

COLLEGE STUDENTS' COMFORT WITH ASSERTIVE BEHAVIORS: AN  
ANALYSIS OF STUDENTS WITH AND WITHOUT DISABILITIES IN THREE  
DIFFERENT POSTSECONDARY INSTITUTIONS

A Dissertation

by

KRISTIE SCRUTCHFIELD ORR

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2003

Major Subject: School Psychology

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## ABSTRACT

College Students' Comfort with Assertive Behaviors:  
An Analysis of Students with and without Disabilities  
in Three Different Postsecondary Institutions. (December 2003)

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First-year college students have many new responsibilities and challenges. They are faced with increasing autonomy and must find resources and people to help guide them. Students with disabilities face an even greater need to be independent and juggle more responsibilities, as they must disclose their disabilities to campus personnel if they need accommodations and become a self-advocate. In order to self-advocate, students must feel comfortable with being assertive.

This study examined the differences in comfort with assertive behaviors between students with and without disabilities at three different types of postsecondary institutions (junior college, 4-year regional university, and 4-year Research 1 university). Two hundred seventy-eight freshman and sophomore students completed a questionnaire concerning their comfort with many different assertive behaviors. The following three variables were examined: a) college students' comfort with overall assertiveness; b) college students' comfort with verbal assertiveness; and c) college students' comfort with prosocial verbal skills.

There were no significant differences between students with disabilities and students without disabilities in terms of their discomfort with assertive behaviors on any of the three variables. Males were more comfortable with assertive behaviors than females in terms of their overall assertiveness and their verbal assertiveness. Students from the 2-year junior college were more comfortable with overall assertiveness and verbal assertiveness than students at either the 4-year regional university or the 4-year Research 1 university. There were no differences between groups in terms of their prosocial verbal skills.

Conclusions about the differences found in the study are reported. Recommendations for disability service providers are provided, as well as suggestions for future research.

## DEDICATION

This dissertation is dedicated to my family. To my husband, Joe, and daughters, Jessica, Laura, and Emmalee, thanks for the sacrifices that you made in order for me to be able to finish my degree. To my parents (Dottie and Leon Scrutchfield) and parents-in-law (Dick and Janice Orr), thank you for all of your help and support even during those times when I needed a break and wasn't working on my dissertation at all. I love you all very much!

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## CHAPTER I

### INTRODUCTION

College is a time of transition for young adults. First-year students often move out of their parents' homes and have to learn to become more self-sufficient. Responsibilities such as paying bills, taking care of an apartment or dorm room, keeping track of where they are supposed to be at different times, and even getting themselves up in the morning are often new to college freshmen. Many students have difficulty with this transition and their schoolwork often suffers.

Along with the changes in responsibilities that new college students face outside of class, there are also many differences in the academic demands of college as compared to high school. Brinckerhoff (1996) points out eight major differences between high school and college: amount of in-class time, opportunities for direct teacher contact, class size, class time versus studying required outside of class, amount of feedback received, complexity of thinking required for college, the external feedback for grades or assignments received in high school, and the independent time management required for college. Other researchers (Weinstein, Johnson, Maloch, Ridley, & Schults, 1988; Shaw, Brinckerhoff, Kistler, & McGuire, 1991; Brinckerhoff, Shaw, & McGuire, 1992) have found several other differences between high school and college, such as: instructional method (experiential versus lecture based), frequency of

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This dissertation follows the style and format of the *Journal of Postsecondary Education and Disability*.

class meeting times (every day versus two or three times a week), structure provided for assignments (step-by-step instructions given versus open-ended assignments), and training of instructors (teachers trained in teacher education programs versus instructors trained in content areas). Students who are used to small classes in which they have frequent tests and assignments with many opportunities for feedback from the instructor and easy access to the instructor for any questions or problems they may have are often overwhelmed by the college experience.

Besides academic and "real world" responsibilities, college students are in a period of attempting to define themselves. These young adults are in the process of determining "who they are" or establishing their identity. Chickering (1969) indicates that the development of identity is the "single major task for young adults." College age individuals are in the process of learning competence intellectually, physically, and socially. They are learning to become autonomous and becoming confident in their abilities (Chickering, 1969).

Although all young adults entering college experience these transitions, students with disabilities may be particularly vulnerable to difficulties with their changing roles. It has been found that 64% of students without disabilities enrolling in postsecondary education have attained a degree or vocational certificate five years later or were still enrolled in postsecondary education, while only 53% of students with disabilities are in the same situation (U.S. Department of Education, 1999). Students with disabilities often have factors other than their disabilities interfering with their educational process. Compared to students without disabilities, they are more likely to have delayed

enrollment in postsecondary education for more than a year after high school, to have received a GED or alternative high school credential, and to have dependents other than a spouse (U.S. Department of Education, 1999).

Students with disabilities have the additional transition of being supported by different federal laws in college than prior to college. The Individuals with Disabilities Education Act of 1990 (IDEA, P.L. 94-142) and the reauthorization of IDEA (Individuals with Disabilities Education Act Amendments of 1997, P.L. 105-17) apply to children ages 5 to 21 who have not finished high school. The Americans with Disabilities Act of 1990 (ADA, P.L. 101-336) and Section 504 of the Vocational Rehabilitation Act of 1973 cover students during the postsecondary years. The main difference between the federal legislation is the need for students to identify themselves as having a disability and advocate for their own needs after they finish high school (Brinckerhoff, Shaw, & McGuire, 1992).

Due to the need to self-advocate, it is very important that students with disabilities have assertiveness skills. Research concerning the assertiveness of individuals with disabilities has been mixed with students with disabilities being more assertive, less assertive, or equally assertive as students without disabilities (Gambrill, Florian, & Splaver, 1986; Mansour, Zernitsky-Shurka, & Florian, 1987; Reber, 1999; Joiner, Lovett, & Hague, 1982; Starke, 1987; Kronick, 1981).

Gender is also often thought to be associated with assertiveness. Studies looking at gender and assertiveness in the general population have also found mixed results. Florian and Zernitsky-Shurka (1987) found no gender differences in assertiveness with

Israeli students. In contrast, Costa, Terracciano, & McCrae (2001), found that males were more assertive than females in their cross-cultural analysis of adults and college students from 26 different countries,.

Although students with disabilities may have a greater need to be assertive, everyone has the occasion to assert themselves at some point or another. According to self-efficacy theory, individuals choose to behave in certain ways due to their expectations of the consequences of their actions and their expectations of how well they will be able to perform certain behaviors (Bandura, 1977). In line with this theory, students' comfort level with assertive behaviors plays a large role in whether or not they decide to be assertive. If students feel comfortable with being assertive, they will be more likely to assert themselves, especially if they feel that they will be able to get what they need.

Due to the changes involved with entering a post-secondary institution, especially in terms of the need to be a self-advocate, many institutions have developed transition programs for students with disabilities. These programs attempt to teach students how to be self-advocates and can play an integral role in their success. The success of postsecondary programs for students with disabilities (including transition services as well as disability services) appears to be very important. Students with disabilities who are successful in earning bachelor's degrees have similar early labor market outcomes and graduate school enrollment rates as students without disabilities (U.S. Department of Education, 1999). Those who are able to persist through the transition of high school to postsecondary education are often very successful.

### Purpose of the Study

Students with disabilities have many more responsibilities in order to receive academic accommodations in college than they did in high school. Because of this increased responsibility, students often must become self-advocates. They must identify themselves to the college or university as a student with a disability and also be able to articulate what academic accommodations they require. Students without disabilities often do not have to demonstrate similar levels of assertiveness or advocacy in their education. It is important to determine if students with disabilities have the skills necessary to get their needs met and if they are comfortable with displaying these skills.

This study is a partial replication and extension of a previous study conducted at Texas A&M University by Reber (1999). Reber found that students with disabilities were no different than those without disabilities in terms of their comfort with assertive behaviors and likelihood of displaying assertive behaviors. These findings may be related to the institution in which the study was conducted, and Reber suggested further research in this area. This study is an attempt to determine if similar results will be found for students at other types of postsecondary institutions and/or if students with disabilities from varying types of institutions differ from each other in terms of their comfort with assertive behaviors. The results have implications for the provision of disability services in that students from different types of institutions may require different services (i.e. assertiveness training, information about their rights, etc.) in order to be successful.

### Definition of Terms

Disability- “(A) A physical or mental impairment that substantially limits one or more major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment.” (Public Law 101-336, 1990).

Cognitive disability- A mental impairment that substantially limits one or more major life activities as previously defined. Examples include learning disabilities and attention deficit hyperactivity disorder.

Emotional disability- A psychological impairment that substantially limits one or more major life activities as previously defined. Some examples include: depression, anxiety, bipolar disorder, and obsessive-compulsive disorder.

Physical disability- An impairment resulting from either a health condition or injury. Some examples include: diabetes, cancer, quadriplegia, and epilepsy.

Assertion- "The direct and appropriate communication of person's needs, wants, and opinions, without punishing, threatening, putting down others, and doing this without fear during the process" (Galassi & Galassi, as cited in Joiner et al., 1982, p. 55).

Self-advocacy- “Speaking out on one’s own behalf” (Wilson, 1994, p.153).

Self-efficacy- The “judgments of the likelihood that one can organize and execute given courses of action required to deal with prospective situations” (Bandura, 1980, p. 263).

### Research Questions

The following three questions are the basis for this research study:

- 1) What effect do gender, institution and disability status have on college students' overall discomfort with assertiveness?
- 2) What effect do gender, institution and disability status have on college students' discomfort with verbal assertiveness?
- 3) What effect do gender, institution and disability status have on college students' discomfort with prosocial verbal skills?

### Design of the Dissertation

This dissertation is designed in the following manner. Chapter I was the introduction including the purpose of the study, definitions of relevant terms, the research questions, and the design of the dissertation. Chapter II consists of the literature review. Chapter III describes the methods, including the participants, instruments and measures, design and procedures, and research questions and statistical analyses. Chapter IV consists of the results of the analyses. Chapter V presents a summary of the study, conclusions, limitations, and recommendations and research implications.

## CHAPTER II

### LITERATURE REVIEW

This chapter will review pertinent literature to this study. Included in the literature review will be information about college student development including the differences between high school and college, the psychosocial development of college students, characteristics of college students in general, and the characteristics of college students with disabilities. Studies concerning college choice will also be reviewed. In examining assertiveness, literature concerning self-advocacy, gender and assertiveness, and assertiveness of students with disabilities will be discussed. Specific challenges for college students with disabilities, the federal legislation that applies to college students with disabilities, and the need for college students with disabilities to be assertive will also be addressed. Finally, a summary and rationale for the study will be provided.

#### Introduction

More and more high school students are choosing to attend college after high school. The U.S. Department of Education (2003) reports that total undergraduate enrollment has increased over the past thirty years and is projected to continue to increase. Attendance at four-year institutions is expected to increase at a faster rate than attendance at two-year institutions. This upward trend is especially true for students with disabilities. In 1994, 62.8% of students with disabilities who graduated from high school went on to some form of postsecondary education (U.S. Department of Education, 1999). Enrolling in a postsecondary institution is only the beginning of college students' journey. Of the students with disabilities who started their college

careers in 1989-1990, 53% had finished their degrees or were still enrolled in 1994 (U.S. Department of Education, 1999). During that same time period, 64% of students without disabilities had completed their degrees or were still enrolled.

In 1999-2000, nine percent of all undergraduate students at degree-seeking institutions reported that they had a disorder or condition that created difficulties for them as a student (U.S. Department of Education, 2002). When asked specifically, "Do you consider yourself to have a disability?" four percent indicated that they did.

Students with disabilities were different in several respects than students without disabilities. Students with disabilities in general were older, more likely to be in the lowest quartile for their income, more likely to have children, more likely to be single parents, and less likely to have parents who had obtained at least a bachelor's degree.

### Transition and Development Issues for College Students

#### *Differences between High School and College*

Given the statistics about college students, it is important to examine issues surrounding the transition to college for students with and without disabilities. The adjustment to college is difficult for many students. The requirements and responsibilities of college are much different than high school. Shaw et al. (1991) identified the following changes for first year college students. College students have much less time in class per week (12 hours versus 30 hours on average) and are expected to study much longer (3-4 hours per day versus 1-2 hours per day). They have fewer opportunities to compensate for any poor grades (i.e. fewer tests, possibly no quizzes, fewer or no homework grades or in-class assignments). The biggest challenge that

beginning college students face is the lack of structure in their daily routines. College students usually have the freedom to decide whether to go to class or not, when to study (if at all), what to do with their free time, etc. (Shaw et al., 1991).

The differences between high school and college go beyond just the academic setting. Students experience new and increased social pressures and expectations, their relationships with their friends and family change, they may leave home and their previous support system of family and friends, they are more independent and accountable for their actions and behaviors, and they have increased financial responsibilities. Students often have changed sleeping and eating routines (i.e. going to bed later at night but still having to get up for class the next morning). Depending on the size of the campus, students may have many buildings to learn and distances to travel to get from one building to another.

Beyond the academic and lifestyle changes that occur in college, there are also personal changes that occur for college students. During college, students face many developmental changes that help define them as individuals.

#### *Psychosocial Development of College Students*

College is a time of great psychosocial development. Chickering (1969) described seven vectors of development for college age individuals: developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, and developing integrity. Chickering and Reisser (1993) further developed the seven vectors. Two vectors have the most

relevance for this study: developing competence and moving through autonomy to interdependence (named developing autonomy in Chickering's 1969 edition).

Developing competence includes the development of intellectual competence (learning both subject matter material and how to learn such as critical thinking, judgment, etc.), physical and manual competence, and interpersonal competence (effective communication with individuals and groups). Developing competence includes not only measurable abilities, but also a sense of competence whereby students feel that they are able to accomplish things. Chickering (1969) defines a sense of competence as "the confidence one has in his ability to cope with what comes and to achieve successfully what he sets out to do" (p. 71).

Moving through autonomy toward interdependence focuses on students' ability to not only take care of themselves independently, but also to use their resources and those around them in their day-to-day functioning. Reisser (1995) identifies that in order to reach emotional maturity, students must separate from their parents and begin to look to their peers, authorities, institutional support systems, and themselves for support and guidance.

More recently, Masten and Coatsworth (1998) identified several developmental tasks that young adults attempt to master in becoming competent individuals. Social competence with their peers, socially appropriate conduct, and academic achievement are all essential to the success of individuals as they move from childhood through adolescence (which is when they typically begin college). Individuals who have achieved competence in those three areas are typically successful in overcoming any

adversities that they may have faced.

### *Characteristics of College Students*

Students come to college with a variety of similar characteristics. Although every student is different, they all have been born into a world with similar circumstances and have some things in common. Students entering college now are described as being part of the Millennial generation (Howe & Strauss, 2000). The Millennials are optimistic, cooperative team players who follow rules and accept authority. They score higher on aptitude tests than in previous years, and eight in ten teenagers now say that it is “cool to be smart” (Howe & Strauss, 2000). Strauss and Howe (1991) describe the Millennials as being a much wanted and much watched over generation, whose parents protected them from as many things as possible (drugs, violence, etc.). Parents of the college students entering college during this generation are often active participants in their students’ college experiences (Daniel, Evans, & Scott, 2001).

### *Characteristics of College Students with Disabilities*

Although college students with disabilities vary widely in their characteristics, some researchers have attempted to find commonalities. Most of the research to date has looked primarily at students with learning disabilities. Studies have found that, as a group, college students with learning disabilities are higher functioning than school-age children with learning disabilities (Hughes & Smith, 1990).

Costello and English (2001) employed Chickering’s theory of college student development in their examination of the psychosocial development of college students

with and without learning disabilities. They found that, overall, college students with and without learning disabilities scored more alike than different in terms of their psychosocial development. The two areas where the students with disabilities were different than those without were academic autonomy and mature interpersonal relationships. Although the differences they found were not large, they were statistically significant and indicated that students with learning disabilities face more difficulty in their ability to make academic plans and interact with others in mature manner. These two skills are important in students with disabilities being assertive and self-advocating, as they must relate appropriately with their instructors and be able to make an academic plan and discuss it with their instructors.

There have been mixed findings about the psychosocial characteristics of college students with disabilities. In studying self-esteem and self-efficacy, Blake and Rust (2002) found that college students with physical and learning disabilities had self-esteem and self-efficacy scores that were the same as or higher than a normative sample. This supports the view that students with disabilities vary widely along the normal continuum and most findings about psychosocial functioning would be similar for students with disabilities and those without. Saracoglu, Minden, & Wilchesky (1989) found conflicting results in that college students with learning disabilities reported significantly poorer academic adjustment, lower self-esteem, and poorer emotional adjustment than their peers who did not have learning disabilities. Hartman-Hall and Haaga (2002) found that the attitude about their disability has a moderating effect on the self-esteem of college students with learning disabilities. Students who viewed their learning

disabilities as more stigmatizing, non-modifiable and global were less likely to seek help when they needed it and had lower self-esteem than those with learning disabilities who had a more positive outlook about having a learning disability.

The definition of learning disabilities most widely recognized at this point also points to the existence of social difficulties in some students with learning disabilities:

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities.

These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. *Problems in self-regulatory behaviors, social perception, and social interaction may exist* [italics added] with learning disabilities but do not by themselves constitute a learning disability...(National Joint Committee on Learning Disability, 1991, p. 65)

College students with disabilities may also experience higher levels of anxiety than college students without disabilities. Richard (1995) posits that freshmen with Attention Deficit Disorder may experience anxiety at the increased performance expectations of postsecondary institutions. Some students with disabilities may not have been placed in the college “track” in high school and may not be sufficiently prepared for college (Richard, 1995).

Mangrum and Strichart (1984) have identified the following affective difficulties for college students with learning disabilities: establishing a positive self-concept, establishing a sense of security, establishing a sense of competence, developing self-

confidence, avoiding overdependence on others, accepting criticism by others, adjusting to the feelings of others, tolerating frustration, viewing their life prospects optimistically, trusting others, acting maturely, clarifying their values about life, meeting responsibilities, curbing impulsive behavior, subordinating their own welfare to that of others, maintaining motivation, controlling anxiety, and interacting with others in a nondefensive manner. Cordoni (as cited in Mangrum & Strichart, 1984) identified typical social challenges for students with learning disabilities as: establishing good relationships with others, reading body language and facial expressions, saying what is thought or felt, knowing what to say in a situation, and relating to authority figures.

Although it may be difficult to label students with disabilities as having certain characteristics as a group, there are certain characteristics that can be identified as helping promote success in college students with disabilities. Sanders and DuBois (1996) examined factors which affected adjustment of college students with disabilities and found that effective problem-solving skills, satisfaction with assistance received from the disability services office, and perceived support from individuals in campus organizations all contributed to students' adjustment to college.

College students with disabilities also vary in their awareness of their disabilities. Students with sensory, physical or health problems are most specific in describing their limitations (Hitchings, Horvath, Luzzo, Ristow, & Retish, 1998). Those with learning disabilities are the most vague in their descriptions and often do not seem to have a good understanding of their disability.

## College Choice

Another factor that may play a role in the success of college students is college choice. Deciding which college to attend is often difficult. In deciding which college to attend, students must consider 2-year or 4-year, public or private, small or large, liberal arts or general curriculum. In 1999-2000, 46 percent of undergraduates attended 4-year institutions, while 45 percent attended 2-year institutions (U.S. Department of Education, 2002). During that same school year, 48.6 percent of students with disabilities were enrolled in public 2-year institutions and 37.8 percent were enrolled in 4-year institutions (U.S. Department of Education, 2002). This trend appears to be somewhat stable. In 1995-1996, 49.5 percent of students with disabilities attended 2-year institutions and 39.6 percent attended 4-year institutions.

Characteristics of students who choose to attend 2-year versus 4-year institutions are somewhat different. College students attending 4-year institutions are more likely to be traditional students who are financially dependent on their parents and are enrolled full-time. They report the most important reason for choosing a particular institution to be due to the reputation of the college or university. Students who attend 2-year institutions are more likely to be over 24 years old, be financially independent or parents, and enrolled part-time. They report location as being the most important reason for choosing their institution (U.S. Department of Education, 1998).

College choice also appears to play a role in degree attainment. Velez's (1985) study of the effects of college type on actually finishing college found that students from private colleges were no more likely to attain a degree than those from public colleges.

However, those students who began their college career at 4-year colleges were 19 percent more likely to finish college than those who began at a 2-year college.

### Assertiveness and Self-Advocacy

All college students have the need to be assertive at some point in their college careers. Although assertiveness and self-advocacy are two different constructs, they are interrelated. Assertion is defined as "the direct and appropriate communication of person's needs, wants, and opinions, without punishing, threatening, putting down others, and doing this without fear during the process" (Galassi & Galassi, as cited in Joiner et al., 1982, p.55). Self-advocacy is defined simply as "speaking out on one's own behalf" (Wilson, 1994, p.153). It would be reasonable, then, that in order to be a self-advocate, one must have assertiveness skills.

### *Assertiveness and Gender*

Gender is often thought to be a factor in assertiveness. The stereotype is that men are more assertive than women. Research has actually produced mixed results in the role of gender in assertiveness. Florian and Zernitsky-Shurka (1987) found no gender differences in the comfort with assertive behaviors of males and females in their study of Israeli Arab and Jewish university students. Interestingly, they found that females were actually more likely to perform certain assertive behaviors than males (initiating interaction, giving negative feedback, complimenting others, and admitting personal deficiencies). They postulated that the females in their study were attending "Westernized" universities and may be more likely to assert themselves than the general

population of Israeli and Arab women. On the other hand, Costa et al. (2001) found that men scored higher in assertiveness than women regardless of their cultural affiliation.

#### *Assertiveness and Students with Disabilities*

Another group that may be thought to be less assertive than the general population is students with disabilities. Gambrill et al. (1986) studied college students with and without physical disabilities and found that students with physical disabilities had low discomfort scores with assertive behaviors and a higher probability of performing assertive behaviors. They hypothesized that college students with physical disabilities may be more assertive than noncollege students with physical disabilities due to the challenges and obstacles that students with physical disabilities face in getting into college. College students with physical disabilities may have developed more assertiveness skills in their quest for higher education. Mansour et al. (1987) studied Israeli males with physical disabilities registered with vocational rehabilitation agencies and found similar results (those with disabilities had lower discomfort scores than those without disabilities). Similarly to the college students, it was hypothesized that the individuals who had the skills necessary to maneuver through the vocational rehabilitation system had learned how to assert themselves in a variety of settings.

Some studies have found no differences in assertiveness of individuals with and without disabilities. In a study of college students with varying types of disabilities, Reber (1999) found that students with disabilities were no different than those without disabilities in terms of their comfort with assertive behaviors and probability of performing assertive behaviors. Joiner et al. (1982) found mixed results in the

assertiveness of individuals receiving services from vocational rehabilitation agencies. The authors concluded that individuals with neurologic or psychiatric disabilities, African Americans, females with disabilities, and individuals with disabilities living in metropolitan areas may be in need of assertiveness training.

Other studies have found that college students with disabilities have more discomfort with assertive behaviors than the general population. Starke (1987) found that college students with physical disabilities scored significantly lower on Gambrill and Richey's Assertion Inventory (1975) than the normative sample. Kronick (1981) explains that people with learning disabilities do not often have the opportunity to assert themselves in a positive manner in the educational environment, and therefore lack self-esteem. Students who have low self-esteem and are not allowed to assert themselves often develop "learned helplessness," whereby they feel that they will fail if they try something on their own and they allow others to continue to do things for them so that they will not have to suffer failure (Kronick, 1981).

Another study (Elliott & Grambling, 1990) found that assertiveness was related to low levels of depression. The participants who were more assertive were more likely to benefit from the support of others who share their values and beliefs and, in turn, had fewer symptoms of depression when they were stressed. In a related study, using individuals with spinal cord injuries, Elliott, Herrick, Patti, Witty, Godshall, & Spruell (1991) found that assertiveness and social support were predictive of depression and psychosocial impairment. They found that the individuals in their study who were more assertive and were being given more guidance were actually more depressed, while those

who were not as assertive benefited from more guidance. In other words, assertive individuals may get the subtle message that they are not competent in their assertiveness skills. This has implications for assertiveness training for individuals with disabilities who may feel they are being devalued if they receive too much guidance (Joiner et al., 1991).

### Self-Efficacy

In order to better understand assertiveness and its role in self-advocacy, it is important to examine the theoretical basis for why individuals behave in certain ways. Bandura's theory of self-efficacy best describes what causes people to perform certain behaviors (1977). Individuals choose to perform actions based not only on their expectations for what will happen (outcome expectations), but also their feelings about whether they will be able to perform the behaviors or not (efficacy expectations). If there is an expectation that a positive outcome will occur, but an individual has doubts about being able to perform the behavior, this will hinder the behavior. People are not likely to attempt to do something intimidating if they feel that they do not have the necessary skills. Other factors such as motivation and skills are also necessary for behaviors to occur with positive outcomes (Bandura, 1977).

Self-efficacy has been found to be a factor in academic success. Zimmerman, Bandura, & Martinez-Pons (1992) found that students' self-efficacy for self-regulated learning was causally linked to their self-efficacy for academic achievement, which predicted their final score in the class. In other words, students who felt that they had the ability for self-regulated learning and academic achievement actually made higher

grades in the class. Newby-Fraser and Schlebusch (1997) found that self-efficacy and social support were both linked to academic performance for first year college students, with poor self-efficacy being a stronger determinant of emotional problems and poor academic performance.

The self-efficacy theory has implications for assertiveness and self-advocacy. Individuals who feel that they have the necessary assertiveness skills and are comfortable using them would be more likely to advocate for themselves when placed in a position to do so. Wilson (1994) provides a further link to self-advocacy or assertiveness in that "a person who does not view him- or herself as a critical component of the learning equation, perceives a lack of control, or who expects to fail, might not realize the benefits of self-advocacy or might not have the skills required for productive advocacy" (p.158).

#### Issues for College Students with Disabilities

##### *Challenges for College Students with Disabilities*

Although the transition to college is difficult for many students, those with disabilities face some unique challenges. Unfortunately, many of the students who enter college have not been prepared for their new responsibilities. Hitchings et al. (1998) found that only 6 of the 44 college students with disabilities in their study reported receiving any transition services in high school. Whether transition services were offered or not, Janiga and Costenbader (2002) found that disability service providers were not satisfied with the advocacy skills of students entering postsecondary institutions. The disability service providers felt that students were especially ill

informed about the services available on college campuses and suggested that improving students' self-advocacy skills should be a focus for transition services. McGuire, Hall, & Litt (1991) found that students with learning disabilities who participated in a program with learning specialists to work on compensatory learning strategies spent 8% of their instructional time working on self-advocacy skills.

Colleges and universities have developed many transition programs for students with disabilities who are entering postsecondary institutions. Recognizing the psychosocial needs of students with learning disabilities, the University of Minnesota developed the Learning Disabilities Transition Project (Ness and Price, 1990). The model for this project includes individual and group counseling, disability awareness training, and vocational counseling for high school students with learning disabilities planning to attend college. An interesting finding from the interactions with these students was that many of them lacked self-awareness about their disability, even if they had been in special education for several years. Other programs have focused on easing the transition for students with psychiatric disabilities (Wells-Moran & Gilmur, 2002) and learning disabilities (Brinckerhoff, 1993; Dalke & Schmitt, 1987). Benefits of transition programs for students with disabilities have included: higher grade point averages, improved study skills, and better communication with professors (Dalke & Schmitt, 1987); as well as better self-advocacy skills (Roessler, Brown, & Rumrill, 1998).

Very few studies have examined college students with disabilities other than learning disabilities. The small numbers of students with physical disabilities and the

stigma associated with psychiatric disabilities oftentimes make research on those populations more difficult. Burbach and Babbitt (1988) interviewed 93 physically disabled college students for a more comprehensive look at the college experience for students with physical disabilities. Among their findings were that more than 45% of the sample reported that poor communication was the major problem between students with disabilities and those without. Megivern, Pellerito, & Mowbray (2003) found that over 90% of the students with psychiatric disabilities in their study had not sought out the assistance of the disability services office and many were not even aware that resources existed to provide assistance to them.

Besides the inherent challenges of having a disability, there are also other obstacles students with disabilities face that may further complicate their college success. Fairweather & Shaver (1990) found that exiting high school students with disabilities were more likely to come from households with incomes less than \$25,000 and to come from families where the head of the household has a lower level of educational attainment.

#### *Differences in Federal Laws for Postsecondary Education*

An additional challenge for students with disabilities in higher education is that the laws that govern their services change. Brinckerhoff et al. (1992) point out the main differences in legislation from secondary to postsecondary education. Students in preschool through twelfth grade may receive special education services due to the Individuals with Disabilities Education Act of 1990 (IDEA, P.L. 94-142), the reauthorization of IDEA (P.L. 105-17), or Section 504 of the Vocational Rehabilitation

Act of 1973 (Section 504). Students in postsecondary education may also receive academic accommodations due to Section 504, or may be afforded services due to the Americans with Disabilities Act of 1990 (ADA, P.L. 101-336).

There are some important differences between these laws. Of utmost importance to the present study are the differences in the identification of students with disabilities and their involvement in the educational process. Under IDEA, it is the responsibility of the schools to identify students with disabilities and ensure that their academic needs are met. Under Section 504, students are responsible for identifying themselves as having a disability. Although IDEA promotes each student's involvement in his or her educational process, the actual focus is on the parent as a partner to the school in making decisions and planning programming for the student. At the postsecondary level, however, students are their own advocates. They are responsible for communicating their academic needs to the schools and making sure that their needs are being met (Brinckerhoff et al., 1992). IDEA is more focused on ensuring that students with disabilities receive the proper modifications in their academics, while the ADA focuses on eliminating discrimination of people with disabilities by providing them with access to employment, transportation, public accommodations, services provided by state and local governments, and telecommunication relay services.

#### *Need for College Students with Disabilities to be Assertive*

One of the ramifications of being served under the ADA and Section 504, is that students with disabilities must self-identify and notify the institution of their needs. College students become adults who must advocate for themselves, rather than allowing

their parents to advocate for them. The role of self-advocacy has been recognized officially by the Association on Higher Education and Disability (AHEAD) which has included “Assist students with disabilities to assume the role of self-advocate” in the AHEAD Program Standards for Disability Services in Higher Education (Shaw & Dukes, 2001). Unfortunately, many students with learning disabilities have become accustomed to their parents or teachers advocating for them and may expect someone else to explain their learning disabilities to their instructors and/or lack the skills to be able to do so themselves (Wilson, 1994).

Troiano (2003) found that the ability to self-advocate was relevant for students with learning disabilities. In in-depth interviews with nine students with learning disabilities, the participants often mentioned the need to self-advocate when talking about coping strategies or the essential skills needed by students with learning disabilities. The students interviewed had varying levels of comfort with self-advocacy, which were related to parental support and time of diagnosis. Those students who were diagnosed early and had a lot of parental support had higher levels of skill with self-advocacy. Troiano identified three components necessary for self-advocacy: self-awareness, understanding of legal and ethical responsibilities of higher education institutions, and negotiation skills. Troiano (2003) found that the college students interviewed had a high degree of awareness concerning their individual strengths, challenges, and special needs, as well as a good understanding of the responsibilities of their institutions from a legal and ethical standpoint.

Several schools of thought indicated that the job of disability service professionals is not to do things for students, but instead to provide them with access to services and programs. In order to take advantage of that access, students with disabilities need to assert themselves and often be self-advocates. Cullen, Shaw, and McGuire (1996) found that disability service providers felt that students with disabilities should be able to describe the accommodations they need to their instructors and describe their learning disability in specific and clear terms to their instructors and university staff. In practice, 67.8 percent of the service providers they surveyed indicated that they address self-advocacy skills with students with learning disabilities, 49.6 percent indicated that they address communication skills with students with learning disabilities, 38.7 percent role-play self-advocacy with their students, 38.4 percent develop a plan to decrease student reliance on support services, and 30.5 percent indicated that they address social/interpersonal skills with students with learning disabilities (Cullen, Shaw, & McGuire, 1996).

Several studies have suggested the need for self-advocacy training for people with disabilities and the effectiveness of such training (Roessler et al., 1998; Starke, 1987, Morgan & Leung, 1980; Glueckauf & Quittner, 1992; Brinckerhoff, 1993; Barbaro, 1982). Brinckerhoff (1993) identified several components of self-advocacy training necessary for college students with learning disabilities: developing an understanding of the learning disability, developing an understanding of the laws regarding students with disabilities, understanding needed accommodations and auxiliary aids, and preparing to discuss needed accommodations with instructors.

Morgan and Leung (1980) found that physically disabled students who were given assertiveness training not only improved their self-concept/self-esteem, but also had increases in their acceptance of their disabilities and social interaction skills.

Elliott et al. (1991) found that not only is assertiveness important for students to be able to receive the services and accommodations that they need, but it is also important for psychosocial factors. In their study of adults with spinal cord injuries, they found that assertiveness moderated depression and impairment. Self-advocacy skills are also necessary for when the college student leaves the university setting. The need to be assertive and explain needs to employers continues long after postsecondary education is complete (Brinckerhoff et al., 1992).

### Summary

College students face pressures that are much different than those that they faced in high school. They have increased responsibilities for all parts of their lives, including being assertive when necessary. College students with disabilities face an even greater need for assertiveness and self-advocacy as they have to identify themselves as having a disability, ask professors for necessary accommodations, and advocate for themselves if they are not receiving what they need.

Research that has been conducted on assertiveness has had mixed results. In some studies, gender is a factor in assertiveness (with females sometimes being less assertive and sometimes being more assertive). In other studies, students with disabilities display either more or less assertiveness than their non-disabled peers. Many disability services offices have developed transition programs to help students develop

assertiveness skills (along with other skills needed for college), but little is known about specific assertiveness of those college students for whom the programs were designed. Even less is known about the differences between students who choose to attend 2-year versus 4-year schools in terms of their assertiveness skills.

#### Rationale for the Study

Several studies have examined assertiveness of students with disabilities with varying results. This study is a partial replication and extension of Reber (1999), in which college students with disabilities were found to be no different than those without disabilities in terms of their assertiveness. The students who participated in Reber (1999) attended a large Research 1 4-year university, and it was thought that the students with disabilities who choose to attend a large academically rigorous school might have differing levels of assertiveness than those who did not. This study is intended to explore the issue of college choice and determine if students with disabilities at different types of institutions may have different comfort levels with assertiveness.

Assertiveness of students with disabilities in postsecondary education is necessary in order for them to receive accommodations. Unlike in the kindergarten through high school, college students with disabilities must not only disclose their disability to disability service providers, but also must be comfortable enough to be self-advocates in explaining their needed accommodations to their instructors. When college students with disabilities are not comfortable in asserting themselves, they may not ask for what they need and may not be successful in college.

## CHAPTER III

### METHODS

This chapter will discuss the methodology used for the study. Included in this chapter are descriptions of the participants, instrumentation, measures, design, procedures, research questions, and statistical analyses.

#### Participants

The participants in the study were 289 college freshmen and sophomores attending one of three public postsecondary institutions in a state in the Southwest. The institutions were chosen due to the varying compositions of each campus. Institution A is a large (40,000+ students) four-year Research 1 state university, Institution B is a smaller (11,000+ students) four-year state regional university, and Institution C is a two-year junior college. All three schools are located within the same geographical region of the state and within 70 miles of each other. Thirteen students either indicated that they attended two institutions or were juniors and their data were not included in the analysis or in the following demographic information. Of the remaining 278 participants, 48 students with disabilities and 47 students without disabilities at institution A completed the measure, 39 students with disabilities and 52 students without disabilities at institution B completed the measure, and 46 students with disabilities and 46 students without disabilities at institution C completed the measure.

Demographic data were obtained on the participants. The age of participants in the study ranged from 17-53 years old. Most participants were 18-21 years old. The mean age of the participants was 20.46 years old. There were 113 males and 165

females who participated in the study. The class status of the participants was as follows: 129 freshmen, 132 sophomores, and 17 who did not answer the question (it was assumed they were either freshmen or sophomores).

The overwhelming majority of the participants were white (n=201), with Hispanic (n=42), and African American (n=22) as the second and third largest categories, respectively. Table 1 has the composition of the ethnicities of the participants for each institution.

The socioeconomic status level was determined using the participants' financial aid status. One hundred forty participants (50.4%) reported that they receive federal financial aid and 137 (49.3%) reported that they do not receive any form of federal financial aid. Table 2 illustrates the make-up of the students within each institution with regards to whether they receive financial aid or not.

Participants were also asked whether they had a disability or not, and if so, what type. Disability classes were broken down to cognitive, physical, emotional, and other. One hundred forty five participants reported that they do not have a disability. A total of 133 participants across the three universities reported that they had a disability. Of those that reported having a disability, 75 reported a cognitive disability, 16 reported a physical disability, 15 reported an emotional disability, and 4 reported "other." The remaining 23 participants had some combination of disabilities. Table 3 presents the make-up of the disabilities of the participants.

Table 1

*Frequency and Percentage of the Ethnicity of Students by Institution*

	4-year Research 1 University		4-year Regional University		2-year Junior College		Total	
	N	%	N	%	N	%	N	%
African American	1	1.1	10	10.9	11	12.0	22	7.6
Asian/Pacific Islander	0	0.0	3	3.3	1	1.1	4	1.4
Hispanic	19	20.0	14	15.2	9	9.8	42	14.6
Native American	1	1.1	1	1.1	0	0.0	2	.7
White	73	76.8	59	64.8	69	75.0	201	72.3
Other	1	1.1	4	4.3	1	1.1	6	2.1
No Answer	0	0.0	0	0.0	1	1.1	1	.3
Total	92	100.0	91	100.0	95	100.0	278	100.0

Table 2

*Frequency and Percentage of Students who Receive Financial Aid at Each Institution*

	Receive financial aid		Do not receive financial aid		No answer	
	N	%	N	%	N	%
4-year Research 1 university	38	40.0	56	58.9	1	1.1
4-year regional university	51	56.0	40	44.0	0	0.0
2-year junior college	51	55.4	41	44.6	0	0.0
Total	140	50.4	137	49.3	1	.4

Table 3

*Type of Disability (by Number and Percentage of Participants) for All Students*

Type of Disability	4-year Research 1 university		4-year regional university		2-year junior college		Total	
	N	%	N	%	N	%	N	%
Cognitive	31	32.6	22	24.2	22	23.9	75	27.0
Physical	3	3.2	6	6.6	7	7.6	16	5.8
Emotional	3	3.2	6	6.6	6	6.5	15	5.4
Other	2	2.1	2	2.2	0	0.0	4	1.4
Cognitive and Physical	1	1.1	2	2.2	4	4.3	7	2.5
Cognitive and Emotional	6	6.3	0	0	6	6.5	12	4.3
Cognitive, Physical, and Emotional	1	1.1	0	0	0	0.0	1	.4
Emotional and other	1	1.1	0	0	0	0.0	1	.4
Cognitive, emotional, and other	0	0.0	0	0	1	1.1	1	.4
Cognitive, physical, emotional and other	0	0.0	1	1.1	0	0.0	1	.4
Total participants w/ disabilities	48	50.7	39	42.9	46	50.2	133	48.0
No Disability	47	49.5	52	57.1	46	50.0	145	52.2

The participants were further asked to specify the onset of their disability. Early onset (prior to age 10) was reported by 73 participants, late onset (after age 10) by 54, and both early and late by 4 (presumably these four had more than one disability). Two participants who had disabilities did not answer the question about the onset of their disability.

The number of males and females with and without disabilities from each institution varied. There were more females than males in every category except students with no disability at the 4-year Research 1 University in which there were 25 males and 22 females. Overall, 79 females and 54 males with disabilities and 86 females and 59 males without disabilities participated in the study. Table 4 presents the composition of the participants by institution, gender, and disability status.

#### Instruments and Measures

The participants in the study completed the Assertion Inventory (Appendix A) and Demographic Questionnaire (Appendix B). The Demographic Questionnaire included the information previously presented about the participants' age, gender, ethnicity, institution, class status, socioeconomic status (SES), type of disability, and onset of disability.

##### *The Assertion Inventory*

Each participant completed the Assertion Inventory (Gambrill & Richey, 1975). The Assertion Inventory is a 40-item scale that examines the respondent's comfort with assertive behavior in 40 different situations, the probability that he or she will be

Table 4

*Number of Students by Institution, Gender, and Disability Status*

	Has a Disability			No Disability Present		
	Males	Females	Total	Males	Females	Total
4-year Research 1 University	20	28	48	25	22	47
4-year Regional University	15	24	39	14	38	52
2-year Junior College	19	27	46	20	26	46
Total	54	79	133	59	86	145

assertive in each of the situations, and an indication of any situations that the respondent would like to handle more assertively. Respondents indicated for each situation their degree of discomfort on a 5 point scale (1=none, 2=a little, 3=a fair amount, 4=much, 5=very much) and the probability of performing each behavior on a 5 point scale (1=always do it, 2=usually do it, 3=do it about half the time, 4=rarely do it, 5= never do it). After completing both of these ratings, the respondent is asked to go back and circle any situation in which he or she wants to be more assertive. Factor analysis of the forty items on the inventory previously conducted by Gambrill and Richey (1975) revealed eleven factors: (a) initiating interactions, (b) confronting others, (c) giving negative feedback, (d) responding to criticism, (e) turning down requests, (f) handling service situations, (g) resisting pressure to alter one's consciousness, (h) engaging in "happy talk", (i) complimenting others, (j) admitting personal deficiencies, and (k) handling a bothersome situations. Reber (1999) examined the initiating interactions (Factor 1), confronting others (Factor 2), responding to criticism (Factor 4), and admitting personal deficiencies (Factor 10) factors. These factors were chosen due to the belief that these were the most relevant and necessary assertiveness skills for college students to display in order to be successful in their academics.

Gambrill and Richey (1975) found Pearson correlations between pre- and posttests to be .87 for discomfort and .81 for response probability, indicating high stability of the scores over time. They also found significant differences between the pre- and posttest scores of a clinical population who underwent assertiveness training,

indicating that the measure has good validity ( $t(36)=3.67, p<.002$  for mean discomfort and  $t(36)=2.39, p<.05$  for the mean response probability scale).

Reber (1999) examined the test-retest reliability of the Assertion Inventory by administering the instrument to 47 college students ranging in age from 18-24 over a 3-week interval. This study yielded Pearson product moment correlation coefficients of .69 for discomfort and .75 for response probability. Although the reliability was lower than that found by Gambrill and Richey (1975), this was explained as being due to the homogeneity of the sample and was thought to be sufficient for the purposes of that study (and would also be sufficient for this study). The current analysis included a Cronbach's alpha, in which the reliability of this instrument was found to be .94, suggesting strong reliability.

Due to the limited use of the instrument with students with disabilities and the age of the instrument, a factor analysis was initiated. Several analyses were conducted to determine the suitability of the data for factor analysis. The overall measure of sampling adequacy was determined using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy, which yielded a score of .91, indicating that the data is meritorious (Kaiser, 1974). Bartlett's Test of Sphericity yielded a Chi-Square value of 4906.858 with 780 degrees of freedom at a significance level of  $p<.01$ , indicating that the variables are correlated.

In order to determine if specific individual items were inadequate to include in the final factor analysis, an Anti-Image correlation matrix was obtained. An inspection of the diagonals of the matrix among the items indicated that the individual measures of

sampling adequacy ranged from .834 to .956. Therefore, each item was determined suitable for the factor analysis. These initial analyses indicate that the data for this sample meets the statistical assumptions necessary to conduct a factor analysis.

In order to further examine the data, Principal Components with Varimax Rotation was conducted. The initial data reduction yielded nine factors (with 1 or above Eigenvalues). The Eigenvalues of the nine factors ranged from 1.014 to 12.357, with the first four factors accounting for 46.119% of the variance. Principal axis factoring was then used in order to take error into account. This yielded four factors, however, factors 1 and 2 appeared to be accounting for most of the variance. Due to the assumption that these two factors were the most meaningful, the factor analysis was conducted with two factors.

The two factors derived from the factor analysis were then examined to determine the commonalities between the items. Tables 5 and 6 list the items loading on each of the two factors and their Eigenvalues.

After analysis of the content of the items, the two factors were labeled as Verbal Assertiveness (Factor 1) and Prosocial Verbal Skills (Factor 2). The Verbal Assertiveness factor encompasses those items that reflect confronting someone about a situation, making or turning down requests, and communicating needs. The Prosocial Verbal Skills factor involves items which reflect engaging with another person, usually in a positive, healthy manner. The items for each factor were summed in order to determine the factor scores and all items were summed to determine the overall discomfort score. Higher scores indicated higher levels of discomfort.

Table 5

*Items Loading on Factor 1 with Eigenvalues*

Item	Eigenvalue
9. Ask for a raise.	.807
18. Your initial request for a meeting is turned down and you ask the person again at a later time.	.735
33. Quit a job.	.690
13. Turn off a talkative friend.	.671
39. Tell a friend or someone with whom you work when he/she says or does something that bothers you.	.608
22. Tell someone that you like them.	.597
6. Turn down request for a meeting or a date.	.595
17. Request a meeting or a date with a person.	.569
24. Discuss openly with the person his/her criticism of your behavior.	.551
40. Ask a person who is annoying you in a public situation to stop.	.507
3. Ask a favor of someone.	.496
11. Turn down a request to borrow money.	.466
15. Initiate a conversation with a stranger.	.412
28. Tell the person when you feel he/she has done something that is unfair to you.	.395
36. Request the return of borrowed items.	.394
21. Ask whether you have offended someone.	.389
19. Admit confusion about a point under discussion and ask for clarification.	.379
23. Request expected services when such is not forthcoming, e.g., in a restaurant.	.372
7. Admit fear and request consideration.	.367
4. Resist sales pressure.	.362
8. Tell a person you are intimately involved with when he/she says or does something that bothers you.	.357
14. Ask for constructive criticism.	.347
1. Turn down a request to borrow your car.	.343
32. Resist a significant person's unfair demand.	.328
20. Apply for a job.	.321
12. Ask personal questions.	.298
10. Admit ignorance in some area.	.217

Table 6

*Items Loading on Factor 2 with Eigenvalues*

Item	Eigenvalue
2. Compliment a friend.	.946
16. Compliment a person you are romantically involved with or interested in.	.825
34. Resist pressure to use recreational drugs.	.742
31. Resist pressure to drink.	.587
30. Tell someone good news about yourself.	.584
26. Express an opinion that differs from that of the person you are talking to.	.553
29. Accept a date.	.524
5. Apologize when you are at fault.	.474
27. Resist sexual overtures when you are not interested.	.446
35. Discuss openly with the person his/her criticism of your work.	.389
37. Receive compliments.	.379
25. Return defective items, e.g., store or restaurant.	.359
38. Continue to converse with someone who disagrees with you.	.330

## Design and Procedure

Disability service providers for each institution were contacted to determine if they were interested in participating in the study. In addition, the disability service provider for a historically black university (HBCU) was contacted and was interested in participating. The approval process for conducting research was different at each school. At the large 4-year Research 1 university (Institution A), a university-wide research review board approved the study. At the 4-year regional university (Institution B), the study was approved by the chair of the university-wide review board without having to go through the full review process. At the 2-year junior college (Institution C), the Vice President for Student Services presented the study to the Executive Board and it was approved. At the HBCU, the proposal was reviewed by the disability service provider's supervisor and rejected. Although no official reason was given, the disability service provider at the HBCU explained that she thought the proposal was rejected because the university gets many requests for research studies and they try to be very selective in allowing researchers to collect data from their students. Thus, this university was not included in the study.

The disability service providers at the participating institutions all agreed to help recruit participants. Due to varying procedures at each disability services office, data collection was conducted somewhat differently. At Institution A, fliers were placed in the disability services office and the testing coordinator for the office asked students if they were interested in participating. At Institution B, the disability service provider recruited some students in person and also sent the surveys to all freshmen and

sophomores who were registered with the office. At Institution C, the disability service provider recruited students in person. Participation in the study was voluntary and it was stressed that students' services with their Disability Services office would not be affected by their participation in the study. Readers, scribes, or a tape-recorded version of the inventory and demographic questionnaire were available for any student who requested these services. No data was collected on whether any student requested accommodations for completing the measure.

Students without disabilities were recruited through introductory social science classes. At Institutions A and B, the primary investigator collected the in-class surveys, while at Institution C, the disability service provider collected the in-class surveys. A script was used to ensure that the same instructions were given to all in-class participants. Participation in the survey in class was voluntary and it was stressed that the students' grades in their classes would not be affected by their participation. During the in-class data collection, some students with disabilities also identified themselves. No data was collected on whether students with disabilities were recruited from their disability services office or from class.

The Assertion Inventory and demographic questionnaire were administered during the Spring 2002 semester and continued through the Summer 2002 semester. Each participant signed informed consent forms before being included in the study (Appendices C and D). Data collection took approximately 15 to 20 minutes. Students were given the incentive of having their name entered in a drawing to win a \$25 gift

certificate to their college's bookstore if they completed the survey. One student from each postsecondary institution was randomly selected to receive the gift certificate.

#### Research Questions and Statistical Analyses

The following three questions were developed through the factor analysis of the Assertion Inventory and were analyzed using three separate 2 (gender-male/female) X 3 (institution- large four-year Research 1 state university, four-year state regional university, or two-year junior college) X 2 (disability status- has a disability/does not have a disability) Analyses of Variances (ANOVA):

- 1) What effect do institution, gender, and disability status have on college students' discomfort with overall assertiveness?
- 2) What effect do institution, gender, and disability status have on college students' discomfort with verbal assertiveness?
- 3) What effect do institution, gender, and disability status have on college students' discomfort with prosocial verbal skills?

## CHAPTER IV

### RESULTS

In this chapter, the results of the statistical analysis of the research questions will be presented. The statistical analysis was conducted using Statistical Package for the Social Sciences (SPSS). Three separate 2 (gender-male/female) X 3 (institution- large four-year Research 1 state university, four-year state regional university, or two-year junior college) X 2 (disability status- has a disability/does not have a disability) Analyses of Variances (ANOVA) were conducted to answer all three questions.

Question 1- What effect do gender, institution and disability status have on college students' overall discomfort with assertiveness?

In order to be included in the analysis of this question, the participant needed to have completed all of the items on the Assertiveness Inventory. Some participants did not answer one or more of the questions, so the analysis of this question included 270 participants. See Table 7 for the means and standard deviations of the discomfort with overall assertiveness.

A 2X3X2 ANOVA was performed with gender, institution and disability status as the independent variables and the students' overall assertiveness (their overall score on the Assertiveness Inventory, see Tables 5 and 6 in Chapter 3 for the actual items) as the dependent variable. Significant main effects were found for gender ( $F(1, 258)=6.26$ ,  $p=.013$ ) and institution ( $F(2, 258)=5.91$ ,  $p=.003$ ). Table 8 presents the complete analysis results.

Table 7

*Means and Standard Deviations of the Students' Discomfort with Overall Assertiveness*

			N	Mean	SD
Males	Institution A	No disability	24	85.38	20.00
		Disability	17	95.59	21.48
		Total	41	89.61	21.00
	Institution B	No Disability	14	94.50	22.44
		Disability	15	84.53	23.11
		Total	29	89.35	22.94
	Institution C	No disability	19	83.84	29.82
		Disability	19	77.47	27.11
		Total	38	80.66	28.29
	Total	No Disability	57	87.11	24.20
		Disability	51	85.59	24.92
		Total	108	86.39	24.44
Females	Institution A	No Disability	22	93.41	25.30
		Disability	26	96.65	25.03
		Total	48	95.17	24.93
	Institution B	No Disability	37	103.14	26.95
		Disability	24	102.71	29.60
		Total	61	102.97	27.78
	Institution C	No Disability	26	86.81	17.26
		Disability	27	85.78	26.02
		Total	53	86.28	21.96
	Total	No Disability	85	95.62	24.70
		Disability	77	94.73	27.44
		Total	162	95.20	25.96
Total	Institution A	No Disability	46	89.22	22.79
		Disability	43	96.23	23.43
		Total	89	92.61	23.24
	Institution B	No Disability	51	100.77	25.86
		Disability	39	95.72	28.41
		Total	90	98.58	26.96
	Institution C	No Disability	45	85.56	23.14
		Disability	46	82.35	26.50
		Total	91	83.93	24.81
	Total	No Disability	142	92.20	24.77
		Disability	128	91.09	26.74
		Total	270	91.67	25.68

Table 8

*ANOVA Summary Table for Analysis of Overall Discomfort with Assertiveness by Gender, Institution, and Disability Status*

Source	SS	df	MS	F	Power	Effect Size
Gender	3891.74	1	3891.74	6.26*	.70	.02
Institution	7339.40	2	3669.70	5.91*	.87	.04
Disability Status	32.84	1	32.84	.05	.06	.01
Gender by Institution	939.00	2	469.50	.76	.18	.01
Gender by Disability Status	109.39	1	109.39	.18	.07	.01
Institution by Disability Status	1786.36	2	893.18	1.49	.31	.01
Gender by Institution by Disability Status	770.24	2	385.12	.62	.15	.01
Error	160281.43	258	621.25			

\* $p \leq .05$

Follow-up Tukey t tests indicated that the students at the two-year junior college had significantly lower discomfort scores for overall assertiveness than those at the 4-year state regional university ( $p < .01$ ), but were not significantly different than students at the 4-year Research 1 university ( $p = .053$ ). Furthermore, students at the 4-year state regional university were not significantly different than those at the 4-year Research 1 university ( $p = .246$ ). Figure 1 plots the means for discomfort with overall assertiveness by gender and indicates that females had a higher mean score on this variable (indicating that they had more discomfort). Figure 2 plots the means for discomfort with overall assertiveness by institution and indicates that the 2-year institution had a lower mean score on this variable (indicating less discomfort with assertive behaviors).

Question 2- What effect do gender, institution and disability status have on college students' discomfort with verbal assertiveness?

In order to be included in the analysis of this question, the participant needed to have completed all of the items for the Verbal Assertiveness factor (Factor 1). Some participants did not answer one or more of the questions, so the analysis of this question included 271 participants. See Table 9 for the means and standard deviations of the discomfort with verbal assertiveness.

A 2X3X2 ANOVA was performed with gender, institution and disability status as the independent variables and the students' Verbal Assertiveness score (Factor 1, see Table 5 in Chapter 3 for the actual items) as the dependent variable. Significant main effects were found for gender ( $F(1,259)=8.03, p=.01$ ) and institution ( $F(2, 259)=8.65, p<.01$ ). Table 10 presents the complete analysis results.

Figure 1

*Means for Discomfort with Overall Assertiveness by Gender*

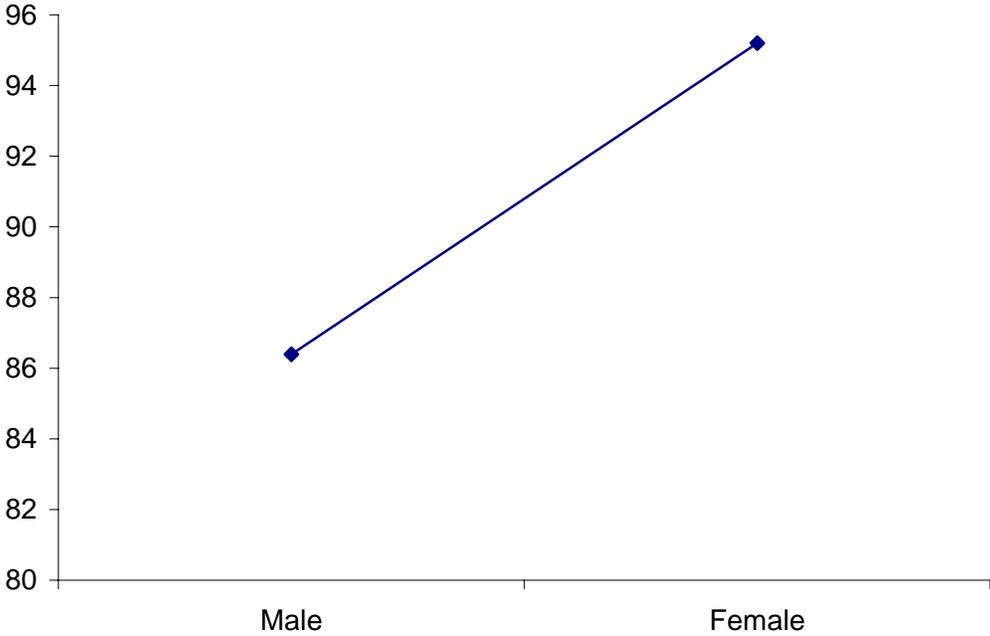


Figure 2

*Means for Discomfort with Overall Assertiveness by Institution*

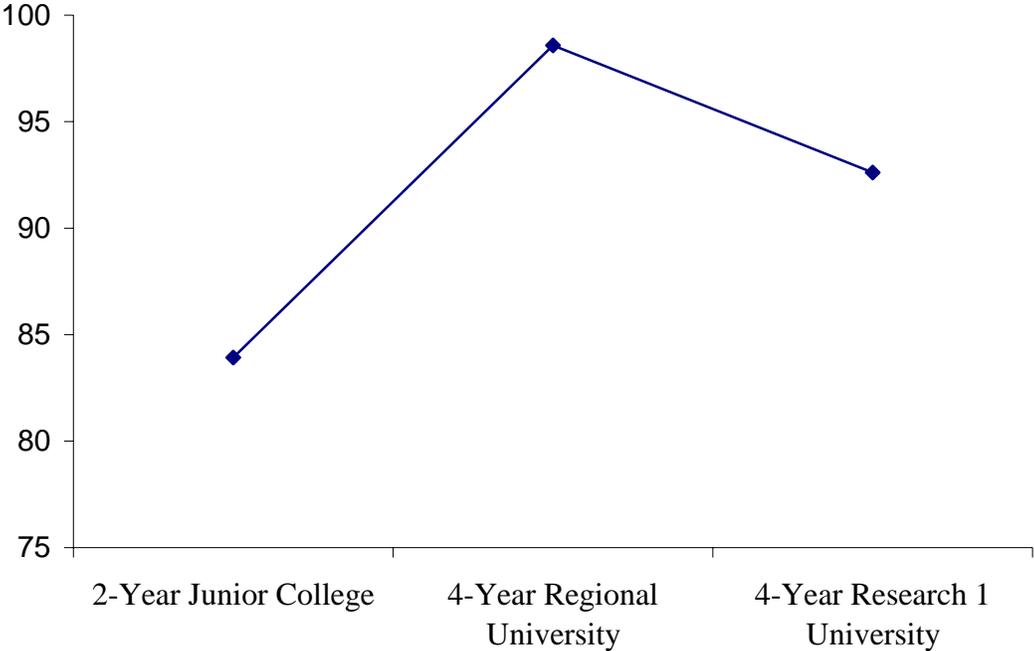


Table 9

*Means and Standard Deviations of the Students' Discomfort with Verbal Assertiveness*

			N	Mean	SD
Males	Institution A	No Disability	25	64.36	16.33
		Disability	17	70.88	15.78
		Total	42	67.00	16.24
	Institution B	No Disability	14	68.29	14.81
		Disability	15	60.73	17.87
		Total	29	64.38	16.63
	Institution C	No Disability	19	60.11	20.00
		Disability	19	55.16	18.78
		Total	38	57.63	19.30
	Total	No Disability	58	63.91	17.27
		Disability	51	62.04	18.47
		Total	109	63.04	17.78
Females	Institution A	No Disability	22	70.18	17.58
		Disability	26	72.00	18.93
		Total	48	71.17	18.15
	Institution B	No Disability	37	75.19	17.06
		Disability	24	75.00	19.55
		Total	61	75.12	17.92
	Institution C	No Disability	26	63.35	12.13
		Disability	27	61.30	19.41
		Total	53	62.30	16.13
	Total	No Disability	85	70.27	16.47
		Disability	77	69.18	19.95
		Total	162	69.75	18.16
Total	Institution A	No Disability	47	67.09	16.99
		Disability	43	71.56	17.56
		Total	90	69.22	17.32
	Institution B	No Disability	51	73.29	16.62
		Disability	39	69.51	19.96
		Total	90	71.66	18.14
	Institution C	No Disability	45	61.98	15.84
		Disability	46	58.76	19.18
		Total	91	60.35	17.57
	Total	No Disability	143	67.69	17.03
		Disability	128	66.34	19.62
		Total	271	67.05	18.28

Table 10

*ANOVA Summary Table for Analysis of Discomfort with Verbal Assertiveness by Gender, Institution, and Disability Status*

Source	SS	df	MS	F	Power	Effect Size
Gender	2464.39	1	2464.39	8.03*	.81	.03
Institution	5304.39	2	2652.20	8.65*	.97	.06
Disability Status	71.78	1	71.78	.23	.08	.01
Gender by Institution	584.50	2	292.25	.95	.21	.01
Gender by Disability Status	54.14	1	54.14	.18	.07	.01
Institution by Disability Status	882.61	2	441.31	1.44	.31	.01
Gender by Institution by Disability Status	387.40	2	193.70	.63	.16	.01
Error	79448.09	259	306.75			

\*  $P \leq .01$

Follow-up Tukey t tests indicated that the students at the two-year junior college had significantly lower discomfort scores for verbal assertiveness than those at the 4-year state regional university ( $p < .01$ ) and students at the 4-year Research 1 university ( $p < .01$ ). Students at the 4-year state regional university were not significantly different than those at the 4-year Research 1 university ( $p = .621$ ). See Figures 3 and 4 for the plots of the mean scores for comfort with verbal assertiveness by gender and institution. Females had higher discomfort scores on this variable. Students at the 2-year junior college had lower discomfort scores than students at either 4-year institution.

Question 3- What effect do gender, institution and disability status have on college students' discomfort with prosocial verbal skills?

In order to be included in the analysis of this question, the participant needed to have completed all of the items for the Prosocial Verbal Skills factor (Factor 2). Some participants did not answer one or more of the questions, so the analysis of this question included 277 participants. See Table 11 for the means and standard deviations of the participants' discomfort with prosocial verbal skills.

A 2X3X2 ANOVA was performed with gender, institution and disability status as the independent variables and the students' Prosocial Verbal Skills score (Factor 2, see Table 6 in Chapter 3 for the actual items in this factor) as the dependent variable. No significant main effects or interactions were found. Table 12 presents the complete analysis results

Figure 3

*Means for Discomfort with Verbal Assertiveness by Gender*

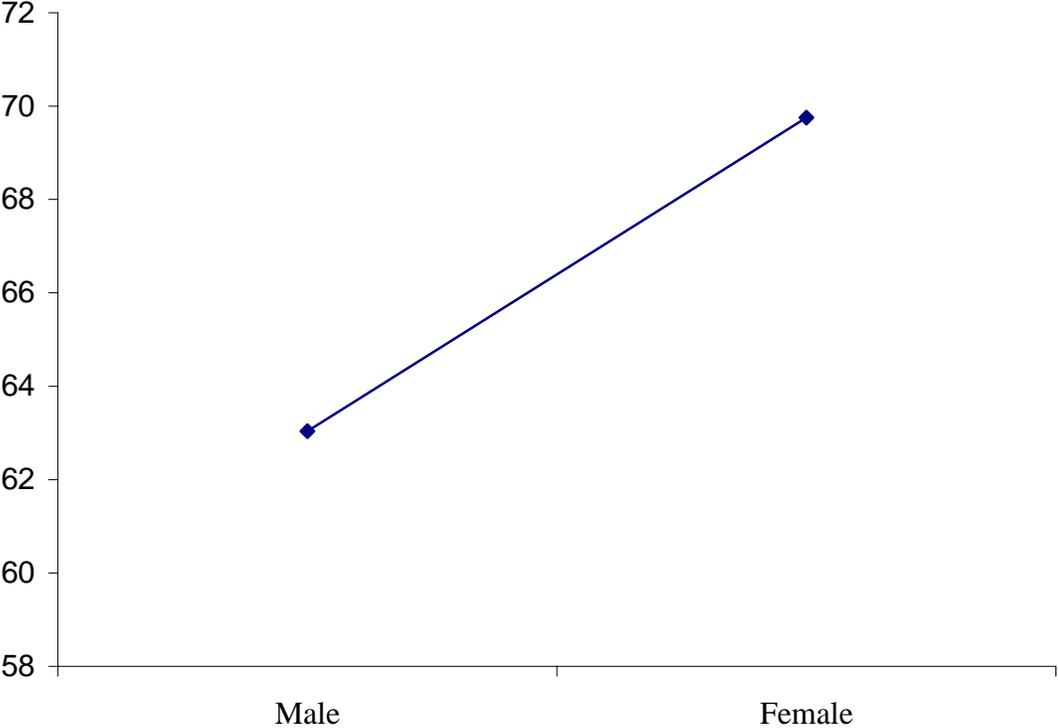


Figure 4

*Means for Discomfort with Verbal Assertiveness by Institution*

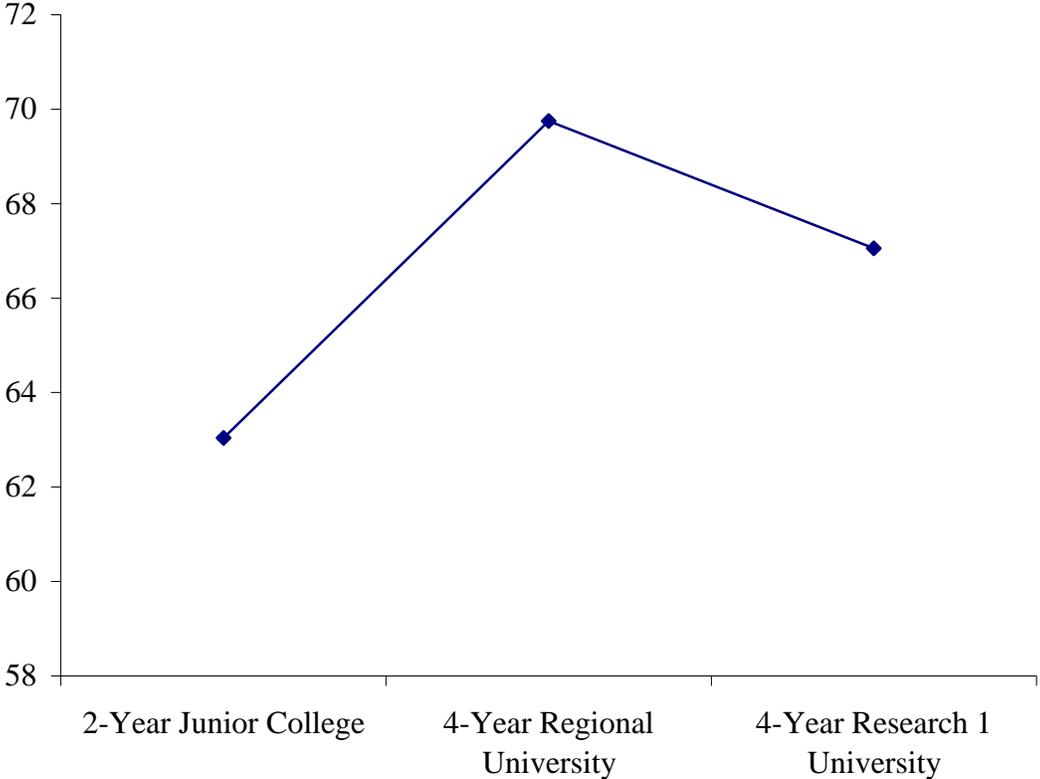


Table 11

*Means and Standard Deviations of the Students' Discomfort with Prosocial Verbal Skills*

			N	Mean	SD	
Males	Institution A	No Disability	24	21.67	5.20	
		Disability	20	24.95	8.20	
		Total	44	23.16	6.85	
	Institution B	No Disability	14	26.21	9.37	
		Disability	15	23.80	6.58	
		Total	29	24.97	7.99	
	Institution C	No Disability	20	23.70	10.67	
		Disability	19	22.32	8.76	
		Total	39	23.03	9.69	
	Total	No Disability	58	23.47	8.49	
		Disability	54	23.70	7.93	
		Total	112	23.58	8.19	
Females	Institution A	No Disability	22	23.23	8.34	
		Disability	28	24.75	7.85	
		Total	50	24.08	8.03	
	Institution B	No Disability	38	27.71	11.95	
		Disability	24	27.71	11.44	
		Total	62	27.71	11.66	
	Institution C	No Disability	26	23.46	7.07	
		Disability	27	24.48	7.68	
		Total	53	23.98	7.33	
	Total	No Disability	86	25.28	9.94	
		Disability	79	25.56	9.04	
		Total	165	25.41	9.49	
	Total	Institution A	No Disability	46	22.41	6.85
			Disability	48	24.83	7.91
			Total	94	23.65	7.47
Institution B		No Disability	52	27.31	11.24	
		Disability	39	26.21	9.95	
		Total	91	26.84	10.66	
Institution C		No Disability	46	23.57	8.71	
		Disability	46	23.59	8.12	
		Total	92	23.58	8.38	
Total		No Disability	144	24.55	9.40	
		Disability	133	24.80	8.62	
		Total	277	24.67	9.02	

Table 12

*ANOVA Summary Table for Analysis of Discomfort with Prosocial Verbal Skills by Gender, Institution, and Disability Status*

Source	SS	df	MS	F	Power	Effect Size
Gender	135.641	1	135.641	1.680	.252	.006
Institution	424.454	2	212.227	2.628	.520	.019
Disability Status	7.364	1	7.364	.091	.060	.01
Gender by Institution	49.161	2	24.581	.304	.098	.002
Gender by Disability Status	16.762	1	16.762	.208	.074	.001
Institution by Disability Status	150.601	2	75.301	.933	.211	.007
Gender by Institution by Disability Status	64.744	2	32.372	.401	.114	.003
Error	21396.436	265	80.741			

## Summary

Three separate 2 (gender-male/female) X 3 (institution- large four-year Research 1 state university, four-year state regional university, or two-year junior college) X 2 (disability status- has a disability/does not have a disability) Analyses of Variances (ANOVA) were conducted to answer the following three questions:

1. What effect do gender, institution and disability status have on college students' overall discomfort with assertiveness?
2. What effect do gender, institution and disability status have on college students' discomfort with verbal assertiveness?
3. What effect do gender, institution and disability status have on college students' discomfort with prosocial verbal skills?

The analyses revealed that there were main effects for gender and institution type for both the comfort with overall assertiveness and the verbal assertiveness scores. Males scored lower than females, indicating that they had less discomfort. Students at the 2-year junior college scored lower, indicating that they had less discomfort. There were no main effects for gender or institution type on the prosocial verbal skills factor. There was no main effect for disability status and no interaction effects for any of the three questions.

## CHAPTER V

### CONCLUSIONS

This chapter will summarize the results of the research study, present conclusions, explain the limitations, and provide recommendations and implications for future research.

#### Summary

First-year college students have many new responsibilities and challenges. They are faced with increasing autonomy and must find resources and people to help guide them. They must navigate not only their educational environment, but also their personal relationships and household responsibilities. Students with disabilities face an even greater need to be independent and juggle more responsibilities, as they must disclose their disabilities to campus personnel if they need accommodations.

Disclosing a disability is the first step in self-advocacy. Students must first inform the appropriate campus staff of their disability, and then (in most cases) inform their instructors of their needed accommodations with the support of the disability service provider. The steps necessary to receive accommodations involve being a self-advocate. In order to self-advocate, students must feel comfortable with being assertive.

Studies have found mixed results about assertiveness. Some studies have found that males were more assertive than females; some have found no differences. Some studies have found students with disabilities to be either more or less assertive than students without disabilities and some have found no differences. Because of the need

for students with disabilities to be their own self-advocates and to be comfortable with assertive behaviors, this study was undertaken.

This study examined the differences in comfort with assertive behaviors between students with and without disabilities at three different types of postsecondary institutions (junior college, 4-year regional university, and 4-year Research 1 university). Students with and without disabilities at each institution were given the Assertion Inventory during the spring and summer 2002 semesters (Gambrill & Richey, 1975). Students were also asked to complete a demographic questionnaire to determine more about their characteristics. This study was a partial replication and extension of a previous study conducted at the large Research 1 university, which found that students with disabilities were no different than those without in terms of their comfort with assertiveness (Reber, 1999).

A factor analysis was initiated on the Assertion Inventory in order to determine whether the ten factors originally determined by Gambrill & Richey (1975) were appropriate for this sample. Two factors emerged from the factor analysis and were labeled “verbal assertiveness” and “prosocial verbal skills” after examination of the content of the items. Those two factors, as well as the overall discomfort with assertiveness score were analyzed for this study.

After determining the 2 factor structure, three separate 2 (gender-male/female) X 3 (institution- large four-year Research 1 state university, four-year state regional university, or two-year junior college) X 2 (disability status- has a disability/does not have a disability) Analyses of Variances (ANOVA) were conducted on the following

three variables: a) college students' discomfort with overall assertiveness; b) college students' discomfort with verbal assertiveness; and c) college students' discomfort with prosocial verbal skills.

In looking at the students' scores on the overall scale, students with disabilities at all three institutions were no different than students without disabilities in terms of their discomfort with assertive behaviors. Males were more comfortable with assertive behaviors than females in terms of their overall assertiveness and their verbal assertiveness. Students from the 2-year junior college were more comfortable with overall assertiveness and verbal assertiveness than students at either the 4-year regional university or the 4-year research 1 university. There were no differences between groups in terms of their prosocial verbal skills.

### Conclusions

Overall, students with disabilities were no different than students without disabilities in terms of their comfort with assertiveness. This finding is consistent with Reber (1999), but contradictory to some other research studies which have found students with disabilities to be either more or less assertive than those without. Although students with disabilities may be as comfortable with being assertive, it is likely that students with disabilities need to actually be more assertive. Students with disabilities need to self-advocate in order to receive accommodations from their institutions and professors. In order to self-advocate, they must be assertive, and their ability to carry out assertive behaviors is at least in part dictated by their comfort with assertive behaviors.

The participants in the study also may be affected by their generation. No data were collected on whether the students received special education services in their school-age years. It is hoped that many of the students who are now entering college who received special education services were involved in determining their accommodations prior to entering college. Students in special education are supposed to participate in the decision meetings concerning their academic progress and needs. It may be that those students who have been involved are more comfortable with asking for what they need and asserting themselves than those students who have not been as involved in their education.

In terms of gender, males were more comfortable with assertive behaviors than females. Although the research has been mixed concerning assertiveness of males and females, this finding matches the stereotypical views of male and female assertiveness. The participants from the study all attended institutions that are fairly conservative, traditional schools, so this finding may be at least in part a reflection of the institutional culture.

Students from the junior college were more comfortable with assertive behaviors than those from either 4-year institution. Although this is somewhat counter-intuitive, there are several explanations for why they may be more assertive. Students who attend junior colleges are usually in a smaller setting than those from 4-year universities. In the case of this study, the 4-year universities are both larger schools with many departments and staff who handle different aspects of campus life. The junior college is a much smaller environment. Student services are located within one or two offices and

instructors are usually seen as more accessible. West, Kregel, Getzel, Zhu, Ipsen, & Martin (1993) found that students with disabilities who attended 2-year community colleges reported less barriers to their education because of their disabilities. With fewer barriers, students may not see the need to self-advocate as much and may feel more comfortable being assertive, especially if they feel that they will be responded to in a positive manner. Although the questions on the Assertion Inventory are not designed to ask about academic assertiveness, much of the students' environment is academic, so if they are feeling more comfortable with their academic environment and know where to go when they have a question, they are more likely to feel comfortable with assertive behaviors in general.

Another factor that may affect the students at a junior college is the severity of their disability. Although data were not collected on the severity of the disability, it is often thought that students who attend junior colleges may be those with more severe disabilities. Those students with more severe and more visible disabilities may be more comfortable with assertive behaviors because they have had to be more assertive in order to navigate their schooling in order to reach the postsecondary level.

#### Limitations

There are several limitations in the current research. Because the research was conducted at three different institutions, there were several different ways of collecting the data. At the large research 1 university and the junior college, participants were approached in person. At the regional school, students were sent the inventory in the mail. Because the data collection was different, it is possible that the students who

responded to the mailed surveys may be different than those that responded to the personal contact.

Another limitation of this study is that there were very few people with disabilities other than cognitive disabilities. As with much of the research conducted in the past, it was difficult to access many students with physical disabilities. The population of students with physical disabilities at all three schools was actually fairly small. Future research focusing on those students with more visible disabilities, such as physical disabilities and blindness, might come up with different results. Also, the demographic questionnaire consisted of students identifying themselves as having a cognitive disability, physical disability, emotional disability, or other. Although no student asked for an explanation of those terms, it could be that they were unclear which category their particular disability fit into. For example, some students with Attention Deficit Hyperactivity Disorder may be unsure if they have a cognitive disability or an emotional disability.

The Assertion Inventory itself also has limitations. The inventory measures comfort with assertive behaviors and the probability of performing certain assertive behaviors. The Assertion Inventory was not designed for an academic setting and does not have items that specifically address the types of assertive behaviors needed in an academic setting by students either with or without disabilities (i.e. asking an instructor about a grade, answering a question in class, explaining about needed accommodations, etc.).

The manner in which the Assertion Inventory was used also limits the findings from this study. In order to limit the scope of the study, the Assertion Inventory was only analyzed to explore the comfort level of students with assertive behaviors. Although the comfort level is important to note, it would also be interesting to see if there were differences in the students' probability of actually performing assertive behaviors.

A further limitation is that the Assertion Inventory relies on self-report. Males may feel the need to present themselves in a socially acceptable light and may report themselves as being more comfortable with assertive behaviors than they actually are. The same may be true for students with disabilities. Furthermore, the Assertion Inventory itself has been found to be confounded by social desirability. McNamara & Delamater (1984) found that undergraduate students who scored high on the Assertion Inventory also scored high in social desirability. Gender also played a role in their study. They found that higher sensitivity to rejection was correlated with less comfort with assertive responding, especially among women.

#### Recommendations and Research Implications

There are practical implications of this study, especially for disability service providers. Oftentimes, programs are designed for students without evaluating the needs of the students. The current data indicate that students with disabilities may have a higher comfort level with assertive behaviors than would be assumed. Programs for teaching self-advocacy may still be necessary (most likely), but the content of the program may be different, in that students may not need assistance with feeling

comfortable with being assertive, but may need more assistance with information about their rights and responsibilities, where to go for assistance on campus, etc. This information may be distributed to all students in the form of a freshman orientation or other program for students in which they are informed of the resources available to them and how to access them. Because students with disabilities appear to be as assertive as those without, they may actually be reporting their disabilities to their instructors. It is important for instructors to also be aware of the services offered and the procedures that students need to follow in order to access them. This information could be distributed during a new faculty orientation, departmental meetings, or other regular channels of communication.

High school counselors, parents, and the students themselves also benefit from this knowledge. Everyone involved in the students' education needs to be aware that services for students with disabilities are provided on college campuses and that many of the same accommodations that students had in high school are available. Student participation in their special education annual reviews and transition meetings are important to their ability to understand and be able to explain their disability.

Future research that would expand the understanding of assertiveness with students with disabilities is necessary. As already noted, there were very few students with disabilities other than cognitive disabilities in this study. Further research needs to be conducted to examine the assertiveness of students with a variety of disabilities, described by actual disability versus the three categories that were used in this study. Furthermore, although students were asked to identify whether they had early or late

onset, they were not asked whether they had participated in special education services prior to attending college. Because of the opportunities to learn self-advocacy skills in high school, this variable is important to include in future studies. Another factor which deserves further attention is the severity of the disability. This study did not delineate the degree of the severity of the disability. Future research should be conducted to determine if students with more significant disabilities are more or less assertive than those with less significant disabilities (possibly looking at the type and number of accommodations utilized to help determine the severity).

Research examining further the assertiveness of students with differing characteristics (i.e. age, socio-economic status, ethnicity) should also be conducted. Although commonly used for determining socio-economic status (SES), the reporting of financial aid received or not may not be an accurate measure of SES. Students who receive scholarships may or may not consider themselves to “receive financial aid,” and those scholarships may or may not be need based. There may be other ways to determine SES, such as asking whether or not the student qualified for a free or reduced lunch in school. Another student characteristic that deserves further attention is the classification of the students. Further research examining the assertiveness of upper level college students (juniors and seniors) may yield different results in terms of their assertiveness after having attended college for 2 to 3 years.

In examining the assertiveness of college students with disabilities, it may be useful to develop a measure that measures academic assertiveness specifically to determine if students’ comfort with assertiveness is different when asked about personal

or work settings versus academic settings. It may be that although college students in general feel very comfortable with the assertive behaviors measured by the Assertion Inventory, they may not respond similarly to what they may see as more high stakes or risky assertive behavior, such as talking to a professor. College students might be asked to rate their comfort on an academic assertiveness inventory on such items as “Introduce myself to the professor,” “Explain an absence from class to the professor,” “Ask a question of a non-faculty member,” and “Attend review session for a class.”

Despite some limitations, this research provides important information about the assertiveness of college students. With future research in the specified areas, more information will be obtained about the assertiveness of college students with disabilities and the field will continue to be broadened.

## REFERENCES

- Americans with Disabilities Act of 1990, Pub.L. No.101-336, 42 USC 12101 *et seq.*
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1980). Gauging the relationship between self-efficacy judgment and action. *Cognitive Therapy and Research*, 4, 263-268.
- Barbaro, F. (1982). The learning disabled college student: Some considerations in setting objectives. *Journal of Learning Disabilities*, 15, 599-603.
- Blake, T. R., & Rust, J. O. (2002). Self-esteem and self-efficacy of college students with disabilities. *College Student Journal*, 36, 214-221.
- Brinckerhoff, L. C. (1993). Self-advocacy: A critical skill for college students with learning disabilities. *Family and Community Health*, 16(3), 23-33.
- Brinckerhoff, L.C. (1996). Making the transition to higher education: Opportunities for student empowerment. In Patton, J.R., & Blalock, G. (Eds.) *Transition and students with learning disabilities*. (pp. 157-189). Austin, TX: Pro-Ed.
- Brinckerhoff, L. C., Shaw, S. F., & McGuire, J. M. (1992). Promoting access, accommodations, and independence for college students with learning disabilities. *Journal of Learning Disabilities*, 25, 417-429.
- Burbach, H. J., & Babbitt, C. E. (1988). Physically disabled students on the college campus. *Remedial and Special Education*, 9(2), 12-19.
- Chickering, A. W. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Chickering A.W., & Reisser, L. (1993). *Education and identity* (2<sup>nd</sup> ed). San Francisco: Jossey-Bass.
- Choy, S. P., Ottinger, C., & Carroll, C. D. (1998). *Choosing a postsecondary institution*. (NCES 98-080). Washington, DC: U.S. Department of Education.
- Costa, P. T., Jr., Terracciano, A., & McCrae, R. R. (2001). Gender differences. Department of Education in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81, 322-331.

- Costello, J. J., & English, R. W. (2001). The psychological development of college students with and without learning disabilities. *Journal of Postsecondary Education and Disability, 15*(1), 16-27.
- Cullen, J. P., Shaw, S. F., & McGuire, J. M. (1996). Practitioner support of self-advocacy among college students with learning disabilities: A comparison of practices and attitudes. *Journal of Postsecondary Education and Disability, 12*(2), 2-15.
- Dalke, C., & Schmitt, S. (1987). Meeting the transition needs of college-bound students with learning disabilities. *Journal of Learning Disabilities, 20*, 176-180.
- Daniel, B. V., Evans, S. G., & Scott, B. R. (2001). Understanding family involvement in the college experience today. *New Directions for Student Services, 94*, 3-13
- Elliott, T. R., & Grambling, S. E. (1990). Personal assertiveness and the effects of social support among college students. *Journal of Counseling Psychology, 37*, 427-436.
- Elliott, T. R., Herrick, S. M., Patti, A. M., Witty, T. E., Godshall, F. J., & Spruell, M. (1991). Assertiveness, social support, and psychological adjustment following spinal cord injury. *Behaviour Research and Therapy, 29*, 485-493.
- Fairweather, J.S., & Shaver, D.M. (1990). A troubled future? Participation in post-secondary education by youths with disabilities. *Journal of Higher Education, 61*, 332-348.
- Florian, V., & Zernitsky-Shurka, E. (1987). The effect of culture and gender on self-reported assertive behavior. *International Journal of Psychology, 22*, 83-95.
- Gambrill, E., Florian, V., & Splaver, G. (1986). Assertion, loneliness, and perceived control among students with and without physical disabilities. *Rehabilitation Counseling Bulletin, 30*(1), 4-12.
- Gambrill, E.D., & Richey, C.A. (1975). An assertion inventory for use in assessment and research. *Behavior Therapy, 6*, 550-561.
- Glueckauf, R. L. & Quittner, A. L. (1992). Assertiveness training for disabled adults in wheelchairs: Self-report, role-play, and activity pattern outcomes. *Journal of Consulting and Clinical Psychology, 60*, 419-425.
- Hartman-Hall, H. M., & Haaga, D. A. (2002). College students' willingness to seek help for their learning disabilities. *Learning Disability Quarterly, 25*, 263-274.

- Hitchings, W. E., Horvath, M., Luzzo, D. A., Ristow, R. S., & Retish, P. (1998). Identifying the career development needs of college students with disabilities. *Journal of College Student Development, 39*(1), 23-32.
- Horn, L., Berktold, J., & Bobbitt, L. (1999). *Students with disabilities in postsecondary education: A profile of preparation, participation, and outcomes* (NCES 1999-187). Washington, DC: U.S. Department of Education.
- Horn, L., Peter, K., Rooney, K., & Malizio, A. (2002). *Profile of undergraduates in U.S. postsecondary institutions: 1999-2000* (NCES 2002-168). Washington, DC: U.S. Department of Education.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.
- Hughes, C. A., & Smith, J. O. (1990). Cognitive and academic performance of college students with learning disabilities: A synthesis of the literature. *Learning Disability Quarterly, 13*, 66-79.
- Individuals with Disabilities Education Act of 1990, Pub.L. No. 94-142, U.S.C. *et seq.*
- Individuals with Disabilities Education Act Amendments of 1997, Pub.L. No. 105-17, 20 U.S.C. *et seq.*
- Janiga, S. J., & Costenbader, V. (2002). The transition from high school to postsecondary education for students with learning disabilities: A survey of college service coordinators. *Journal of Learning Disabilities, 35*, 462-479.
- Joiner, J. G., Lovett, P. S., & Hague, L. K. (1982). Evaluation of assertiveness of disabled persons in the rehabilitation process. *Rehabilitation Counseling Bulletin, 26*(1), 55-58.
- Kaiser, H.F. (1974). An index of factorial simplicity. *Psychometrika, 39*, 31-36.
- Kronick, D. (1981). *Social Development of Learning Disabled Persons*. San Francisco: Jossey-Bass.
- Livingston, A., & Wirt, J. (2003). *The condition of education 2003 in brief* (NCES 2003-068). Washington, DC: U.S. Department of Education.
- Mangrum, C. T., III, & Strichart, S. S. (1984). *College and the learning disabled student*. Orlando, FL: Grune & Stratton, Inc.

- Mansour, G., Zernitsky-Shurka, E., & Florian, V. (1987). Self-reported assertion of males with and without a physical disability: A cross-cultural study. *International Journal of Rehabilitation Research, 10*, 167-174.
- McGuire, J. M., Hall, D., & Litt, A. V. (1991). A field-based study of the direct service needs of college students with learning disabilities. *Journal of College Student Development, 32*, 101-108.
- McNamara, J. R., & Delamater, R. J. (1984). The assertion inventory: Its relationship to social desirability and sensitivity to rejection. *Psychological Reports, 55*, 719-724.
- Masten, A.S., & Coatsworth, J.D. (1998). The development of competence in favorable and unfavorable environments. *American Psychologist, 53*, 205-220.
- Megivern, D., Pellerito, S., & Mowbray, C. (2003). Barriers to higher education for individuals with psychiatric disabilities. *Psychiatric Rehabilitation Journal, 26*, 217-231.
- Morgan, B., & Leung, P. (1980). Effects of assertion training on acceptance of disability by physically disabled university students. *Journal of Counseling Psychology, 27*, 209-212.
- National Joint Committee on Learning Disabilities. (1991). Learning disabilities: Issues on definition. *Asha, 33*, (Suppl. 5), 18-20.
- Ness, J., & Price, L. A. (1990). Meeting the psychosocial needs of adolescent and adults with LD. *Intervention in School and Clinic, 26*, 16-21.
- Newby-Fraser, E., & Schlebusch, L. (1997). Social support, self-efficacy and assertiveness as mediators of student stress. *Psychology: A Journal of Human Behavior, 34*(3,4), 61-69.
- Reber A. (1999). *Effects of discomfort on self-assertive behaviors between college students with and without disabilities*, Unpublished doctoral dissertation, Texas A&M University, College Station.
- Reisser, L. (1995). Revisiting the seven vectors. *Journal of College Student Development, 36*, 505-511.
- Richard, M. M. (1995). Pathways to success for the college student with ADD accommodations and preferred practices. *Journal of Postsecondary Education and Disability, 11*(2,3), 16-30.

- Roessler, R. T., Brown, P. L., & Rumrill, P. D. (1998). Self-advocacy training: Preparing students with disabilities to request classroom accommodations. *Journal of Postsecondary Education and Disability, 13*, 20-31.
- Sanders, K. S., & DuBois, D. L. (1996). Individual and socio-environmental predictors of adjustment to college among students with disabilities. *Journal of Postsecondary Education and Disability, 12*(2), 28-42.
- Saracoglu, B., Minden, H., & Wilchesky, M. (1989). The adjustment of students with learning disabilities to university and its relationship to self-esteem and self-efficacy. *Journal of Learning Disabilities, 22*, 590-592.
- Shaw, S. F., Brinckerhoff, L. C., Kistler, J. K., & McGuire, J. M. (1991). Preparing students with learning disabilities for postsecondary education: Issues and future needs. *Learning Disabilities, 2*, 21-26.
- Shaw, S. F., & Dukes, L. L., III. (2001). Program standards for disability services in higher education. *Journal of Postsecondary Education and Disability, 14*, 81-90.
- Starke, M. C. (1987). Enhancing social skills and self-perceptions of physically disabled young adults. *Behavior Modification, 11*, 3-16.
- Strauss, W., & Howe, N. (1991). *Generations*. New York: William Morrow and Company, Inc.
- Troiano, P. F. (2003). College students and learning disability: Elements of self-style. *Journal of College Student Development, 44*, 404-419.
- Velez, W. (1985). Finishing college: The effects of college type. *Sociology of Education, 58*, 191-200.
- Vocational Rehabilitation Act of 1973, 504, 29 U.S.C. 794 *et seq.*
- Weinstein, C.E., Johnson, K., Malloch, R., Ridley, S., & Schults, P. (1988). *Innovation Abstracts*. (National Institute for Staff & Organizational Development v.x. No. 21).
- Wells-Moran, J., & Gilmur, D. (2002). *Supported education for people with psychiatric disabilities*. Lanham, Maryland: University Press of America.
- West, M., Kregel, J., Getzel, E. E., Zhu, M., Ipsen, S. M., & Martin, E. D. (1993). Beyond section 504: Satisfaction and empowerment of students with disabilities in higher education. *Exceptional Children, 59*, 456-467.

Wilson, G.L. (1994). Self-advocacy skills. In Michaels, C.A. (Ed.), *Transition strategies for persons with learning disabilities* (pp.153-184) San Diego: Singular Publishing Group, Inc.

Zimmerman, B. J., Bandura, A., Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, 29, 663-676.

## APPENDIX A

## The Assertion Inventory

Many people experience difficulty in handling interpersonal situations requiring them to assert themselves in some way, for example, turning down a request, asking a favor, giving someone a compliment, expressing disapproval or approval, etc. Please indicate your degree of discomfort or anxiety in the space provided before each situation listed below. Utilize the following scale to indicate the degree of discomfort:

- 1=none  
 2=a little  
 3=a fair amount  
 4=much  
 5=very much

Situation	Degree of Discomfort
1. Turn down a request to borrow your car	_____
2. Compliment a friend	_____
3. Ask a favor of someone	_____
4. Resist sales pressure	_____
5. Apologize when you are at fault	_____
6. Turn down request for a meeting or a date	_____
7. Admit fear and request consideration	_____
8. Tell a person you are intimately involved with when he/she says or does something that bothers you	_____
9. Ask for a raise	_____
10. Admit ignorance in some area	_____
11. Turn down a request to borrow money	_____
12. Ask personal questions	_____
13. Turn off a talkative friend	_____
14. Ask for constructive criticism	_____
15. Initiate a conversation with a stranger	_____
16. Compliment a person you are romantically involved with or interested in	_____
17. Request a meeting or a date with a person	_____
18. Your initial request for a meeting is turned down and you ask the person again at a later time	_____
19. Admit confusion about a point under discussion and ask for clarification	_____
20. Apply for a job	_____
21. Ask whether you have offended someone	_____
22. Tell someone that you like them	_____
23. Request expected services when such is not forthcoming, e.g., in a restaurant	_____
24. Discuss openly with the person his/her criticism	_____

- of your behavior \_\_\_\_\_
25. Return defective items, e.g., store or restaurant \_\_\_\_\_
  26. Express an opinion that differs from that of the person  
you are talking to \_\_\_\_\_
  27. Resist sexual overtures when you are not interested \_\_\_\_\_
  28. Tell the person when you feel he/she has done  
something that is unfair to you \_\_\_\_\_
  29. Accept a date \_\_\_\_\_
  30. Tell someone good news about yourself \_\_\_\_\_
  31. Resist pressure to drink \_\_\_\_\_
  32. Resist a significant person's unfair demand \_\_\_\_\_
  33. Quit a job \_\_\_\_\_
  34. Resist pressure to use recreational drugs \_\_\_\_\_
  35. Discuss openly with the person his/her  
criticism of your work \_\_\_\_\_
  36. Request the return of borrowed items \_\_\_\_\_
  37. Receive compliments \_\_\_\_\_
  38. Continue to converse with someone who  
disagrees with you \_\_\_\_\_
  39. Tell a friend or someone with whom you work  
when he/she says or does something that bothers you \_\_\_\_\_
  40. Ask a person who is annoying you in a  
public situation to stop \_\_\_\_\_

Now, go over the list a second time and indicate after each item the probability or likelihood of your displaying the behavior if actually presented with the situation. \*For example, if you rarely apologize when you are at fault, you would mark a "4" after that item. Utilize the following scale to indicate the response probability:

- 1=always do it
- 2=usually do it
- 3=do it about half the time
- 4=rarely do it
- 5=never do it

Situation	Response Probability
1. Turn down a request to borrow your car	_____
2. Compliment a friend	_____
3. Ask a favor of someone	_____
4. Resist sales pressure	_____
5. Apologize when you are at fault	_____
6. Turn down request for a meeting or a date	_____
7. Admit fear and request consideration	_____
8. Tell a person you are intimately involved with when he/she says or does something that bothers you	_____
9. Ask for a raise	_____

10. Admit ignorance in some area \_\_\_\_\_
11. Turn down a request to borrow money \_\_\_\_\_
12. Ask personal questions \_\_\_\_\_
13. Turn off a talkative friend \_\_\_\_\_
14. Ask for constructive criticism \_\_\_\_\_
15. Initiate a conversation with a stranger \_\_\_\_\_
16. Compliment a person you are romantically involved  
with or interested in \_\_\_\_\_
17. Request a meeting or a date with a person \_\_\_\_\_
18. Your initial request for a meeting is turned down and you  
ask the person again at a later time \_\_\_\_\_
19. Admit confusion about a point under discussion and  
ask for clarification \_\_\_\_\_
20. Apply for a job \_\_\_\_\_
21. Ask whether you have offended someone \_\_\_\_\_
22. Tell someone that you like them \_\_\_\_\_
23. Request expected services when such is not forthcoming,  
e.g., in a restaurant \_\_\_\_\_
24. Discuss openly with the person his/her criticism of  
your behavior \_\_\_\_\_
25. Return defective items, e.g., store or restaurant \_\_\_\_\_
26. Express an opinion that differs from that of the person  
you are talking to \_\_\_\_\_
27. Resist sexual overtures when you are not interested \_\_\_\_\_
28. Tell the person when you feel he/she has done  
something that is unfair to you \_\_\_\_\_
29. Accept a date \_\_\_\_\_
30. Tell someone good news about yourself \_\_\_\_\_
31. Resist pressure to drink \_\_\_\_\_
32. Resist a significant person's unfair demand \_\_\_\_\_
33. Quit a job \_\_\_\_\_
34. Resist pressure to use recreational drugs \_\_\_\_\_
35. Discuss openly with the person his/her criticism of your work \_\_\_\_\_
36. Request the return of borrowed items \_\_\_\_\_
37. Receive compliments \_\_\_\_\_
38. Continue to converse with someone who disagrees with you \_\_\_\_\_
39. Tell a friend or someone with whom you work when he/she  
says or does something that bothers you \_\_\_\_\_
40. Ask a person who is annoying you in a public situation to stop \_\_\_\_\_

Lastly, please indicate the situations you would like to handle more assertively by placing a circle around the item number.

\*Please turn to the last page to complete the demographic information.

## APPENDIX B

## Demographic Information

**DIRECTIONS:** Please fill in the blanks or check the appropriate information as it pertains to you. Responses to these questions will allow for the different analyses described in the informed consent.

Age: \_\_\_\_\_

Gender: \_\_\_\_\_ Male \_\_\_\_\_ Female

Ethnicity: \_\_\_\_\_ African American \_\_\_\_\_ Asian/Pacific Islander  
 \_\_\_\_\_ Hispanic, Mexican American, Cuban, Puerto Rican, Latino  
 \_\_\_\_\_ Native American \_\_\_\_\_ White \_\_\_\_\_ Other, please specify \_\_\_\_\_

Institution: \_\_\_\_\_ Blinn College- Bryan \_\_\_\_\_ Blinn College- Brenham  
 \_\_\_\_\_ Sam Houston State University \_\_\_\_\_ Texas A&M University

Class Status: \_\_\_\_\_ Freshman \_\_\_\_\_ Sophomore

## Socioeconomic Status:

Do you receive financial aid? \_\_\_\_\_ Yes (if yes, continue with next questions)  
 \_\_\_\_\_ No (if no, stop here)

Do you receive a Federal Pell Grant? \_\_\_\_\_ Yes  
 \_\_\_\_\_ No

Do you receive a Federal Stafford Loan? \_\_\_\_\_ Yes (if yes, continue with last question)  
 \_\_\_\_\_ No (if no, stop here)

If you receive a Federal Stafford Loan, is it...? \_\_\_\_\_ Subsidized  
 \_\_\_\_\_ Unsubsidized

## Type of Disability (choose your primary disability category from those below):

\_\_\_\_\_ No disability present  
 \_\_\_\_\_ Cognitive (e.g. learning disability, ADD/ADHD, dyslexia)  
 \_\_\_\_\_ Physical (e.g. paraplegia, cerebral palsy, deafness, health impairments)  
 \_\_\_\_\_ Emotional (e.g. depression, anxiety disorder, panic disorder)  
 \_\_\_\_\_ Other: \_\_\_\_\_

Onset of Disability: \_\_\_\_\_ Early onset (prior to age ten)  
 \_\_\_\_\_ Late onset (after age ten)

## APPENDIX C

## Informed Consent for Students with Disabilities

The purpose of this study is to explore the difference in levels of self-reported assertive behaviors between college students with disabilities and college students without disabilities in several different postsecondary institutions in Texas (Blinn College, Sam Houston State University, and Texas A&M University).

I am aware that I will be part of a group of approximately 300 college students, with and without disabilities, enrolled at Blinn College, Sam Houston State University, and Texas A&M University volunteering for this study. Data collection will begin in February 2002 and extend through December 2002 or longer should the sample size be inadequate.

My responsibility in the study is to complete a 40-item questionnaire which should take approximately 20 minutes. Upon completion of the demographic information and questionnaire, I can have my name entered in a drawing for a \$25.00 gift certificate to my college bookstore if I so choose. I understand that the gift certificate will not be awarded until the necessary number of questionnaires has been acquired for the study. If I withdraw from the study, I will still be eligible for the gift certificate drawing.

My participation in this study is completely voluntary and I may withdraw from the study at any time. I am aware that while completing the questionnaire, I may refuse to answer any question that makes me feel uncomfortable.

I fully understand that the services I receive through my registration with my college's disability service office will in no way be affected by my participation in or withdrawal from this study.

I will receive no direct benefit or consequence for participation in this study.

I understand that the information I provide through the questionnaire is anonymous. In addition, I understand that all records and data will be stored under lock and key in the Texas A&M Department of Educational Psychology under the supervision of Dr. Salvador Hector Ochoa.

I understand that this research study has been reviewed and approved by the Institution Review Board-Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the Institutional Review Board through Dr. Michael W. Buckley, Director of Support Services, Office of Vice President for Research at (979) 458-4067.

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction and I voluntarily agree to participate in this study. I have been given a copy of this consent form.

---

Signature of Participant

---

Date

---

Signature of Principal Investigator

For more information about this study, please contact:

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Texas A&M University

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---

Signature of Research Supervisor

Dr. Salvador Hector Ochoa

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Texas A&M University

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## APPENDIX D

## Informed Consent for Students without Disabilities

The purpose of this study is to explore the difference in levels of self-reported assertive behaviors between college students with disabilities and college students without disabilities in several different postsecondary institutions in Texas (Blinn College, Sam Houston State University, and Texas A&M University).

I am aware that I will be part of a group of approximately 300 college students, with and without disabilities, enrolled at Blinn College, Sam Houston State University, and Texas A&M University volunteering for this study. Data collection will begin in August 2001 and extend through December 2001 or longer should the sample size be inadequate.

My responsibility in the study is to complete a 40-item questionnaire which should take approximately 20 minutes. Upon completion of the demographic information and questionnaire, I can have my name entered in a drawing for a \$25.00 gift certificate to the bookstore at my college if I so choose. I understand that the gift certificate will not be awarded until the necessary number of questionnaires has been acquired for the study. If I withdraw from the study, I will still be eligible for the gift certificate drawing.

My participation in this study is completely voluntary and I may withdraw from the study at any time. I am aware that while completing the questionnaire, I may refuse to answer any question that makes me feel uncomfortable.

I will receive no direct benefit or consequence for participation in this study.

I understand that the information I provide through the questionnaire is anonymous. In addition, I understand that all records and data will be stored under lock and key in the Texas A&M Department of Educational Psychology under the supervision of Dr. Salvador Hector Ochoa.

I understand that this research study has been reviewed and approved by the Institution Review Board-Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the Institutional Review Board through Dr. Michael W. Buckley, Director of Support Services, Office of Vice President for Research at (979) 458-4067.

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction and I voluntarily agree to participate in this study. I have been given a copy of this consent form.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Signature of Research Supervisor

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- B.S. Psychology, Texas A&M University, College Station, TX, 1991, Cum Laude, University Honors Program.

Professional Experience:

- Accommodations Counselor, Services for Students with Disabilities, Texas A&M University, College Station, TX, 1998 to date.
- Psychology Intern, Houston Independent School District, Houston, TX, 1997-1998.
- Therapist, Options for Young Parents, Bryan Independent School District, Bryan, TX, 1996-1997.
- Staff Counselor, Counseling and Assessment Clinic, Texas A&M University, College Station, TX, 1994-1996.
- Graduate Teaching Assistant, Department of Educational Psychology, Texas A&M University, College Station, TX, 1993-1994.
- Youth Counselor, Sheltering Arms, Bryan, TX, 1989-1991.