (2006) attendance can be a stronger predictor of academic success than any other eighth grade indicator. Allensworth and Easton (2007) found that only 63 percent of students who missed more than five days of school during ninth grade graduated, whereas 87 percent of students who missed fewer than five days of school during ninth grade graduated (Allensworth & Easton, 2007). Interestingly, ninth grade attendance can be more predictive of ninth grade course failure than eighth-grade classroom and district assessments (Allensworth & Easton, 2007). Allensworth and Easton (2007) found that students with eighth-grade test scores in the top quartile who also demonstrated poor attendance were more likely to fail courses in ninth grade than lower achieving students who missed less than one week of school.

Interpersonal Relationships

Schiller (1999) examined the relationship between eighth-grade academic performance, changes in ninth-grade peer group, and ninth-grade academic performance. Ninth graders who received high math grades in eighth grade tended to receive higher grades in ninth grade, but only if they attended the same high school as a large proportion of their middle school classmates. Conversely, ninth graders who received low math grades in middle school tended to receive higher grades in ninth grade only when they attended a high school with a smaller proportion of their middle school classmates (Schiller, 1999). One hypothesis offered for this finding is that when large groups of students move to the same high school together, their academic and social stratification is largely unchanged (Schiller, 1999). Conversely, when students are broken up, and dispersed into ninth grade in smaller groups, a reorganization of the academic and social

stratifications becomes possible. This provides lower achieving students an opportunity to move up in the stratification system (Schiller, 1999). Langenkamp (2010) also found that students were less likely to fail classes during ninth grade when they attended a high school with a smaller proportion of their middle school classmates.

Langenkamp's research (2010) also studied the extent to which positive relationships with teachers and peers can be a protective factor for students during the transition to high school. Her work was an extension of Schiller's (1999) research. As such, Langenkamp specifically examined whether district context moderated the effects of academic performance for popular, low achieving students. Student popularity with eighth grade teachers was not predictive of ninth grade success for any group of students. However, both high and average achieving eighth-grade students who also had strong peer relationships appeared to be protected against course failure in ninth grade. This protection was not found to extend to low-achieving students. Schiller (1999) found that students who struggled academically during eighth grade and were also found to be socially isolated from peers were at higher risk for failure during ninth grade.

Cumulative Stressors

The research cited in this section suggests that the factors associated with success or failure in ninth grade can be complex. Stressors can interact with one another and have cumulative effects. The accumulation of stressors related to ninth grade failure (absenteeism, poor grades, and social difficulties) is, in itself, a strong predictor of disengagement and school failure (Cooper & Liou, 2007). Armacost (1989) notes that cumulative effects, when combined with recurrent stressors, have an even greater impact on students making the transition to ninth grade. Students with learning disabilities and

emotional/behavioral disabilities are more likely than general education peers to experience challenges related to attendance, grades, and interpersonal relationships. In fact, academic underachievement and social difficulties are core eligibility requirements for these disabilities. Because these are specific eligibility characteristics for students with learning disabilities and emotional/behavioral disabilities, it is likely that these groups would exhibit particular challenges related to the transition to ninth grade.

Summary

Ninth grade is a pivotal year for high school students; their success or failure can place them on an educational path with consequences for school and beyond. Research on the transition from eighth to ninth grade suggests that students disproportionately struggle in their freshman year, especially when compared to eighth-grade performance. The basic act of transitioning from eighth grade to ninth grade is associated with decreased academic performance, attendance, and self-esteem for many students. The difficulties that students experience may include decreases in grades and attendance, increased behavioral issues, social isolation and loss of self-esteem.

The present study attempted to replicate previous findings related to ninth-grade transition, and also extend research in an attempt to tease apart specific factors that may contribute to difficulty with the ninth-grade transition. Specifically, the current study examined change in grade point average for students with learning disabilities and emotional/behavioral disabilities as compared to general education peers and explored whether there are any differences in grade point average for students with disabilities based on when they were identified for special education.

METHODS

An archival review was conducted to determine whether students experience a decline in academic achievement, as measured by grade point average, after the transition to ninth grade and whether the decline is greater for students with learning disabilities and emotional/behavioral disabilities. Information was gathered about students' grades during eighth, ninth, and tenth grades. Fall and spring semester grade point averages, for each grade, were recorded for each student. Additional archival data included student educational category (general education, specific learning disability, emotional/behavioral disability) and student's gender. Considering the school district's overall demographics, student race was not included in the archival review as the cell size would have been too small to yield meaningful results. The data were analyzed in a series of mixed-design analyses of variance.

Students

Data were recorded for students with learning disabilities, emotional/behavioral disabilities, and students in general education that attended eighth grade during the 1995-1996 school year in a suburban school district in the Midwest and made the transition to the same high school during the 1996-1997 school year. The school district had a total enrollment of 6,010 students of which 87.9% were white. The school district's special education incidence was 16.9%. The total sample included 256 students. Of the 256 students, 69 were identified with a specific learning disability, 37 with an emotional/behavioral disability, and 150 with no disability classification. Table 1 provides a breakdown of the students by educational category as well as the number of

students with disabilities that were identified for special education early and late in their educational career.

Table1

Number of Students by Educational Category, Gender and Time of Identification

Ed. Category	Male	Female	Early ID	Late ID
LD	48	21	40	29
EBD	28	9	20	17
Gen Ed	71	79	-	-
Total	147	109	60	46

Measures

Grade point average was selected as the dependent variable for this study because it was a relatively simple and consistent measure that had been used in other ninth-grade transition research. The school district calculated grade point average on a 4.0 scale. The grade point average is a number that represents the average of a student's grades during a specified time interval (e.g., one semester, one year, multiple years). The 4.0 scale used by the school district is common to many school districts and colleges in the United States. In this system of calculation, numerical values are applied to the letter grade students receive (i.e., A=4, B=3, C=2, D=1, F=0). The maximum grade point average is 4.0, which is equivalent to receiving an A in every course. Therefore, semester grade point average is calculated by averaging the assigned value for each course. Because semester courses in the school district were all equal in credit value, weighting was not necessary.

The Midwestern school district identified students with learning disabilities in accordance with federal law and state of Minnesota criteria. Criteria included severe academic underachievement, severe discrepancy between predicted and actual achievement levels, and an information processing deficit (Minnesota Office of Revisor of Statutes, 2014). Emotional/behavioral disabilities were also identified in accordance with federal law and state of Minnesota criteria. Criteria included exhibiting extreme aggression, anxiety, impulsivity, or thought disorder in more than one setting, occurring for longer than 6 months and significantly impairing educational functioning (Minnesota Office of Revisor of Statutes, 2014). Early identification for special education was defined as occurring before sixth grade while late identification was defined as occurring during, or after, sixth grade.

Materials

The researcher completed a one-page data collection form (see Appendix A) for each student in the archival review. A different color form was used for each group for ease in coding. Forms listed data from the archive, including each student's gender, specific disability (if relevant), marital status of parents, junior high and high school semester grade point averages, and when each student with a disability was identified as qualifying to receive special education services.

Procedure

The study procedures were approved by the University of Wisconsin – Eau Claire Institutional Review Board. Authorization to examine existing school records was obtained from a suburban school district in the Midwest. No identifying information was collected. The researcher completed data collection forms with information found in

existing school records. The records were housed at the school district's central administration building and at the district high school. A complete list of all students who received special education services for the cohort was provided by the school district to facilitate the archival review. All students identified with a specific learning disability or an emotional/behavioral disability, and no additional special education identification were included in the student sample. A complete list of all students not receiving special services for the cohort was also provided by the school district.

From this list, 150 general education students who did not have a special education classification were randomly selected through a simple random sample procedure. A table of random numbers from a statistics textbook was used to randomly generate numbers for student selection. Students were ordered alphabetically and assigned a number beginning with "000". Only three digit numbers were used to select students, because there were fewer than 1000 students in the population. Random numbers that exceeded the population size were ignored. The data collection forms were kept in a locked file cabinet at the researcher's place of residence for a period of at least three years.

Analysis

This study set out to determine the extent to which the transition to ninth grade was associated with changes in the academic performance of students with a specific learning disability, emotional/behavioral disability, or no disability. The research questions were answered by conducting a series of repeated measures analyses of variance in order to analyze the change in mean grade point average between eighth, ninth, and tenth grade.

RESULTS

The present study replicates and extends the ninth-grade transition literature. The relationship between the transition to ninth grade and the academic performance of students with learning disabilities and emotional/behavioral disabilities was examined and compared to the performance of general education peers. Four questions were asked:

- 1) Do all students (i.e., students in general education and students with disabilities) experience a decline in grade point average following the transition to high school?*
- 2) Do students with learning disabilities and emotional/behavioral disabilities experience a more significant decline in grade point average from eighth to ninth grade than general education peers?*
- 3) Which group of students with disabilities (i.e., students with learning disabilities or students with emotional/behavioral disabilities) experiences a more significant decline in grade point average from eighth to ninth grade?*
- 4) Is time of identification for special education (early or late) associated with differences in change in grade point average between eighth and ninth grade?*

A series of analyses were conducted to determine if all students experience a decline in grade point average upon transition to ninth grade. In addition, disability status and time of special education classification were examined to determine whether these factors were differentially related to grade point average change across students. The following paragraphs will summarize the results of these analyses.

First, a one factor within subjects repeated measures analysis of variance was conducted to determine whether significant differences in grade point average existed

from eighth to tenth grade. Six semesters of grade point average scores were analyzed. A significant main effect for grade/semester was observed $F(5,1280) = 8.86, p < .0001$. Figure 1 depicts the significant pattern of decline and recovery in semester grade point average. Means and standard deviations are presented in Table 2 within Appendix C.

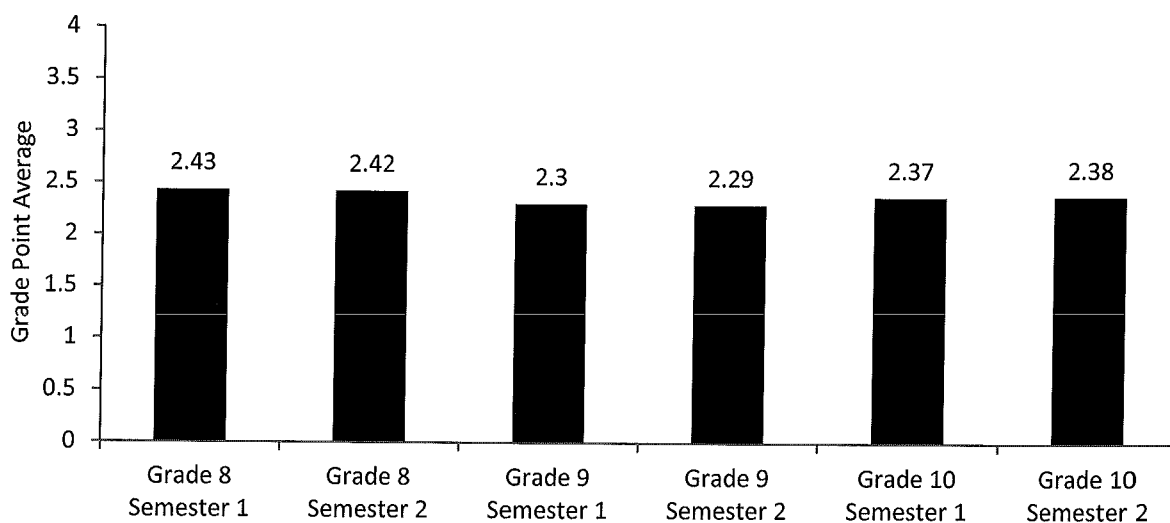


Figure 1. Semester grade point average from eighth grade to tenth grade for all students in the study.

Second, a 3 x 6 repeated measures analysis of variance was conducted to determine if disability status was associated differences in semester grade point averages from eighth to tenth grade. The between subjects factor was student educational category (emotional/behavioral disability, specific learning disability, general education) and the within subjects factor was semester grade point measured over six consecutive semesters. Results revealed statistically significant main effects for both education category $F(2,25) = 74.27, p < .0001$ and semester of grade point average $F(5,1270) = 10.15, p < .0001$. The mean grade point average was 1.465 (SD=.554) for students with emotional/behavioral disabilities, 1.825 (SD=.687) for students with learning disabilities, and 2.844 (SD=.912) for general education students. Students with learning disabilities and emotional/behavioral disabilities had lower grade point averages every semester. The

interaction between disability status and semester was not significant. Figure 2 depicts the pattern of decline and recovery in semester grade point average for each subject educational category. Means and standard deviations are presented in Table 3 within Appendix C.

T-tests, assuming two tails and unequal variances, were performed to determine which differences between the educational groups were statistically significant. First, grade point averages for students with learning disabilities with a mean of 1.825 (SD=.035) were compared to those from students in general education with a mean of 2.84 (SD=.052). The difference was statistically significant at $p<0001$. Second, students with emotional/behavioral disabilities with a mean of 1.46 (SD=.14) were compared to the students in general education with a mean of 2.84 (.052) and the difference was statistically significant at $p<.0001$. Finally, students with learning disabilities were compared to students with emotional/behavioral disabilities and the difference was statistically significant at $p<0001$.

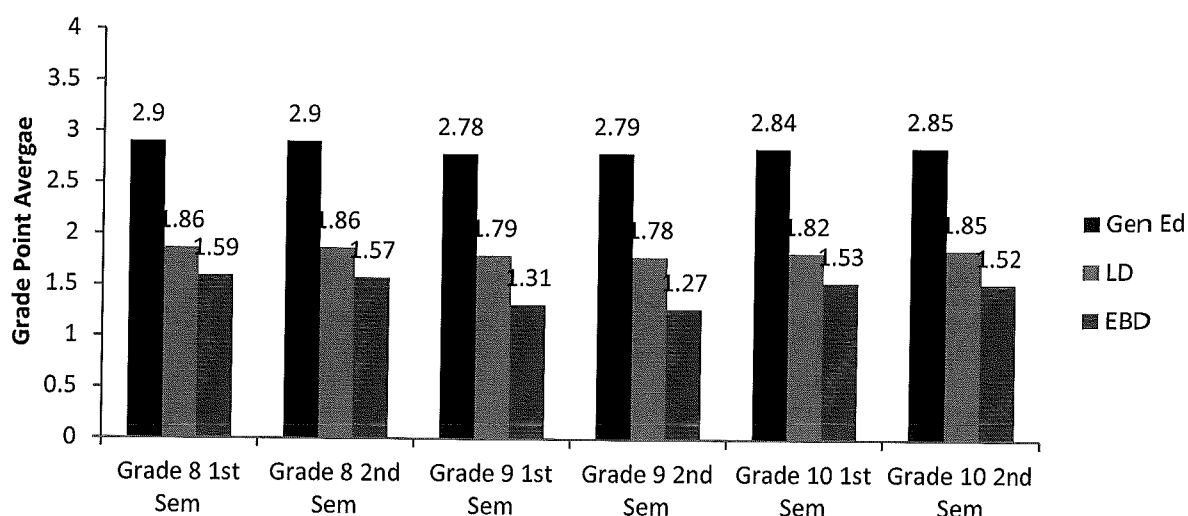


Figure 2. Mean semester grade point average from eighth grade to tenth grade for groups of students with learning disabilities, emotional/behavioral disorders, and general education students.

Finally, a 2 x 6 repeated analysis of variance was conducted to determine if time of identification for special education was associated with differences in semester grade point average from eighth to tenth grade. The between subjects factor was time of identification for special education (early, late) and the within subjects factor was semester of grade point average. There was a statistically significant main effect for year of grade point average $F(5,525) = 3.604, p < .0033$, but not for time of identification. The mean grade point average for students that were identified with a disability early in their educational career was 1.731 (SD=.652), while the mean for students that were identified late in their educational career was 1.664 (SD=.678). There was no interaction observed. Figure 3 depicts the pattern of decline and recovery in semester grade point average of subjects based upon the time of special education classification. Means and standard deviations are presented in Table 4 within Appendix C.

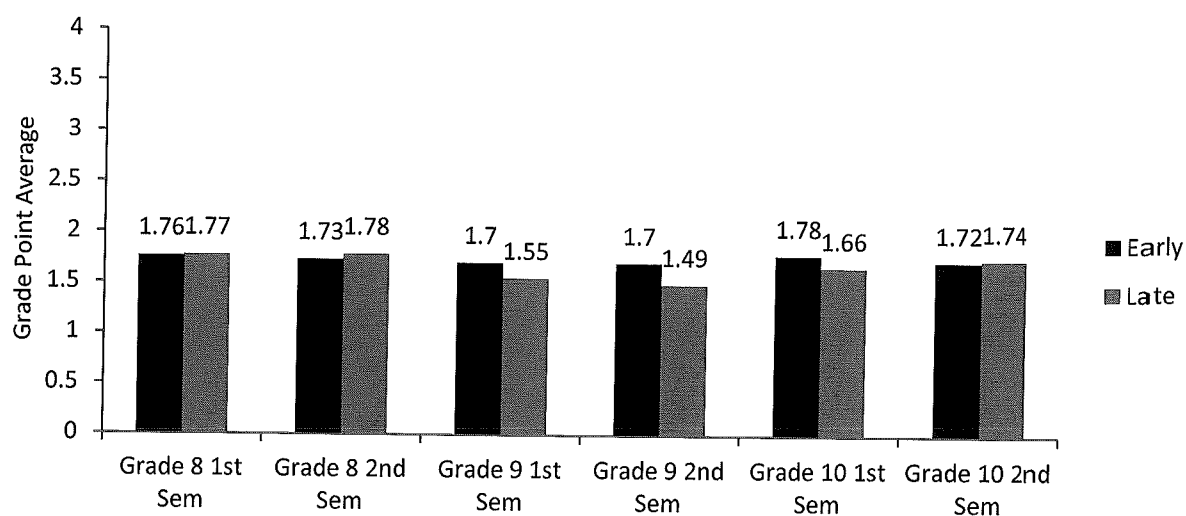


Figure 3. Mean semester grade point average from eighth grade to tenth grade for groups of students who were identified with a disability early and late in their educational careers.

DISCUSSION

This study compared the change in grade point average from eighth to tenth grade for students in general education and students identified with a learning disability or an emotional/behavioral disability. The study attempted to replicate previous research that had found declining student grades between eighth and ninth grade. In addition, the present study extended previous research to include an examination of student grades through tenth grade to determine if student grades rebound after the initial decline in ninth grade. The following sections discuss findings and describe limitations of the study. Finally, implications for school psychologists and opportunities for future research are offered.

Summary of Findings

An archival review was conducted to determine whether students experience a decline in academic achievement, as measured by grade point average, after the transition to high school. In addition, the study examined whether the decline was greater for students with learning disabilities and emotional/behavioral disabilities. Information was gathered about students' overall grade point average during eighth, ninth, and tenth grade. Fall and spring semester grade point averages were recorded for each grade. The sample included 150 randomly selected general education students, 69 students with specific learning disabilities, and 37 students with emotional/behavioral disabilities. The students attended a medium-sized, suburban school district in the Midwest, and all attended eighth grade during the 1995-1996 school year.

Results from the analyses revealed that, as a group, the students in the study experienced declining grades from eighth to ninth grade. However, the students also

demonstrated a recovery in grades from ninth to tenth grade. The students mean grade point average for the second semester of tenth grade was 2.38, compared with 2.42 during the second semester of eighth grade. This finding suggests that despite the disruption in grades, students demonstrate resilience and adaptability in school performance over a relatively short period of time.

When the data were analyzed according to disability status the same general pattern of declining and recovering grades was observed across groups. Each of the educational groups (general education, learning disabilities, and emotional/behavioral disabilities) experienced a statistically significant decline in grade point average upon the transition to ninth grade. There was not a significant interaction, indicating that all of the groups experienced similar patterns of change in grade point averages over time.

Finally, the time at which students were identified with a disability (early or late) was also examined. Similar to the other findings within the study, both early and late groups experienced significant decline in grade point average from eighth to ninth grade. However, there was not a statistically significant main effect for time of identification or interaction between the groups. These findings indicate that both groups had statistically similar grade point averages and the patterns of change in grade point average over time were also similar for each group.

Research over the past three decades has clearly demonstrated that student grades can decline significantly after the transition to ninth grade (Allensworth & Easton, 2005; Alspaugh, 1998; Balfanz, 2009; Barone, et. al., 1991; Blythe, et. al., 1983; Isakson & Jarvis, 1998; Weiss & Bearman, 2007). Multiple studies (Barone, et. al, 1991; Isakson & Jarvis, 1998) have found that students experienced a significant drop in grade point

average between the second semester of eighth grade and the first semester of ninth grade. The current study replicated these findings, as the mean grade point average for all students in the sample declined significantly from 2.42 to 2.3.

The students in this study all transitioned from one middle school to the same high school. Their decline in semester grade point average between eighth and ninth grade is similar to work by Blythe and colleagues (1983) where high school feeder patterns were related to differences in academic performance in ninth grade. Similar to the Blythe study, the current study found decline in grade point average for students when moving from one district middle school or junior high to only one district high school. Blythe suggested that the finding may be due to a lack of change in social stratification when all students transition from one middle school to the same high school. Research by Schiller (1999) and Langenkamp (2010) supported and extended this hypothesis, finding that students were less likely to fail classes in ninth grade when they entered a high school with a smaller percentage of their eighth grade peers.

There is little specific research on the impact of the transition from eighth to ninth grade on students with disabilities. However, existing data would suggest that students with disabilities are at higher risk for academic decline from eighth to ninth grade than their general education peers. For example, Farmer and colleagues (2010) found that students with disabilities had more difficulties adjusting to the academic and social demands of high school than their general education peers. Additionally, the NLTS2 findings suggest that students with disabilities were more likely than their general education peers to experience academic problems during ninth and tenth grade evidenced by lower grades and fewer credits earned. Interestingly, the current findings do not

support the hypothesis that students with disabilities are differentially affected by the transition to ninth grade. Students with disabilities and students in general education were found to experience similar drops in grade point average between eighth and ninth grade. It should be noted, though, that students with disabilities had lower grade point average than students in general education every semester.

Risk factors associated with a poor transition to ninth grade included poor academic performance in eighth grade and impaired social relationships. Schiller (1999) found that students who struggled academically during eighth grade and were also found to be socially isolated from peers were at higher risk for failure during ninth grade. Students with emotional/behavioral disabilities are characterized by difficulties that often impact educational progress and disrupt social relationships. As such, it was hypothesized that students with emotional/behavioral disabilities would experience greater decline in grades than students with specific learning disabilities between eighth and ninth grade.

Early intervention and identification for students with disabilities has been cited as important in improving long-term outcomes for students. The lack of timely prevention and intervention for students can diminish the effectiveness of later special education services (Conroy & Brown, 2004). Therefore, it was hypothesized that students identified for special education late (i.e., 6th grade or later) in their educational career would experience more significant decline in grades between eighth and ninth grade than those identified for special education earlier (i.e., before 6th grade). Similar to the other analyses that were conducted, both groups of students experienced significant decline in grades between eighth and ninth grade. However, there was not a significant

difference in grades between those identified early and those identified late. Additionally, there was no interaction between early and late identification, indicating that the groups experienced similar grade point average decline between eighth and ninth grade.

Overall, the current study replicated prior research, demonstrating that students experienced a significant decline in grades between eighth and ninth grade. However, the same pattern of decline was present for each of the student groups in the study (i.e., general education, specific learning disabilities, emotional/behavioral disabilities, early identification for special education and late identification for special education), and there were no interactions between disability status and changes in grade point average each semester. Each of the student groups experienced similar declines in grade point average between eighth and ninth grade.

Based on existing literature it was no surprise that student grade point average declined upon the transition to ninth grade. The transition to ninth grade frequently requires students to learn skills related to study habits, self-advocacy, time management, and socialization. The transition often also coincides with significant adolescent developmental changes. The multitude of new skills students must learn, along with developmental changes, make it understandable why students struggle with the transition to ninth grade. Students with more stressors and changes associated with the transition to high school might be expected to be more at-risk to struggle with the ninth-grade transition. Research indicates that cumulative stressors (e.g., having a disability and transitioning to a new school) can exponentially impact student performance. Yet, the current study found that students in general education and students with disabilities had statistically equal declines in grade point average.

While the current results were unexpected, a number of factors associated with the current sample and the use of grade point average as the dependent variable confound interpretation of the results. One explanation is related to the fact that the students with disabilities had a mean grade point average of 1.65 which was significantly lower than the mean grade point average of 2.84 obtained by students in general education. Students with disabilities' grades were so low at the outset, in fact, that it may have experienced a floor effect in which in which it was statistically less likely for them to decline much further. Additionally, teachers may be less willing to assign students a grade of "F" because it could result in the student having to retake the class and not earn required credits toward graduation. Therefore, a grade of "D" may be more often assigned to students unless they are habitually truant and making any effort to pass. A second explanation is that use of grade point average as the dependent variable. In the past grades were understood to be a measure of academic achievement and learning. More recently, though, grades have been demonstrated to be an unreliable metric for student learning. Given this fact, alternative results may have been obtained if metrics more sensitive to student learning would have been used.

Another potential factor that may have confounded the results is that there was heterogeneity within each of the educational groups. Students in the study varied with regard to a number of educational experiences. For example, students with disabilities presented with a range of severity in their educational challenges. Based on the level of severity, they received services that fell along a continuum from full mainstreaming to full pull-out special education. Additionally, the types of services these students received also widely varied. Because students with a disability in one category may also receive

services in another category, there may have been some overlap in student needs despite their categorical designation.

This study was able to evaluate the relationship between transition to high school and student grade point average across multiple grades by extending the semesters across which changes in grade point average were evaluated. Students in the current study appeared to experience a pattern of rebound in grade point average by tenth grade. Second semester tenth-grade grade point average had rebounded to near eighth-grade levels. This rebound was consistent with previous research for average and high-achieving students. Previous research had also found that low-achieving students did not experience the same pattern of rebounding grades. Interestingly, though, both students with learning disabilities and emotional/behavioral disabilities also experienced the same pattern of rebound. Given the academic difficulties typically experienced by these groups, this pattern of rebound is a unique finding within the present study.

One possible explanation for the observed rebound in grades during tenth grade is that course failure in ninth grade lead to grade retention for a number of students. Wheelock and Miao (2005) found that ninth grade has the largest percentage of the overall high school population specifically because students are disproportionately retained during ninth grade. The EPE Research Center (2006) also found that a majority of states experience the highest rates of retention in ninth grade with enrollment declining nearly 20% in tenth grade. However, there was no observed attrition in the current study.

Implications for Practice

The current findings suggest that the transition to ninth grade is challenging for students, regardless of their disability status. So, in addition to transition services for

students with disabilities, school districts should recognize these challenges and seek to develop multi-tiered systems of support to facilitate successful transition to high school for all students. One evidence-based practice is to personalize student learning through the implementation of a “freshman academy.” Freshman academies create smaller, separated learning communities for ninth-grade students. The freshman academy is much like a middle school “house” concept, but is developmentally appropriate for ninth grade students. These small learning communities offer several core content classes and the teachers are able to meet together as an interdisciplinary team every day (Bennett, 2012). The purpose of the daily collaboration is to focus on individual student progress and social/emotional well-being. Students are identified for intervention based on multiple risk factors including test scores, homework completion, attendance, and school behavior. Tiers of intervention are available to students based on their level of need, and students are able to fluidly move in and out of interventions.

As school districts seek to implement ninth grade support initiatives, like freshman academy, to support all students, school psychologists should have an active role. School psychologists should play a central role in the selection of evidence based instructional strategies that are implemented for all students, and the selection of research-based interventions that supplement the regular curriculum for struggling students. Upon implementation of evidence-based instructional strategies and research-based interventions to support ninth graders, school psychologists can also provide oversight in the delivery process to ensure that the strategies and interventions are implemented with fidelity.

Findings from this study also have implications for transition planning within special education and general ninth-grade reform efforts taking place across the country. Transition planning is a required activity for teams that support students with disabilities. The Individuals with Disabilities Education Act (IDEA) requires “comprehensive and coordinated” transition planning and services. The IDEA does not require transition planning and implementation of services until students are sixteen years of age (United States Department of Education, 2014). However, states like Minnesota and Wisconsin have transition requirements that exceed federal law. In Minnesota, transition plans must be in place for students with disabilities during, or before, ninth grade (Minnesota Office of Revisor of Statutes, 2014). One of the primary purposes for this legislation that exceeds federal law is to support student transition into, and through, high school.

Activities intended to improve the transition into, and through, high school deserves greater attention due to the disproportionate dropout rates, post-secondary education participation, and employment rates for students with disabilities. While the current study did not find differential changes in grade point average between groups, students with disabilities had lower grade point averages in every measured semester. This finding illuminates the importance of providing students with disabilities individualized plans to support their transition into high school. Unfortunately, many special education teachers and school psychologists do not possess the unique knowledge or skills to support effective transition planning (National Center on Secondary Education and Transition, 2014). To further complicate matters, few universities, pre-service programs, or school district employers provide meaningful training or experience related to transition planning. In order to better support student transitions into, and through,

high school, greater training and professional development should be dedicated to transition planning for students with disabilities.

Future Research

The current study did not find statistically significant interactions between student status (general education, learning disabilities, or emotional/behavioral disabilities) and change in grade point average between eighth and ninth grade. However, there may be other risk factors associated with poor transition outcomes for students. Future research should examine the extent to which race and socio-economic status of students with disabilities may interact with academic performance during the ninth-grade transition.

Future research should attempt to address this by examining how the extent to which students with disabilities receive instruction outside of the general education setting interacts with their grades upon transition to ninth grade. Future research should also examine the extent to which other academic indicators like attendance and disciplinary referrals change from eighth to ninth grade for students with disabilities. These studies would provide more information about how students with disabilities may be disproportionately impacted by the transition to ninth grade than students in general education.

Students with other types of disabilities (e.g., autism, other health impairments, cognitive disabilities, etc.) may also be at significant disadvantage when facing the transition to ninth grade due to the academic and/or social challenges they face. Given these challenges, future research should examine whether or not these groups of students experience disproportionate difficulty with the transition to ninth grade when compared with students in general education.

Future research should also examine how states with different rules for transition planning for students with disabilities may impact these students' transition to ninth grade. While the IDEA only requires that transition plans be implemented prior to age sixteen, several states (e.g., Wisconsin) have requirements that exceed federal law. In Wisconsin, for example, post-secondary transition plans must be developed and implemented before, or during, the school year in which the student turns fourteen. It is possible that students in states like Wisconsin which have transition rules exceeding federal requirements experience more positive transitions to ninth grade than students with disabilities from states that minimally meet federal requirements.

Many of the strategies and initiatives for supporting transition to ninth grade have not been studied with quality research methodology. For example, while research has identified that small learning communities (e.g., freshman academies) support a positive transition to ninth grade, researchers have not assigned similarly situated schools to research and control groups to examine differences. Future research, therefore, should attempt to address this weakness in the literature by using sound methodological practices when examining the strategies that support a successful transition to ninth grade.

Limitations

There are several limitations to this study. First, grade point average was selected as the dependent measure because it was a simple metric that had been widely used in previous research. However, grade point average may not be the most reliable metric for academic achievement or growth. Second, the study only examined one cohort of students that transitioned from eighth to ninth grade. This cohort may or may not be representative of the overall pattern of transition from eighth to ninth grade for the school

district when multiple years are considered. Third, given the numerous factors that influence student behavior and academic success, the current study does not clearly tease apart whether changes in student performance are due to the act of transition to ninth grade or other some other factor (e.g., issues related to adolescence, different expectations between middle school and high school, etc). Given the methodological structure of the current study, it is not possible to assign causation to any of the variables that may have impacted student performance upon the transition to ninth grade. The data does not clearly demonstrate whether or not changes in grade point average are caused by the transition to ninth grade or if they are a continuation of challenges that had already been experienced. Fourth, the results may not be generalizable to other districts that use different curriculums and are composed of a different population of students. Similarly, the results may not be generalizable to other states that employ different definitions for learning disabilities and emotional/behavioral disabilities.

Summary

As predicted, students in both general and special education experienced statistically significant decline in grade point average from eighth to ninth grade. More positively, though, all groups examined also experienced a recovery in grades from ninth to tenth grade. This research replicates previous high school transition research and also extends the literature in relation to the finding of a tenth-grade recovery. Students appear to possess coping skills that allow them to overcome the challenges they face during the transition to high school. However, the use of grade point average as the dependent variable confounds interpretation of the results, as it is not the most sensitive metric for assessing student learning.

Due to the importance of ninth grade in overall high school success, though, educators should focus on developing systems that support all students during the transition to ninth grade. Evidence-based practices, like freshman academies, that are universally designed to support all students appear to be a better use of educational resources than individual transition planning for students with disabilities.

REFERENCES

- Akos, P. & Galassi, J.P. (2004). Middle and high school transitions as viewed by students, parents and teachers. Professional School Counseling, 7(4), 212-221.
- Allensworth, E. & Easton, J. (2005). The on track indicator as predictor of high school graduation. Chicago: Consortium on Chicago School Research. Retrieved December 28, 2013 from <https://ccsr.uchicago.edu/publications/track-indicator-predictor-high-school-graduation>
- Alspaugh, J.W. (1998). Achievement loss associated with the transition to middle school and high school. Journal of Educational Research, 92(1), 20-25.
- Armacost, R. L. (1989). Perceptions of stressors by high school students. Journal of Adolescent Research, 4, 443-461.
- Balfanz, R. & Letgers, N. (2004). Locating the dropout crisis: Which high schools produce the nation's dropouts? Where are they located? Who attends them? Baltimore: John Hopkins University. Retrieved from <http://files.eric.ed.gov/fulltext/ED484525.pdf>
- Barone, C., Aguirre-Deandreis, A. I., & Trickett, E. J. (1991). Means-ends problem solving skills, life stress, and social support as mediators of adjustment in the normative transition to high school. American Journal of Community Psychology, 19(2), 207-224.
- Beck, L., & Muia, J. A. (1980). A portrait of tragedy: Research findings on the dropout. The High School Journal, 64(2), 65-72.

Bennett, C. L. (2012). The freshman academy impact: A comparison of ninth grade structures through analyses of student perceptions and performance data. Retrieved from http://libres.uncg.edu/ir/asu/f/Bennett,%20Christopher_2012_Dissertation.pdf

Blyth, D. A., Simmons, R. G., & Carlton-Ford, S. (1983). The adjustment of early adolescents to school transitions. *Journal of Early Adolescence*, 3(1-2), 105-120.

Cognato, C. A. (1999). The effects of transition activities on adolescent self-perception and academic achievement during the progression from eighth to ninth grade. Paper presented at the annual meeting of the National Middle School Association, Orlando.

Conroy, M. A. & Brown, W. H. (2004). Early identification, prevention, and early intervention with young children at risk for emotional or behavioral disorders: Issues, trends, and a call for action. *Behavioral Disorders*, 29(3), 224-236.

Cooper, R. & Liou, D. D. (2007). The structure and climate of information pathways: Retinking opportunity to learn in urban high schools during the ninth-grade transition. *The High School Journal*, 92(1), 43-56.

De Wit, D. J., Karioja, K., Rye, B. J., & Shain, M. (2011). Perceptions of declining classmate and teacher support following the transition to high school: Potential correlates of increasing student mental health difficulties. *Psychology in the Schools*, 48(6), 556-572.

Eccles, J. S., Midgley, C., & Adler, T. (1984). Grade-related changes in the school environment: Effects on achievement motivation. *Advances in Achievement and Motivation*, 3, 283-331.

EPE Research Center. (2006). Diplomas count: An essential guide to graduation rates and policies. EdWeek. Retrieved from <http://www.edweek.org/ew/toc/2006/06/22/index.html>

Epstein, J. L., & Mac Iver, D. J. (1992). Opportunities to learn: Effects on eighth graders of curriculum offerings and instructional approaches. Baltimore, Md.: The Johns Hopkins University, Center for Research on Effective Schooling for Disadvantaged Students.

Farmer, T. W., Hall, C. M., Weiss, M. P., Petrin, R. A., Meece, J. L. & Moohr, M. (2010). The school adjustment of rural adolescents with and without disabilities: Variable and person-centered approaches. Journal of Child and Family Studies, 20, 78-88.

Felner, R. D., Primavera, J., & Cauce, A. M. (1981). The impact of school transitions: A focus for preventive efforts. American Journal of Community Psychology, 9(4), 449-459.

Frasier, J. R. (2007). Transitioning students with disabilities from middle to high school. Teaching Exceptional Children Plus, 4(2) 1-10.

Haney, W. (2004). The education pipeline in the United States 1970-2000. Chestnut Hill, MA: The National Board on Educational Testing and Public Policy. Retrieved from <http://www.bc.edu/research/nbetpp/statements/nbr3.pdf>

Isakson, K. & Jarvis, P. (1999). The adjustment of adolescents during the transition into high school: A short-term longitudinal study. Journal of Youth and Adolescence, 28(1), 1-26.

Jerald, C. D. (2006). Identifying potential dropouts: Key lessons for building an early warning data system – A dual agenda of high standards and high graduation rates. Washington, DC: Archive, Inc. Retrieved December 28, 2013 from http://www.achieve.org/files/FINAL-dropouts_1.pdf.

Kaufman, P. Alt, M. N. & Chapman, C. (2004) Dropout rates in the United States: 2001 (NCES 2005-046). U.S. Department of Education: National Center for Education Statistics. Washington, DC: U.S. Government Printing Office. ERIC Document: ED 483 073.

Langenkamp, A. G. (2010). Academic vulnerability and resilience during the transition to high school: The role of social relationships and district context. Sociology of Education, 83(1), 1-19.

Legnick-Hall, M. L., Gaunt, P. M., Brooks, A. A. R. (2003). Why employers don't hire people with disabilities: A survey of the literature. Retrieved from <http://www.cprf.org/whyemployersdonthire.htm>

Letgers, N., & Kerr, K. (2001). Easing the transition to high school: An investigation of reform practices to promote ninth grade success. Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University. Retrieved from <http://civilrightsproject.ucla.edu/research/k-12-education/school-dropouts/easing-the-transition-to-high-school-an-investigation-of-reform-practices-to-promote-ninth-grade-success/legters-easing-transition-2001.pdf>

Letrello, M., & Miles, D. D. (2003). The transition from middle school to high school: Students with and without learning disabilities share their perceptions. The Clearing House, 212-214.

Lillenstein, D. J. (2002). The role of the school psychologist in transition planning: A survey of transition coordinators and school psychologists in Pennsylvania. Retrieved from http://www.lib.umi.com/dissertations/preview_all/3034_580

Lillenstein, D. J., Levinson, E. M., Sylvester, C.A., & Brady, E. E. (2006). School psychologist involvement in transition planning: A comparison of attitudes and perceptions of school psychologists and transition coordinators. The Journal for Vocational Special Needs Education, 29(1), 4-16.

Livermore, G. A., Stapleton, D. C., Nowak, M. W., Wittenburg, D. C., & Eisman, E. D. (2000). The economic policies and programs affecting the employment of people with disabilities. Retrieved from http://www.ilr.cornell.edu/extension/files/download/Economics_Policy_Programs.txt

MacIver, D. J. (1990). Meeting the needs of young adolescents: Advisory groups, interdisciplinary teaching teams, and school transition programs. Phi Delta Kappan, 71(6), 458-464.

Maute, J., & Brough, J. (2002). The next big step: Helping our students transition out. Middle Ground, 6(1), 16-19.

Mccallumore, K. M., & Sparapani, E. F. (2010). The importance of the ninth grade on high school graduation rates and student success in high school. Education, 130(3), 447-456.

McIntosh, K., Flannery, K. B., Sugai, G., Braun, D. H., & Cochrane, K. L. (2008). Relationships between academics and problem behavior in the transition from middle school to high school. Journal of Positive Behavior Intervention, 10(4), 243-255.

Midgley, C., Maehr, M. L. (2000). The transition to high school study: Report to participating schools and districts. Retrieved from http://www.umich.edu/~pals/hs_feedback_report.PDF

Minnesota Office of Revisor of Statutes. (2014). Administrative rules: Emotional or behavioral disorders. Retrieved from <https://www.revisor.leg.state.mn.us/rules/?id=3525.1329>

Minnesota Office of Revisor of Statutes. (2014). Administrative rules: Specific learning disability. Retrieved from <https://www.revisor.leg.state.mn.us/rules/?id=3525.1341>

Minnesota Office of Revisor of Statutes. (2014). Administrative rules: Specific learning disability. Retrieved from <https://www.revisor.mn.gov/rules/?id=3525.2900>

National Center for Educational Statistics. (2005). Digest of education statistics tables and figures 2004. Washington, DC: Author. Retrieved from http://nces.ed.gov/programs/digest/d05/tables/dt05_097.asp

National Center for Education Statistics. (2014). Annual earnings for young adults. Retrieved from http://nces.ed.gov/programs/coe/indicator_cba.asp

National Center for Education Statistics. (1995). Dropping out and disabilities. Retrieved from <http://nces.ed.gov/pubs/dp95/97473-6.asp>

National Center for Education Statistics. (2012). Postsecondary Education. Retrieved from http://nces.ed.gov/programs/digest/d12/ch_3.asp

National Center for Secondary Education and Transition. (2014). Current challenges facing the future of secondary education and transition services for youth with

disabilities in the United States. Retrieved from
<http://www.ncset.org/publications/discussionpaper/#5>

National High School Center. (2007). Dropout prevention for students with disabilities: A critical issue for state education agencies. Retrieved from
http://www.betterhighschools.org/docs/NHSC_DropoutPrevention_052507.pdf

National High School Center. (2007). Easing the transition to high school: Research and best practices designed to support high school learning. Retrieved from
http://www.betterhighschools.org/docs/NHSC_TransitionsReport.pdf

Neild, R. C. (2009). Falling off track during the transition to high school: What we know and what can be done. Future of Children, 19(1), 53-76.

Nisivoccia, J. D. (1997). The influence of parental separation and divorce on adolescent academic achievement: Developmental issues. Nova Southeastern University, Child and Youth Studies. (ERIC Document Reproduction Service No. ED 420 819).

Reschley, D. J. (1996). Identification and assessment of students with disabilities. The Future of Children, 6(1), 40-53.

Reyes, O., Gillock, K., Kobus, K., & Sanchez, B. (2000). A longitudinal examination of the transition into senior high school for adolescents from urban, low-income status, and predominantly minority backgrounds. American Journal of Community Psychology, 28(4), 519-544.

Roderick, M., & Camburn, E. (1999). Risk and recovery from course failure in the early years of high school. American Educational Research Journal, 36(2), 303-343.

Schiller, K. S. (1999). Effects of feeder patterns on students' transition to high school. Sociology of Education, 72, 216-233.

Smith, J. B. (1997). Effects of eighth-grade transition programs on high school retention and experiences. The Journal of Educational Research, 90(3), 144-151.

Swanson, C. B. (2008). Special education in America. Retrieved from:
http://www.edweek.org/rc/articles/2008/10/27/special_education_in_america.html

Tilleczek, K., & Ferguson, B. (2008). Transitions and pathways from elementary to secondary school: A review of selected literature. Retrieved from
<http://www.edu.gov.on.ca/eng/teachers/studentssuccess/transitionliterature.pdf>

United States Department of Education. (2004). Changes over time in secondary school experiences of students with disabilities. Retrieved from
http://www.nlts2.org/reports/2004_04/nlts2_report_2004_04_complete.pdf

United States Department of Education. (2014). Topic: Secondary Transition. Retrieved from <http://idea.ed.gov/explore/view/p/,root,dynamic,TopicalBrief,17>

United States Department of Labor (2013). Earnings and unemployment rates by educational attainment. Retrieved from http://www.bls.gov/emp/ep_chart_001.htm

Weiss, C. C., & Bearman, P. S. (2007). Fresh starts: Reinvestigating the effects of the transition to high school on student outcomes. American Journal of Education, 113(3), 395-421.

Wheelock, A., & Miao, J. (2005). The ninth-grade bottleneck: An enrollment bulge in a transition year that demands careful attention and action. School Administrator, 62(3), 36-40.

APPENDIX A: Data Collection Forms

APPENDIX B: Cover Letter

Dear _____:

I am a graduate student from the University of Wisconsin-Eau Claire, completing my thesis in school psychology. I would like to ask your school's help by participating in my research. I am examining the effects of the transition to high school. More specifically I would like to investigate the change in GPA for students involved in special education (i.e., students with learning disabilities, cognitive disabilities, and emotional disabilities) when they make the transition into the high school.

In order to examine the relationship between the transition to high school and special education students' grades it is necessary to review high school academic records. I wish to review the files of all the students with learning disabilities, cognitive disabilities, and emotional disabilities who do not have an additional special education identification and who made the transition to high school between 1996 and 1998. I also wish to randomly select 150 general education students who also made the transition to high school between 1996 and 1998. The individual student information I collect includes gender, specific disability, GPA for each academic year from 7th to 12th grade, eligibility for free lunch (as a measure of socioeconomic status), when each student was identified to have a disability, and marital status of parents. In addition I plan to conduct an analysis of the change in students' GPA when the transition to high school occurs. Record review should last between two and three hours. The purpose of this letter is to request your authorization to review academic records of students who have transitioned into your high school between 1996 and 1998.

I have enclosed a complete copy of my thesis proposal to explain the purpose of my thesis in more detail and explain the measures I intend to take in order to ensure record confidentiality. Student confidentiality and anonymity are paramount. No individual students will be identified. Grade point averages will be grouped by disability and grade level.

A letter of consent has been enclosed for your signature that would officially authorize academic record review. I will contact you by phone in the next week to discuss this project and determine your reaction. If you wish for your school to provide the requested student academic records, you may inform me during phone contact. At that time I will also establish a date and time to meet with you and any other school personnel involved in this study to arrange for a record examination, if authorized.

I would greatly appreciate your authorization to examine the above-mentioned student academic records. Your participation could help to better understand the potential effects of school transition on special needs students. A copy of study results will be available upon request. If you have any questions or concerns as a participant in this study, please contact me:

Anthony Mayer
422 Swift Circle
Hudson, Wisconsin 54016
651-341-5505

If you have any questions or concerns as a result of this study, you may contact my thesis advisor:

Dr. Mary Beth Tusing
Department of Psychology, University of Wisconsin – Eau Claire
Eau Claire, WI 54702-4004
Telephone: (715) 836-5525

If you have concerns about your involvement as a participant in this study, please contact:

Dr. Michael Axelrod
Institutional Review Board for the Protection of Human Subjects
17 Schofield Hall
University of Wisconsin – Eau Claire
Eau Claire, WI 54702-4004
Telephone: (715) 836-2373

Thank you for your cooperation and consideration.

Sincerely,

Anthony Mayer, M.S.E
School Psychology Graduate Student
University of Wisconsin – Eau Claire

APPENDIX C: Mean and Standard Deviation Tables

Table 2

Mean semester grade point averages for all students

	<u>Grade 8</u> <u>Semester 1</u>	<u>Grade 8</u> <u>Semester 2</u>	<u>Grade 9</u> <u>Semester 1</u>	<u>Grade 9</u> <u>Semester 2</u>	<u>Grade 10</u> <u>Semester 1</u>	<u>Grade 10</u> <u>Semester 2</u>
M	2.428	2.424	2.299	2.291	2.372	2.383
SD	.976	.979	1.036	1.044	.959	.972

Table 3

Mean semester grade point averages for students by educational category

	<u>LD</u>		<u>EBD</u>		<u>General Education</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Grade 8 1 st Sem	1.859	.675	1.586	.578	2.902	.888
Grade 8 2 nd Sem	1.858	.677	1.566	.524	2.902	.896
Grade 9 1 st Sem	1.792	.717	1.310	.543	2.783	.965
Grade 9 2 nd Sem	1.776	.772	1.268	.484	2.787	.952
Grade 10 1 st Sem	1.819	.597	1.531	.614	2.840	.884
Grade 10 2 nd Sem	1.846	.683	1.515	.579	2.850	.884

Table 4

Mean semester grade point averages for subjects based upon the time of special education identification

	<u>Early</u>		<u>Late</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Grade 8 1 st Sem	1.755	.690	1.768	.621
Grade 8 2 nd Sem	1.732	.658	1.775	.628
Grade 9 1 st Sem	1.695	.680	1.551	.713
Grade 9 2 nd Sem	1.705	.698	1.493	.738
Grade 10 1 st Sem	1.782	.571	1.655	.654
Grade 10 2 nd Sem	1.715	.617	1.741	.712