Summer 2011

Study strategies in high school students with specific learning disabilities

Mikaela Renee Cribbs
James Madison University

Follow this and additional works at: https://commons.lib.jmu.edu/edspec201019
Part of the Psychology Commons

Recommended Citation
Cribbs, Mikaela Renee, "Study strategies in high school students with specific learning disabilities" (2011). Educational Specialist. 45.
https://commons.lib.jmu.edu/edspec201019/45

This Thesis is brought to you for free and open access by the The Graduate School at JMU Scholarly Commons. It has been accepted for inclusion in Educational Specialist by an authorized administrator of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.
Study Strategies in High School Students with Specific Learning Disabilities

Mikaela Renee Cribbs

A research project submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Educational Specialist

School Psychology

August 2011
Table of Contents
List of Tables ..................................................................................................................... iii
Abstract .............................................................................................................................. iv

I. Introduction ....................................................................................................................1
   Impact of IDEA
   Preparation for College
   Different Needs for Students with Learning Disabilities
   Trends in College Transitions
   Need for Research
   Instrument
   Hypothesis

II. Methodology ................................................................................................................11
    Participants

III. Results ..........................................................................................................................13
    Hypothesis Results

IV. Discussion ....................................................................................................................16
    Impressions
    Limitations
    Field Relevance

V. References .....................................................................................................................19
List of Tables

Table 1: Description of LASSI-HS Subscales .............................................................11
Table 2: Mean Scores and Standard Deviations for the LASSI-HS Subscales ............13
Table 3: Focus Group: Primary Themes Identified .....................................................15
Abstract

Students with Specific Learning Disabilities (SLD) are entering college after high school at higher rates than in the past. Previous research suggests that students with SLD have a significantly more difficult time adjusting to the demands of college, with deficits noted in the area of study strategies. This study compared study strategies of students with SLD with those of students without disabilities. The Learning and Study Strategies Inventory High School, 2nd edition (LASSI-HS; C.E. Weinstein & D.R. Palmer, 2002) was used to assess ten areas of study strategies. Results indicate that students with student with SLD have significantly more developed study strategies in the areas of Self Testing and Study Aids, but have significantly less developed study strategies in the areas Selecting Main Ideas compared to their Non-disabled peers (ND). Both groups would benefit from direct instruction in the area of study strategies. These findings should be interpreted within several limitations including; assuming homogeneity among the SLD group and small sample size. The results may help guide future planning for groups that target study skills in schools. Surveying students to gather information prior to implementing an intervention is necessary for School Psychologists to target their efforts. The information from this study may help other School Psychologists plan an intervention program by targeting the less developed study strategies. School administrators and teachers may also find this information helpful in planning activities to help the students gain mastery of the classroom material.
Chapter I

Introduction

Over the past several years there has been a noticeable increase in the number of individuals with a diagnosis of a Specific Learning Disability choosing post-secondary education after graduation. According to the National Center for Education Statistics (2009), 38.2% of individuals served under special education are identified as having a Specific Learning Disability (SLD). High schools are faced with the task of adequately preparing this population for success in a higher academic setting.

A longitudinal study of high school students indicated that 76.7% of students with a disability wanted to attend post secondary education upon completion of high school. Two years later, only 19% were enrolled in a post secondary education program, compared to 40.5% of their non-disabled peers who were currently attending a post secondary education program (Maudaus & Shaw 2006).

College graduates experience similar employment and salary rates, regardless of being identified with a specific learning disability. Students with an identified learning disability experience more favorable outcomes in adulthood if they have completed a college degree compared to their peers with SLD who did not complete a degree (Madaus & Shaw, 2006).

Impact of IDEA

Since the revision of the Individuals with Disabilities Education Act (IDEA) in 2004, transition plans have become a requirement of Individual Educational Program (IEP) when the student becomes fourteen years old. These plans focus on the needs of the individual after graduation and may include a college transition plan or college
readiness activities. Even with additional support provided by an IEP, students who have been identified as having a disability are enrolling in colleges at lower rates than their non-disabled counterparts, taking longer to complete their program of study, and have higher drop-out rates. This may be due in part to transition plans that do not fully meet the needs of the students they are serving (Heiman & Percel, 2003; Madaus & Shaw, 2006). The purpose of transition plans is to create opportunities during high school that focus on success after graduation. A planned sequence of activities gradually occurs so the students are more prepared for independence after graduation.

Universities and other post secondary institutions are not obligated by IDEA regulations to provide the same supports that are available in high schools. The Association on Higher Education and Disabilities (AHEAD) provides best practice guidelines for universities to follow when determining the presence of a disability and determining the appropriate accommodations (Association on Higher Education and Disabilities, 2011). It is the Office of Disability Services (ODS) that determines the necessary documentation for 504 plans. A 504 plan falls under the Americans with Disabilities Act (ADA) and specifies that no one can be excluded from federally funded programs due to a disability. A 504 outlines the accommodations needed for a person to be successful in the setting it is created for. The student may be left to provide the necessary documentation at their own expense if the high school’s documentation does not meet the standards set by the institution (Maudaus & Shaw, 2006). Creating a transition plan that encompasses the needs of the student as well as the legal documentation required by the institution helps create a smooth transition to college.
College readiness is one area a transition plan may focus on when preparing a student for the transition out of high school. College readiness includes courses taken while in high school and national placement tests that most institutions require for acceptance. College readiness may also include other areas such as content knowledge, writing skills, study skills, critical thinking skills, time-management skills, confidence, persistence, self-regulation, advocacy, motivation, and coping skills. Students with disabilities need to understand their strengths and weaknesses to better advocate for themselves, as well as their legal rights under ADA (DaDeppo, 2009; Durlak, Rose, & Bursuck, 1994; Milsom & Dietz, 2009; Reaser, Prevatt, Petscher, & Proctor, 2007; Reis, McGuire, & Neu, 2000).

In high school, students with SLDs may be unaware of their diagnosis or their needs resulting from their disability. Due to the supportive nature of high school, these individuals may be receiving the services necessary to be successful without being fully aware of all the extra support and opportunities available to them through their IEP. Once the student transitions to college all of these extra accommodations are left behind, leaving the student to fend for themselves. The individual suddenly gains a new academic independence at college and there are many opportunities for failure if they have not been given the necessary tools to be successful in this different academic setting (DaDeppo, 2009; Heiman & Percel, 2003).

While transition plans focus on activities that build independent skills, may plans are not meeting the needs of the students. Upon entering college, the workload increases as does the amount of time spent on homework needed to obtain passing grades. The professors expect the student to master the material independently. The students may not
be prepared to handle the increase in workload or independence. Also, students with SLDs may need to spend a larger portion of time studying than non-disabled students (Schunk & Zimmerman, 1994).

**Preparation for College**

A survey of professors at a community college indicated that they felt that the majority students, with and without disabilities, did not have the necessary study skills to be successful in college. They also felt their students were ill prepared to take comprehensive notes of class lectures, lacked the necessary skills to be critical readers, and lacked skills to identify important concepts in the textbooks. The same study showed the students had no formal training regarding effective study skills (Simmons, 2006).

Previous research suggests that undergraduate students do not demonstrate adequate study skills. “Study skills are defined as competence in acquiring, recording, organizing, synthesizing, remembering, and using information and ideas (Proctor, Prevatt, Adams, Hurst, & Petscher, 2006).” Activities that are part of study skills include listening, reading, scanning, report writing, test taking, time management, and the use of additional resources.

**Different Needs of Students with Learning Disabilities**

Previous research has shown all of these areas are negatively impacted by the presence of a learning disability (Hoover, 2001). Difficulties with language processing or other deficits characteristic of SLD may cause difficulties in academic performance and college completion (DaDeppo, 2009). Students with a SLD may need to use different learning strategies than the typical college student would use. One study reported that students with SLDs would devise specific techniques to help them remember class
material, such as singing, using imagery, making diagrams, repetition, or making special marks in the text. The students reported preferring information that is presented visually and orally rather than in written form. Students with SLDs generally choose strategies that do not include writing techniques, which differs from their non-disabled peers. Some helpful strategies for learning the course content include having well organized materials, as well as having a space that is free from distractions during studying (Heiman & Precel, 2003).

Study strategies are one way to manage difficult course work. They can help the student know how to approach the task, create an environment most conducive for learning, and build independent learning skills. Study strategies are behaviors that can be taught and learned. Selecting main ideas, self testing, study aids, test strategies, and time management are examples of study skills. Selecting main ideas is when a student is able to recognize the main topic of assigned reading or lecture and focus on the relevant information. By focusing on the relevant information the student is better able to remember what they studied or heard and not get overwhelmed by the large amounts of information being presented. Self testing is when a student reviews the material and assesses their level of understanding and comprehension. This strategy aids in linking new information with previously known information and helps in the memory process. Self testing occurs when a student reviews notes, creates questions about the material, or reviews for an exam. Study aids occur naturally in readings and are incorporated into most lectures, but can be overlooked by students. Text books often include supplemental materials or websites for students to access more information. Texts often use font changes, headings, and critical thinking questions throughout the readings to indicate
important information. Students may also create their own study aids that consist of graphs, charts, or marks in texts. Study groups or searching for clarification through other resources also fall into the category of study aids. Test strategies are the preparation needed to perform well on a test, which include knowing what type of test is being given (multiple choice, short answer, and essay) and knowing how to study so the material is easily recalled. Time management is an area affecting successful study strategies and is a part of the self regulation needed for effective study habits. Efficient time management involves setting a specific time aside during the day to promote good study habits, as well as planning enough time to work on projects and difficult courses. Choosing the space where studying is completed is also important. Some students report that the library is too distracting while others report using earplugs or books on tape to help them study successfully (Weinstein & Palmer, 2002; Dexter, 1982).

Many of these strategies are learned during elementary and high school, with some schools offering specific programs that teach study skills. For those who have not received directed instruction in study or learning strategies, they may rely on relationships with others to help them succeed. Having open lines of communication with the classroom teacher is helpful for clarification of class material. Some students use peers in the class who can assist in note taking or scheduling reminders to help keep them on track. Some students find it useful to limit the course load they take each semester. Limiting extracurricular activities, as well as employment, during the academic school year may help the student remain focused on their assignments and help them limit the amount of responsibility and time required for class (Reis, McGuire, & Neu, 2000).
Trends in College Transitions

Study strategies and knowledge of the student’s strengths and weaknesses are essential in being successful in the college setting as well as maintaining the grades needed for continued enrollment. Students who enter college with a disability may have lower high schools grades than their peers or may not be exposed to college preparatory material. There are demonstrated links between high school grades and first semester grades at college. One study found that students with SLDs took approximately one additional semester longer to finish their program of study, possibly due to limiting the number of classes taken during each semester or having to retake courses due to low grades (Sparks & Lovett, 2009; Jorgensen, Fichten, Havel, Lamb, James, & Barile, 2005).

Students with SLDs are less likely to be exposed to material that would prepare them for college course work. These students enter college with less knowledge and skills that would encourage success in the university setting. With the decrease of supportive services in college, many of these students find the change challenging and difficult, often entering college without the skills needed to adjust successfully to the college environment (Chiba & Low, 2007; Sparks & Lovett, 2009).

Students with SLD may fail, not due to lack of intelligence, but due to lack of skills and appropriate preparation needed to succeed in a highly competitive academic environment. Students who are transitioning to college need to have knowledge in the areas of compensatory strategies, knowledge of diagnosis, time management, knowledge of assistance offered on campus, and knowledge of support networks available (Chiba & Low, 2007).
Need for Research

Currently, research in this area is limited and the field may benefit from understanding more about the study strategies used in various circumstances. Study strategies are one area that impacts success after graduating high school. Completion of higher education is essential for more opportunities in adulthood. Higher education increases the likelihood of higher economic employment opportunities over a person’s lifetime as well as more independence (Madaus & Shaw, 2006). Completion of college sets the stage for a lifetime of opportunity and advancement.

By identifying specific areas of study skill deficits in students with and without SLDs, early intervention may be made possible so students with SLD are not hampered by a lack of knowledge about the use of study strategies. Understanding the areas that students are struggling with in college allows school psychologists to find ways to intervene early. Building study skills before a student enters college may help set a positive tone for their college experience and help improve the graduation rate for students with SLDs.

Instrument

The LASSI-HS was used to collect information about study strategies. It was designed to address the high school population (freshman through senior) and asks questions regarding the thoughts and behaviors of students regarding learning and study strategies. The LASSI-HS is commonly used as a screener that identifies students who may be at risk for poor academic performance. The test contains seventy-six items and is broken into ten subscales. The subscales include: attitude, motivation, time management, anxiety, concentration, information processing, selecting main ideas, study aids, self...
testing, and test strategies. The inventory looks at the skill, will, and self-regulation of the participant and looks at the thoughts and behaviors that relate to learning in post-secondary education. The “skill” aspect assesses the students learning strategies, approach to acquiring new information, and ability to demonstrate the information. The “will” aspect assess the degree that students worry about their academic performance, receptiveness to new information, and the degree of effort they are willing to exert to be successful in the academic setting. The “self-regulation” component assesses how the student manages the whole learning process, through self-regulation, time management, and attention. This component also includes the student’s use of study supports (study groups, tutors) and their ability to monitor their progress of acquiring the new information as they study.

<p>| Table 1 |
| Description of LASSI-HS Subscales |</p>
<table>
<thead>
<tr>
<th>Subscale (Coefficient Alpha)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety (.82)</td>
<td>Anxiety and worry about school performance</td>
</tr>
<tr>
<td>Attitude (.74)</td>
<td>Attitudes and motivation for succeeding in school</td>
</tr>
<tr>
<td>Concentration (.82)</td>
<td>Concentration and attention to academic tasks</td>
</tr>
<tr>
<td>Information processing (.80)</td>
<td>Information processing, acquiring knowledge, and reasoning</td>
</tr>
<tr>
<td>Motivation (.78)</td>
<td>Motivation, diligence, self-discipline, and willingness to work hard</td>
</tr>
<tr>
<td>Self-Testing (.81)</td>
<td>Self-Testing, reviewing, and preparing for classes</td>
</tr>
<tr>
<td>Selecting Main Ideas (.71)</td>
<td>Selecting main ideas and recognizing important information</td>
</tr>
<tr>
<td>Study Aids (.68)</td>
<td>Use of support techniques and materials</td>
</tr>
<tr>
<td>Time Management (.77)</td>
<td>Use of time management principles for academic tasks</td>
</tr>
<tr>
<td>Test Strategies (.80)</td>
<td>Test strategies and preparing for tests</td>
</tr>
</tbody>
</table>

The LASSI was originally created to assess the study strategies of college students but a high school version was created in response to the need for early intervention at the high school level. The LASSI-HS assesses the covert and overt
thoughts and behaviors associated with success in high school, however, these thoughts and behaviors can be altered through interventions. This test can be completed in approximately twenty to twenty five minutes and can be administered individually or in a group setting. The participants are asked to respond on a five-point Likert scale to statements that most describe them and their behavior (Weinstein & Palmer, 2002; Proctor, Prevat, Adams, Hurst, & Petscher, 2006; Reaser, Prevatt, Petscher, & Proctor, 2007). For the purpose of this study, the last five areas that the LASSI measures were the main focus: self testing, selecting main ideas, study aids, time management, and test strategies.

**Hypothesis**

From previous research, the main hypothesis (Hypothesis 1) for this study is that students identified with SLDs will report less use of the skills and study strategies needed to be successful in a higher level academic setting, based on the LASSI-HS subscales. This hypothesis will be supported by the following areas, (Hypothesis 2) High school students with SLD will report less use of selecting main ideas (attend to important topic) than non-disabled high school students. (Hypothesis 3) High school students with SLD will report less use of study aids than non-disabled high school students. (Hypothesis 4) High school students with SLD will report less use of self testing strategies than non-disabled high school students. (Hypothesis 5) High school students with SLD will report less time management techniques than non-disabled high school students. (Hypothesis 6) High school students with SLD will report less use of test strategies than non-disabled high schools students.
Chapter II

Methodology

The LASSI-HS was used to gather self-reported information about high school student’s knowledge and use of study strategies. The assessment identifies thoughts and behaviors that relate to successful learning.

Participants

Participants for this study were currently enrolled high school students grades nine through twelve at a rural city school in southern Virginia. Fifty of the participants were identified as having a SLD with an active IEP, while the other Fifty students were randomly selected from each grade through the general education population. The guidance office at the high school provided names of potential participants. The list of names was cross-checked with the district-wide electronic IEP program to ensure students were correctly identified for the study. Addresses were found through the online student information system and letters were mailed to the parents of the students explaining the purpose of the research, methods, and researcher contact information. Permission forms were returned to the main office at the high school, or returned through the mail with the stamped envelope that was provided. Follow-up letters were sent three weeks after the initial contact. The research project was explained to the students at school and a permission form was made available again. Twenty-three students with SLD volunteered while thirty-three students from the Non-disabled (ND) population volunteered. These students were surveyed during non-core classes over the course of four weeks. The researcher explained the purpose of the research and provided the students with assent forms prior to administration and was available for questions.
throughout the survey administration. The students completed the web based version of
the Learning and Study Strategies Inventory- 2nd edition High School version (LASSI-
HS). The publishing company automated scored and returned the results via a secure
online access available though their online testing center. The students were instructed,
prior to administration, to identify themselves as a one or a two based on their
membership in each group. Results of each individual administration were available
immediately after completing the survey and the students had the option to print out their
results. The testing administrator was provided a password to maintain confidentiality of
the results. Once data collection was completed, the examiner removed identifying
information that the students included (i.e. names) that were not asked for.
Chapter III

Results

The LASSI-HS means and standard deviations can be seen on Table 2. An independent t-test was used to determine the significance of the differences between the groups on all ten subscales of the LASSI-HS; a Bonferroni correction was administered to adjust for family wise error.

Table 2
Mean Scores and Standard Deviations for LASSI-HS Subscales

<table>
<thead>
<tr>
<th>LASSI-HS Subscales</th>
<th>SLD M</th>
<th>SLD SD</th>
<th>ND M</th>
<th>ND SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>24.33</td>
<td>6.11</td>
<td>27.03</td>
<td>7.68</td>
<td>-1.42</td>
<td>.80</td>
</tr>
<tr>
<td>Attitude</td>
<td>29.54</td>
<td>7.02</td>
<td>32.30</td>
<td>4.41</td>
<td>-1.70</td>
<td>.49</td>
</tr>
<tr>
<td>Concentration</td>
<td>24.79</td>
<td>6.89</td>
<td>26.00</td>
<td>7.15</td>
<td>-0.64</td>
<td>.26</td>
</tr>
<tr>
<td>Information Processing</td>
<td>26.08</td>
<td>5.15</td>
<td>24.67</td>
<td>6.05</td>
<td>0.93</td>
<td>.18</td>
</tr>
<tr>
<td>Motivation</td>
<td>29.50</td>
<td>5.12</td>
<td>29.81</td>
<td>5.26</td>
<td>-0.23</td>
<td>.41</td>
</tr>
<tr>
<td>Self-Testing*</td>
<td>25.46</td>
<td>4.49</td>
<td>22.33</td>
<td>5.94</td>
<td>2.17</td>
<td>.02*</td>
</tr>
<tr>
<td>Selecting Main Ideas*</td>
<td>16.21</td>
<td>3.80</td>
<td>18.24</td>
<td>3.56</td>
<td>-2.07</td>
<td>.02*</td>
</tr>
<tr>
<td>Study Aids</td>
<td>24.92</td>
<td>5.12</td>
<td>22.24</td>
<td>6.12</td>
<td>1.74</td>
<td>.04*</td>
</tr>
<tr>
<td>Time Management</td>
<td>20.54</td>
<td>4.30</td>
<td>20.09</td>
<td>6.01</td>
<td>0.33</td>
<td>.37</td>
</tr>
<tr>
<td>Test Strategies</td>
<td>25.75</td>
<td>5.50</td>
<td>28.45</td>
<td>6.91</td>
<td>-1.59</td>
<td>.06</td>
</tr>
</tbody>
</table>

*significant difference at the p<.05  **significant difference at p<.005

The subscales had a maximum score of the following; Attitude and Motivation-40; Test Strategies and Information Processing- 39; Anxiety, Concentration, and Self Testing- 38; Study Aids- 36; Time Management- 34; Selecting Main Idea-25.

Significant differences at the p<.05 value revealed that ND students reported significantly higher knowledge and use of Selecting Main Ideas; while SLD students reported significantly higher uses skills in the area of Self Testing and Study Aids. SLD students reported higher use or knowledge on the subscales Information Processing and Time Management. While the ND students reported high knowledge or use of Anxiety, Attitude, Concentration, Motivation, and Test Strategies; however no significant
difference between were found between the SLD and ND students responses in these areas.

**Hypothesis Results**

Hypothesis 1 was not supported. It was hypothesized that students with SLD would have a more difficult time implementing the study strategies needed to be successful in a higher level academic setting. According to the LASSI-HS results students with SLD do not have a significantly more difficult time implementing study strategies and may have more developed skills in some areas than their ND peers (see Table 2).

Hypothesis 2 was supported. It was hypothesized that students with SLD would report less efficient use of Selecting Main Ideas than their non disabled counter parts. The results of the LASSI-HS indicated that students with SLD reported less developed knowledge and use of skills in the area of Selecting the Main Idea from a text. On average, SLD reported significantly lower scores ($M=16.20$, $SE=0.78$) than their ND peers ($M=18.24$, $SE=0.62$). This difference was significant at the $p<0.05$, but not significant at the $p<0.005$.

Hypothesis 3 was not supported. It was hypothesized the students with SLD would report significantly depressed scores for the use of Study Aids then their ND peers, however, the results show that SLD reported significantly elevated scores for the use of Study Aids than their ND peers. On average, student with SLD reported significantly high scores ($M=24.91$, $SE=1.04$) than their ND peers ($M=22.24$, $SE=1.07$). This difference was significant at the $p<0.05$, but not significant at the $p<0.005$. 
Hypothesis 4 was not supported. It was hypothesized that students with SLD would report significantly depressed scores for the use of Self Testing strategies than their ND peers, however, the results show that students with SLD reported significantly elevated scores ($M=25.46$, $SE=0.92$) for the use of Self Testing strategies than their ND peers ($M=22.33$, $SE=102$). This difference was significant at the $p<0.05$, but not significant at the $p<0.005$.

Hypothesis 5 was not supported. There were no significant differences between the students with SLD ($M=20.54$, $SE=0.88$) and the ND ($M=20.09$, $SE=1.05$) on the subscale of Time Management. This difference was not significant at the $p<0.005$, or the $p<0.05$ level.

Hypothesis 6 was not supported. No significant differences were found between the students with SLD ($M=25.75$, $SE=1.12$) and the ND ($M=28.45$, $SE=1.20$) groups on the subscale of Test Strategies. This difference was not significant at the $p<0.005$, or the $p<0.05$ level.
Chapter IV

Discussion

The results of this study demonstrate that students with SLD report depressed knowledge and use of study strategies; however, they do report more knowledge than their ND peers in some areas. The students with SLD reported significantly depressed scores in the area of Selecting Main Ideas than the ND population. The students with SLD reported significantly higher scores then their ND peers in the areas of Self Testing and Study Aids. The results of the study indicate that the SLD population and the ND population would benefit from direct instruction in all areas of study strategies.

Post graduation plans are becoming a major focus for student with disabilities, with many students being enrolled in Advanced Placement classes. High schools are taking deliberate steps to prepare students for success after high school and many student with disabilities are assigned a mentor throughout high school to help focus on individual skills. At this particular high school, students with disabilities are fully included in the general education classrooms and are assigned a case manager that follows them until graduation. Students with SLD are exposed to the general curriculum and receive pull out or inclusion services based on their need. The case manager is able to provide specific targeted interventions for each student and build relationships through the school year.

Since transition plans have become a required piece of IEPs, the rural school where this study was completed indicated that having deliberate discussions about future goals has been helpful. High school students take a career interest inventory that helps guide the activities in their IEP. One limitation of the transitions plans noted was that
goals tend to be vague or overly general for the students, especially when the student is in middle school. Students are able to discuss their future goals with their case manager and the guidance counselors to plan an appropriate course sequence to meet their goals.

Study strategies are becoming more a part of elementary curriculum and focused on early in a student’s academic career. With schools relying on standardized tests, more emphasis is being placed on test taking strategies, specifically multiple choice strategies. Students are being exposed to and encouraged to use study strategies early on and can build on those skills through graduation, however, schools should teach a variety of methods that focus on more than multiple choice test taking strategies.

As expected students with SLD report less use of study strategies compared to their ND peers in the area of Selecting Main Ideas. However, students with SLD, in general, report similar use of study skills compared to their peers. Within this given sample students with SLD are demonstrating study strategies commensurate with their peers, however, both groups may benefit from direct instruction in this area.

**Limitations**

The finding of this study should be interpreted in light of several limitations. First, the students with SLD were considered one homogenous group; the students may have different areas of strengths and weaknesses that would impact their ability to successfully implement certain study strategies. Future studies should consider the impact of the different areas of learning disabilities and the impact on the study strategies implemented. Second, the inadequate sample size increased the potential for error within the statistical analysis, thus increasing the probability for Type I or Type II error. Future studies should look at a larger population sample from a diverse area. Third, many
student who completed the LASSI-HS were enrolled in AP classes where study strategies are reviewed and needed to be successful in the class. The students who volunteered may be more actively involved in their education and putting more effort into their studying. Further research would benefit from looking more thoroughly at the impact of inclusion, mentors, and participation in advanced classes on the acquisition of successful study skills.

Future research would benefit looking at the acquisition of different study strategies as student’s progress through the grades. Other studies may also want to consider the impact of high stakes assessments on the instruction of study strategies. Future studies may consider looking at the individual item responses instead of the overarching domains. An item analysis may present more information about the specific skill areas that the students are struggling in.

**Field Relevance**

Research has demonstrated that students identified with a disability drop out of school more frequently than students without disabilities. The students who do drop out often lack the skills necessary to gain employment, often experiencing low paying jobs or unemployment throughout life (Levinson, Ferchak, & Seifert, 2004). Building the skills needed to be successful in a post-secondary setting helps increase the odds that a student will complete college. The transition to college can be a difficult time for students; the expectations are different and may require more work to understand the content of a class. With the course work being more difficult, some students lack the skills necessary to study and learn the material. Better study skills help decrease the chance of dropping out and help increase the student’s ability to grasp the material. Students with a better
understanding of study strategies have higher grade point averages and will remain in high education longer (Simmons, 2006). By assessing the foundation of study strategies, remediation may be made available to intervene with students who may be experiencing difficulty with studying and the intention of retaining students in a college setting.

If a student enters college with a SLD and is also hampered by a lack of knowledge of study strategies, then the student is going to face challenges beyond the traditional college student. Addressing the specific needs for SLD students for acquiring study strategies would help prepare them for success in college. This study was used to identify the extent to which there is a discrepancy between knowledge of study strategies between students with and without SLDs. The results will help guide future planning for study skills groups in schools. Surveying students to gather information prior to implementing an intervention is necessary for School Psychologists to target their efforts. The information gained through surveys helps shape the focus of interventions by identifying specific areas of need and ensures a more productive use of resources. The information from this study may help other School Psychologists plan an intervention program by targeting the less developed study strategies. School administrators and teachers may also find this information helpful in planning activities to help the students gain mastery of the classroom material. This information can help school psychologists and school employees prepare students with SLDs for college success.
References


