

Brigham Young University
BYU ScholarsArchive

Theses and Dissertations

2011-12-16

Childhood Family Factors That Influenced the Enrollment of College Students with Learning Disabilities

Abigail Kirk
Brigham Young University - Provo

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

 Part of the Counseling Psychology Commons, and the Special Education and Teaching Commons

BYU ScholarsArchive Citation

Kirk, Abigail, "Childhood Family Factors That Influenced the Enrollment of College Students with Learning Disabilities" (2011). *Theses and Dissertations*. 3195.
https://scholarsarchive.byu.edu/etd/3195

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

Childhood Family Factors that Influenced the Enrollment of College Students with Learning Disabilities

Abigail Cook

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Science

Dr. Gordon S. Gibb, Chair
Dr. Betty Y. Ashbaker
Dr. Darlene H. Anderson

Department of Counseling Psychology and Special Education

Brigham Young University

December 2011

Copyright © 2011 Abigail Cook

All Rights Reserved

ABSTRACT

Childhood Family Factors that Influenced the Enrollment of College Students with Learning Disabilities

Abigail Cook
Department of Counseling Psychology and Special Education
Master of Science

The purpose of this study was to use qualitative measures to investigate the childhood family factors that influenced the enrollment of college students with learning disabilities. Six participants were interviewed, all of whom were registered through the University Accessibility Center at a four-year university and were served at some point during their school years for a learning disability. Interviews were held in a confidential location and lasted approximately thirty minutes. The interview protocol was constructed in a way that allowed participants to reflect on their experiences and tell their story in their own manner. Planned prompts were included to solicit more information as needed. The interviews were digitally recorded using an Ipod recorder and transcribed using *NVivo 8* software. Investigators used thematic analysis to identify themes or patterns in the data, analyzed the themes, and reported the results based on their interpretation of the themes. In this approach, the data drove the interpretation rather than attempting to fit the data into the investigators' existing beliefs or interests. Four major themes emerged from the data analysis. Two themes centered on family factors that influenced college enrollment. These themes included parent support during school years and family involvement with college enrollment. Participants described the supportive relationship they had with their parents and the underlying feelings of support that always existed in their homes. They also reported their family's tradition of college attendance and parent expectations to attend college as significant factors in their own college enrollment. The other two themes relate to participants' feelings and beliefs about their disabilities. These themes include the impact of the disability on the individuals' sense of self-worth and personal strengths that contributed to success. Participants reported experiencing a lack of understanding about their disability. They recalled comparing themselves to their peers and not knowing how to explain their learning challenges to others. Despite their frustrations, participants made personal contributions to their own success. These contributions included the use of coping strategies and a determination to succeed. The individuals' use of coping strategies created an opportunity to experience success in the school setting, thereby increasing their motivation to continue their education after high school.

Keywords: learning disability, parent, support

ACKNOWLEDGEMENTS

First and foremost I would like to thank my committee for all of their support. Thank you Betty Ashbaker, Darlene Anderson, and Gordon Gibb for sharing your expertise and responding to my countless emails. I am especially appreciative to you, Gordon, and the many hours you spent planning, organizing, and editing my paper. Your sense of humor and encouragement helped motivate me to finish. Thank you!

I am also grateful to Tina Dyches for her help in getting my thesis started. Tina, you have been one of my favorite professors at BYU and I appreciate your willingness to help with our unique needs, despite your own busy schedule. I could not look back at my thesis project without remembering Diane Hancock and her role in helping me finally graduate. Diane, you went beyond your responsibilities to remind me of deadlines, requirements, and other administrative tasks. I truly believe I would still be in school without your consistent email reminders!

Finally, I would like to express my gratitude for my family. Thank you Rob, for taking an interest in my project and for assisting me along the way. I would never have finished this project without your support and encouragement. Thanks to my mom and dad for teaching me the importance of education and for encouraging me to continue working towards a master's degree.

TABLE OF CONTENTS

ABSTRACT....ii

ACKNOWLEDGEMENTS....iii

TABLE OF CONTENTS....iv

INTRODUCTION OF THESIS STRUCTURE....vii

Background....2

Learning Disabilities....2

Children with Learning Disabilities....2

Adults with Learning Disabilities....3

College students with Learning Disabilities....4

Problem Statement and Purpose of Study....7

Research Question....7

Method....7

Participants....7

Instruments....8

Procedure....9

Validity and Reliability....10

Thematic Analysis and Interpretation....10

The inductive analysis approach....10

The steps in the analysis 11

Results 13

Family Factors that Influenced College Enrollment 13

Parent support during school years 13

Supportive relationships 13

Involvement at school 14

Involvement at home 16

Family involvement with college enrollment 16

Participants' Feelings and Beliefs about Learning Disabilities 18

Impact of disability on sense of self-worth 18

Personal strengths that contributed to success 19

Discussion 21

Reflection on Factors Identified as Significant in Participants' Success 21

Supportive relationships 21

Family involvement at home and in school 22

Family involvement with college enrollment 23

Participants' feelings and beliefs about Learning Disabilities 24

Summary of Results 26

Limitations 27

Implications for Future Research 28

Implications for Parents, Practitioners, and Individuals with Learning Disabilities 29

Implications for parents 29

Implications for practitioners 29

Implications for individuals with Learning Disabilities 29

Conclusion 30

References 32

APPENDIX A: Review of Literature 35

Learning Disabilities 35

Children with Learning Disabilities 35

Adults with Learning Disabilities 36

College students with Learning Disabilities 39

THESIS REFERENCES 44

APPENDIX B: Consent Form 48

APPEDIX C: Recruitment Email 50

APPENDIX D: Interview Protocol 51

INTRODUCTION OF THESIS STRUCTURE

This thesis, *Childhood Family Factors that Influenced the Enrollment of College Students with Learning Disabilities*, is written in a hybrid format. The hybrid format brings together traditional thesis requirements and journal publication formats. The preliminary pages of the thesis reflect requirements for submission to the university. The thesis report is presented as a journal article, and conforms to length and style requirements for submitting research reports to education journals. The literature review is included in Appendix A. The consent form, recruitment email, and interview protocol are included in Appendices B, C, and D.

TEXT OF ARTICLE

Childhood Family Factors that Influenced the Enrollment of College Students with Learning Disabilities

Background

High school graduates face significant challenges in making the transition to adult life. Individuals with learning disabilities face the same challenges as their peers, but with greater risk due to difficulties with school work (Lerner, 2003). College students are expected to analyze information, apply knowledge, and make decisions, but, due to cognitive difficulties and academic struggles, students with learning disabilities may not acquire and apply these skills as quickly or efficiently as students without disabilities (Gregg, 2007). As a result, students with learning disabilities are less likely to enroll in a four-year university than their peers (U.S. Department of Education, 2005).

Learning Disabilities

The Individuals with Disabilities Education Improvement Act (IDEA) defines learning disabilities as cognitive disorders associated with difficulties in understanding spoken or written language (U. S. Department of Education, 2006a). Individuals are affected by learning disabilities in a variety of ways, including difficulties with listening, writing, speaking, reading, and math calculation. Deficits in these areas significantly affect a student's ability to make progress in school without specially designed instruction or appropriate accommodations.

Children with learning disabilities. As a result of these challenges, only 54.5% of students with learning disabilities graduated high school in 2004 (U. S. Department of Education, 2006b) compared to 74.3% of the general school population (Laird, DeBell, & Chapman, 2006).

Lower graduation rates may be the reason that individuals with learning disabilities who enter the work force typically accept lower paying jobs than their peers without disabilities (Dickinson & Verbeek, 2002).

The latest report to Congress indicates that just over four percent of the total school population, or 46.4 % of students with disabilities, receive special education and related services for specific learning disabilities (U. S. Department of Education, 2006b). Some of these students go on to attend college. Results from the National Longitudinal Transition Study indicate that 49% of students with learning disabilities attend some postsecondary schooling (U. S. Department of Education, 2005). It is evident that while many individuals with learning disabilities drop out of high school and accept low status jobs, others enroll in four-year universities, live independently, and work toward successful careers.

Adults with learning disabilities. Learning disabilities are an integral part of the lifespan of affected individuals. Gerber and Ginsberg (1990) found that the difficulties persons with learning disabilities experienced in their younger years did not disappear as they grew to adulthood (Gerber & Ginsberg, 1990). Yet many individuals with learning disabilities learn to cope by identifying and using personal strengths to compensate for specific weaknesses. Polloway, Shewel, and Patton (1992) reported that learning to use computer programs and relying on a dictionary had a positive influence on participants' success in life. Another study reported that successfully dealing with their disabilities fostered improvements in participants' determination, persistence, confidence, and coping skills, as well as improved relationships and self-advocacy (Wilgosh, Sobsey, Cey, & Scorgie, 2008). These and other studies (see Gerber &

Ginsberg, 1990; Goldberg, Herman, & Spekman, 1992) indicate that adults with learning disabilities who consider themselves successful consider coping strategies, positive decision making, support systems, and acceptance of their disability as contributing factors to success.

College students with learning disabilities. Researchers have sought to determine factors that make it possible for some adults with learning disabilities to succeed in college, and several factors that seem to affect success have emerged in the literature. In a study with disability services counselors for college students, results showed that motivation, preparation, and self-advocacy skills were the main characteristics in successful college students with disabilities (Hicks-Coolick & Kurtz, 1997). Other factors include private tutoring, participation in regular coursework during school years, psychological support, and postsecondary schooling prior to entering a four-year university (Vogul, Hruby, & Adelman, 1993); knowledge of computers, books on tape, and self-advocacy (Reis, Neu, & McGuire, 1997); and campus services, priority registration, family support, accommodations on tests, and counseling (Greenbaum, Graham, & Scales, 1995).

Transition to college. In an effort to ease the transition from high school to college, most universities offer a one-or two-day orientation for new students. During this time, new students meet important personnel and begin to become familiar with the campus. However, this brief introduction to college life is not sufficient for students with learning disabilities (Dalke & Schmidt, 1987). As the number of students with learning disabilities who enroll in college increases (Foley, 2006), so does the need for effective transitional programs to assist students with learning disabilities as they move from high school to college. Several transition programs

across the country are having a positive effect on students with learning disabilities and their confidence in entering college by educating them about campus services and accommodations, introducing them to individual counselors, and providing support services (Aune, 1991; Burgstahler, 2003; Dalke & Schmidt).

Pertinent to this study is the effect of family support on the success of college students. In several studies participants with learning disabilities reported that academic and emotional support from family members was a highly influential aspect of their success in college (Greenbaum et al.; Troiano, 2003).

Preparatory factors based in families. Families can have a positive role in the lives of individuals with disabilities during their school years. One study found that adolescents have more confidence in various tasks when they believe their parents support them. Likewise, without the support of parents, an adolescent's ability to master new skills can be negatively affected. Parents of students in this study appeared to have a significant effect on the autonomy of their children in dealing with problems. If a parent turned to others for answers and support, the child with learning disabilities was more likely to seek help when encountering a problem. The tendency to seek outside support was evident in many situations (Shulman, Carlton-Ford, Levian, & Hed, 1995).

In another study, all 88 participants reported that family support systems had been essential in their lives. Participants mentioned that they continue to seek guidance from family members in making large purchases, reading complex material, and managing finances. As the groups were primarily from upper and middle class families, all participants' parents had the

resources necessary for additional services. Most families were involved in supporting their child at school and collaborating with teachers regarding placement and services (Rogan & Hartman, 1990). In a 20-year longitudinal study of individuals with learning disabilities, Raskind, Goldberg, Higgins, and Herman (2002) found that the use of support systems had more impact on student success than intelligence and academic assessments, age, gender, race, or socioeconomic status.

Polloway, Shewel, and Patton (1992) noted that successful individuals with learning disabilities found support in particular family members. They reported that having a family member advocate for appropriate placement in school programs triggered effective teaching and accommodations. Participants also reported that family members encouraged their involvement in after-school organizations that fostered social relationships and helped the individuals with learning disabilities feel successful. These positive relationships promoted the optimistic view most participants had of themselves, which resulted in success in postsecondary settings.

Troiano (2003) gathered information from college students with learning disabilities regarding family support during school years. Many students reported having parents who were engaged in their education. These parents helped their children get the accommodations they required and helped their children complete homework assignments. For a few students, this parental support continued throughout college years. Students who reported having a support system also reported that they had an understanding and acceptance of their disability.

In summary, college students with learning disabilities report success as a result of preparation, self-advocacy skills, accommodations, and family support. However, while past

studies report general factors leading to success, they provide little specific detail to inform families about ways to help their children with learning disabilities prepare for college.

Problem Statement and Purpose of Study

The purpose of this study was to use qualitative measures to investigate in detail childhood family factors that influenced the college enrollment of students with learning disabilities who attend a four-year university.

Research Question

The following question directed the investigation: What childhood family factors influenced the enrollment of college students with learning disabilities in a four-year university?

Method

This is a qualitative study in the phenomenological tradition designed to elicit descriptions of family factors that participants believe prepared them for eventual admission to a four-year university. Phenomenology is described as the investigation of individuals' thoughts and feelings about their own life experiences with the purpose of shedding light on how they make meaning of those experiences (Gall, Gall, & Borg, 2005). This section will include details about the participants in the study, the procedures, including construction of the interview protocol and the interviewer's preparation, and details about how the data were analyzed.

Participants

Participants were self-selected students who were registered for support for learning disabilities through the accessibility center at a four-year university, and who were served in

special education at some time during their school years. Arrangements were made to contact students through accessibility center email lists to invite them to volunteer for the study. The recruitment statement included a general description of the study, the anticipated time requirements, assurance of informed consent, and the promise of a coupon redeemable at a popular eatery for participation. The director of the University Accessibility Center (UAC) sent the email to all students registered through the UAC for learning disabilities. Six participants responded, all of whom qualified and were included in the study. All six were interviewed, two females and four males. Participants were all served in special education at some point during their school years in southern or western states. Two of the participants were completing their fourth year in college, and the other four were completing their second or third years. Declared college majors of the participants included Math, Construction Management, Graphic Design, and Accounting.

Instruments

The interview protocol was constructed based on a two-principle structure presented by McCracken (1988). The first principle is to word questions in such a way that the respondent can tell their story in their own manner. This requires that large open-ended questions use wording that does not direct the respondent to a particular answer, but instead promotes free expression on the topic. The second principle is to plan a series of prompts to elicit further clarification of the large questions. These planned prompts can be in one or more of several formats. One format is the contrast prompt, in which the respondent is asked to explain the difference between two ideas. A second is the category prompt, which seeks to extend a large

question by asking the respondent to further categorize aspects of the topic, such as time, place, persons, feelings, events, or outcomes. A third type of prompt asks for notable incidents which illustrate the topic, such as a time when the respondent came to a sudden realization or was impacted by an event (McCracken, 1988).

The interview protocol for this study listed large questions designed to address the study question in a generally sequential way. Planned prompts were included as possible questions to deepen and strengthen the responses to each large question. In addition, the interviewer asked for clarification of key terms and other aspects of responses as appropriate throughout the interview.

Procedure

The investigator conducted a single interview with each participant in a confidential setting using a prepared protocol of questions designed to address the study question. Each interview took approximately 30 minutes and was audio recorded using a digital voice recorder. Prior to the interview the investigator asked each participant to read and sign a consent form that explained the nature and purpose of the study, the participant's rights, safeguards for confidentiality, and contact numbers for the investigator, the thesis chair, and the BYU Institutional Review Board.

The investigator prepared by using the protocol to practice interviewing two individuals. This helped the interviewer become familiar with the interview format and the types of prompts that may be appropriate for eliciting further information from the respondents. It also provided

the opportunity to test the recording device. Following the practice interviews the investigator and thesis chair reviewed the process and data and made minor changes to the interview protocol, including more detailed questions and additional prompts.

Validity and Reliability

Several measures were taken to improve the validity of this study. After every interview was transcribed, they were sent back to the individual participants. Participants were asked to read over the transcript to ensure their experiences were conveyed accurately. They were given the opportunity to clarify or change any statements they had made during the interviews. Two participants reviewed the transcript of their interview and both indicated that their statements were accurate. In order to increase the reliability of the results, two separate investigators independently completed the coding process for each interview. Once the coding was complete, the investigators discussed the discrepancies and made changes until they reached 100% agreement.

Thematic Analysis and Interpretation

The digital interview files were uploaded to a computer for analysis using *NVivo 8* software (QSR International, 2007), a program designed to sort, classify, and arrange information for thematic analysis. Thematic analysis was used to identify themes or patterns in data, analyze them, and report results based on investigators' interpretation of the patterns.

The inductive analysis approach. Themes in this study were analyzed by the investigator and thesis chair through an inductive approach using methods described by Braun

and Clarke (2006). Inductive thematic analysis involves coding and analyzing themes to determine outcomes without using a predetermined framework. In other words, the data drive the interpretation rather than trying to match the data to the researchers' analytic interest. This approach adheres to the essentialist/realist epistemology wherein the analyst assumes a direct relationship between participants' comments and their experiences. This is in contrast to a constructionist epistemology that assumes that meaning and experience are constructed in the social context rather than inherent in individual experiences.

The steps in the analysis. Braun and Clark's (2006) process for inductive thematic analysis involves six steps: (a) become familiar with the data, (b) generate initial codes, (c) search for themes, (d) review themes, (e) define and name themes, and (f) produce the report.

Become familiar with the data. Reading the material over repeatedly, while searching for themes and patterns, assisted the investigator in becoming familiar with the content. This step lays the foundation for the rest of the study. As the data was transcribed, the investigators applied analytical skills to glean more meaning from the content as they read and interpreted every word.

Generate initial codes. The process of coding included highlighting the information according to what the investigator thought was interesting. The material was then grouped by topic. It was important to carry out a thorough investigation of the data to ensure all potential themes were recognized.

***Search for themes*.** At this phase, the investigator searched for relationships and commonalities among coding groups to create broader themes. Visual symbols, such as tables or maps, are were used to distinguish themes from codes.

Review themes. Once the themes were identified, a filtering process took place to sort out the meaningful material and refine the individual groups. At this point, the investigator considered the themes in comparison to the entire data set to determine whether the themes were applicable and significant. Once this was accomplished, a thematic map was created that fits together and brings meaning to the data.

***Define and name themes*.** Defining the individual themes included writing a detailed description of the data within each theme. It was critical that the investigator keep in mind the relevance each theme had to the rest of the data set and research question. Titles were created to give the reader a clear idea of what the theme would include.

Produce the report. The information organized during the process of thematic analysis was written into a report to support the investigators' research topic or argument. The purpose of the write-up is to give a clear depiction of the data that was collected and how it is significant to the investigator's purpose.

Since the study was designed to reflect the individual participants' perceived experiences rather than to compare participants' experiences to the broader social context, the prevalence of themes was calculated as the number of occurrences in each interview rather than across the data set (Braun & Clark, 2006). The prevalent themes from each participant's interview were then

grouped into salient categories across participants to be reported in the results of the study and further examined in the discussion.

Results

Four major themes emerged from the data analysis. Two themes centered on family factors that influenced college enrollment and two related to participants' feelings and beliefs about their disabilities. Family themes included parent support during school years and family involvement with college enrollment. Themes regarding feelings and beliefs include the impact of disability on participants' sense of self-worth and personal strengths that contributed to success. The remainder of this section summarizes the findings according to the four themes.

Family Factors that Influenced College Enrollment

Parent support during school years. Although the participants in this study had attributes of determination and were well equipped with self-taught coping strategies, they all reported the significance of parent support. In addition to establishing a supportive relationship with their children, parents also supported their children at school, by communicating with teachers, and at home, by assisting with school work and other school-related activities.

Supportive relationships. Throughout the interviews, it was apparent that the parents and families of participants provided a reliable support system. This section includes statements regarding the supportive relationship that existed between parents and children.

Daniel. Daniel always knew he could turn to his mother when he needed someone to listen. He remembered feeling that his parents were "behind me one hundred percent",

regardless of what path he chose to take after high school. They allowed him to make his own decisions and did not push him to do anything he did not want to do. In reflecting on his enrollment in college he reported, "They are the reason I'm here, and you couldn't convince me otherwise."

Eva. Eva mentioned that her mother was always encouraging her to do her best in school. When she felt like giving up, Eva's mother was there to motivate her by reminding her that the hard work would pay off in the end. She believed that she "probably could've had a little bit more involvement from the school, but from parents it was totally there."

Megan. Although her mother was the one home during the day to help with school, Megan reported feeling supported by both parents. She described her parents' solid marriage and the difference it made in her life. A major factor in her support system was having both parents in the home who expressed love for each other and love for their children. They were consistent in their decision making and supported each other as partners. Megan pointed out that she always had someone at home to help her, had a ride to and from school, and had meals provided each day. She stated "I felt safe, I felt comfortable." In remembering her mother's involvement at school, Megan said that she knew her mother cared so much because she confronted school personnel even when it was uncomfortable for her.

Involvement at school. Although the parents of each participant provided support in different ways, they all demonstrated support for their children with disabilities throughout their school years. One way participants felt supported was by parental involvement at school. This involvement included parents meeting with teachers, volunteering in the classroom, and assisting

with their children's class schedule. Ben, Eva, and Megan shared specific examples of the ways their parents communicated with school personnel to help them be successful.

Ben. Ben remembered an experience when his mother visited the school to collaborate with a teacher. "After class with a teacher that I was real close with, my mom came and they just had a discussion about how they could help me." The teacher shared suggestions for his parents and Ben felt that this relationship was beneficial. He also reported that his parents were in frequent communication with his teachers and athletic director, as he was required to earn passing grades in order to participate on school sports teams. This ongoing communication kept his parents informed about specific assignments and deadlines in his classes. Ben remembered feeling more supported when his teachers and parents were working together to help him.

Eva. Eva was diagnosed with a learning disability at a very young age. A resource teacher educated her mother about her learning disability, including ideas on how to support Eva at home. Her mother also volunteered in the resource program when Eva was in school. Eva felt this allowed her mother to acquire a clearer understanding of her disability, thereby benefitting Eva throughout school. Eva's mother also attended every IEP meeting, showing her support for Eva's academic progress. When Eva switched districts during high school, her mother contacted the special education program to ensure her IEP had been received and to introduce Eva to the resource teacher. When Eva expressed her desires for more challenging classes, her mother discussed options with her teachers and helped create a schedule that best suited Eva's personal goals. In regards to this experience Eva's mother said "I support her on what she wants." Her mother's attitude helped Eva set and accomplish her personal objectives.

Megan. Megan's mother met with school personnel on several occasions to request specific teachers, change her classes part-way through the year, and discuss ways that Megan could be better supported at school. Megan reported that her mother "worked with my special education teachers to get me in the place that I needed to be."

Involvement at home. In addition to maintaining a relationship with the school, parents also provided supportive home environments. This support included reading practice after school, asking if their child had homework, selecting the school district they attended specifically for its special education program, encouraging children to attend their resource classes, and finding resources outside of the home to get the appropriate help. Megan outlined some of the things her mother did that helped her feel supported.

Megan reported feeling that her mom was always there for her. She helped with homework, picked her up after school, and acknowledged her good grades. She was also able to identify areas in which Megan needed more help, and followed through by finding the appropriate resource. Speaking of her mother, Megan remembered that "She got me help when I needed it."

Family involvement with college enrollment. As participants reflected on their decision to attend college, they remembered a variety of ways they were influenced by family members. These influences included the family tradition of college attendance, parent expectations to attend college, and specific discussions regarding college planning.

Family tradition of college attendance. Although the interviewer did not solicit any information regarding the participants' parents' education, several individuals included statements on this topic. Three participants mentioned that having one or both parents with a college degree motivated them to pursue postsecondary education themselves. Daniel summarized his feelings by saying, "If my dad hadn't gone to college, I probably wouldn't be here right now."

Parent expectations. Toward the end of their secondary schooling, participants reported that college seemed to be the next logical step, as their parents had set an expectation that all of their children would continue their education after high school. Parents communicated the desire for all of their children to attend college, whether the child had a disability or not. The consistent expectations between siblings to attend college motivated participants as they developed the confidence to continue going to school. Megan's comments were representative of the feelings and experiences of other participants. She mentioned that attending college was always part of her future because she had "grown up with" the mentality that a college degree was important. She also stated, "It was always known that I would go to college."

College planning. The participants' decision to attend college was partly influenced by conversations with family members. They felt supported in their decisions, as parents offered advice and helped them create a plan for life after high school. Participants recalled specific discussions they had with family members and the impact they had on their college experience. Eva commented on her mother's support as they established a college plan together. She remembered her mother encouraging her to attend a small two-year college after she graduated

high school. "She was really good at making sure I knew my options before I made a decision." Her mother believed she would be more successful making the transition to college life if she attended a college with smaller class sizes and adequate support before enrolling in a four-year university. Eva reported that this conversation influenced her decisions and helped her to be successful in college.

Participants' Feelings and Beliefs about Learning Disabilities

Participants expressed the effects of their disability on many aspects of their lives and how learning disabilities influenced their performance in school. For most participants, their experiences gave rise to coping strategies they relied on to keep up with their peers. They also reflected on motivating factors in their lives and recognized their own determination as a contributor to success.

Impact of disability on sense of self-worth. Participants shared similar thoughts on how their disability influenced their feelings about themselves. The following information shared by Megan and Daniel represents typical participants' responses.

Megan. Megan reported feeling inferior to her peers throughout her school years. She recalled being removed from regular classes to get extra support from the special education team, but she never fully understood the extent of her disability. This made it difficult for her to face her classmates when she was confronted with questions, and she felt ashamed. She was acutely aware of the many areas at which she did poorly, including reading, writing and test taking, and felt school was a daily reminder of her weaknesses. Megan commented, "I recognized when I

was little that school was already a hard thing for me. I wanted to be normal." She struggled to understand her disability and how it impacted her education.

Daniel. Daniel reported similar feelings about himself. As with Megan, he did not understand what a learning disability was and tried to ignore it when he could. He hated being pulled out of class in front of his friends and admitted being embarrassed about needing extra help. He also recalled many attempts to describe these feelings to others but remembers that no one really understood the challenges he faced. He summed up his experience by saying, "I just wanted to be normal."

Personal strengths that contributed to success. Several participants reported positive attributes that helped them deal with the emotional aspects of learning disabilities. Their comments suggest that they found ways to actively address the difficulties caused by their learning differences. Comments fell into two categories: coping strategies and determination to succeed.

Coping strategies. Participants described coping strategies they developed to compensate for their limitations. These coping skills included relying on friends, reading strategies, talking about material out loud, and accessing supplemental resources online. Daniel's responses represent the ways individuals learned to cope.

Daniel identified his relationship with friends as a significant help in his life. He mentioned that when he did not understand what was going on in class, a friend would teach him. He also reported that discussing assigned reading out loud with another student increased

his comprehension and helped him pass his classes. He purchased books on tape to decrease the anxiety of reading the material himself. This was one way that he applied a multisensory approach to his own learning. He also found resources on the internet that provided detailed summaries of stories so that he could anticipate events in the texts. He felt these strategies were paramount to his success in school. He expressed the benefit of coping strategies by saying "At times I get to whatever the goal is faster because I've had to teach myself a different way that fit just perfect."

Determination to succeed. Despite the challenges, a consistent theme of self-motivation and determination emerged across participants. Megan, Garrett, and Eva represent the range of strategies resulting from the determination to succeed.

Megan. Megan summarized her personal resolve to succeed in life by saying, "I learned how to be an advocate for myself." She had conversations with her teachers about her disability on several occasions. She recalled meeting with her general education teachers and working out accommodations for her assignments. When she was ridiculed about being dyslexic or felt uncomfortable with comments made by the teacher, she openly expressed her feelings and encouraged others to be more sensitive.

Garrett. Garrett remembered a specific time when he sat down and created his life plan on his own. He commented, "I really made my life plan of what I was going to do." His plan included going to college, earning a degree in a specific field, and ensuring a bright future for himself. He informed parents and teachers of his plan and then completed the necessary steps to reach his goals.

Eva. Eva reported that she wanted to be challenged in school similar to her peers. Upon arrival to a new school, she met with the special education teacher and explained that she did not want to be in special classes. From then on she received accommodations in regular classrooms. She also recalled being involved in her IEP meetings throughout high school and explaining her own agenda for her future to other team members. Her plans included attending college, and she commented, "It was something I always thought I would do."

Discussion

The purpose of this study was to investigate childhood family factors that influenced the enrollment of college students with learning disabilities in a four-year university. The results of this study list several family factors that participants reported as significant to their success, as well as the participants' personal beliefs and contributions to their college enrollment.

Reflection on Factors Identified as Significant in Participants' Success

The following section reflects on the results of this study under themes relating to family influences and personal contributions. The themes include (a) supportive relationships, (b) family involvement at home and in school, (c) family involvement with college enrollment, and (d) participants' feelings and beliefs about Learning Disabilities.

Supportive relationships. Research has shown that adolescents with learning disabilities develop more confidence in their abilities when they feel supported by their parents (Shulman et al. 1995). In the present study, all participants cited parent support as a contributing factor to their success in school and eventual enrollment in college. Participants reported on the supportive parent-child relationship they experienced. They described parents who valued their

goals for the future, provided counsel, and let them make their own decisions. This encouraged participants to practice autonomy and instilled a stronger sense of self-worth and confidence. Participants also relied on their parents to acknowledge their successes and provide assistance when they fell short of their goals. Megan remembered her mother praising her for good grades at the end of a term and felt this was a demonstration of her mother's love and support. Daniel recalled his parents allowing him to attempt homework assignments on his own and then stepping in at the "eleventh hour" to assist when he needed help. Both of these experiences demonstrated parents who were aware of their children's strengths and unique needs. This parent-child relationship laid the foundation for other ways parents provided support in school and at home.

Family involvement at home and in school. Participants commented on the benefits of having parents who supported them academically both in school and at home. Several individuals remembered specific instances when their parents visited the school to meet with their teachers. During these meetings parents and teachers discussed schedule changes, assignments, accommodations, and other ways to help participants succeed. Additional ways parents remained involved in their child's schooling included attending IEP meetings, emailing teachers for clarification on assignments, and selecting specific teachers, schools, or districts that were highly regarded for their assistance of students with disabilities. Participants not only acknowledged their parents' efforts to communicate with teachers, but believed this effort was a critical aspect of their achievements in school. The home environment was another setting where parents influenced the participants' success. Megan reported that she always felt safe in

her home. She described the loving relationship that existed between her parents and contrasted that with many of her peers who had single-parent families. She attributed some of her success to the family stability that surrounded her. Participants also cited assistance with homework and extra reading practice at home as factors in their success. Participants' reflections helped the researchers identify specific family factors that influenced not only the participants' achievement in school, but their eventual enrollment in college.

Family involvement with college enrollment. Parents and other family members influenced the participants' decisions to attend college. Two recurring themes that emerged during the interviews: (a) participants wanted to attend college because their parents had attended, and (b) parents expected them to attend college.

Family tradition of college attendance. Although specific questions regarding parents' education were not included in the interviews, several participants reported that one or both parents had attended a four-year university. Knowing that their parents had college degrees helped participants realize the importance of continuing their education after high school. This knowledge helped a college degree appear more attainable for two participants because their fathers, who both finished college, were diagnosed with disabilities themselves. This instilled the belief that if their fathers could succeed in college in spite of their challenges, then they could too.

Parent expectations. As the interviewer solicited information regarding the participants' decisions to attend college, many of them reported that it was always part of their plan. Their parents had communicated, in both direct and subtle ways, that college enrollment was expected

of them. Participants remembered this expectation being consistent between all children in the family. They were not held to a lower standard than their siblings because of their disability. This expectation helped participants recognize their parents' confidence in them and their own potential to succeed.

College planning. In addition to setting the example and expectation to attend college, parents also had detailed conversations about planning for college with their children. Participants felt that sitting down to discuss college options with their parents was an effective way to plan for and set postsecondary goals. Parents gave counsel regarding the benefits of a college degree and which colleges to attend. Eva reported that, because of the discussion she had with her mother, she chose a better plan for transitioning to a four-year college and experienced a more appropriate college classroom setting for her learning needs. Without this counsel, Eva did not think she would have organized an appropriate plan to attain her postsecondary goals.

Participants' feelings and beliefs about Learning Disabilities. Although the purpose of this study was to investigate family factors, participants reflected on their own personal qualities and accomplishments that led to their enrollment in a four-year university. Research indicates that individuals with learning disabilities are affected throughout their entire lives (Gerber & Ginsberg). Similar findings emerged in this study as participants described the effects of their disability throughout their school years and into college. The investigators felt these findings were also significant to the study.

Impact of disability on sense of self-worth. As participants answered questions regarding their disability and how it affected their achievement in school, it was evident that their

learning challenges negatively affected their feelings about themselves. Participants reported feeling different from their peers and recalled just wanting to be normal. Several participants remembered how little they understood about their disability or not ever knowing they had a disability at all. This lack of understanding resulted in participants comparing themselves to their peers and constantly recognizing their own limitations. Understanding the self-perception of these participants sheds light on the degree to which they were affected by their disability.

Personal strengths that contributed to success. Despite the challenges they encountered, participants acquired specific coping strategies and a determination to succeed that helped motivate them to continue their schooling. The use of coping strategies has also been identified as a factor in success in previous studies (Hicks-Coolick & Kurtz, 1997). In the present study, coping strategies such as listening to books on tape and discussing assignments out loud with peers directly influenced participants' accomplishments in school. These techniques allowed participants to experience success as they were able to complete homework and other classroom assignments. Most participants recalled a time when they realized that they could do anything their peers could do as long as they approached the task in a way that was conducive to their own learning styles. Their unique coping strategies helped bridge the gap between their current level of performance and the level of their peers. Although they encountered many barriers to learning, the determination to succeed was consistent between participants. They reported this determination in a variety of ways, including advocating for themselves, setting goals for their future, and expressing their own plans for college attendance. Participants knew what they wanted to achieve and had a resolve to accomplish their goals.

Summary of Results

What childhood family factors influenced the enrollment of college students with learning disabilities? The supportive relationship parents maintained with their children emerged as a significant factor to the participants' success in school. Parents repeatedly reinforced the strengths of their children and helped them see their own potential for success. When it came time to make decisions, parents voiced their opinions and counsel and allowed their children draw conclusions. As participants practiced making their own decisions, they developed independence and confidence to plan for their own futures. Participants repeatedly reported that they would not have made it to college without the support of their parents. Other factors in their college enrollment included parent expectations and a family tradition of college attendance. Participants understood their parents' expectations for them to do well in school and attend postsecondary schooling. These expectations made it easier for participants to decide to attend college because they knew their parents believed in them. Parents taught their children the value of a college degree and kept high standards for all of their children to attend college, whether they had a disability or not. Several participants reported that they knew a college degree was important because their parents had made sacrifices to earn their own degrees. Participants determined that having one or two parents who had attended college gave them a desire to attend themselves and helped them realize a college degree was a realistic goal. Parents also influenced their children's decisions by discussing their plans and helping them set goals. Parents helped their children look into school programs, class sizes, college services, and tuition costs. Some parents assisted their children by helping them pay for school. Others gave counsel regarding

class schedules and accommodations offered at the university level. Parents provided their own assistance but they also encouraged their children to find outside resources for help with school-related questions.

In addition to family factors, personal contributions that participants made to their own success also emerged. The coping strategies that participants developed acted as a starting point for their experience with success. Prior to using coping strategies, participants reported feeling discouraged about their limitations, and many of them remembered wanting to give up. These coping strategies allowed participants to not only complete their school assignments, but to understand texts and new concepts on a deeper level. They began to make accomplishments similar to their peers as they utilized their strengths and accommodated for their own limitations. Participants reported that they could achieve anything as long as they could adapt tasks to their personal learning styles. Throughout the interviews, participants consistently referred to their own intrinsic motivation to attend college. This motivation developed throughout their school years and fueled their desire to live up to the high standards they had for themselves. They possessed a determination to succeed that withstood any negative experience that may have caused them to give up. This personal determination has proven to be critical for these participants as they continue to work through the challenges of college life.

Limitations

This study is limited in its scope due to the population sampled and the knowledge of the participants. The small sample size of six participants presents difficulties in drawing conclusions to a larger population of college students with disabilities. The investigators cannot

guarantee the findings in this study would be the same if a large sample of students were included in a follow-up study. However, many of the findings in this study are supported by previous research of students with learning disabilities.

Based on the demographics of the participants, it may not be possible to generalize the results to a sampling of other college students with learning disabilities at other universities. In view of the fact that all participants in this study attend the same university, it can be assumed that social and cultural variables may have influenced the results.

During the interviews, some of the participants had a difficult time understanding how to answer specific questions. The investigators assume their disability interfered with complete comprehension of the questions being asked. Some of the participants made contradicting statements in different sections of their interview. Clarifying questions were asked during the interviews to ensure the participants' response was understood. A thorough analysis of the data assisted the investigators in determining the meaning of the participants' responses.

Implications for Future Research

The results of this study could be better supported by further research on this topic. A similar study that included interviewing college students as they reflect on family factors during their school years would improve the research literature in this area. Including a larger sample of individuals from a variety of universities would strengthen the support for the research findings and add to the existing literature. A follow-up study that included interviews of the participants' parents would create a more complete depiction of the participants and the support they received.

The parent interviews would provide a new perspective and may shed light on other factors that influenced their children's college enrollment.

Implications for Parents, Practitioners, and Individuals with Learning Disabilities

Parents and teachers of children with learning disabilities may benefit from the findings of this study, as could the individuals themselves. Specific family factors were identified that participants reported as critical to their success in school and eventual enrollment in college.

Implications for parents. Parents of children with learning disabilities may gain a different perspective of their situation and feel empowered to encourage their children to attend postsecondary schooling. Parents may recognize specific ways they can help their children succeed in school by helping them at home and by communicating with their teachers on a regular basis.

Implications for practitioners. Although this study did not focus on school factors, teachers also play a role in helping their students succeed in school. The results of this study reveal the benefit of open communication between home and school. Understanding the impact they will have on a student's performance, teachers can meet regularly with parents and share the achievements and challenges of the students with their families. This will place the student in a supportive environment and may add to the likelihood of their completion of high school and interest in college attendance.

Implications for individuals with Learning Disabilities. Students with learning disabilities can benefit from the success stories of these individuals. Despite the large population

of students with learning disabilities who do not attend college, many students with learning disabilities do enroll in four-year universities and earn college degrees. By reading the challenges and successes of individuals to whom they can relate, younger students with learning disabilities may be inspired to set their own goals of postsecondary schooling. They may learn that they have personal attributes that can contribute to their success and may find renewed determination to maintain high expectations for their future.

Conclusion

In this study, college students with learning disabilities reported on specific factors that influenced their college enrollment. Some of these factors included family support, and other factors included the personal beliefs and contributions of participants. Parent support was reported most consistently as the most critical factor in their success. Many participants stated that they would not have made it to college without their parents' help. Parents provided support in a variety of ways. They assisted their children with homework, maintained involvement in their schools and classrooms, and helped them create a plan for college. Parents also encouraged their children to attend college by setting the example of college attendance themselves, communicating expectations for their child to attend college, and providing a supportive home environment. Personal contributions of participants also emerged during the interviews. Participants reported that college enrollment was always a part of their plan. Despite their learning difficulties, participants were motivated to set and achieve goals for continued education after high school. Their own determination to succeed helped them acquire the necessary skills to compete with their peers and attend a four year university. Coping strategies were developed

to help the participants cross the barriers their disabilities presented, and allowed them to experience success in school. The results of this study may inform parents, teachers, and individuals about the specific factors that have helped college students with learning disabilities succeed.

References

Aune, E. (1991). A transition model for postsecondary-bound students with learning disabilities. *Learning Disabilities Research and Practice, 6,* 177-187.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77-101.

Burgstahler, S. (2003). DO-IT: Helping students with disabilities transition to college and careers. *National Center on Secondary Education and Transition,* 2, 1-4.

Dalke, C., & Schmitt, S. (1987). Meeting the transition needs of college-bound students with learning disabilities. *Journal of Learning Disabilities, 20,* 176-180.

Dickinson, D. L., & Verbeek, R. L. (2002).Wage differentials between college graduates with and without LD. *Journal of Learning Disabilities, 35,* 181–182.

Foley, N. (2006). Preparing for college: Improving the odds for students with learning disabilities. *College Student Journal*, *40,* 641-645.

Gall, J. P., Gall, M. D., & Borg, W. R. (2005). *Applying educational research. A practical guide.* Boston, MA: Pearson.

Greenbaum, B., Graham, S., & Scales, W. (1995). Adults with learning disabilities: Educational and social experiences during college. *Exceptional Children, 61, 460-471.*

Gregg, N. (2007). Underserved and unprepared: Postsecondary learning disabilities. *Learning Disabilities Research & Practice*, *22*, 219–228.

Hicks-Coolick, A., & Kurtz, D.P. (1997). Preparing students with learning disabilities for

success in postsecondary education: Needs and services. *Social Work in Education, 19,* 31-43.

Laird, J., DeBell, M., & Chapman, C. (2006). *Dropout Rates in the United States: 2004* (NCES 2007-024). Washington, DC: U. S. Department of Education, National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch.

Lerner, J. W. (2003). *Learning disabilities. Theories, diagnosis, and teaching strategies* (9th ed.). Boston, MA: Houghton Mifflin.

McCracken, G. (1988). The long interview. (Qualitative research methods, Vol. 13). Newbury Park, CA: Sage.

Polloway, E.**,** Schewel, R., & Patton, J. (1992). Learning disabilities in adulthood: Personal perspectives. *Journal of Learning Disabilities, 25*, 520-522.

QSR International. (2007). *NVivo 8.* Cambridge, MA: Author. Retrieved from http://www.qsrinternational.com/products_nvivo.aspx

Raskind, M., Goldberg, R., Higgins, E., & Herman, K. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic,* 37, 201-208.

Reis, S., Neu, T., & McGuire, J. (1997). Case studies of high-ability students with learning disabilities who have achieved. *Exceptional Children*, 63, 463-479.

Rogan, L., & Hartman, L. (1990). Adult outcome of learning disabled students ten years after initial follow-up. *Learning Disabilities Focus, 5*, 91-102.

Shulman, S., Carlton-Ford, S., Levian, R., & Hed, S. (1995). Coping styles of learning disabled adolescents and their parents. *Journal of Youth and Adolescence,* 24(3), 281.

Troiano, P. (2003). College students and learning disability: Elements of self-style. *Journal of College Student Development* 44, 404-419.

U. S. Department of Education (2005). *National Longitudinal Transition Study-2 (NTLS2) Wave 3 Parent Interview and Youth Interview/Survey.* Washington, D.C.: Institute of Education Sciences, National Center for Special Education Research. Retrieved from http://ies.ed.gov/ncser/pdf/20093017.pdf

U. S. Department of Education (2006a). *Assistance to States for the Education of Children with Disabilities and Preschool Grants for Children with Disabilities*. Washington, D. C.: Office of Special Education and Rehabilitation, Office of Special Education Programs. Retrieved from http://idea.ed.gov/explore/view/p/%2Croot%2Cregs%2C

U. S. Department of Education (2006b). *28th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2006,* Vol. 1. Washington, D.C.: Office of Special Education and Rehabilitation, Office of Special Education Programs. Retrieved from http://www.ed.gov/offices/OSERS/OSEP.

Vogul, S., Hruby, P.J., & Adelman, P. B. (1993). Educational and psychological factors in successful and unsuccessful college students with learning disabilities. *Learning Disabilities Research and Practice 8*(1), 35-43.

Wilgosh, L., Sobsey, D., Cey, R., & Scorgie, K. (2008). Life management of post-secondary students with disabilities. *Developmental Disabilities Bulletin, 36*(1), 199-224.

APPENDIX A: Review of Literature

High school graduates face significant challenges in making the transition to adult life. Individuals with learning disabilities face the same challenges as their peers, but with greater risk due to difficulties with school work (Lerner, 2003). College students are expected to analyze information, apply knowledge, and make decisions, but, due to cognitive difficulties and academic struggles, students with learning disabilities may not acquire and apply these skills as quickly or efficiently as students without disabilities (Gregg, 2007). As a result, students with learning disabilities are less likely to enroll in a four-year university (U.S. Department of Education, 2005).

Learning Disabilities

The Individuals with Disabilities Education Improvement Act (IDEA) defines learning disabilities as cognitive disorders associated with difficulties in understanding spoken or written language (U. S. Department of Education, 2006a). Individuals are affected by learning disabilities in a variety of ways, including difficulties with listening, writing, speaking, reading, and math calculating. Deficits in these areas significantly affect a student's ability to make progress in school without specially designed instruction or appropriate accommodations.

Children with learning disabilities. As a result of these challenges, 54.5% of students with learning disabilities graduated with high school diplomas in 2004 (U. S. Department of Education, 2006b), compared to 74.3% of the general school population (Laird, DeBell, &

Chapman, 2006). Individuals with learning disabilities who enter the work force typically accept lower paying jobs than their peers without disabilities (Dickinson & Verbeek, 2002).

The latest report to Congress indicates that just over four percent of the total school population, or 46.4 % of students with disabilities, receive special education and related services for specific learning disabilities (U. S. Department of Education, 2006b). Some of these students go on to attend college. Results from the National Longitudinal Transition Study indicate that 49% of students with learning disabilities receive some postsecondary schooling (U. S. Department of Education, 2005). Of this population, about 34% attend a junior college and about 16% enroll in a four-year university (U. S. Department of Education, 2005). It is evident that while many individuals with learning disabilities drop out of high school and accept low status jobs, others can be found enrolled in four-year universities, living independently, and working toward successful careers.

Adults with learning disabilities. Learning disabilities are an integral part of the lifespan of affected individuals. Gerber and Ginsberg (1990) found that the difficulties persons with learning disabilities experienced in their younger years did not disappear as they grew to adulthood. Most of the 133 adults in the study reported that their most difficult areas of functioning grew more challenging over time, perhaps due to the higher demands of adulthood. However, adults with learning disabilities can choose whether or not to disclose their condition. Many see learning disabilities as related to school rather than day-to-day adult life; hence, they weigh the social risks of disclosure against the rewards of understanding and accommodation (Taymans et al., 2009).

Self-perception is a factor in determining adults' level of comfort with their disabilities. Polloway, Shewel, and Patton (1992) reported that the development of coping strategies such as learning to use computer programs and relying on a dictionary had a positive influence on participants' success in life. The underlying strategy for coping with a learning disability was the individuals' abilities to identify and use personal strengths to compensate for specific weaknesses (Polloway et al. 1992). Personal strengths were also important indicators of self-perception, as reported by Wilgosh, Sobsey, Cey, and Scorgie (2008). Study participants reported that successfully dealing with their disabilities fostered improvements in determination, persistence, confidence, and coping skills, as well as improved relationships and self-advocacy (Wilgosh et al. 2008).

Another qualitative study compares adults with learning disabilities in two groups, successful and unsuccessful. Gerber and Ginsberg (1990) found that the successful adults shared the common themes of making internal decisions and becoming adaptable in external situations. Internal decisions included wanting to achieve, goal-setting, and thinking more positively about their learning disability. It was noted that success appeared over time with conscious effort. A key component in the achievements of successful adults was the recognition, understanding, and action that took place in regards to their personal strengths and limitations. In order to succeed, participants reported that they had to be flexible in a society that was biased towards individuals without disabilities. This adaptation occurred when the participants persevered, selected environments in which they could succeed, created new ways to achieve goals by making personal accommodations, and selected a network of supportive and helpful individuals (Gerber

& Ginsberg, 1990). These factors, among others, have helped students with learning disabilities succeed as adults in a variety of postsecondary settings.

Goldberg, Herman, and Spekman (1992) conducted a study to explore factors in the past and current life experiences of young adults with learning disabilities. The authors used qualitative and quantitative measures to determine whether young adults with learning disabilities were successful. The following factors were used to determine success: (a) the individuals' view of themselves as doing well and being content with their present situation, (b) whether the individuals' present life experiences were in line with their self-perceptions and goals, and (c) the individuals' achievements based on the expectations of society for this time of life and what is socially accepted. The findings showed three themes that were common among successful participants. First, the individuals had realistic views of their situations and accepted their disabilities. They demonstrated emotional stability and acknowledged their strengths and weaknesses. Second, successful participants set realistic goals for themselves. They expressed an understanding of and appreciation for the step-by-step process of gaining skills and accomplishing goals. Third, individuals were surrounded by supportive individuals. The participants mentioned specific people who had expressed realistic expectations and encouraged them to do their best. This support was primarily from family members, but those without families found support systems in teachers or other mentors (Goldberg, Herman, & Spekman, 1992).

Learning disabilities affect individuals throughout their lives. Adults with learning disabilities who consider themselves successful cited coping strategies, positive decision making, support systems, and acceptance of their disability as contributing factors to success.

College students with learning disabilities. Researchers have sought to determine factors that make it possible for some adults with learning disabilities to succeed in college. As a result, several factors that seem to affect success have emerged in the literature. In a study with disability services counselors for college students, results showed that motivation, preparation, and self-advocacy skills were the main characteristics in successful college students with disabilities (Hicks-Coolick & Kurtz, 1997). Other factors in successful college students with learning disabilities have emerged, including private tutoring, participation in regular coursework during school years, psychological support, and postsecondary schooling prior to entering a four-year university (Vogul, Hruby, & Adelman, 1993); knowledge of computers, books on tape, and self-advocacy (Reis, Neu, & McGuire, 1997); and campus services, priority registration, family support, accommodations on tests, and counseling (Greenbaum, Graham, & Scales, 1995).

Pertinent to this study is the effect of family support on the success of college students. Troiano (2003) found one participant who reported that she sends home college coursework to her father, who reads the material and assists her in completing her assignments from home. Participants with learning disabilities in a study by Greenbaum, et al. (1995) reported that academic and emotional support from family members was the most influential aspect of their success in college.

Transition to college. In a study by Janiga and Costenbader (2002), a survey from college service coordinators indicated significantly low satisfaction with the transition services provided to students with learning disabilities. Most of the participants, across 74 universities, agreed that high school programs are not effectively preparing their students for university life (Janiga & Costenbader, 2002). In an effort to ease the transition from high school to college, most universities offer a one-or two-day orientation for new students. During this time, new students meet important personnel and begin to become familiar with the campus. However, this brief introduction to college life is not sufficient support for students with learning disabilities (Dalke & Schmidt, 1987). As the number of students with learning disabilities who enroll in college increases (Foley, 2006), the need for effective transitional programs to assist students with learning disabilities as they move from high school to college is evident. Aune (1991) studied a transition plan for students with learning disabilities to assist them in their transition to a postsecondary setting. The participants were assigned a transition counselor who worked with the students from their junior to senior year of high school. Individual counseling was provided to teach students how to set goals and take responsibility for their Individualized Education Plan objectives. Results indicated that 26 of the 31 students spent the first year after high school graduation in college, in the military, or in full-time employment. At the end of the transition, students knew more about specific programs and services in postsecondary schools. They were able to identify specific accommodations and were also more willing to identify themselves as having a learning disability. The author pinpointed several factors in the successful transition of

high school students to college, including college preparatory coursework, student participation, a transition team, and transition case management (Aune, 1991).

DO-IT Scholars is a summer program for students with all types of disabilities, in which directors aim to prepare students for college in specific and practical ways. It incorporates factors such as campus tours, computer and internet lessons, and social skills practice to help students become familiar with the pressures of a college setting. Out of 168 students who participated in the DO-IT Scholars program, over 90% attended college. Many students reported increased confidence in finding success in postsecondary schools (Burgstahler, 2003).

A five-week summer program was created to help prepare students with learning disabilities for the transition to college (Dalke & Schmidt, 1987). This program was conducted in an environment that resembled a college setting. Each student was formally assessed to determine strengths and weaknesses. The results of the testing were shared with each student to help them gain an informed, realistic view of themselves. They then received intensive instruction in weak academic areas and took organized tours of campus. Support services offered at each campus were discussed and students received instruction on how to get tickets to social events, where to park, and other common demands on new freshman. All 23 participants in this study reported positive results and expressed that they felt more prepared to engage in college life (Dalke & Schmidt, 1987).

Preparatory factors based in families. Families can have a positive role in the lives of individuals with disabilities during their school years. Shulman, Carlton-Ford, Levian, and Hed (1995) found that adolescents have more confidence in various tasks when they believe their

parents support them. Likewise, without the support of parents, an adolescent's ability to master new skills can be negatively affected. In this study, students with and without learning disabilities and their parents completed questionnaires reflecting their coping strategies. Parents of students with learning disabilities appeared to have a significant effect on the autonomy of their children in dealing with problems. If a parent turned to others for answers and support, the child with learning disabilities was more likely to seek help when encountering a problem. The tendency to seek outside support was evident in many situations (Shulman et al. 1995).

Rogan and Hartman (1990) used interviews and surveys to gather information from adults who were classified with learning disabilities during their school years. All 88 participants reported that family support systems had been essential in their lives. Participants mentioned that they continue to seek guidance from family members in making large purchases, reading complex material, and managing finances. As the groups were primarily from upper and middle class families, all participants' parents had the resources necessary for additional services. Most families were involved in supporting their child at school and collaborating with teachers regarding placement and services (Rogan & Hartman). In a 20-year longitudinal study of individuals with learning disabilities, Raskind, Goldberg, Higgins, and Herman (2002) found that the use of support systems was one of the factors that had more impact on student success than intelligence and academic assessments, age, gender, race, or socioeconomic status (Raskind et al. 2002).

Polloway, Shewel, and Patton (1992) noted that successful individuals with learning disabilities found support in particular family members. They reported that having a family

member advocate for appropriate placement in school programs triggered effective teaching and accommodations. Participants also reported that family members encouraged their involvement in after-school organizations that fostered social relationships and helped the individuals with learning disabilities feel successful. These positive relationships promoted the optimistic view most participants had of themselves, which resulted in success in post-secondary settings (Polloway, et al. 1992).

Troiano (2003) gathered information from college students with learning disabilities regarding family support during school years. Many students reported having active parents who were engaged in their education. Parents were involved in helping their children get the accommodations they required and helped their children complete homework assignments. For a few students, this parental support continued throughout college years. Students who reported having a support system also reported that they had an understanding and acceptance of their disability (Troiano, 2003).

In summary, college students with learning disabilities report success as a result of preparation, self-advocacy skills, accommodations, and family support. However, past studies provide little detail to inform families about specific ways to help their children with learning disabilities prepare for college.

THESIS REFERENCES

Aune, E. (1991). A transition model for postsecondary-bound students with learning disabilities. *Learning Disabilities Research and Practice, 6,* 177-187.

Burgstahler, S. (2003). DO-IT: Helping students with disabilities transition to college and careers. *National Center on Secondary Education and Transition,* 2.

Dalke, C., & Schmitt, S. (1987). Meeting the transition needs of college-bound students with learning disabilities. *Journal of Learning Disabilities, 20,* 176-180.

Dickinson, D. L., & Verbeek, R. L. (2002).Wage differentials between college graduates with and without LD. *Journal of Learning Disabilities, 35,* 181–182.

Foley, N. (2006). Preparing for college: Improving the odds for students with learning disabilities. *College Student Journal, 40,* 641-645.

Greenbaum, B., Graham, S., & Scales, W. (1995). Adults with learning disabilities: Educational and social experiences during college. *Exceptional Children,* 61, 460-471.

Gregg, N. (2007). Underserved and unprepared: Postsecondary learning disabilities. *Learning Disabilities Research & Practice, 22,* 219–228.

Hicks-Coolick, A., & Kurtz, D.P. (1997). Preparing students with learning disabilities for success in postsecondary education: Needs and services. *Social Work in Education, 19,* 31-43.

Janiga, S., Costenbader, V. (2002). Students with learning disabilities: A survey of college

service coordinators. *Journal of Learning Disabilities, 35*, 462-488.

Laird, J., DeBell, M., & Chapman, C. (2006). *Dropout Rates in the United States: 2004 (NCES 2007-024).* Washington, DC: U. S. Department of Education, National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch

Lerner, J. W. (2003). *Learning disabilities. Theories, diagnosis, and teaching strategies* (9th ed.). Boston, MA: Houghton Mifflin.

Polloway, E., Schewel, R., & Patton, J. (1992). Learning disabilities in adulthood: Personal perspectives. *Journal of Learning Disabilities, 25*, 520-522.

Raskind, M., Goldberg, R., Higgins, E., & Herman, K. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37,* 201-208.

Reis, S., Neu, T., & McGuire, J. (1997). Case studies of high-ability students with learning disabilities who have achieved. *Exceptional Children, 63,* 463-479.

Rogan, L., & Hartman, L. (1990). Adult outcome of learning disabled students ten years after initial follow-up. *Learning Disabilities Focus, 5*, 91-102.

Shulman, S., Carlton-Ford, S., Levian, R., & Hed, S. (1995). Coping styles of learning disabled adolescents and their parents. *Journal of Youth and Adolescence, 24*, 281.

Spekman, N., Goldberg, R., Herman, K. (1992). Learning disabled children grow up: A search for factors related to success in the young adult years. *Learning Disabilities Research & Practice, 7,* 161-170.

Taymans, J. A., Swanson, H. L., Schwarz, R. L., Gregg, N., Hock, M., & Gerber, P. J. (2009). *Learning to achieve. A review of the research literature on serving adults with learning disabilities.* Washington, D. C.: The National Institute for Literacy. Retrieved from http://www.nifl.gov/publications/pdf/L2ALiteratureReview09.pdf

Troiano, P. (2003). College students and learning disability: Elements of self-style. *Journal of College Student Development 44,* 404-419.

U. S. Department of Education (2005). *National Longitudinal Transition Study-2 (NTLS2) Wave 3 Parent Interview and Youth Interview/Survey.* Washington, D.C.: Institute of Education Sciences, National Center for Special Education Research. Retrieved from http://ies.ed.gov/ncser/pdf/20093017.pdf

U. S. Department of Education (2006a). *Assistance to States for the Education of Children with Disabilities and Preschool Grants for Children with Disabilities*. Washington, D. C.: Office of Special Education and Rehabilitation, Office of Special Education Programs. Retrieved from http://idea.ed.gov/explore/view/p/%2Croot%2Cregs%2C

U. S. Department of Education (2006b). *28th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2006,* Vol. 1. Washington, D.C.:

Office of Special Education and Rehabilitation, Office of Special Education Programs. Retrieved from http://www.ed.gov/offices/OSERS/OSEP.

Vogul, S., Hruby, P.J., & Adelman, P. B. (1993). Educational and psychological factors in successful and unsuccessful college students with learning disabilities. *Learning Disabilities Research and Practice, 8*, 35-43.

Wilgosh, L., Sobsey, D., Cey, R., & Scorgie, K. (2008). Life management of post-secondary students with disabilities. *Developmental Disabilities Bulletin, 36*, 199-224.

APPENDIX B: Consent Form

Introduction: The purpose of this study is to identify childhood family factors that college students with learning disabilities report helped prepare them for enrollment in a university. You were invited to participate because you were served in special education for learning disabilities at some time during grades K-12.

The investigators are Dr. Gordon Gibb and Abby Cook. Dr. Gordon Gibb is a professor in the Department of Counseling Psychology and Special Education (CPSE). Abby is a graduate student in the CPSE department.

Procedures: You will take part in one 30-minute interview. The interview will be digitally recorded and transcribed, and the data will be analyzed and reported by the investigators.

Risks/Discomforts: There is minimal risk to you as a participant. You may choose whether or not to answer the interview questions without penalty or prejudice. Your participation or refusal to participate will not affect your services at the Accessibility Center in any way.

Benefits: There are no direct benefits to you as a participant. Potential benefit to society lies in identifying factors under the control of parents and families that may help prepare children with learning disabilities for college.

Confidentiality: All personal information collected during this study including names will be kept confidential. Data gathered from the interviews will be reported as a group, without being identifiable to any specific person. All participant information, audio recordings, transcripts, and data analyses will be kept in a locked faculty office. Only those directly involved in the study will have access to the information. Identifying information will be destroyed upon completion of the study.

Compensation: Participants will receive a gift certificate to a local eatery.

Participation: Participation in this study is voluntary. You have the right to withdraw at any time or decline to participate entirely without consequence.

Questions about the Research: You have the right to contact the investigators if you have questions about this study. Contact information for Abby Cook and Gordon Gibb is listed here:

Abby Cook: 925-708-9657, abigail.kirk@wasatch.edu

Dr. Gordon Gibb: 801-422-4915, gordon_gibb@byu.edu

Questions about your Rights as Research Participants: Participants may contact the IRB Administrator with questions about their rights at any time. IRB Administrator, Brigham Young University, A-285 ASB, Brigham Young University, Provo, UT 84602; 801-422-1461; irb@byu.edu

I understand and have received a copy of the consent form and agree to participate in the research.

_____ _____

Participant Date

APPENDIX C: Recruitment Email

Dear Student,

We are writing to invite you to voluntarily participate in a research study being conducted at Brigham Young University. The research question for the study is "What family factors helped prepare students with learning disabilities for enrollment in a 4-year university?"

We are seeking individuals who were served in special education for learning disabilities at some time in their elementary or secondary school years. Participants will take part in a 30-minute confidential interview that will be audio recorded for transcription and analysis. Each participant will read and sign a consent document describing the study, the potential risks and benefits, and the measures used to maintain strict confidentiality.

While we are offering the opportunity to participate to students utilizing the Accessibility Center, the UAC is not otherwise involved in this study, and your participation or refusal to participate will not affect your services at the Accessibility Center in any way.

Participants will be given a gift certificate redeemable at Jamba Juice for their time.

If you are interested in participating in this study, please contact one of us as noted below.

Abby Cook, graduate student: 925-708-9657, abigail.kirk@wasatch.edu

Gordon Gibb, associate professor: 801-422-4915, gordon_gibb@byu.edu

Best regards,

Gordon Gibb, PhD

Associate Professor

Counseling Psychology and Special Education

McKay School of Education

Brigham Young University

Appendix D: Interview Protocol

1. In which grades did you receive special education services for learning disabilities?

    Planned prompts

    a. In what setting (regular classroom, resource room, self-contained classroom) did you receive special education services?

2. Describe your experiences in special education.

    Planned prompts

    a. What subjects did you work on in the resource (or special education) program?
    b. How did resource (or special education) affect your progress in school?
    c. Describe instructional practices that influenced your achievement in school.
    d. How were your resource (or special education) classes different than your other classes?
    e. At what point did your special education services begin?
    f. For what period of time did they continue?
    g. Did you receive a form of "private" special education testing or services outside of the public education system?

3. Describe the effects of learning disabilities on your achievement in school.

    Planned prompts

    a. How did your learning disability affect reading in school?
    b. How did your learning disability affect writing in school?
    c. How did your learning disability affect math in school?
    d. How did your learning disability affect other classes?
    e. How did your learning disability affect your feelings about yourself?
    f. What were the effects of your learning disability on your relationships with other children?
    g. What were the effects of your learning disability on your relationships with your siblings?

4. Describe your parents' involvement with your schooling.

    Planned prompts

    a. Describe an occasion when your parent or parents met with school personnel to address a concern with your learning.
    b. Were both parents involved?
    c. Describe an occasion, or even an at-home routine, when your parent or parents supported you at home in your educational needs.

5. With regards to your learning disability, what did your parents do that contributed to you eventually entering college?

Planned prompts

a. What did your parent or parents do at home that contributed to you eventually entering college?
b. How did your parent or parents interact with the school that contributed to you eventually entering college?
c. What did other family members do that contributed to you eventually entering college?