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Identifying the Negative Stigma Associated with Having a Learning Disability

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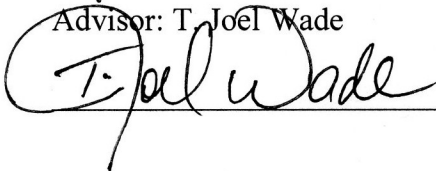
By

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Abstract

Those with learning disabilities (LDs) can be characterized as a minority group, and like most groups of minorities they face a distinct stigma by the larger population. While there is currently a lack of research in understanding LD stigma, it has become increasingly important given the push for inclusive classrooms settings. In this study it was hypothesized that regardless of a participants' gender, when participants were given a hypothetical description of a person that included information indicating that the individual has a LD, the participants would rate that individual less favorably. Results were consistent with the hypothesis. Participants perceived the hypothetical LD individual as being less attractive, less successful, less emotionally stable, and more open to new experiences when compared to those participants who were given the non-LD description. These results show a level of negative bias in our population towards those with LDs. It is hoped that this research will help address the goal of inclusion and equality for those with LDs and aid in finding ways to identify, address, and attenuate these stigmatizations within all aspects of our society.

Identifying the Negative Stigma Associated with Having a Learning Disability

Bias

Bias is a popular topic in psychological research. As a result of this research, a theory has been developed to classify the components of bias. This theory states that "[b]ias can encompass behavior (discrimination), attitude (prejudice), and cognition" (stereotyping) (Hewstone, Rubin, & Willis, 2002; Mackie & Smith, 1998; Wilder & Simon, 2001). Bias shown through behavior (discrimination) is arguably the most detrimental component of this three-part theory. The Merriam-Webster Dictionary (2010) defines discrimination as the act, practice, or instance of discerning categorically rather than individually. It defines racial discrimination as prejudiced or prejudicial outlook, action, or treatment of another individual or group.

Many groups of people are affected by bias. Society most commonly identifies race, gender and religious affiliation as factors that cause groups to receive considerable bias. In order to understand the prevalence and significance of a bias towards a particular group, it is essential to examine the root of the problem, which is determined by attitude (prejudice) and cognition (stereotyping). Through many avenues, including lack of contact, negative experiences and lack of education, attitudes develop into the stigmatization of particular groups (Hornstra, Denessen, Voeten, van den Bergh, & Bakker, 2010). Stigmatization occurs when a negative attitude is adopted with regard to a group in general as opposed to basing one's judgments on the specific characteristics of individuals (Dovidio, Major, & Crocker, 2000). Understanding the extent of these beliefs in our society could help determine how often these beliefs develop into discriminatory behaviors. But what about other groups?

Learning Disability Defined

Another group that often experiences discrimination is those with Learning Disabilities (LDs). The United States Office of Education (1977) defined LD as a permanent-information processing deficit (disorder) that affects the manner in which individuals with average to above average intelligence learn. LDs affect "one or more of the basic psychological processes involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations" (USOE, as cited in Frymier & Wanzer, 2003, p. 175). Learning disabilities occur regardless of gender, race, or ethnic origin, and they are not the result of a poor academic background, mental retardation, or emotional disorders (Various Definitions of Learning Disabilities, 2005). People with disabilities can be defined as a subset of the population. And like many subsets, they are treated differently than the norm.

Historically, people with disabilities were isolated and segregated from society. Like other minorities, most people with disabilities desire to achieve acceptance and integration in society. The 1990 Americans with Disabilities Act defined the nature of the [disabled individual's] environment as an essential predictor of one's acceptance and integration into society (as cited in Nagler, 1993; Li & Moore, 1998). However, in the pursuit of societal approval, the disabled continuously fall victim to the stigma and prejudice of others (Li & Moore, 1998).

How Do We Know That A Stigma Exists

While there is no empirical evidence that shows how and to what degree stigma affects the perceptions of personality in conjunction with perceived life success for those with LDs, there is an significant amount of evidence that suggests that a stigma exists.

For example, qualitative research has provided countless personal accounts of people who struggle due to the stigmatization caused by having a LD. Commonly found in autobiographical literature (as well as in some quantitative studies), those with LDs speak of being mistaken as intellectually inferior, thus providing evidence to support the existence of a stigma (Gerber, Reiff, &Ginsberg, 1996; Greenbaum, Graham, & Scales, 1995; McNulty, 2003; Roer-Strier 2002; Denhart, 2008). Similarly, a study done by Snyder, Carmichael, Blackwell, Cleveland, and Thornton (2010) revealed through the examination of disability types that those with non-physically visible disabilities reported more negative experiences than those with physical disabilities. LDs are categorized as a non-visible disability, which provides further support for the notion that people with LDs face stigma. Do teacher's fall prey to the bias?

Teachers' Ratings and Attitudes

Further evidence, which supports the presence of a societal bias, is found when examining and measuring teachers and professors' attitudes towards LD students. The negative attitudes of educators are reflected in Kavale and Fornes's (1995, 1996) study, which revealed that when teachers were made aware of the presence of an LD those teachers differentiated almost 80% of students with LD from their peers without LD as having problems with distractibility, hyperactivity, and adjustment (also see Mishna, 2003). Throughout the literature, there is a common negative attitudinal theme that arises in response to those with LDs. For example, one study found that instructors frequently reported feeling sorry for those students

with disabilities (Frymier & Wanzer, 2003; Pernell, McIntyre & Bader, 1985) and perceive them as not only more difficult to teach but also less intelligent (Darch, Walker, & Gersten, 1988; Frymier & Wanzer, 2003; Gerber & Sernmel, 1984).

Some of these negative attitudes may be due to the negotiation process required between students and teachers when they are determining how accommodations will be met. This is understandably a difficult and stressful process for the student as well as the teacher, and often educators appear to be reluctant to provide accommodations to students or seem suspicious of their non-visible disability (Frymier & Wanzer, 2003).

Another common negative attitude that is reported by teachers and professors is the judgment that those with LDs are lazy or not trying hard enough. This finding was supported in Lock and Layton's (2001) study, which showed that some professors held the belief that students use learning disabilities as an excuse to get out of work. This negative perception is unfortunate because abundant in the literature are reports of students labeled with LD working themselves into a state of exhaustion (Barga, 1996; Denhart, 2008; Gerber, Ginsberg, & Reiff, 1992; Reiff, Gerber, & Ginsberg, 1997; Reis & Neu, 1994) and even developing headaches and physical illness from the workload required to compensate for the difficulties that their LD causes them (Rodis, Garrod, & Boscardin, 2001).

Essay Grading Differences

In past research, it has been proven that group stereotyping has the ability to influence the grading of students' essays and other school related tasks (e.g., Babad, 1985; Fazio & Olson, 2003; Hornstra et al., 2010). In relation to LDs, there have also been studies that demonstrate discriminatory grading of those students who are dyslexic. When teachers held a more negative

implicit attitude toward dyslexia, they gave lower ratings on writing achievement to those who were dyslexic (Hornstra et al., 2010). This is a clear indication of stigmatization and may provide some explanation as to why students with LDs who have high levels of intelligence often receive below average grades.

The evidence provided from personal accounts, teacher and professor attitude measurements/self-reports, and discrepancies in grading differences related to implicit negative attitudes, suggests that there is a stigmatization for those who carry the LD label. What remains undetermined is the prevalence of this negative bias in the general population and the amount it affects the perception of others. These questions have remained unanswered due to a lack of research. Misperceptions of those with disabilities have persisted more than a decade after the passage of the Americans with Disabilities Act, and three decades after the beginning of the Disability Rights Movement (McDonald, Keys, & Balcazar, 2007). As time has passed, disability identification has increased and this issue has only become more relevant. Since the passing of the No Child Left Behind Act, the United States government has been pushing for the use of inclusive classrooms, where both LDs and non-LDs can be taught in unison. With this push, there is a great need to examine negative attitudes and perceptions of teachers and students in order to avoid the risk of unequal treatment (Hornstra et. al, 2010). It is evident that ignoring the underlying stigma that these individuals face, as done in the past, will no longer be acceptable. There is clear evidence that supports the existence of stigma against those with LDs, but the degree to which it is present is not yet known (McDonald et al., 2007; Yazbeck, Parmenter, & McVilly, 2004). Denhart identified this void in 2008 when he pointed out that larger scale quantitative studies need to be conducted to confirm if the discrimination is real and to what degree it might be experienced. Accordingly, the goal of this study is to uncover

whether or not it is stigmatizing, with respect to personality and perceived life success, to have a learning disability.

Why Does an LD Stigma Persist

A number of reasons may account for the development and perpetuation of stigmatization and discrimination toward those with learning disabilities. The reasons may include a lack of knowledge, invisibility of the disability cues, self-fulfilling prophecy, unconscious detection of covariance, confirmation bias, out-group homogeneity, and ableism theory.

Lack of Knowledge. A lack of knowledge is often what leads people to define a learning disability incorrectly. This statement is supported by Duchane, Leung and Coulter-Kern's (2008) study, which examined teachers' attitudes toward LD students, and revealed that less favorable attitudes toward teaching students receiving a special education are related to misunderstanding or lack of knowledge about disabilities. People are often unaware that the effects and characteristics of LDs differ from person to person. These effects differ most frequently in severity, visibility and prevalence of characteristics. It is not just possible, but rather common, for people to have more than one learning disability. For this reason, expectations and accommodations should not be held constant across populations; instead all interactions, accommodations, and treatments need to be interpreted and carried out on an individual basis.

Not only is knowledge of the disability important, it is also critical to understand the legislation associated with the learning disability. This idea is supported by Rao's (2004) study that showed that faculty who reported a better knowledge of the legislation had a more positive attitude toward those who had learning disabilities. As the population of people with LDs

continues to grow, the laws and regulations that govern treatment, acceptance, and accommodations continue to change and develop. Staying on top of the current legislation can provide the assurance for faculty and businesses to be sure that they are meeting all requirements and expectations as defined by the law.

       Invisibility of Disability Cues. It is important to note that the visibility of a disability has also been found to elicit bias from the non-disabled. An empirical study done by White, Jackson, and Gordon (2006) used an implicit measure to detect bias toward disabled athletes, when compared to able-bodied athletes, and found that implicit attitudes toward athletes with disabilities were consistently negative. Also, a statistically significant difference was found when timing participants' responses when asked to view pictures of disabled athletes and make positive word associations. Results showed that a longer amount of time for participants to connect persons with disabilities to positive word associations (White et al., 2006). Furthermore, both of these findings showed a large effect size. It can be inferred that if those with visible disabilities face unconscious discrimination, then those with invisible disabilities will face this same problem.

       Unlike physical disabilities, LDs are often characterized as being invisible disabilities. Invisible disabilities have no signs or cues to make them easily perceived by others. They are not noticeable in an individual's everyday actions. The effects caused by an individual's LD may only show up in certain environments (e.g. educational environments). Unfortunately, the invisible nature of these disabilities often perpetuates ignorance and differential treatment. Upton, Harper, and Wadsworth's (2005) findings revealed that the perception of accommodation deservedness was greater for disabilities that are more visible and have more obvious educational

implications. Accordingly, it has been proposed that the visibility/invisibility of disabilities is an important influence on the formation of disability perceptions (Upton et al., 2005). The "invisibility" of these disabilities is particularly problematic for those who do not have previous experience or knowledge of the effects of LDs. Upton, Harper, and Wadsworth's (2005) findings propose that a lack of physical cues for invisible disabilities hinders non-LDs from understanding the respective educational impact of the disabling conditions. When there are no physical cues available to determine that a person has a LD, it is common that the person's failures or mistakes are assumed to be due to a lack of intelligence rather than a disability that is exacerbated by an incorrect learning environment. Even though a defining component of the term LD requires the person to have an IQ that is average or above, people still expect them to have lower intelligence, and often treat them accordingly (Winters, 1997). In each case, ignorance is what drives this initial misunderstanding.

Individuals may choose to reveal invisible disabilities. This is especially true in higher education settings where accommodations must be negotiated between the professor and student. Until the student approaches the professor, the LD remains invisible. It is not surprising that the literature has provided sufficient evidence that documents the negative perception of both educators and peers particularly in an educational environment because this is where LDs are required to become visible through the use of special services and accommodation negotiations.

Merely requesting accommodations is noted for being a highly anxiety provoking situation for those with LDs. It requires that they highlight a "negative" part of their character to a person who in the future will be judging their coursework and participation. In a logical sense, this is not an interaction that makes students appear better in the eyes of the educators from whom they are requesting accommodations. Often students with LDs feel awkward during

conversations for fear of being stereotyped as "dumb" (Frymier et al., 2003). From the educators' perspective, it has been recognized that conversations between students with LDs and those without tend to elicit high amounts of uncertainty and generally negative predicted perceptions (Frymier et al., 2003; Grove & Werkman, 1991).

Once accommodations are made known and the disability becomes "visible", research indicates there is a common perceived discriminatory reaction among educators and peers. The mere label of 'Student with a Learning Disability' has been shown to place children at risk of stigmatization by teachers (Hornstra et al., 2010). In a qualitative study, Denhart (2008) found that many college students avoid using their accommodations because they fear that their professors will misunderstand and they will be stigmatized due to the LD label. They also reported fearing they would be misunderstood as cheating for using their accommodations (Field, Sarver, & Shaw, 2003).

Another common perception of those with LDs who receive accommodations, which was noted in Hill's (1994) study, was that faculty members often reported believing that granting access to accommodations provided an unfair advantage (also see Frymier et al., 2003). In a sample of college students who received classroom accommodations, Elaqua, Rapaport, and Kruses (1996) found that they frequently reported feeling that professors believed that they were trying to take advantage of the situation or that they were trying to 'pull a fast one' on them. It is likely that this perception also exists in the classmates of those who have LD accommodations. Classmates are often not made aware of accommodation arrangements or the reasons why they are needed. Students without learning disabilities often misinterpret the situation and perceive students with disabilities as being given an unfair advantage (Frymier et al., 2003). These

frequent misconceptions can explain the manifestation of discrimination as well as perpetuate the misconceptions.

       Self-fulfilling Prophecy. The self-fulfilling prophecy also makes it easy to understand how people who are discriminated against often fall victim to others' expectations. Hilton and Von Hippel (1996) explain that the self-fulfilling prophecy emerges when people hold expectancies that lead them to alter their behavior, which in turn causes the expected behaviors to be exhibited by people who are targets of the expectancies. This theory allows one to better understand not only why people show more discrimination towards those with learning disabilities, but it also explains why those with LDs tend to have lower rates of success (Jussim Eccles, & Madon, 1996). The self-fulfilling prophecy theory is supported by a study that found a significant association between teacher expectations and student achievement (Hornstra et al., 2010). If one believes that a group of people is not intelligent or is incapable, one will treat them accordingly. In turn, those who are treated as unintelligent will start believing and acting as though they are incapable. With this information in mind, one can better understand why 35% of children with learning disabilities drop out of high school (Levin, Zigmond, & Birch, 1985; Mishna, 2003). This is twice the dropout rate of students without LD. Of those students with LDs who do graduate, less than 2% attend a four-year college, despite the fact that many are above average in intelligence (Kenyon, 2003; McDonald et al., 2007). Once students drop out of school, they are at risk for social and economic disadvantage (Lichtenstein, 1993; Mishna, 2003; Morrison & Cosden, 1997), which may explain the high proportion of young criminal offenders who have LDs (Brier, 1989; Keilitz & Dunivant, 1987; Mishna, 2003; Winters, 1997).

Confirmation Bias. Confirmation bias is a social psychological theory that may help explain why misconceptions are held for those with LDs. This theory states that people have a tendency to interpret information in a manner consistent with existing beliefs or expectations (Nickerson, 1998). As mentioned before, those with LDs are often viewed as unintelligent due to a number of misconceptions and misunderstandings. In accordance with the confirmation bias theory, once this generalization has been made, people will view any person with an LD in a similar manner. Higgins, Raskin, Goldberg & Herman (2002) explained that according to this theory, a person's "individual characteristics are ignored" thus allowing people to group all types of LDs together based upon this one label. Each label is associated with a set of defining characteristics that each person is expected to have. This may explain why people expect all dyslexics to read backward or invert letters. While it may be true that some dyslexics have difficulty with mirror image letters (i.e., d and b), it does not mean that all dyslexics share this struggle. The confirmation bias can explain why many educators and classmates expect particular types of LDs to require a particular set of classroom accommodations. But, as has already been identified, accommodations are determined by the individual's needs, not the individual's type of LD.

Unconscious Detection of Covariance. This is a theory that is similar to the confirmation bias, yet the key difference between these two concepts is that the later is a completely unconscious process. It is believed that this could be a potential cause of LD stereotyping and that these stereotypes can be further strengthened by self-perpetuation (Hilton & Von Hippel, 1996). For example, as mentioned before, differences between people with the same disability are common. It has been shown that stereotypes can be formed through the

generalization from the behaviors of one group member to the evaluation of others. Humans unconsciously abstract a relationship between the characteristics of one person's LD and develop a scheme that allows them to incorrectly understand other people with a LD. A key component of this theory is that once a relationship is conceptualized, it will strengthen even in the absence of supporting evidence (Hilton & Von Hippel, 1996).

Out-group Homogeneity. Out-group homogeneity plays an equally important role in the development of stereotypes. Not only are out-group members perceived as possessing less desirable traits than in-group members, they are seen as more homogeneous as well (Hilton & Von Hippel, 1996). According to this theory, people with LDs are the out-group and they are viewed by those without LDs (in-group) as being less intelligent or able when compared to themselves. This also explains the common misunderstanding that all LDs are affected by their disability in the same way. It is easiest for the in-group to lump the out-group together into one category under the title of learning disabled than it is to treat people as individuals. This method of understanding acts as an unconscious catalyst for discrimination.

Abelism. Abelism is a form of prejudice towards people with disabilities, which illuminates society's influence in disability discrimination. An ableist is a person who is influenced by society's assumption that those without disabilities are more capable than those with disabilities. Thomas Hehir explains that an ableist perspective asserts that it is preferable to read print rather than Braille, to walk rather than to use a wheelchair, to spell independently rather than with the aid of a spell-checker, and to socialize with nondisabled children rather than disabled children (2007). Assuming that there is only one "right" way to learn, walk, talk, paint,

read, and write is the root of fundamental inequities (Hehir, 2007). The ableist outlook becomes particularly problematic for the learning disabled, who often need to be taught with methods that differ from mainstream teaching. For example, a dyslexic who can comprehend audio text, but who experiences difficulty comprehending through reading will still be viewed by an ableist as disabled or intellectually inferior because literacy through the eyes is privileged over literacy through the ears (Denhart, 2008).

The learning disabled and children who are placed in special education often deal with the scorn of classmates, teachers and even parents who look down upon their non-normal behaviors and special needs. The most damaging ableist assumption is that people with disabilities are intellectually incapable. From what we know about learning disabilities, this is fundamentally incorrect. Many disabilities including autism and dyslexia are associated with above average intelligence scores. Therefore, treating all people with LDs as intellectually incapable is detrimental to their confidence and growth, thus perpetuating this cycle of discrimination. Those who behave in accordance with an ablest perspective often create an unwelcoming and inaccessible environment for individuals with disabilities (Hehir, 2007). It is evident that this perspective has the ability to cause conscious and unconscious bias and lead to discriminatory behaviors in those who do not understand learning disabilities and their effects.

LD Population

There is a large population of people who suffer the effects of learning disabilities. According to the U.S. Department of Education, learning disabilities affect approximately 5% of public school children (Kenyon, 2003). There is also an incredibly large number of people who have LDs that are undiagnosed. The National Institute for Literacy reported that 30 - 50% of the

population has an undiagnosed learning disability (Kenyon, 2003). As of 1998, for every seven people in the United States, one has a disabling condition that interferes with life activities (Li & Moore, 1998). Not only is the LD population large, it is also growing. The National Institute of Health (2003) found that learning disabilities have increased 22% over the past 25 years. These numbers are on the rise even in the realm of academia. For example, in the past year alone, the number of students who have submitted testing documentation for disabilities at Bucknell University has increased by 40% (Robert Midkiff, Invisible Disability Panel Discussion, March 25, 2011).

Lack of Research

It is apparent that the population of people with learning disabilities is large, yet social psychological research is underdeveloped in exploring how this group of individuals is perceived by others with respect to major and minor aspects of personality and expected life success **(**McDonald et al., 2007**).** It is known that the perception of societal stigma and discrimination against deformity and disability create barriers to full participation in life for people with disabilities. For some individuals, these social barriers also impede on personal adjustment to their disability, making it all the more important to study this issue (Li & Moore, 1998).

Research must focus on identifying the underlying causes and effects of discrimination against LDs because answers in this field could eventually lead to successful social integration and acceptance. Minimizing perceptions of unfairness expressed by students without disabilities in response to LD accommodations could lead to more positive peer relations (Upton et al., 2005). It has also been found that negative attitudes may prevent students with disabilities from using self-advocacy skills and requesting appropriate accommodations, particularly in college

and work, where students must advocate for themselves. For these reasons, it is easy to understand why only 6 percent of all undergraduate students report having a disability (Rao, 2004). It seems that disconnecting their ties to having a LD becomes a coping mechanism to avoid negative social perceptions. Even though attitudinal barriers are recognized widely as an impediment to the success of persons with disabilities, there is a dearth of experimental research on the topic (Rao, 2004).

The fact that discrimination and stereotyping in relation to those with learning disabilities are largely under researched supports the point that this minority group is often overlooked. Almost all of the research done for the identification of stigmatization against those with disabilities has focused on white males with physical disabilities (Fine & Asch, 1988; Linton, 1998; McDonald et al., 2007).   In addition to the narrow research focus, there are also other issues that need to be addressed.

Measurement Discrepancies

It is important to note that for the limited amount of research on LD discrimination there has been a wide discrepancy in methods for testing. Quantitative studies use implicit or explicit measurement techniques or a combination of both to find their results. Explicit measures involve measuring a person's conscious reactions or responses to a situation or question. While this may appear to be the most direct method of data collection, it has been evident that social desirability may influence an individual's reactions.

White and colleagues (2006) explain that explicit measures, unlike implicit measures, are subject to self-presentational manipulation. Conscious discrimination is frowned upon in modern society, thus potentially influencing participant response when measuring the

participants' perception of minority groups. For this reason, explicit (conscious) measurements are often accompanied with the Crowne-Marlowe Social Desirability Scale (SDS), which is a widely used measure designed to detect excessive response distortion (White et al., 2006). From this measurement, one can discern how much of the subjects' responses represent their true opinions and how much is due to social influence. While some see social desirability as a confounding variable, others believe that attitudes and other unconcious cognitions like stereotypes, reflect an individual's past experiences and learned associations. Since these beliefs are unconscious they can often be triggered or primed by the presentation of associated stimuli. For this reason, measures of implicit attitudes are thought to be relatively immune from the influence of social desirability and acts of self-preservation (White, Jackson, & Gordon, 2006). If discrimination and stereotypes are types of implicit attitudes and they are beyond conscious control, then social desirability would not influence the participants' responses, and explicit forms of measurement would prove to be a valid predictor of disability discrimination.

Implicit measures are known for being the most valid data collection method. Implicit measures of bias are evaluations and beliefs that are automatically activated by the mere presence of the attitude object. Implicit measures tap unintentional bias, of which well intentioned and would-be unprejudiced people are largely unaware (Hewstone, Rubin, & Willis, 2002). This method is popular because it attempts to take an unconscious measurement, which would eliminate the problems caused by social desirability and self-presentational manipulation. Implicit measures often include deception through the use of a cover story, which unconsciously elicits the participant's biases. This proves to be useful because it allows one to quantify the true extent of people's bias, given pressures to conform to socially desirable or politically correct norms. (Hewstone, Rubin, & Willis, 2002).

There is much debate in the field as to what is the correct method of testing implicit attitudes towards minority groups. What we can see is that when using both implicit and explicit measures on the same group of participants, there has been a discrepancy in scores. Hewstone et al. (2002) explain that this discrepancy can be attributed to making a compromise between the desire to evaluate their own group positively and the wish to maintain a self-image of fair-mindedness. For this reason, many researchers choose to use qualitative forms of data collection to analyze this topic. While one should not detract from the important knowledge gained through this method, it is inherently accompanied with unavoidable limitations of external validity.

Taking into account all of the aforementioned information, it is the purpose of this thesis to identify whether a LD stigma exists and the extent of the stigma in the areas of personality and perceived life success. For this study, emphasis will be placed on the idea that one is measuring unconscious attitudes. Therefore, it is most fitting to use an evaluative measure assessing perceived personality and life success. Through the use of this method of measurement, the intent is to avoid the limitations that accompany qualitative research, in search of more concrete trends of bias and stereotypes in the population. Additionally, this research endeavors to avoid social desirability influences through the use of deception via a cover story. The dependent measure will be accompanied by Crowne-Marlowe Social Desirability Scale, which will give empirical evidence to rule out the influence of societal norms.

Hypothesis

It is hypothesized that regardless of a participants' gender, when they are given a hypothetical description of an individual that includes information indicating that the individual has a learning disability, the participants will rate that individual less favorably in terms of

personality and life success than an individual who is not described as having a LD.

Method

Participants

Data was collected from 200 participants, of which 137 were women and 63 were men. Participants ranged in age from 18 – 75 years, M = 26.41.

Procedure

A link for the survey was posted on the Bucknell message center and participants were invited to follow the link and complete the online survey made through the university's academic survey creator. The link randomly assigned the participants into one of four groups. Each group received a different stimulus description of a hypothetical individual which varied in terms of gender, name and presence of a LD: male with LD, male without LD, female with LD, female without LD. The first page of the online survey was a participant Informed Consent form.

Measures

Person Perception Accuracy. The following page consisted of the "Person Perception Accuracy" cover story (Dion, Berscheid, & Walster, 1972), which was used in order to try to insure unbiased responses to all questions. The participant was informed that the series of questions that followed served the purpose of identifying the participant's ability to accurately answer questions based upon the limited content in the given descriptions. Once read, the participant was prompted to continue on to the next page.

Stimulus descriptions. This next page included one of four hypothetical descriptions of an individual, which were created by the researcher specifically for this experiment. Each description varied in terms of the stimulus person's sex, name, and presence of a learning

disability. In addition to the manipulation, each description was four sentences long and provided the reader with information about the individual's hobbies, age, and level of education. The descriptions were followed by a series of questions.

Manipulation check. The first set of seven questions included a "manipulation check" and questions to reinforce the cover story. For those participants who received the LD description a question was included which asked the participant whether or not the hypothetical individual had an LD. This set of questions allowed one to determine whether or not participants realized the description included the learning disability (if applicable).

27 Personality Traits Scale. The next set of questions included the "27 Personality Traits Scale" obtained from Dion, Berscheid, and Walster (1972). Participants were prompted to rate the hypothetical individual's prevalence of 27 different personality traits on a 7-point Likert scale. These questions allowed one to analyze the effect of the description on the participant's perceptions of the stimulus person.

Life Success Measures. The Life Success Measures were obtained from Dion, Berscheid, and Walster (1972). This measurement asked the participant to answer eight questions, which indicated the hypothetical individual's perceived future success in life. For example, "How intelligent is this person?" with the score of 1 indicating the rating of "not very intelligent" and the score of 7 indicating the rating of "very intelligent".

10-item Big-5 personality scale. A 10-item version of the Big-5 personality scale was also used to identify the variance between participant's perception of the described individual in terms of five personality dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Gosling, Rentfrow, & Swann, 2003). This scale is known for its frequent use in psychological research as well as its consistent reliability and validity.

10-item form of the Marlowe-Crowne Social Desirability scale. Participants were also prompted to answer a 10-item form of the Marlowe-Crowne Social Desirability scale, (Reynolds, 1982; Strahan & Gerbasi, 1972). This allowed one to determine the degree of social influence or truthfulness in the participant's answers on the previous perception measurements.

Demographic questionnaire. Participants were given five basic demographic questions. These questions included; age, sex, race and presence of personal experiences with learning disabilities.

The final page of the survey included a debriefing and consent to include one's data in the study form.

Results

This study had 3 independent variables with 2 levels each; 2 (Learning Disability Description) x 2 (Sex of Stimulus Person) x 2 (Sex of Participant). According to the hypothesis, a main effect for the LD description was expected.

To determine the effects of the description of the stimulus person, a multivariate analysis of variance (MANOVA) was computed for the life success measures and Big 5 personality trait measures, and an analysis of variance (ANOVA) was computed for a sum-score created from the 27 personality traits measure. Also, a Chi-Square was computed for the manipulation check, and the social desirability sum-score was included as a covariate in the MANOVA and ANOVA analyses to rule out possible confounding influences on the data.

Manipulation Check

A Chi-square was computed to determine whether or not the disability manipulation was effective. The LD manipulation was effective, $X^2(200) = 187.88$, $p < .0001$. The stimulus descriptions were perceived correctly by the participants.

Tests of Hypothesis

Big 5 Ten Item Personality Inventory. A 2(disabled or not) x 2(sex of stimulus person) x 2(sex of participant) MANOVA with the social desirability score included as a covariate was computed for the Big-5 personality dimensions.

Results revealed a main effect for having a disability or not, $F(6, 185) = 6.41$ $p < .0001$, $eta^2 = .17$, which occurred for the following Big-5 personality dimensions, Emotional Stability, $F(1, 185) = 13.39$, $p < .001$, $eta^2 = .066$, and Openness to Experiences $F(1,185) = 7.12$, $p < .008$, $eta^2 = .036$, see Table 1. Those described as having a learning disability were perceived as being less emotionally stable and more open to experiences than those described as not having a learning disability. No other significant effects were found for the other personality items in the measure. Also, the Social Desirability score covariate did not reach statistical significance; showing that participant's answers were given truthfully and without significant influence of social conformity.

Life Success Measures. A 2(disabled or not) x 2(sex of stimulus person) x 2(sex of participant MANOVA with the social desirability score included as a covariate was computed for the 8 life success measures. There was a main effect for having a disability or not, $F(8, 183)$ = 4.29, $p < .0001$, eta^2 = .158, which occurred for the items, Attractiveness $F(1, 198) = 16.63$, p $< .0001$, eta^2 = .080, and future Successfulness $F(1, 198) = 4.57$, $p < .034$, eta^2 = .023, see Table 2. In particular, those with a disability were perceived as being less attractive and with less potential for success when compared to their non-learning disabled counterparts.

No other significant effects were found for the remaining life success questions used in this measure. Also, once again, the Social Desirability score covariate did not reach statistical significance; showing that participant's answers were given truthfully and without significant influence of social conformity

Discussion

It was hypothesized that regardless of a participants' gender, when participants were given a hypothetical description of a person that included information indicating that the individual has a learning disability, the participants would rate that individual less favorably.

The results obtained were consistent with the hypothesis. A main effect was obtained for the presence of a learning disability in the stimulus description. Those given the stimulus description, which included the presence of a learning disability, rated that person less favorably, in terms of personality and life success, than did participants who received a description of a person that did not include a learning disability. No interactions were obtained. These findings

provide support for previous research that suggests that there is a level of negative bias in our population towards those with LDs.

Life Success Findings

A statistically significant difference was shown for the perception of those with learning disabilities in regards to two items among the Life Success measures. These results revealed that those participants who received the LD stimulus description were perceived as being less attractive and had less potential for success when compared to the control group who received a description without a LD. The variation of gender within the context of the stimuli descriptions did not make a statistically significant impact on the results. This finding was consistent across all participants regardless of age and gender. These results indicate a clear bias towards those who have learning disabilities and help explain in what way this group is being stigmatized.

Attractiveness

It is not surprising that those with LDs are perceived as being less attractive. Past research has shown that once a LD is identified, people may experience the "spread effect", which explains that when one negative characteristic is identified, it often causes people to ascribe deficits to other areas, rendering an inaccurate perception that the person with an LD is multiply impaired (Kranz , Miller, Chen, & Glover-Graf, 2009; Livneh, 1982). It is true that there is a cultural narrative that exists which suggests that people with learning disabilities are less than fully human and regarded as less worthy of attention, respect and inclusion in community life (McDonald et al., 2007). This perception has the ability to detract from a person's perceived attractiveness.

Although a lower rating of attractiveness was seen across genders for LDs further exploring gender stereotypes may explain how the LD stigma effects perceived attractiveness. In terms of gender identification, men with disabilities may be viewed as less masculine, capable, and strong (Morris, 1993). Women with LDs may also face a similar perception. Studies show that women are viewed as weaker and less intelligent than males, and that these pejorative cultural views are exacerbated with the presence of a disability (McDonald et al., 2007). Clearly, these gender expectations may be misinterpreted when a LD is present, thus providing us with an understanding of why a diminished level of attractiveness for LD individuals exists.

The effects of this detraction of perceived attractiveness can also be viewed through its effects on individuals' willingness to engage in conversation and relationships with those with LDs. Kranz (2009) reported that students expressed more willingness to have relationships with people with sensory, health, and physical impairments and were substantially less willing to pursue relationships with those who have cognitive impairments. As a result of these negative perceptions, it is easy to understand why people with LDs may experience difficulty making friends, finding partners, and forming romantic relationships (De Loach, 1994; Gill, 1996; Goldstein & Johnson, 1997; Kranz et. al, 2009; Rintala, Howland, Nosek, Bennett, Young, Foley, 1997).

Future Success

There is a great deal of research which explains that the perception of attraction and success are closely intertwined**.** Perceived attractiveness causes the halo effect, where attractive individuals are judged as more socially desirable (Dion, Berscheid, & Walster, as cited in Wade, 2005). In accordance with the "what is beautiful is good" stereotype, those who are perceived as

being more attractive may also be viewed as being more successful in life (Cash & Duncan, 1984). This theory can explain the negative perception of life success for those with LDs. Since those who have LDs are perceived as less attractive, they may also be viewed as possessing less potential for success in life. In turn, the self-fulfilling prophecy can explain how these perceptions influence the actual life success of those with LDs.

In accordance with this theory Hilton and Von Hippel (1996) explain that people will act in accordance with the way they are treated or expected to behave. Therefore, if those with LDs are expected to have less success than their counterparts without LD, then those with LDs will be treated with behaviors and attitudes that are congruent with these expectations. This targeted treatment towards those with LDs will result in those with LDs altering their behaviors to fit and meet these expectations. Through the self-fulfilling prophecy it becomes evident that these negative perceptions have the ability to greatly influence the future life success of those with LDs.

The Big 5-Ten Item Personality Inventory

In terms of the Big 5 Ten-Item Personality Inventory, participants given the LD stimulus description perceived this person differently on two items when compared to those given the non-LD description. These results revealed that those participants who received the LD stimulus description gave lower ratings in terms of emotional stability and higher ratings in terms of openness to new experiences when compared to those participants who were given the control stimuli. Similar to the obtained life success measures, gender and age of the participant did not significantly influence the results. These findings indicate a clear bias towards those who have learning disabilities.

Emotional Stability

There are many reasons that can explain why those with LDs are perceived as less emotionally stable. People who have LDs are characterized as experiencing a great deal of struggle throughout their lives in both social and educational settings. These perceived struggles may influence the perception of emotional stability.

As mentioned in the introduction, studies have shown that LD students are misinterpreted as being unintelligent. Those who are mistaken as intellectually inferior often have more negative early school experiences. Accordingly, students with LDs are particularly vulnerable to experiencing a wide range of psychosocial difficulties (Kavale & Forness, 1996; Lewandowski & Barlow, 2000; Margalit, 1998; Mishna, 2003; Morrison & Cosden, 1997). Children with LDs have notably higher accounts of being bullied, teased, ridiculed and hounded, which has been shown to be the cause of high rates of loneliness, despair, depression, anxiety, and low self-esteem (Denhart, 2008; Gregg, Hoy, King, Moreland, & Jagota, 1992). Sadly, results have shown that those with LDs have fewer friends and experience more rejection as children than their peers without LD (Bryan, 1976). An influential component of one's emotional stability is his or her support system. Therefore, it is understandable why those who are characterized as having more life struggles and more negative peer relationships (LDs) as well as weak emotional support systems are also perceived as less emotionally stable. Gitanjali (2004) tested the personality characteristics of those with and without LDs and found that children with LDs were significantly more likely to have problems with emotional adjustment than their peers without LD. This finding may give further explanation as to why the label of LD can lead to perceptions of decreased emotional stability.

Unfortunately, there may be people with LDs who are also emotionally unstable, but this does not make it appropriate to extrapolate this individual characteristic and apply it to all people with LDs. This all-encompassing negative perception only strengthens the common pejorative misconceptions, which stigmatize those who have LDs.

Openness to Experience

The second item on the Big 5 Ten-Item personality measure that received differential ratings depending on the presence of a LD in the stimulus description was openness to new experiences. On this item, the LD stimulus was perceived as being more open than those who do not have a LD. Those who are more open to new experiences may be characterized as being more creative, imaginative, and curious. They are also noted to be more likely to hold unconventional beliefs and be more aware of their feelings (McCrae, 1987). It seems plausible that since those with LDs are expected to struggle in an educational setting that involves reading and writing, people may assume that individuals with LDs may hold interests in more creative areas, including, art, dance, and theater. In addition, those who are rated higher on the openness measurement are characterized as being more open to diversity (McCrae, 1996). Since those with LD are a type of diverse population, it makes logical sense that those with LDs are perceived as being accepting towards other types of diversity.

To date there has been no other study that has tested whether those who have LDs are perceived as or actually are more open to new experiences. What is apparent is that being open to new experiences is not necessarily a negative perception, yet this finding shows that the mere label of LD will cause a differential perception to develop and surface.

Conclusion

These results provide clear evidence that a bias exists toward those who have learning disabilities. The mere presence of the LD label had the ability to cause a differential perception between those with LDs and those without. In this study we found that, regardless of age or gender, participants were more likely to stereotype those with LDs as having less future life success, as being less attractive, as having less emotional stability, and as being more open to new experiences when compared to their counterparts without LD. Since the label of being learning disabled says nothing about the individual in terms of these personality characteristics these perceptions are stereotypes that have no valid evidence.

It can be inferred that these negative stereotypes cause and strengthen a perpetual cycle of bias towards those with LDs, thus providing explanation to the frequent struggles that this group of people face.

Limitations

Contact. Although participants' level of contact with the LD population was not examined as a possible moderating variable, a number of studies suggest that an individual's exposure to and contact with the disabled directly influences their level and direction of bias towards those with disabilities (Askamit et al., 1987; Baggett, 1993; Benham, 1995; Duchane et al., 2008; Fonosch & Schwab, 1981; Kleinsasser, 1999; Rao, 2004, 2002; Upton et al., 2005). Some studies have reported a negative correlation between the increase in contact and the decrease in negative perceptions (Duchane et al., 2008; Rao, 2004; Upton et al., 2005). Unfortunately, due to participant characteristics, the influence of exposure to LDs on participants' direction and level of bias could not be determined. Of the 200 participants tested,

too few people reported having a LD and too many people reported knowing an individual with an LD, which thwarted the ability to run statistical analyses on this.

Significance of These Findings and Implications for Future Research

There is immense significance in exploring the topic of learning disability discrimination. Better defining the effects of this phenomenon can help explain the stratification of this group of people. This information could be useful in explaining why people with LD's are known to have low success rates, high dropout rates, drug problems, and higher than average suicide rates. It could also lead to finding an intervention that could help undo the psychological trauma associated with the negative stigma that is often felt by those with LDs.

To this researcher's knowledge, this is the only study that has used the Big-5 personality scale, which is considered one of the most important and reliable assessments of personality, along with the 27 Personality Traits Scale, which is considered a more general assessment, in the same study in order to uncover a bias towards learning disabilities.

It is hoped that these findings will allow for a better understanding of the pervasiveness of bias toward the learning disabled. Identifying what personality characteristics are influenced by the LD label, one can better understand how to address these pejorative misconceptions. In the long term, it is hoped that this research will help address the goal of inclusion and equality for those with LDs and aid in finding ways to identify, address, and attenuate these stigmatizations within all aspects of our society.

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Table 1. Mean Perceived Personality as a function of LD Description

Big-5 Item	Description	Mean(SD)
Emotional Stability	Learning Disability	8.57(1.88)
	No Learning Disability	9.66(1.82)
Openness to Experiences	Learning Disability	8.92(1.93)
	No Learning Disability	8.10(1.84)

Note: higher numbers mean more emotionally stable and more open to experience, standard deviations are in parentheses.

Table 2. Mean Perceived Life Success as a function of LD Description

Life Success Item	Description	Mean(SD)
Attractiveness	Learning Disability	4.27(.75)
	No Learning Disability	4.77(.77)
Successfulness	Learning Disability	4.43(1.03)
	No Learning Disability	4.75(.76)

Note: higher numbers mean more attractive and more successful, standard deviations are in parentheses.

Appendix

Student Consent Form
Bucknell University

1. **Project Name**: "Perception Accuracy"
2. **Purpose of the research**: I understand that I will be asked to indicate how I perceive some actions. I also understand that all of the details of the research cannot be explained to me at this time, but that I will be fully debriefed at the conclusion of the experiment.
3. **General plan of the research**: I understand that I will be responding to a series of statements. I also understand that I will be volunteering for a survey that asks me to answer questions regarding my demographic information (sex, race, age, etc.).
4. **Estimated duration of the research**: I understand that my participation in this study will take no more than thirty minutes.
5. **Estimated total number of participants**: I understand that the researcher wishes to include approximately 90-100 participants in this study.
6. **Questions or concerns**: I understand that if I have any questions or concerns related to this study I may contact the Principal Investigator, Kelsey Lisle via email at Kelseylisle@mac.com. I may also contact Professor T. Joel Wade, Chair, Department of Psychology at Bucknell University, at (570)-577-1693 or by email at jwade@bucknell.edu. For general questions regarding human subject research or questions regarding ethical treatment and rights of human subjects, I may contact Abe Feuerstein, Chair of the Institutional Review Board at Bucknell University, at (570)-577-3293 or by email at abe.feuerstein@bucknell.edu. Minimal risk or discomfort is anticipated for this study, but it is not possible to anticipate everything that may occur. All possible measures will be taken by the Principal Investigator to reduce or prevent discomfort.
7. **Subject participation is voluntary**: I understand that my participation in this study is completely voluntary. I understand that if I agree to participate I may change my mind at any time. I also understand that I reserve the right to refuse to answer any question(s) and may withdraw from the study at any point without penalty.
8. **No compensation**: I understand that I will receive no compensation for my participation in this research.
9. **Possible risks or discomforts**: I understand that minimal risks are associated with participation in this study and that no more than mild psychological discomfort is anticipated. I also understand that information I disclose for the purposes of this study will be secured and kept confidential to protect my privacy.
10. **Possible benefits**: I understand that my participation in this study will contribute to and build upon already existing knowledge on perception accuracy as well as help to give insight into the how psychological research is conducted.
11. **Confidentiality**: I understand that this is an anonymous survey and that no personally identifiable data will be collected. I understand that data acquired through this study will be kept confidential. I also understand that all data collected will be secured and only made available to those persons conducting the study unless I provide written permission to do otherwise. I understand that no reference will be made in any oral or written reports that could possibly link me to the study.

By continuing I acknowledge that I am over 18 years of age, and that I understand the above information and consent to participate in this study being conducted at Bucknell University.

Person Perception Accuracy (Cover Story)

The experiment you are taking part in deals with person perception accuracy. We are interested in determining how well individuals can accurately identify the personality characteristics of others based upon limited information of different types, specifically the type of information one might receive in a brief encounter or chance meeting with others. Attached is an individual's description chosen at random from a group of currently enrolled college students at other universities who are participating in a longitudinal study of personal development. Therefore, the accuracy of your judgments will be compared to information that is currently available on these individuals, and against forthcoming information on these individuals. We ask you to carefully read the description of an individual, which is attached to this packet, and then to answer some questions based on the description you receive about this individual.

Now that you have read the instructions, please turn the page and begin. So that we may obtain precise information regarding each individual's accuracy of perception, please do not discuss your responses with others who may be taking part in the experiment.

Four Description Possibilities

1. Male LD
Dan just recently celebrated his 20th birthday. He is a rising junior in college and was recently diagnosed with a learning disability. He participates in a variety of clubs and academic organizations. His hobbies include exercising, listening to music and hanging out with friends.

2. Female LD
Danielle just recently celebrated her 20th birthday. She is a rising junior in college and was recently diagnosed with a learning disability. She participates in a variety of clubs and academic organizations. Her hobbies include exercising, listening to music and hanging out with friends.

3. Male Without LD
Dan just recently celebrated his 20th birthday. He is a rising junior in college. He participates in a variety of clubs and academic organizations. His hobbies include exercising, listening to music and hanging out with friends.

4. Female Without LD
Danielle just recently celebrated her 20th birthday. She is a rising junior in college. She participates in a variety of clubs and academic organizations. Her hobbies include exercising, listening to music and hanging out with friends.

Manipulation Check
Directions: So that we may get an indication of how well you processed and/or remembered the information you were presented regarding the individual, please answer the following questions.

(1)   Was the individual sex?
   a. Male
   b. Female

(2)   What level of schooling is this person currently enrolled in?
   a) Elementary school
   b) High School
   c) College
   d) Middle School

(3)   How old is the individual?
   (a) 20
   (b) 30
   (c) 40
   (d) 50

(4)   What year in college is the individual?
   (a) Freshmen
   (b) Sophomore
   (c) Junior
   (d) Senior

(5)   This person enjoys which of the following activities?
   (a) Reading
   (b) Traveling
   (c) Eating
   (d) Listening to music

(6)   What was the individual's favorite sport?
   (a) Football
   (b) Basketball
   (c) Soccer
   (d) This information was not provided

(7)   What does the individual like to do during free time?
   (a) Read a book
   (b) Watch TV
   (c) Visiting friends
   (d) Pottery making

27-Item Personality Traits Scale

Directions: Based on the description of the person you received, please rate the person on what you think the person might be like.

Altruistic	1	2	3	4	5	6	7	Egoistic
Unconventional	1	2	3	4	5	6	7	Conventional
Assertive	1	2	3	4	5	6	7	Passive
Dull	1	2	3	4	5	6	7	Exciting
Unstable	1	2	3	4	5	6	7	Stable
Emotional	1	2	3	4	5	6	7	Unemotional
Dependent	1	2	3	4	5	6	7	Independent
Safe	1	2	3	4	5	6	7	Unsafe
Boring	1	2	3	4	5	6	7	Interesting
Genuine	1	2	3	4	5	6	7	False
Sensitive	1	2	3	4	5	6	7	Insensitive
Outgoing	1	2	3	4	5	6	7	Introverted
Sexually Permissive	1	2	3	4	5	6	7	Sexually Nonpermissive
Insincere	1	2	3	4	5	6	7	Sincere
Cold	1	2	3	4	5	6	7	Warm
Unsociable	1	2	3	4	5	6	7	Sociable
Competitive	1	2	3	4	5	6	7	Cooperative
Obvious	1	2	3	4	5	6	7	Nonobvious
Unkind	1	2	3	4	5	6	7	Kind
Modest	1	2	3	4	5	6	7	Inmodest

Strong	1	2	3	4	5	6	7	Weak
Serious	1	2	3	4	5	6	7	Silly
Sexually Cold	1	2	3	4	5	6	7	Sexually Warm
Simple	1	2	3	4	5	6	7	Complex
Unpoised	1	2	3	4	5	6	7	Poised
Shy	1	2	3	4	5	6	7	Bold
Sophisticated	1	2	3	4	5	6	7	Unsophisticated

Life Success Measures

Directions: Please answer the following questions according to what you think the person is like based on the description you received.

(1) How intelligent is this person?

    1   2   3   4   5   6   7
Not very   Very
Intelligent   Intelligent

(2) How attractive is the person in the description?

    1   2   3   4   5   6   7
Not very   Very
Attractive   Attractive

(3) How friendly is this person?

    1   2   3   4   5   6   7
Not very   Very
Friendly   Friendly

(4) How enthusiastic is this person?

    1   2   3   4   5   6   7
Not very   Very
Enthusiastic   Enthusiastic

(5) How trustworthy is this individual?

    1   2   3   4   5   6   7
Not very   Very
Trustworthy   Trustworthy

(6) How successful will this person be?

    1   2   3   4   5   6   7
Not very   Very
Successful   Successful

(7)   Will this person be a good parent?

        1   2   3   4   5   6   7
        Not very   Very
        Good   Good

(8)   Will this individual be a good mate (husband or wife)?

        1   2   3   4   5   6   7
        Not very   Very
        Good   Good

BIG 5 Ten Item Personality Inventory

Directions: Based on the description of the person you received, please rate the person on the following 10 pairs of personality traits. Please select an answer to each question that indicates the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to the individual, even if one characteristic applies more strongly than the other.

1 Disagree strongly
2 Disagree moderately
3 Disagree a little
4 Neither agree nor disagree
5 Agree a little
6 Agree moderately
7 Agree strongly

I see the individual as:
1. _____ Extraverted, enthusiastic.
2. _____ Critical, quarrelsome.
3. _____ Dependable, self-disciplined.
4. _____ Anxious, easily upset.
5. _____ Open to new experiences, complex.
6. _____ Reserved, quiet.
7. _____ Sympathetic, warm.
8. _____ Disorganized, careless.
9. _____ Calm, emotionally stable.
10. _____ Conventional, uncreative.

Social Desirability Scale

Directions: The following questions contain a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to your personally. If it does not pertain to you, answer F.

(1)   I never hesitate to go out of my way to help someone in trouble._____

(2)   I have never intensely disliked anyone._____

(3)   There have been times when I was quite jealous of the good fortune of others._____

(4)   I would never think of letting someone else be punished for my wrong doings._____

(5)   I sometimes feel resentful when I don't get my way._____

(6)   There have been times when I felt like rebelling against people in authority even though I knew they were right._____

(7)   I am always courteous, even to people who are disagreeable._____

(8)   When I don't know something I don't at all mind admitting it._____

(9)   I can remember "playing sick" to get out of something._____

(10)   I am sometimes irritated by people who ask favors of me._____

<u>Background Questions</u>

Directions: For the purpose of data organization please answer the following questions.

1. Age: _____

2. Race:
        A. White
        B. Black
        C. Asian
        D. Hispanic
        E. Other

3. Sex:
        A. Male
        B. Female

4. Do you have a Learning Disability?
        A. Yes
        B. No

5. Do you know anyone who has a Learning Disability?
        A. Yes
        B. No

Debriefing Statement

The questionnaire you just completed was examining how learning disabilities affect other's ratings of perception. The only deception employed was that you were not informed of the hypothesis of the research. From the results of this study we expect to see an impact on perception when there is a presence of a learning disability. We hope that you understand the need for this mild deception to accomplish the purposes of the experiment. If you wish to deny permission to use your data in this study, please exit out of this page and your data will be disposed of. If you wish to submit your data for use, please select the **submit button below**. The only individuals who will see the responses are myself, the experimenter, and my supervisor, Professor Wade. I would be happy to answer any questions you may have either at this time or in the future. I may be contacted via email at Kelseylisle@mac.com. Thank you for your participation.