Learning Disabilities: Assessing Stereotypes, Metastereotypes, and Stigma Consciousness

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ABSTRACT
Past research has shown that students with a learning disability (LD) diagnosis face more obstacles that just their disability. The purpose of this study was twofold. The first purpose was to examine the perceived social stigma that students with a learning disability experience in college. The second purpose was to assess the existing stereotypes about students with a learning disability. Four undergraduate students with a LD and 101 students without a LD completed a questionnaire designed to assess the prevalence of stereotypes, metastereotypes, and stigmas on the college campus in regards to those with a learning disability. Students with a LD responded to what extent they felt others held stereotypes about students with a LD (metastereotypes). The specific metastereotypes and stereotypes measured were questions related to the constructs of low intelligence, process deficit, nonspecific insurmountable conditions, working the system, and compensation possible. Contrary to hypotheses, the results showed that the most endorsed stereotype construct was compensation possible, a positive stereotype that students with a LD can succeed as well as other students when provided with compensation such as extra time on tests. Overall, the results showed that some negative stereotypes about students with a LD are held, but the stereotypes are not as negative as some students with a LD believe them to be. These findings have practical implications for educating students about learning disabilities and for helping students with a learning disability feel less stigmatized.

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I am especially grateful to my loved ones for their unwavering love and for the immeasurable amount of patience they have shown me. Mom, I love you all the muches. You are truly an inspiration to me, and I hope, one day, to become half the woman you are.
Learning Disabilities: Assessing Stereotypes, Metastereotypes, and Stigma Consciousness

In 2011, it was found that 2.4 million U.S. children, from pre-kindergarten to twelfth grade, or 5% of the total public school population, were diagnosed with a learning disability (National Center for Learning Disabilities, 2013). A learning disability (LD) according to the Individuals with Disabilities Education Act of 2004 (IDEA), is defined as “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.” Specific learning disabilities also include conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia, a disorder that creates a challenge for the individual to learn, interpret what they visualize and hear, and to connect information from different parts of the brain (Katz, Goldstein, & Beers, 2001). Students who are diagnosed with a LD often have normal intelligence, but struggle in one or several of these main academic areas: writing, mathematics, and reading (Ellis, Ellis, & Hayes, 2009).

The most common obstacles students with a LD experience are difficulties retaining and comprehending sentences and reading passages, confusion of phonics, poor grammar, frequent spelling errors, struggling to memorize basic facts, and confusion of numbers (Lindstrom, 2007). A LD diagnosis does not include Attention Deficit Hyperactivity Disorder (ADHD), Obsessive Compulsive Disorder (OCD), and other disorders that require a doctor and/or a psychologist’s diagnosis. The purpose of this research was to assess levels of stigma consciousness, self-esteem, self-advocacy, and
metastereotypes—the stereotypes that members of a group think that other people hold about their group—in a sample of students with a diagnosed learning disability, and to assess levels of stereotype endorsement and self-esteem in a sample of students without a diagnosed learning disability.

**Transition into College**

Once students with a LD graduate from high school, it is highly unlikely they will attend postsecondary schooling; many graduate from high school and immediately start working because of their lack of self-control and direction, and their absence of knowledge about the laws that provide protection and assistance in the postsecondary setting (Shaw, 2009). Although these numbers are growing, self-advocacy strategies and disclosure about their disability upon admittance to college play a role in their success in the postsecondary setting.

Two civil rights laws, Section 504 of the *Rehabilitation Act of 1973* and Title II of the *Americans with Disabilities Act Amendment Act*, protect students with disabilities from discrimination and provide access into college and once in, provide access to reasonable services that help the student learn most effectively (Hadley, 2011). The laws that are in place are The Rehabilitation Act, which applies to any entity that chooses to accept federal financial assistance for any program or service, including higher education institutions. The specific provision of the Rehab Act that applies in higher
education, with respect to otherwise qualified students with disabilities, is section 504. Subpart E of section 504 specifically applies to postsecondary education settings. Subpart E requires any public or private college or university that accepts federal funds for any activity to provide "program accessibility."

*Program accessibility* allows recipients of federal funds, in this case colleges and universities, to make their programs and activities available to individuals with disabilities without extensive retrofitting of their existing buildings and facilities by offering those programs through alternative methods. In practical terms this means that campus buildings are not required to be made accessible to, and usable by, students or others with disabilities as long as the "program" is made accessible to individuals with disabilities. For example, if the second floor of a campus science building has no elevator and a course is offered on that floor that a student who uses a wheelchair wants to take, then the course must be relocated to a classroom that is accessible for the student. Under section 504, a campus is not required to make each of its existing facilities accessible to students with disabilities, though newly constructed campus buildings and facilities are required to be usable by all individuals with disabilities.

Congress intended the section 504 program-access requirements to enable individuals with disabilities to participate in and benefit from the services, programs, or activities of public entities in all but the most unusual cases. However, section 504 only applies to colleges and universities that accept federal financial assistance of some sort,
and does not apply to those institutions that do not accept federal dollars. Moreover, section 504 was not adequately enforced and, therefore, did not increase the number of students with disabilities attending postsecondary education. A more comprehensive civil rights law was needed to implement access for people with disabilities in all facets of society, including higher education. Thus, the foundation for the Americans with Disabilities Act was developed, leading to its passage in Congress by an overwhelming majority and its enactment into law on July 26, 1990. The Americans with Disabilities Act (ADA) is the most comprehensive civil rights law protecting people with disabilities in history. In terms of higher education for students, the ADA applies to every public college and university and nearly every private college or university in America, with the exception of those institutions affiliated with religious entities or organizations. Students, however, with disabilities must notify, and in some cases provide documentation of disability, prior to asserting the need for modifications, and they must not wait until the last minute. Then came Title II and the Higher Education Act, which included policy and curricular changes at the secondary level, under the No Child Left Behind Act (NCLB). These adjustments have focused on improving academic achievement and post-school expectations for students with disabilities with the hope of facilitating access to higher education.

The college environment, when compared to the high school setting, is less structured and full of distractions. When students with a learning disability move onto the college setting, they are solely responsible for seeking help with, and gaining access to, their accommodations and keeping up with the demands of all their classes. These students can no longer rely on parents and teachers to
continually check on their progress and identify if they are having difficulties. College requires the students to manage and organize their schedules and actively seek assistance, whereas in high school, accommodations were implemented in the classroom.

As the years go on, more students with a LD have been reported to be attending college. In 1990, it was noted that only fifty percent of high school graduates with a learning disability attempted college, and one year after they were enrolled, only 6.5% of them were still pursuing their degree (Stilson & Fran, 1990). Ten years later, in 2000, 9% of college students reported having a learning disability (Troiano, Leifeld, & Trachtenberg, 2010). While most students with documented disabilities received accommodations in their previous educational setting, when they enter into a less structured setting such as college it is up to them to seek out the accommodations they had in the past.

**Accommodations**

Even though the number of students with a LD diagnosis is steadily increasing, this does not mean that they are achieving their full potential while in college. Each college is required to provide services that assist and benefit students with an LD diagnosis, but only about 25% of the LD college population actually uses these services (Hadley, 2011). The accommodations that are provided by colleges vary, but most include, but are not limited to, peer-note takers, extended test times, alternative tests, and tutoring. In order to receive accommodations, students must disclose and provide documentation of their diagnosis to the Disability Resource Center on campus and to their professors.
Findings have demonstrated that students with a learning disability believe their participation and association with on campus resource centers will lead to their peers and professors to identify them as severely disabled (Abreu-Ellis, 2007). Abreu-Ellis (2007) interviewed six participants with a learning disability in regards to the experiences they have had while in college. One interview question participants were given asked them to reflect on what their primary obstacles were in college. The responses to this question demonstrated that these students felt compelled to pass as an average student without disclosing their diagnosis out of fear of being labeled negatively. These participants eventually did disclose their disability, but only after they carefully weighing the costs of their actions; they could disclose, receive accommodations, and risk being stigmatized, or they could not disclose, struggle in their academics, and avoid the possibility of stigmatization. Research also shows that students only disclose their LD to professors if they know they will struggle academically with the class (Barga, 1996). If the students feel they can get by without the accommodations they often will opt not to use the services provided by the school because they feared they would be negatively labeled (Barga, 1996; Nguyen & Fichten, 2013). Barga termed the action of avoiding disclosure as a using negative coping technique; a technique when employed caused consequences for students with a learning disability because those who did not disclose did not pass their classes.

Self-Advocacy

Self-advocacy refers to an individual’s ability to effectively communicate his or her own interests, needs, and rights as well as to assume the responsibility for making
appropriate choices. It is often defined as the ability of an individual to express one’s needs and to make educated decisions about requesting and utilizing accommodations and treatments that are necessary for his or her needs to be met. Students with a LD who make the transition to college must be proactive in seeking help with their disability (Hurtibis-Shalen & Lehmann, 2006). Students with a LD may be limited in self-advocacy due to their prior years in school where they did not have the opportunity to develop these skills. The skills may have been limited in part due to the Individuals with Disabilities Education Act (IDEA); a law the Department of Education passed in 1990 and updated in 2004 that put the identification and provision of services in the hands of the school system rather than the students.

Past research found that students leaving high school often were not active members in the decision process that focused on their own services, supports and direct instruction (Abery & Stancliff, 1996; Grella, 2014). This leads to low advocacy skills at the high school level and carries over to the postsecondary level. Students with a learning disability in the post secondary setting are expected to be self-advocates and make executive decisions about their disability on their own; something many may not have experienced before. Self-advocacy is a skill that has not been taught to students with a LD, and as a result the skill will most likely not be cultivated during their college years. Cawthon and Cole (2010) found that a relatively low percentage of students with learning disabilities discussed their accommodations with their professors; interactions between professors and students with a learning disability were formal in nature and not about the specific help they needed. For example, students with a LD visited their professors during scheduled meeting times to dropped off
letters and paperwork, but outside of that they were reluctant to ask for clarification of notes or added assistance.

Social Theory

Students with learning disabilities are not only attempting to achieve academically in college, but also trying to fit in socially. These students may desire to seek help with their disability through accommodations, but very few actually do (Troiano, Leifeld, & Trachtenberg, 2010). Students with a LD may find it difficult to balance their academic needs while upholding a positive social identity.

People, in general, are sensitive and conscious of their social image, and they will take measures to ensure that their image, which is observed by others, stays positive. Tajfel and Turner (1979) explain this phenomenon in their Social Identity Theory. This theory states that people divide themselves into groups, and it turns the social world into an in-group (us) versus an out-group (them) situation. Tajfel and Turner (1979) said that there are three cognitive processes that every individual goes through when they mentally create an in-group and out-group. The first is categorization; people who have similar attributes are grouped together. The second is social identification; a person becomes affiliated with their group, and this group becomes their identity. The last stage is social comparison; people in this stage are a member of their group, and they begin to point out the differences between the other groups to elevate their own status. Once a hierarchy is established, prejudice and stereotyping between the groups are inevitable, along with the establishment of negative metastereotypes from in group members. Metastereotypes are perceptions a group member has about other people’s stereotypes about their group.
Once a person who is connected to their group begins to feel inferior to another group, he or she will begin to renounce their association with the group. This may be one reason students with a LD diagnosis do not seek accommodations or disclose their disability; they may fear that they are negatively judged by their peers who do not have a learning disability, and may not want to further associate themselves with their in-group students with a learning disability even if they need help or assistance in school.

Another reason students with a LD may be unwilling to seek help is that they fear their group will be negatively judged based upon their actions of utilizing accommodations. For example, a study conducted by Wakefield, Hopkins, and Greenwood (2013) examined why people in need of help avoided seeking help, leaving their needs unmet. Researchers asked female Scottish undergraduates how they thought that the English stereotyped Scottish people. They did this because of the known rivalry and competitiveness between the two locations, Scotland and Europe. Scottish participants were given a questionnaire to see how they believed the English judged their national identity. They also measured the Scottish participants’ help seeking behavior during a problem-solving assignment.

Participants were led to believe that they were taking a two-part study. In the first part of the study the manipulations were delivered in a questionnaire where they were asked to rate traits. In the control group, participants were asked to rate how well English people demonstrated each trait. In the experimental group, participants were asked how much they believed English people thought Scottish people possessed each trait.

Participants were then led to believe that they were partnered with another person in another room who they could request levels of help from on completing a mystery
task. Participants were allowed to request biographical information of their partner. The participants received information from the partner that clearly defined the person as English.

Results from this study showed that help-seeking behaviors were impacted by a person’s social identity (Wakefield, Hopkins, & Greenwood, 2013). Participants who were in the experimental group demonstrated that they believed the English endorsed negative stereotypes against Scots. In turn, these participants exhibited significantly lower self-help seeking behaviors than those who only had to reflect on the differences between the two groups. In other words, those who held metastereotypes were less likely to ask for help with a task if they thought the out-group was going to judge them for it (Wakefield, Hopkins, & Greenwood, 2013).

**Stereotypes and Metastereotypes**

Not only do college students with a learning disorder have a difficult time keeping up with the demands of their postsecondary education, but they also have to deal with negative societal perceptions of their disabilities. If the transition was not hard enough for students with disabilities, they also have to compete and overcome stereotypes about them. Stereotyping is the act of labeling and categorizing people based on their appearance and actions (Barga, 1996). The student environment has great influence on how the student succeeds. If peers and professors make those with learning disabilities feel that they are inferior to students who do not have a learning disability, students with a LD will struggle more to achieve (Nario-Redmond, 2010).
A qualitative research project was conducted by Abreu-Ellis (2007) that investigated how students with a LD described their experiences in college in relation to their diagnosis. Six with a LD diagnosis were individually interviewed using open-ended questions to identify the challenges they faced while in college. Participants with a LD were asked how they interpreted their relationships with the professors and peers at their university. The six participants overall shared similar responses in regards to both professors and peers. It was reported that these students shared experiences with professors in which the teacher deemed them lazy and working the system. Similar answers were provided for how their peers viewed their disability. Participants reported that the students without a LD diagnosis would call them names, such as idiot and retard, and equate their disability to having severe mental or physical problems (Abreu-Ellis, 2007).

Another study that attempted to analyze the attitudes that were demonstrated toward those with a LD in the college setting was conducted by May and Stone (2010). They surveyed students with and without a LD to examine what factors may have been related to the stereotypes they placed on the LD population. They investigated metastereotypes and entity versus incremental views of intelligence. Metastereotypes are perceptions a group member has about other people’s stereotypes about their group. The views of intelligence are broken down into two categories: entity and incremental. Those who hold an entity view believe that intelligence is unchanging and impossible for students with a LD to overcome or improve with their disabilities. Others who hold an incremental view believe that students with a LD are able to change or improve their intelligence by putting forth more effort.
Two universities were used to conduct the study because of small sample sizes. Thirty-eight students with a LD and ninety-nine students without a LD volunteered to complete the survey. The data from the metastereotypes questionnaire resulted in five major stereotype and metastereotype categories that were consistent with past research. The category labeled Low Intelligence included statements that those with a LD diagnosis are less intelligent than those without a learning disability. The category Compensation Possible was defined as the idea that those with a LD are not any less intelligent than those without, but that they just need accommodations to achieve like those without an LD diagnosis (May & Stone, 2010). The category Processing Deficit is defined as the belief that those with a LD diagnosis will never be able to perform academically like those without an LD diagnosis, but believe that they still have some potential to learn information. The Nonspecific Insurmountable Conditions category is defined as the idea that those with a LD diagnosis are faced with a lifetime challenge (May & Stone, 2010). The Working the System category is defined as a belief that students who disclose their LD diagnosis are trying to trick others so they can get accommodations and that such students ultimately have an easier time in school than students without a learning disability (May & Stone, 2010).

The results also showed that almost half of all the participants believed that “people in general” believe students with a LD to have lower IQs than those without a learning disability. It was reported that 38% of students without a LD wrote statements referring to students with a LD as having low intelligence; whereas 52.5% percent of students with a LD endorsed this metastereotype. It was
found that 13% of students without a LD reported that students with a learning
disability needed compensation for their disorder to complete tasks, whereas
10.5% of students with a learning disability endorsed this metastereotype. It was
found that 22% of students without a learning disability believed that students with
a learning disability were inflicted with a nonspecific insurmountable condition,
whereas 2.6% of students with a learning disability endorsed this metastereotype.
It was also reported that 5% of students without a learning disability believed
students with a LD were working the system, whereas 13.5% of students with a
LD expressed this metastereotype. Twelve percent of students without a learning
disability, and 13.2% of students with a learning disability made statements that
did not fit into any of the previous categories. Students with and without a learning
disability were found to endorse low ability stereotypes most often (May & Stone,
2010). Despite the congruent results from the metastereotypes questionnaire, the
results for the views on intelligence significantly differed. Students with a learning
disability were more likely to hold an entity perspective of intelligence, whereas
students without a learning disability diagnosis believed in an incremental
perspective.

Although there has been little research conducted on the stereotype
endorsement of students without a LD, the available research findings demonstrate
that the stereotypes that do exist are largely negative towards those with a LD.

**Stigma and Stigma Consciousness**

Stigmatization occurs when people judge others based on their labels
rather than their individual personalities and differences. Students who disclose
their LD diagnosis may become just an “LD student” in their professors and peers eyes, rather than a student that has difficulties in one aspect of their life. All of the negative stereotypes that go along with having an LD may soon get applied to the student. Once a label is applied to a student it can become detrimental to their success because it adds to their current struggles; students now have to overcome an invisible barrier, the label, in addition to receiving help with their school work (Hatton, 2009). Past research has shown that students with a LD are often stigmatized, and ultimately rejected by their peers (May & Stone, 2010), and that being stigmatized often becomes an obstacle for people seeking mental health services (Tucker, Hammer, Vogel, Bitman, Wade, & Bayer, 2013).

Pinel (1999) created a stigma consciousness scale (SCQ) to measure stigma consciousness in target groups. Stigma consciousness is defined as person’s expectation of being stereotyped by others (Pinel, 1999). The first two studies were conducted with women and focused on testing the reliability and validity of the SCQ. Studies 3, 4, and 5 tested the reproducibility of the SQC across various target groups who may face stigmatization: gay men and lesbians, men, women, Whites, Blacks, Asians, and Hispanics. The results of Study 6 showed that individuals who reported high levels of stigma-consciousness were more likely to avoid situations where they believed others would stereotype them. Pinel discovered that individuals who have high stigma consciousness levels are the ones who are usually the minority group in a given situation. The study overall found that individuals low in stigma consciousness disclosed that they were unaware of being
stereotyped when interacting with other people, and that individuals high in stigma consciousness anticipated that others were stereotyping them during interactions.

Summary, Study Overview, and Hypotheses

Research has demonstrated that individuals without a LD hold negative stereotypes about students with a learning disability. Past research has shown that some students with a learning disability feel that their peers, staff, and professors hold negative stereotypes about them (Abreu-Ellis, 2007) (May & Stone, 2010). Students with a LD who are aware of these stereotypes and stigmas may internalize them, and ultimately base their social interactions off of these perceptions (Gay, 2004). These social interactions that they avoid, for example disclosing their diagnosis and seeking or receiving accommodations, may be detrimental to their success. Also, previous research findings show that those with a disability have experienced stigmas and have lower self-esteem than those who have not been diagnosed with a disability (Gay, 2004).

While the number of students with a LD that are attending college is growing, the percentage of students that access the accommodations that are available to them remains low. Past research and theory suggests that the avoidance of accommodations and disclosure of a LD diagnosis may be due to their fear of stigmatization, low levels of self-esteem and low self-advocacy levels, despite having protection against discrimination from the law. Past research also demonstrated that students with learning disabilities perceived that some of their professors, staff, and peers endorse negative stereotypes and stigmas about their diagnosis. In order to obtain pertinent information regarding these
issues, students with and without a learning disability diagnosis, were asked to respond to a questionnaire that examined the presence of these social barriers.

A vast amount of research has been conducted regarding the experiences of students with learning disabilities during their pre-college years. In comparison, there is not much research involving students with a LD and the post secondary setting. Even thought students with a learning disability make up a small percentage of the student populations on college campuses, the social stigmas and stereotypes struggles they may be facing could potentially be detrimental to their success. Previous research has only attempted to name and categorize the stereotypes and metastereotypes that have been endorsed in regards to students with a learning disability rather than qualitative measures. With the research that has been done, the most frequently endorsed stereotypes have been given, but the extent to which each one is present on campuses is unknown.

The purpose of the current study was twofold. The first purpose was to recruit a sample of students with a diagnosed learning disability and measure their perceptions of social stigma, metastereotypes, and levels of self-esteem and self-advocacy. The second purpose was to recruit a sample of students without a diagnosed learning disability and measure their endorsement of stereotypes about students with a learning disability and measure their levels of self-esteem.
In this study there were six hypotheses guided by the past research. The first hypothesis was consistent with May and Stone (2010), students without a learning disability would endorse the low intelligence stereotype more than the other stereotypes. The second hypothesis was congruent with findings from Gay (2004) that participants with a LD diagnosis were expected to have lower levels of self-esteem, when compared to a sample of non-learning disability students. The third hypothesis was consistent with May and Stone (2010) was that participants with a LD diagnosis would hold a greater level of metastereotypes of their group than the level of stereotypes endorsed by non-learning disabled students. The fourth hypothesis was for participants with a LD, there would be a negative association between self-advocacy levels and metastereotypes, such that participants with a LD with lower levels of self-advocacy would report higher levels of metastereotypes. The fifth hypothesis was consistent with findings reported by Hatton (2009) and May and Stone (2010) that for LD participants, there would be a positive association between stigma consciousness and metastereotypes, such that LD participants with higher levels of stigma consciousness related to self, peers, staff, and professors would report higher levels of metastereotypes. The sixth hypothesis was consistent with May and Stone (2010), students without a learning disability would endorse stereotypes in relation to the nonspecific insurmountable condition construct more than the LD participants.

Method

Participants
One hundred and five students enrolled in undergraduate psychology courses at Georgia Southern University participated in this study. Of these participants 101 reported that they did not have a LD diagnosis and 4 reported that they did have a learning disability diagnosis. The mean age of the participants was 20.49 years \((SD = 4.39 \text{ years})\), and 58% of the participants were women. The frequencies of the year in college participants were in were 33% first-year, 39% sophomore, 14% junior, and 14% senior. These participants also identified as 74% White/European American, 24% Black/African-American, 1% Hispanic/Latino, and 1% Other defined as “American.” The mean age of the participants with a LD was 22.25 years \((SD = 5.19)\). The four LD participants identified as male, two were White/European and two were Black/African-American. Three participants with a LD were sophomores in college and one was a senior. Three students were eliminated completely from this study because they did not answer any questions within the questionnaire.

**Design**

Participants were asked to complete a questionnaire online using the Qualtrics survey software. Student participants were recruited through the Georgia Southern University Psychology Department’s online SONA system, an online participant recruitment system. Participants who signed up for the study were given a link to an online Qualtrics survey and were asked to give their consent to participate. Once students gave their consent to participate in this study, they were initially asked if they had a LD diagnosis or not, and if they did, to indicate the academic area(s) in which they were diagnosed. The response participants gave to this
question determined which questionnaire they would receive. Two versions of the questionnaire were created: one for students who identified themselves as having a LD diagnosis and one for those who did not identify that they had an LD diagnosis.

The survey that students without a LD diagnosis completed included: the Rosenberg Self-Esteem scale, and a questionnaire about potential stereotypes they may have held against students diagnosed with a LD, and demographics.

The other survey was for students who disclosed that they have a LD diagnosis. All the scales included in this version of the survey were adapted for a LD population, excluding the Rosenberg Self-Esteem Scale; this scale was not modified. This survey included four different assessments which included: the Self-Advocacy scale, Pinel’s Stigma-consciousness questionnaire, and an evaluation of metastereotypes that students with a LD have that students without a LD previously held, Rosenberg Self-Esteem Scale and demographics.

**Measures**

**Rosenberg Self-Esteem Scale.** The Rosenberg Self-Esteem Scale was created by Rosenberg in 1965. This is a ten-item scale that measured a person’s perspective of their own worth (Rosenberg, 1965). The statements were answered on a four-point Likert scale that ranges from “strongly agree” to “strongly disagree”. The reported test-retest reliability had correlations that ranged from .82 to .88. The reported Cronbach’s alpha for the scale ranged from .77 to .88. In this current study Cronbach’s alpha was .91.
Self-Advocacy Scale. Brashers, Haas, and Neidig (1999) created a reliable and valid Self-Advocacy Scale. Self-advocacy was defined as the willingness of a person to actively seek out accommodations and effectively communicate concerns about their disability (Brashers, Haas, & Neidig, 1999). Originally, this scale was created for measuring the self-advocacy levels of AIDS patients, but it was adapted in the current study to fit the population of students who have a LD. Instead of participants answering survey questions based upon the illness of AIDS and HIV, participants responded to questions within three constructs in relation to the Student Disability Resource Center (SDRC), rather than a physician. The three constructs included education, assertiveness, and non-adherence. Education was defined as participants obtaining their own pertinent information regarding their diagnosis (Brashers, Haas, & Neidig, 1999). Assertiveness was defined as the patient’s willingness to ask their physicians questions about their AIDS diagnoses and treatments that were available. Non-adherence was originally defined as the tendency of an AIDS patient to reject the treatments they were prescribed by their doctors. In this current study, items regarding education focused on the extent of information a student with a LD sought about their disability. In this study, the treatments LD participants received would be the advice on accommodations they have previously received from the SDRC. This 12-item scale was used to measure a student’s own interests within a decision-making process on a five-point Likert scale. Reliabilities and correlations between constructs were reported for each subscale; education ranged from .73 to .75, Assertiveness ranged from .78 to .83, and nonadherence from .69
to .73. In this current study the Cronbach’s alpha for education was found to be .97, assertiveness was .54, and nonadherence was .84.

**Stigma Consciousness Questionnaire.** This questionnaire determined if the participant is high or low in stigma-consciousness. Pinel (1999) constructed and validated this questionnaire using gay men and lesbians, men, women, Whites, Blacks, Asians, and Hispanics. The original questionnaire contained 10 items that were answered on a four-point Likert scale. The reported Cronbach’s alpha for the scale was .72. In this current study the scale items were tailored to students with a learning disability. Items 1, 2 and 5 from the original scale were transformed, in this scale, to focus on the participant’s generalized feelings of how people viewed students with a LD. For example, the original first item stated, “Stereotypes about women have not affected me personally.” This item was replaced with “Stereotypes about students with disabilities have not affected me personally.” The remaining seven items were divided into three constructs: peers, professors, and staff. This measured the LD participant’s perspective of each category they interacted with on campus. For example, number four of Pinel’s item stated, “Most men do not judge women on the basis of their gender.” This item was replaced with the statement, “Most of the (professors, peers, or staff) at Georgia Southern University do not judge me on the basis of my disability.” In this study Pinel’s original 10-item scale was converted into a 24-question survey. The original scale reported a Cronbach’s alpha of .77. In this current study the alpha coefficient was calculated for each individual stigma consciousness scale. The Cronbach’s alpha for the scale that focused on perceived stigma from
professors was .84. The Cronbach’s alpha for the perceived stigma from peers was .78. The Cronbach’s alpha for perceived stigma from staff was .63. The Cronbach’s alpha for the scale about the persons generalized feelings of perceived stigma was .91.

**Stereotype and Metastereotype Questionnaire.** The stereotype and metastereotype questionnaire was designed to address five stereotype constructs that were established from May and Stone (2010). The sixth construct found within that study was not a solidified category of responses, so it was ruled out for this study. The sixth category was labeled “Other” and responses were placed in this category because they did not fit any of the other specified categories. In the May and Stone (2010) study participants with and without a LD provided responses to an open-ended question, “What do you think people in general believe about individuals with learning disabilities?” All responses were divided into five main constructs that included: low intelligence, compensation possible, process deficit, nonspecific insurmountable condition, and working the system. The categories in which the responses were divided into were from a qualitative examination May and Stone conducted. Each construct either described an attribute or characteristic students with a LD supposedly have, or a behavior that they supposedly demonstrate. In this current study some responses from May and Stone were divided into separate statements to avoid complex and double-barreled questions. For example, the original statement was “I think they believe that their disability is biologically determined and something that they can’t overcome.” This was transformed into two separate questions, resulting in: Out of 100 students with
a learning disability diagnoses, how many do you believe have a disability that is biologically determined?” and “Out of 100 students with a learning disability diagnoses, how many do you believe have a disability that they cannot overcome?” The list for the constructs and the corresponding statements are located in the Appendix.

The constructs and statements derived from May and Stone (2010) were then applied to the questionnaire format detailed by Saroglou, Yzerbyt, and Kaschtem (2011). Saroglou, Yzerbyt, and Kaschtem (2011) conducted a study on meta-stereotypes levels in regards to religious believers and nonreligioius. They examined how the religious believers and non-believers thought the out group members, non-believers and believers, respectively, thought of their in group. The methodology that they used asked all participants to indicate from 1 to 100 to what extent they thought the out group demonstrated the characteristics provided. The same characteristics were given to the participants again, and they were asked to indicate what percentage (0 to 100) of out group members they believed thought held the characteristic of their in group.

The stereotype questionnaire asked participants without a diagnosed learning disability to signify the extent to which they thought students with a LD portrayed the behaviors or attributes in the statements, by providing their evaluation of how many students with a LD out of 100 demonstrated them. This offered information about the stereotypes that students without a LD diagnosis endorsed of students with an learning disability. The metastereotype questionnaire asked participants with a LD to signify the extent to which they thought students without a LD held these beliefs of their group. They did this by providing their evaluation of how many students without a LD out of
100 believe the behavior or attribute described students with a LD. This offered information about the metastereotypes that were held by students with a LD.

**Results**

**Preliminary Analyses and Analytic Decisions**

Due to the very low sample size of participants with a learning disability, the hypotheses that made comparisons between participants with a learning disability and participants without a diagnosed learning disability (hypotheses 2, 5, and 6) or that predicated associations between the measures completed by the participants without a learning disability (hypotheses 3 and 4) could not be tested; testing these hypotheses with only data from four students without a learning disability would have greatly increased the chances of both Type I and Type II errors. Although four participants who had a learning disability completed measures of stigma, metastereotypes, self-advocacy, and self-esteem, we decided not to report any descriptive statistics on these measures. The informed consent form that participants signed stated that participants’ scores would be reported in the aggregate and that individual scores could not be linked to a participants’ identity. With such a low sample size of participants without a learning disability, we feared that these participants might feel that their identity had been compromised. Therefore, the analyses focused on understanding the stereotypes endorsed by students without a learning disability. We assessed the hypothesis that the most commonly endorsed stereotype about students with a learning disability would be the negative belief that students with a learning disability are low in intelligence.
Missing data decisions. Participants without a learning disability received the Rosenberg Self-Esteem scale and the Stereotype questionnaire. All participants completed the self-esteem scale (n = 101). However, a missing data analysis showed that there were many missing responses for several questions on the stereotype questionnaire. Interestingly, the greatest percentage of missing data was reported for the questions that made up the low intelligence stereotype. The construct that had the largest percentage of data missing was low intelligence at 52.5%. The construct that had the second largest percentage of data missing was working the system at 43.6%. Almost thirty five percent of participants failed to report their belief in the stereotypes related to processing deficit. Over twenty percent of participants failed to report their belief in stereotypes related to nonspecific insurmountable condition. The construct that had the smallest percentage of data missing was compensation possible at 12.9%. Overall every construct in the stereotype questionnaire was missing at least 10% of data. We decided not to conduct a multiple imputations analysis because the pattern of missing data suggests that the missing data is not random. It seems plausible that participants purposefully failed to respond to the stereotypes regarding low intelligence and working the system more because they either found these stereotypes offensive, or because they endorsed these negative stereotypes, but did not want to report such negative attitudes. Refer to Table 1 for descriptive statistics regarding missing data from participants without a LD diagnosis.

Endorsement of Stereotypes

To test the hypothesis that the highest average scores obtained from the non-LD participants would be for the low intelligence subscale, a repeated measures ANOVA was conducted on the stereotype endorsement of low intelligence, compensation possible,
processing deficit, nonspecific insurmountable condition, and working the system. The results showed a significant difference of stereotype endorsement, $F(4, 36) = 29.28$, $p < .001$, $\eta^2 = .77$. The results of the pairwise comparisons showed that participants endorsed Compensation Possible stereotypes ($M = 50.16; SD = 19.91$) more than low intelligence ($M = 16.78; SD = 11.48$), processing deficit ($M = 31.25, SD = 14.82$), nonspecific insurmountable condition ($M = 32.74, SD = 17.80$), and working the system ($M = 15.94, SD = 15.50$). Results also showed that the second and third most endorsed stereotypes by participants were nonspecific insurmountable condition and processing deficit respectively. These two constructs had greater means than low intelligence and working the system. There was not a significant difference between nonspecific insurmountable conditions and processing deficit. Lastly, the results showed that the least endorsed stereotype was low intelligence. There was not a significant difference between low intelligence and working the system, $p < .05$. Refer to Table 2 for the descriptive statistics of stereotype endorsement by nonLD participants.

**Effects of Gender on Stereotype Endorsement**

We also explored whether there were any gender differences in the endorsement of stereotypes. The results from the MANOVA demonstrated a nonsignificant multivariate effect for the relationship between gender and the stereotype constructs, Wilks' Lambda $T(5, 34) = 1.98$, $p = .11$, $\eta^2 = .22$. Due to the low sample size, which would decrease statistical power to detect a significant effect, we decided to examine the univariate results for any significant differences. The univariate results for the relationship between gender and low intelligence stereotype construct were significant, $F(1, 38) = 4.65$, $p = .04$. Results showed that men reported a higher level of
endorsement of the low intelligence stereotypes ($M = 21.14; SD = 10.89$) than did women ($M = 13.57; SD = 11.04$). The relationship between gender and the compensation possible stereotype construct was also significant, $F(1,38) = 5.08, p = .03$. Results showed that men reported a higher level of endorsement of the compensation possible stereotypes ($M = 58.02, SD = 19.67$) than did women ($M = 44.36, SD = 18.40$). The results of the relationship between gender and nonspecific insurmountable condition stereotype construct was significant, $F(1,38) = 5.73, p = .02$. Results showed that men reported a higher level of endorsement of nonspecific insurmountable condition ($M = 40.14, SD = 17.19$) than did females ($M = 27.27, SD = 16.53$). The relationship between gender and working the system construct was significant, $F(1,38) = 4.73, p = .04$. Results showed that men reported a higher level of endorsement of working the system stereotypes ($M = 21.86, SD = 16.92$) than did females ($M = 11.56, SD = 13.06$). The relationship between gender and processing deficit stereotype construct was not significant, $F(1,38) = 1.58, p = .22$. Refer to Table 3 for the descriptive statistics of gender and stereotype endorsement.

**Discussion**

The purpose of this research was to assess the level of stereotype endorsement by students without a learning disability in college in regards to students with a learning disability. This study also aimed to analyze metastereotypes, stigma-consciousness, self-esteem, and self-advocacy, factors that could create barriers for students with a learning disability in seeking needed accommodations. The first hypothesis was that the low intelligence stereotype would have the highest group mean when compared to the other stereotype construct means. The second hypothesis was that participants with a LD diagnosis were expected to have lower
levels of self-esteem, when compared to a sample of students without a LD. The third hypothesis was that participants with a LD would hold a greater number of metastereotypes of their group than the number of stereotypes endorsed by students without a LD. The fourth hypothesis was that for participants with a LD, there would be a negative association between self-advocacy levels and metastereotypes, such that participants with a LD with lower levels of self-advocacy would report higher levels of metastereotypes. The fifth hypothesis was that for participants with a LD there would be a positive association between stigma consciousness and metastereotypes, such that LD participants with higher levels of stigma consciousness related to self, peers, staff, and professors would report higher levels of metastereotypes. The sixth hypothesis was that participants without a LD would endorse stereotypes in relation to the nonspecific insurmountable condition construct more than the participants with a LD. Due to only have four participants with a learning disability complete the study, the hypotheses that predicted differences between students with a learning disability and students without a learning disability could not be tested.

The analyses therefore focused on understanding the stereotypes endorsed by students without a learning disability. We assessed the hypothesis that the most commonly endorsed stereotype about students with a learning disability would be the negative belief that students with a learning disability are low in intelligence. The data did not support this hypothesis. The results were inconsistent with previous research that stated the low intelligence construct would be endorsed more by participants than any other construct. Results from May and Stone (2010)
showed that the stereotype of low intelligence was most endorsed by participants in their study. Our results showed that the compensation possible stereotype had a significantly higher mean than the other stereotypes, meaning this was the stereotype construct that was endorsed the most by participants without a LD diagnosis in regards to students with LD. This construct also had the lowest percentage of missing data. The compensation possible stereotype could be described as the least negative stereotype when comparing it to the other four stereotypes. Other stereotypes seem to define students with a LD as suffering from a debilitating mental disorder that a person can never overcome, whereas compensation possible suggests students with a LD just need extra aid in completing tasks. The results demonstrate that students without a LD hold stereotypes that imply students with a LD are just as intelligent as students without a LD, but they just need accommodations and/or extra help to assist them with their work.

It was found that Low Intelligence and working the system, the stereotypes that had insensitive and harsh descriptions of students with a LD (i.e. dumb, stupid, lazy, lower achievers) had the greatest number of responses missing and the two smallest levels of endorsement. This demonstrates that the stereotypes that were more negative had more missing data. There are two possible reasons as to why this occurred. The first conceivable reason is that participants without a LD did not answer the statements within these two stereotype constructs as often as the other stereotypes because they found the statements to be offensive and did not endorse them. Participants without a LD did not rank the negative stereotypes because they
may have felt that they did not exist. Social desirability is the second reason that would explain the missing data in the stereotype questionnaire. Participants may have refused to endorse such negative stereotypes out of fear that they were going against social norms and were representing themselves in a negative way. However, we purposefully used an online survey to reduce demand characteristics. It therefore seems more likely that many participants refused to respond to the negative stereotypes because they felt that the stereotypes were wrong and offensive.

Results also showed that men had a higher average score on each subscale of the stereotype questionnaire than did women. This finding is consistent with existing literature about women being more accepting of interpersonal differences (Buunk & Schaufeli, 1999).

Limitations

The biggest limitation for this study is the small sample size of students diagnosed with a LD. We had four participants with a LD. This been a common theme throughout previous research regarding students with a LD in a postsecondary education setting. The small sample size in the current study can be attributed to the fact that the LD population was not directly solicited to take the survey. During this study we were unable to solicit students with a LD directly, and only four participants with a learning disability volunteered to take our survey through our convenience sampling method.

Practical Implications

Very little is known about what particular stereotypes and metastereotypes are endorsed by students in the post secondary setting in regards to those with a LD.
diagnosis. Past research (May & Stone, 2010)(Abreu-Ellis, 2007) has used open-ended questions in attempts to uncover the exact statements people use to stereotype students with a LD, but percentages of endorsement of these stereotypes is unknown. The current study examined to what extent students in college endorsed stereotypes s of students with a LD diagnosis. The results from the current study demonstrated that stereotypes about students with learning disabilities are not endorsed in high percentages, but they are still present on campus. Knowing this information, other resource centers on campus can educate professors, staff, and students on not only what exactly a learning disability is, but also debunk the negative beliefs that go along with it. The stereotypes that are endorsed by students without a learning disability are relatively benign. These results could be shared with students with a learning disability to demonstrate to them that the extremely negative stereotypes that may be feared, such as lazy, stupid, dumb, and retarded, are not commonly endorsed. Doing so may encourage students with a learning disability to reveal their status and received needed accommodations.

**Future Directions**

Future research should seek direct access to the LD student population through an established resource center found on all college campuses. In addition to seeking more students with a learning disability, it could be beneficial to have a larger more diverse sample of nonLD participants in regards to genders, and race and ethnicity. With more diversity, the results from repeating this study could be generalized to the nonLD population. Research could potentially uncover the existence of significant relationships between stereotype endorsement and demographic factors in relation to stereotype endorsement.
Furthermore, this study also provided information on how the current methodology could be altered in order to obtain valid data and decrease missing responses. Future research in this area would benefit from the inclusion of a Social Desirability Scale (Crowne and Marlowe, 1960) to eliminate the possibility that participants are attempting to keep their self-presentation positive by not endorsing the stereotypes that are listed in the questionnaire. In addition, the questionnaire should incorporate an adapted stigma-consciousness scale and self-advocacy scale to allow for comparisons between participant with a learning disability and participants without a learning disability. Students with a LD are faced with added obstacles in college that students without a LD are not, and are thusly deemed as not the typical or normal student. In addition, an open-ended question that asked nonLD participants what they thought of students with LD could possibly be added to see if any other stereotypes, both negative and positive, existed that were not mentioned in the current questionnaire.

Overall, the findings of this study showed that the most endorsed stereotype about students with a learning disability was compensation possible. This stereotype consists of a relatively positive set of traits that describes students with a LD as being smart or smarter than the average college student, but that they need some aid in completing their class requirements. These findings are positive and should be shared with college students with a learning disability. Doing so may reduce stigma consciousness in students with a learning disability, and allow them to seek needed accommodations.
References


Appendix A
List of stereotype and metastereotype questionnaire constructs and corresponding statements

<table>
<thead>
<tr>
<th>Stereotype Construct</th>
<th>Example Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Intelligence</strong></td>
<td>They can be taught the basics, but will never be able to learn as much as someone without a learning disability.</td>
</tr>
<tr>
<td></td>
<td>I think that people consider individuals with learning disabilities stupid by virtue of their disability and unable to learn as much or to be as smart as those who do not have the disability.</td>
</tr>
<tr>
<td></td>
<td>They are dumb because it takes them longer to learn things.</td>
</tr>
<tr>
<td></td>
<td>The majority of people with LD are stupid, have physical problems, or are retarded.</td>
</tr>
<tr>
<td></td>
<td>They can be taught skills for living, however cannot learn concepts.</td>
</tr>
<tr>
<td><strong>Compensation Possible</strong></td>
<td>It takes them longer time to learn something.</td>
</tr>
<tr>
<td></td>
<td>That they don’t comprehend information as well and that they need more time to complete activities or else they get really stressed out.</td>
</tr>
<tr>
<td></td>
<td>They may be just as smart or smarter but need aid to reach their full potential because of a basic deficiency in mind-slower, etc.</td>
</tr>
<tr>
<td></td>
<td>They need a little extra help or time to do things that others can do normally.</td>
</tr>
<tr>
<td></td>
<td>They need to work harder than others.</td>
</tr>
<tr>
<td><strong>Processing Deficit</strong></td>
<td>I think people believe they will always be slow.</td>
</tr>
<tr>
<td></td>
<td>That they are slower than others. Some people believe everyone has a learning disability only some peoples are diagnosed. That’s how I feel.</td>
</tr>
<tr>
<td></td>
<td>They can learn more if they are taught at their own pace and not challenged as much as those without a disability.</td>
</tr>
<tr>
<td></td>
<td>They cannot achieve high academically speaking.</td>
</tr>
<tr>
<td></td>
<td>That the learning disabled will not do in society with occupations that require cognitive skills.</td>
</tr>
<tr>
<td>Nonspecific Insurmountable Condition</td>
<td>I think in general people lose hope for people with learning disabilities. I think people not well-informed would believe that we cannot help people with learning disabilities.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>I think they believe that their disability is biologically determined and something that they can’t overcome.</td>
</tr>
<tr>
<td></td>
<td>They feel sorry for them and want little to do with them, or else they want to help.</td>
</tr>
<tr>
<td></td>
<td>People in general think that people with learning disabilities will always have difficulty.</td>
</tr>
<tr>
<td></td>
<td>They are disadvantaged and will never achieve what those without disabilities have the potential to achieve.</td>
</tr>
<tr>
<td>Working the System</td>
<td>That they are lying.</td>
</tr>
<tr>
<td></td>
<td>They don’t try, if they tried harder they would overcome their problems.</td>
</tr>
<tr>
<td></td>
<td>Ask for special privileges, pity, unruly, behind, nuisance, silent.</td>
</tr>
<tr>
<td></td>
<td>That they are lower achievers than everyone else and that some of them are taking the easy way out.</td>
</tr>
<tr>
<td></td>
<td>That some learning disabilities don’t really exist.</td>
</tr>
<tr>
<td></td>
<td>People with LD are individuals who can pay or know someone who will give the diagnosis or are otherwise willing to stoop to duping other so that they can get accommodations that would actually assist anyone who is willing to work the system.</td>
</tr>
</tbody>
</table>
Table 1
*Descriptive statistics of missing data from Stereotype Questionnaire*

<table>
<thead>
<tr>
<th>Missing Data and Stereotype Endorsement</th>
<th>N</th>
<th>Count</th>
<th>Percent</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Intelligence</td>
<td>48</td>
<td>53</td>
<td>52.5</td>
<td>16.78</td>
<td>11.48</td>
</tr>
<tr>
<td>Compensation Possible</td>
<td>88</td>
<td>13</td>
<td>12.9</td>
<td>50.16</td>
<td>19.91</td>
</tr>
<tr>
<td>Processing Deficit</td>
<td>66</td>
<td>35</td>
<td>34.7</td>
<td>31.25</td>
<td>14.82</td>
</tr>
<tr>
<td>Nonspecific Insurmountable Condition</td>
<td>73</td>
<td>28</td>
<td>27.7</td>
<td>32.74</td>
<td>17.80</td>
</tr>
<tr>
<td>Working the System</td>
<td>57</td>
<td>44</td>
<td>43.6</td>
<td>15.94</td>
<td>15.50</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>101</td>
<td>0</td>
<td>0</td>
<td>3.04</td>
<td>.54</td>
</tr>
</tbody>
</table>
Table 2
*Participants without a LD mean scores and standard deviations of Stereotype Questionnaire and Self-esteem measure*

<table>
<thead>
<tr>
<th>Stereotype Endorsement</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Intelligence</td>
<td>48</td>
<td>0.00</td>
<td>39.63</td>
<td>16.78</td>
<td>11.48</td>
</tr>
<tr>
<td>Compensation Possible</td>
<td>88</td>
<td>11.86</td>
<td>92.00</td>
<td>50.16</td>
<td>19.91</td>
</tr>
<tr>
<td>Processing Deficit</td>
<td>66</td>
<td>0.00</td>
<td>67.80</td>
<td>31.25</td>
<td>14.82</td>
</tr>
<tr>
<td>Nonspecific Insurmountable Condition</td>
<td>73</td>
<td>0.00</td>
<td>78.20</td>
<td>32.74</td>
<td>17.80</td>
</tr>
<tr>
<td>Working the System</td>
<td>57</td>
<td>0.00</td>
<td>73.40</td>
<td>15.94</td>
<td>15.50</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>101</td>
<td>1.50</td>
<td>4.00</td>
<td>3.04</td>
<td>0.54</td>
</tr>
</tbody>
</table>
Table 3
Effects of gender on stereotype endorsement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>Low Intelligence</td>
<td>22</td>
<td>21.14</td>
</tr>
<tr>
<td>Compensation Possible</td>
<td>33</td>
<td>58.02</td>
</tr>
<tr>
<td>Processing Deficit</td>
<td>29</td>
<td>34.65</td>
</tr>
<tr>
<td>Nonspecific Insurmountable Condition</td>
<td>30</td>
<td>40.14</td>
</tr>
<tr>
<td>Working the System</td>
<td>23</td>
<td>21.86</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>38</td>
<td>3.07</td>
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