### Southern Illinois University Carbondale OpenSIUC

**Research Papers** 

Graduate School

12-2012

# LEARNING DISABILITIES AND SUBSTANCE USE

Marqueeta L. Harrington Southern Illinois University, marqueetah21@gmail.com

Follow this and additional works at: http://opensiuc.lib.siu.edu/gs\_rp

#### **Recommended** Citation

Harrington, Marqueeta L., "LEARNING DISABILITIES AND SUBSTANCE USE" (2012). *Research Papers*. Paper 308. http://opensiuc.lib.siu.edu/gs\_rp/308

This Article is brought to you for free and open access by the Graduate School at OpenSIUC. It has been accepted for inclusion in Research Papers by an authorized administrator of OpenSIUC. For more information, please contact opensiuc@lib.siu.edu.

#### LEARNING DISABILITIES AND SUBSTANCE USE

By

Marqueeta L. Harrington B.A., Southern Illinois University, 2009

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the

Master of Science Degree

Rehabilitation Institute

In the Graduate School

Southern Illinois University Carbondale

December 2012

#### RESEARCH PAPER APPROVAL

#### LEARNING DISABILITIES AND SUBSTANCE USE

By

Marqueeta L. Harrington

A Research Paper Submitted in Partial Fulfillment of the Requirements

for the Degree of

Master of Science

in the field of Rehabilitation Counseling and Training

Approved by:

Dr. Carl Flowers, Chair

Graduate School

Southern Illinois University Carbondale

November 8, 2012

#### TABLE OF CONTENTS

<u>CHAPTER</u>	PAGE
ABSTRACT	2
CHAPTER 1 – Introduction	3
CHAPTER 2 – Literature Review	7
CHAPTER 3 – Conclusion	
REFERENCES	
VITA	

#### **CHAPTER 1**

In today's society learning disabilities and substance use is a topic that individuals with disabilities have limited knowledge of. There is no actual cause of substance use, but there are a number of effects or risk factors that can increase the chances of someone developing an abuse or dependency disorder. Learning disabilities are hidden, and at times it may be difficult in diagnosing an individual with a learning disability. Since, learning disabilities are hidden it is often difficult for people to recognize their disability. A permanent condition that alters the way an individual observe, perceive sound, and process information from varies areas of the human brain is known as a learning disability (Kenyon, 2003). Chapman and Wu (2012) mentioned that social and environmental factors impact the increasing numbers of individuals with disabilities. If the individual with a learning disability does not receive treatment, it can affect an individual in different ways and it will vary from person to person. The activities of daily living are affected by the limited functions and behaviors for those that have learning disabilities.

Individuals with learning disabilities tend to engage in substance usage often as a result of their social and environmental conditions. Some of those social and environmental factors are lower socioeconomic status, decrease in school enrollment and participation; which is lower than those that do not have learning disabilities. Substance usage can occur from the influences by peers, wanting to be accepted by others, or even rejection of peers as well. Individuals with learning disabilities may also experience a decline in school involvement, and participating socially with others or even in activities would be difficult for them. Some of the substances that an individual use are marijuana, alcohol, and even tobacco. According to Essential Learning Institute (2012), 75%-80% of special education individuals identified as having a deficit in language and reading with a learning disability. An individual with learning disabilities drop out of high school has been shown to be approximately 35%, which is doubled compared to individuals without disabilities. Information from the Essential Learning Institute (2012), indicated that 50% of all students in special education in the public schools have learning disabilities, which estimated to about 2.25 million children. It was estimated that 60% of adults with severe learning difficulties have gone unnoticed or untreated, 50% of juvenile delinquents tested were found to have learning disabilities that were unnoticed. Adolescents that received treatment for substance abuse has learning disabilities were 60%. Lastly, 31% with learning disabilities will be arrested 3-5 years after high school (Essential Learning Institute, 2012).

Accommodations for individuals with learning disabilities will vary from person to person; also individuals that engage in substance usage would find it little more difficult to adjust in different environment. It should be understood as much as possible about what implications are needed for individuals with specific disabilities in an academic setting. Florida State University's website disability resource center explains how important is it to be receptive and responsive to the needs of the student as a faculty member. Also, effective communication and cohesiveness with staff and students is important in helping student's with their strengths and weaknesses to assist with the accommodations as much as possible. Accommodations in a workplace setting would be different then in a school setting for those that have a learning disability. According to the Job Accommodations Network (2011), as an employer it should be considered how to accommodate an individual with a learning disability with difficulties in spelling, writing, speaking and communication. Also, including how to assist an individual with organizational skills, time management, memory and social skills needs to be addressed.

#### **Purpose of the Research**

The purpose of this paper is to research the literature on the environmental effects of substance use and disorders on individuals diagnosed with a learning disability. I will discuss identifying learning disabilities and some warning signs, in a classroom setting as well as some difficulties that an individual may encounter that have a learning disability. Also, I will look at functional implications of learning disabilities such as, psychological stressors, lifestyles issues, social issues and vocational issues as well. In addition, this review will discuss services that are available that can be provided to individuals with learning disabilities as well as substance use. By providing an analysis of research over these topics, these specific questions will be addressed:

- 1. What are some signs, diagnosis and accommodations for learning disabilities?
- 2. What are some hindering factors of an individual that has a learning disability that goes untreated and unnoticed?
- 3. What are the functional implications of learning disabilities and the likelihood it will lead to substance use and disorders?

#### Definitions

The following is a list of definitions or terms that are used throughout the paper: <u>Learning Disability (LD):</u> Learning disability is a neurobiological disorder that affects the brains ability to receive, process, store, express, and respond to information (Kenyon, 2003). <u>Attention Deficit Hyper Activity Disorder (ADHD):</u> ADHD is having difficulties with inattentiveness, over-activity, impulsivity, or a combination. For these symptoms to be diagnosed as ADHD, they must be out of the normal range for a child's age and development (http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002518/). <u>Austim:</u> Autism is a developmental disorder that appears in the first 3 years of life, and affects the brain's normal development of social and communication skills

(http://www.ncbi.nlm.nih.gov).

<u>Information Processing Disorders (IPDS):</u> IPDs are learning disorders related to a person's ability to utilize the information that they receive through their senses such as seeing, hearing, tasting, smelling, and touching which are not related to an inability to see or hear. Instead, the conditions affect the way the brain recognizes, responds to, retrieves, and stores sensory information (National Center for Learning Disabilities, 2012).

<u>National Institute on Drug Abuse (NIDA):</u> The National Institute on Drug Abuse (NIDA) is a United States federal-government research institute whose mission is to "lead the Nation in bringing the power of science to bear on drug abuse and addiction."

<u>The International Classification of Function (ICF):</u> The International Classification of Functioning, Disability and Health, known more commonly as ICF, is a classification of health and health-related domains. These domains are classified from body, individual and societal perspectives by means of two lists: a list of body functions and structure, and a list of domains of activity and participation. Since an individual's functioning and disability occurs in a context, the ICF also includes a list of environmental factors ( http://www.who.int/classifications/icf/en/).

#### **CHAPTER 2**

#### **Overview of Literature:**

Research Question #1: What are some signs, diagnosis and accommodations for learning disabilities?

Learning disability is a neurobiological disorder that affects the brains ability to receive, process, store, express, and respond to information (Kenyon, 2003). There are different definitions for learning disabilities and people view them differently as well. As stated before learning disabilities are a general set of disorders that can affect a person's ability in the areas of listening, speaking, reading, writing and mathematics. In 1977, the United States Office of Education defined learning disabilities as a disorder that is permanent, which affects an individual's intellect. According to the Individuals with Disabilities Education Act (IDEA) (2004), it states that learning disabilities include limited brain dysfunction perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and language impairment. IDEA states that learning disabilities do not include learning problems that result in visual, hearing, or motor disabilities; mental retardation; or environmental, cultural, or difficulties economically.

When it comes to learning disabilities the definition will vary from state to state. There are different definitions for learning disabilities, according to Fletcher, Lyon, Fuchs and Barnes (2007), this issue originated when the United States attempted to discuss disabilities in a policy, and the meaning of disability was not clear and it was difficult to provide appropriate services for adults and children in need. Also, this lack of clarity has interfered with the provision of accommodations for high stakes accountability and college aptitude tests, the selection of people

with learning disabilities for research studies, individual eligibility for insurance, social security, and other entitlements, and the development of specialized interventions (Fletcher et al., 2007).

Learning disability is not the same as physical disability, but a person that is learning disabled can have a physical disability too. About 20% children that are in school are affected because of having a learning disability (Califano, 2000). Learning disabilities are invisible or considered to be a disability that is hidden, and because their disability is not seen they often go unnoticed. Learning disabilities vary from person to person. There are three levels of learning disabilities to include mild, moderate and severe.

First, mild learning disability refers to individuals that have the ability to acquire social and communication skills, live independently with little support and gain employment (Falvo, 2009). An individual with mild learning disability has an Index quotient (IQ) in the 50 to 70 range. Second, individuals diagnosed with moderate learning disability may need some assistance in the activities of daily living such as budgeting, preparing meals, and shopping. It may be difficult for individuals to develop abstract information such as problem solving skills and applying knowledge and information to situations. Some vocational skills may be learned, but functioning independently may vary. Third, severe learning disability refers to individuals that have limited communication skills and most of their childhood they would receive assistance to help live independently; therefore, supportive or assistive living could be considered (Falvo, 2009). An individual with severe disability has an IQ range of 20 to 40. It is not easy to identify learning disabilities and there is no cure for any of them, but there are some warning signs that may help with identifying learning disabilities. Signs and symptoms of disability vary from person to person depending on their age. For someone that is in the age group of prekindergarten, they may have difficulty with identifying and remembering numbers or even

following directions or specific routines. Another example is an individual that is a little older may have trouble with time sequencing, and confuses basic words when reading. Also, individuals around the sixth grade may have trouble with math comprehension; they may dislike reading or reading aloud during class and even poor organizations skills. When it becomes difficult to function in a school environment is when it is recognized that an individual has a learning disability that can occur in young children. Learning disabilities affect a person in many parts of their life such as school, work, friendships and relationships and family, which often leads to substance usage. Other causing risk factors of substance abuse of individuals with learning disabilities are low self esteem, difficulty with literacy, depression, loneliness and the desire of wanting to be accepted socially (Califano, 2000).

Specific types of learning disabilities are; dysgraphia, dyscalculia, nonverbal learning disability and dyslexia. Dysgraphia is when an individual experiences difficulty with writing legible words and letters which makes it hard to understand the writing. Dyscalculia is when an individual does not completely understand the concept of math. Another learning disability is nonverbal learning disability. It is when an individual have low motor coordination, visual perception and limited social skills. Lastly, dyslexia is when a person alternates their words and letters and experiences difficulty with spelling words. (Kemp, Smith, & Segal, 2012).

There are other disabilities within reading. The two types of disabilities within reading are comprehension, and comparing and contrasting with sound. Learning disabilities varies in math when it comes to an individual's strengths and limitations according to Helpguide.com; it will be affected differently by a language disability, difficulty with memory and organization. Remembering and putting together numbers would be difficult for a person with a learning disability that has trouble with math. When it comes to writing it may be difficult to form words and letters. Spelling words, writing neatly, and copying letters and words could be very difficult with individuals with a learning disability. These are not the only types of learning disabilities that learning is impacted, other types of difficulties involve difficulties with fine motor skills (dyspraxia), language (aphasia), when it comes to sound understanding the difference (auditory processing disorder), and difficulty interpreting visual information (visual processing disorder).

When it comes to diagnosing and testing it is not easy to determine the specific diagnosis for individuals with learning disabilities. It is best for qualified professionals to administer tests and provide diagnosis for individuals with learning disabilities. Some specialists that are able to diagnose learning disabilities are clinical psychologists, school psychologists, neuropsychologist, psychometrist and speech and language therapist just to name a few. Once an individual is diagnosed with a learning disability, it is imperative to know the specifics of the learning disability, find out how it affects the learning process, and learn about treatments and services that are available. Some of the techniques used by these professionals to determine a learning disability are through different testing such as academic achievements, intelligence testing, and interaction with others. Some assessments may include cognitive, memory, attention and language skills. In result this will determine the cause of a possible learning disability. Treating majority of learning disabilities does not always include medication. It is recommended that the individual have training in the area where he or she seems to have trouble in, this can be done by teachers, specialists and tutors. The law requires that if a child is diagnosed with a learning disability that has an Individualized Education Plan (IEP) to develop an approach for each child. Being able to understand the disability and support the individual is something that can help as well.

Accommodations for learning disabilities depend on the learning disability and the person itself. Individuals that experience trouble with reading aloud, and reading fast may have difficulties in school when they are being compared to their classmates. An accommodation that would be beneficial is a read along technique; which can be a text that is audio as well as printed. There are many books on tape that are provided in the school setting and public libraries. Techniques for learning can be used for both in a classroom setting and outside of one as well. There are accommodations for individuals that experience memory problems or difficulties with taking notes. Note taking is an accommodation that could be provided for individuals with memory problems. Note taking would allow the individual to have someone take note s during class (Disabilities, Opportunities, Internetworking, and Technology (DO-IT), 2012). Also, the lesson could be recorded with a tape-player with the teacher's permission. Another accommodation is that the teacher could provide an outline of the day's lesson to the individual if notified about it in advance. There are also accommodations for individuals with disabilities that have difficulty with math. An accommodation that could be utilized is a calculator to assist with that subject. Another accommodation is to provide a tutor or help for the individual to be able to learn math better. A technique that is utilized for spelling words accurately is a dictionary, and if a computer is being used then there is spell checker feature that helps with providing suggestions with spelling and grammar. All of these accommodations make it easier for individuals with disabilities to be able to grasp and learn the material presented in a classroom setting.

Learning Disabilities Association of America (2004), information suggests that in order to teach spelling, using a multi-sensory approach is beneficial. A multi- sensory approach combines sayings, spelling, and writing words aloud. Dictionaries are a very resourceful tool to help with defining words, improve on vocabulary and comprehension. Another technique that individuals with disabilities can utilize to help with organizing time, homework and other tasks is going to a quiet area to complete assignments, individuals can have a planner to write things done that is important for school, work or appointments as needed. Also, since individuals have difficulties with processing auditory information such as not understanding the question that was asked fully, or creating an answer, allow some time for the answer to be given, or ask for clarification to make sure that the individual understands the material (Learning Disabilities Association of America, 2004). Written and verbal language is a significant part of communication and understanding for individuals with learning disabilities. Both written and verbal language should be taught together as much as possible to increase comprehension skills.

Many organizations in the community are designed to address the individual's needs and goals but many services are provided based on the disability itself. It is more beneficial for individuals to have one on one attention in hopes to address their needs and meet their goals effectively. This attention is required when it comes to learning for individuals that have disabilities in learning; the literature suggested that may of the needs of individuals with learning disabilities are not met in the classrooms (Gal & Yerger, 2010). In order to have an equal opportunity, it calls for listening to an individual's goals, and needs that are limited by a disability in order to participate in everyday activities, regardless of the disability type (National Joint Committee on Learning Disabilities (NJCLD), 2010). The question asked by Gal and Yerger (2010), whether or not to concentrate on the needs and wants of the students on an individual or group basis to according to populations. Making accommodations varies on each setting and the individual with the disability.

10

Accommodating in a workplace environment is a little different than a school setting.

According to Kitchen and Dufalla (2006), there are questions to consider when working with an individual with a learning disability in a workplace environment, for example, What limitations are the employee with the learning disability experiencing? How would the limitation affect their performance on the job? What accommodations are available to decrease or limit the problems? Would training be needed for employees or supervisors on learning disabilities? These are some things to remember when working with someone or hiring someone with a learning disability. Individuals with learning disabilities may have a hard time with socializing with others in a workplace or school environment. This can affect the way they work effectively, communicate and interact with their peers (Kitchen & Dufalla, 2006). All factors should be considered when diagnosing and treating an individual with a learning disability, it also should be taken into consideration what may happen if a diagnosis goes untreated or unnoticed.

## Research Questions #2: What are the hindering factors of an individual that has a learning disability that goes untreated and unnoticed?

Once an individual is diagnosed with a disability receiving treatment for services is voluntary. Talking to counselors, physicians, and other mental health professionals to know what services are available for their particular diagnosis is important. There are individuals that do not take advantage of the services, or care to get treatment, either because they chose not to or they are not able to get services or treatment for it. According to Pandit (2010), these problems could increase by poor nutrition, health, and safety; as can improper linguistic and cognitive models in the home. It was also stated that socio-cultural factors that do put emphasis on the values of

education, attending school on a regular basis, and even the work and study habits may become more difficult for someone that has a learning disability (Pandit, 2010). Being able to learn effectively would be difficult for individuals that have lack of centers available for learning that would meet the needs of those in the area and other populations. Physical factors that of learning disabilities when it comes to impaired vision, if it goes unnoticed or not treated can lead to problems learning.

According to Murphy (2009), 80% of the material that is learned in a school setting is visual. If the hearing is impaired it becomes an issue if an individual is not able to hear the instructor fully. Over time it could possibly hinder the comprehension skills, decrease or limit the vocabulary and other areas as well. This could easily be overlooked if the individual appears to be at the same pace as others in a classroom (Murphy, 2009). As the individual grows from childhood to adulthood their learning disability does not go away. It is obvious that some of the negative outcomes of a learning disability are absent in the environment of school. Negative outcomes may hinder individuals later in life in their development of learning. Having limited or lack of access to services plays a part in receiving effective services for those that have learning disabilities. For example, communities that are considered to be poor, individuals are not able to transport to the facilities to receive services and/or do not have the finances to pay for the services if they are not free. Also considering places that are not accessible if someone has a learning disability and a physical impairment. Having a physical disability could limit services if lack of transportation was a barrier to access services. Factors such as lack of access, transportation or finances plays a part in individuals not receiving services, if someone also had a chronic illness such as; asthma, diabetes, or even anemia and that also requires treatment, which would require more attention and intervention. There are negative attitudes towards individuals

that have learning disabilities, some employers often do not want to hire them because of lack of knowledge about the disability or they do not have enough benefits to support someone with a learning disability. They may need accommodations and the employer may not have the resources to do so or does not want to take the time to do it. Research on adults with learning disabilities has shown some complications when it comes to employment, challenges in a workplace environment, not happy with their lives and self esteem.

#### Research Question #3: What are the functional implications of learning disabilities and the likelihood it will lead to substance use and disorders?

The International Classification of Function (2001), pointed out that the various factors children with disabilities normally face is in their experience through their education. Focusing on education does not always focusing on environmental factors. Focusing more on the environmental factors could possibly help aid and increase the participation in everyday life; it would alter the discussion of being more child- friendly. Some psychosocial factors to consider when a person is diagnosed with a learning disability are researching the history of the individual and the family history as well. Early intervention is encouraged to ensure the individual receives the appropriate care, able to build on the strengths and able to reach their full potential. Learning disabilities increase the likelihood of chronic illness in adulthood and other health issues that change over a life span (Prater & Zylstra, 2006). Vocationally, the function of an individual would depend on the level of the learning disability; it would be an issue if the person has not had the opportunity to develop any vocational skills, or have any exposure to different work settings. Individuals with a learning disability usually perform better in an environment that is

structured. Learning disabilities affect a person in many parts of a person life, for example if an individual with a learning disability experience self esteem concerns, difficulties with academics, loneliness, depression and wanting to be accepted socially can cause the risk factors of substance abuse (Califano, 2000).

Morrison & Cosden (1997), stated in regards to learning disabilities there are two assumptions when it comes to emotional adjustment. First, there is a higher level of depression and anxiety. Second, due to the increase level of anxiety and depression it is a result of frustration and lack of control because of the learning disability. Self-awareness and self-esteem are considered to be protecting factors anxiety and depression. With higher levels of self-esteem and self-awareness, there is a possibility of lower anxiety and depression. Having a family member with a learning disability can be stressful for a family. Being supportive, providing protection and the entire dynamics of the family plays a part in the family adaptation to learning disabilities (Morrison & Cosden, 1997). Other stressors include but not limited to, interactions in school, behavioral concerns, social and vocational concerns, this is important to the individual with a learning disability because they may need support throughout adulthood. For juvenile delinquency, 50% of offenders were reported to have a learning disability (Morrison & Cosden, 1997). Some risk factors for deviant behavior included, failure in school, self-imaging issues, dropping out of school and lack of acceptance amongst peers. Some protecting factors are to elude deviant behavior would include, attachment to peers, and social involvement which can increase academic achievement. Some concerns with adults with learning disabilities include living independently, career goals, and social relationships. One characteristic that leads into adulthood is depending on family, this can possibly hinder the individual from finding employment, and learning independency skills (Morrison & Cosden, 1997). Some risk factors

include, quitting high school, adjustment is difficult for them and even denying their disability. Adults that deny the fact that they have a disability can affect their coping mechanisms, and hinders the possible ways that may lead to taking effective steps to vocational and educational goals. Some protecting factors include successfully completing high school, which would aid to positive outcomes into adulthood, being aware of the disability knowing ones strengths and weaknesses. Being aware of the disability an individual is more likely to obtain assistance and other treatment that is needed will help with independency into adulthood. Lastly, adults who have supportive family, gain independency, counselors and other role models would be a positive factors that an individual with a learning disability may be exposed to in society today. Risk factors depend on the individual and the type of environment that they are in. Being able to understand these issues will help limit further problems for those that have learning disabilities.

It is estimated that the Americans diagnosed with a physical or mental disability is 54 million. Alcohol, tobacco, and other drug problems pose a threat for these individuals with disabilities. For example, some barriers that do not exist, the recovery process is difficult individuals without a disability. The number of risks that individuals with disabilities experience will increase the likelihood of substance abuse. These risks include medication and health problems, societal enabling, a lack of identification of potential problems and a lack of accessible and appropriate prevention and treatment services. Persons with disabilities experience substance abuse rates at two to four times that of the general population (U.S. Department of Health & Human Services, 2010). At least one in twenty adolescents experience substance usage or dependency, the development and course of an adolescent substance use disorder can be viewed

as a life trajectory, which can influence towards or away from substance use disorders (Mulvery, Schubert, and Chassin, 2010).

According to the Department of Health and Human Services (2011), alcohol, tobacco, illegal drugs, and prescription medications are substances that can be abused. When it comes to the health and concern of society substance abuse and the problems that factor to it is considered common. Persons with disabilities are at risk for substance abuse, there are risk factors that play a part in it. Substance use is said to occur more within those that have disabilities then those that do not have a disability. Some problems are misusing medication, mostly prescription drugs and illegal drugs as well (Chapman & Wu, 2012). Understanding the factors that affect the individual with a learning disability will help understand some of the reasons that may or may not lead to the use of substance abuse. Some environmental factors that influence the use of substances are peer pressure, be socially included with others of the age group, potential stress, and limited coping skills (Chapman & Wu, 2012).

The cause of using illegal substances and drugs could be a possible factor in having a detrimental health and risks of safety for younger people, family, and even the environment that they live in. When an individual is exposed with difficulties of learning, substance use may come about from limited information in regards to the consequence of substance use with a deficit in social skills and the negativity of influences socially, which required to adequately address the challenges they pose (Yu, Huang, & Newman, 2008). There are a lack of suggestions for proposals; such as prevention programs that is aim to meet the needs of younger individuals with special needs. It is important to realize that as the participation of those with learning disabilities in more mainstream activities increases; which may lead to the use or abuse of both illegal and legal drugs to try to fit into society. Substance usage has been increasing; and it is common that

if an adolescent has a friend that uses drugs or substance then he or she will likely to use as well. (Branstetter, Low, & Furman, 2011). Friends using substances may appear to be normal and if it is a large group then they are likely to use as well.

Another relationship that is related to the use of substance usage is parent to an adolescent. Having a positive relationship with support, affection, and encouragement would decrease the likelihood of substance usage versus a relationship that is filled with conflict (Branstetter, et al., 2011). A study was conducted to determine how often substance usage is prevalent in friendships whenever adolescents have a healthy relationship with their mother. The conclusion showed that there was a higher use of substance usage amongst friends whenever adolescents did not have a positive relationship with their mother. The substance that was most likely utilized includes tobacco, marijuana, and alcohol. Also higher levels of negative interactions with a friend and lower levels of friendship support were associated with substance usage (Branstetter, et al., 2011). Whenever adolescent had lower levels of support from their mother they engaged in alcohol, marijuana, and hard drug use with an increase in negative outcomes as well (Branstetter, et al., 2011).

Califano (2000), questioned do learning disabilities and/ or behavioral disorders lead to substance abuse? It was stated that most research conducted focused on the physiological factors but not environmental factors of substance abuse. The first theory focused on whether behavioral effects of learning disabilities are the risk factors of substance use. When several studies were looked at the behavioral effects of learning disabilities were the same for adolescent substance abuse which are reduced self-esteem, difficulty in school, depression, the feeling of being lonely and being accepted amongst others. Being able to not succeed academically could increase chances of not being accepted by others. Engaging in substance usage is a reason to feel more

acceptable to their peers. (Califano, 2000). Califano (2000), also pointed out that just because an individual has a learning disability it does not mean that they are going to use substances. The second theory focused on whether individuals with learning disability turn to drugs to self-medicate themselves. For example, individuals that are not accepted socially have trouble in school with self-esteem issues and they might self-medicate as a result of the negative feelings they are experienced.

The last theory focused on whether individuals prescribed psychoactive medications are more likely to believe in the drugs having a positive effect. Psychoactive drugs are chemical substances that affect the way the brain works, causing changes in behavior, mood and consciousness. These drugs are used for therapeutic reasons, and it also can be used to treat both physical and psychological disorders, they are also used to change mood, perceptions and consciousness (About.com, 2012). This theory focuses on individuals with learning disabilities and behavioral disorders who take drugs to treat the disability, which is believed to increase the risk of the abuse of substances. The drugs that were taken to treat the disability are designed to help with the effects they were experiencing of the condition. Using the drugs that were prescribed may help the individual least likely in the future to use drugs. A recent study on boys who take Ritalin with ADHD was conducted in 2008 by the National Institute on Drug Abuse This study pointed out that boy's who had received Ritalin was significantly less likely to abuse alcohol and other drugs than those who had not received the medication. To be a positive factor for not using substances this study suggested that proper use of medication is controlled. One possible reason is that because the medication decreases a child's inappropriate social behaviors, as far as peer groups the child is least likely to be rejected. If the medication is properly used it may decrease the chances of children with ADHD will abuse alcohol and drugs by improving the ways in which they interact with peers (Califano, 2000).

Another study was conducted by Belfast Youth Development on adolescents engaging in substance usage over a four year period. This study included 4000 adolescents that attended 43 mainstream schools and there were a higher percentage of males that lived in single parent housing and a lower percentage that engaged in substance usage that lived with their biological parents. Those that were in a mainstream school were looked as in the study as "school sample" and those in special needs school were "mild learning disability (MLD) sample." The results showed that those that were MLD sample had lower levels of use of drugs than the school sample (McCrystal, Percy, and Higgins 2007). The only illegal drug that was reported of being used was marijuana, tobacco was reported to be use on a weekly basis and those that were 15 and 16 of age report the use of alcohol. This information relates to the limited information that is found on younger people with learning disabilities. As discussed earlier these factors does not necessarily implicate that the risk factors or characteristics causes the other. It is said that is difficult to look at both substance abuse and learning disabilities at once given so many causes and factors (Hollar & Moore, 2004). Substance abuse is the number one public health care problem in America today costing society \$500 billion dollars. According to the U.S. Department of Education, the excess costs of special education that is, the cost beyond that required educating a child without disabilities in 1997 was \$5,435 per pupil. Children in special education are divided into three categories: learning disability (LD), emotional disturbance (ED) and other health impairment (OHI). In 1996, there were 2.6 million children receiving special education. Substance abuse can be avoided. There is a possibility that the use of drug could decrease in children and teens if there are effective treatment and prevention programs in the

home and in the school (Califano, 2000). Whether learning disabilities and behavioral disorders can be prevented depends on the relative importance of genetic and environmental factors in causing these disorders. In order to prevent the use of substance and other disorders, there should be some things taken into consideration, such as if an individual is pregnant, there should be not the use of alcohol, illegal drugs and other substance. (Califano, 2000).

Some research shows individuals with learning disabilities progresses past their reading and writing inabilities. Individuals with learning disabilities experience depression, anger sadness, anxiety, and behavioral problems that can possibly lead to substance abuse. The struggles that an individual with a disability endure, is often met with disapproval by teachers, peers, and parents. This type of censure can end up as negative labeling of a child as "slow," "lazy," or "dumb." These types of feelings can decrease the development of a positive selfconcept. Even when others offer some support, it still could be a struggle and self-esteem images may still occur. This could cause to further hinder the individual's learning and academic success and reinforce a cycle of failure and negativity. Some social challenges are not to be accepted by peers and diagnosing, treatment, and management for individuals with substance abuse is completely different from learning disabilities. During a physical examination, drug abuse is barely diagnosed. A few cases of alcohol abuse are signaled by; changing, high blood pressure or mild soreness in the abdominal area. In some cases of sniffing cocaine, that can be identified by damage nasal some cases of cocaine snorting can be recognized by damaged nasal mucosa and some instances of injection drug abuse by needle marks (National Institute on Drug Abuse NIDA). According to Dodgen & Shea (2000), there are several instruments that have been used in research settings. The instruments are presented in terms of their role in the evaluation process (screening measure, diagnostic) and are placed into two groups (alcohol and drug abuse

assessment measures). Some of the alcohol screening tests includes MacAndew Alcoholics Scale (MAC), Alcohol Use Disorders Identification Test (AUDIT), Adolescent Specific Scale (AAIS), and Rutgers Alcohol Problem Index (RAPI) just to name a few. In order to provide treatment for an individual it is necessary to be knowledgeable in the recovery from the addiction. Drug addiction or alcohol recovery is a not a short process that often requires several attempts and many changes in an individual's lifestyle and behavior. Most people will relapse several times before achieving abstinence for a long period, regardless of whether the drug that was being abused was nicotine, cocaine, heroin or other addictive substances. Individuals can still relapse years of being abstinence, if they are in stressful situations. In discussing options with the individual, there should be a comprehensive treatment plan that is recommended by a physician. Some individuals may agree with these approaches and a less intensive approach should be considered (NIDA). Drug usage also affects peer interactions, which may result in the appearance of a learning disability. Drug users may choose a different or what some may see as unusual groups of friends and behave in ways that can be considered to be as antisocial. An individual academic function and motivation to success could be affected by heavy usage of drugs. Over time, failure in school may appear to result from a learning disability instead of drug abuse. The lack of training that physicals may have and a clear understanding how and what disabilities to look for, would make it difficult to diagnose a disability (Califano, 2000).

According to the National Institute on Drug Abuse (2011), when counseling someone with substance usage it is important to identify the goals of treatment. When goals and the determination to change are establish, it makes it easier for individuals to maintain abstinence from all psychoactive drugs, and foster development of (nonchemical) coping and problem solving skills to prevent and eventually stop considering or taking drugs. This approach combines cognitive-behavioral, motivational, and insight-oriented techniques according to each client's individual needs. The therapeutic style is empathic, client centered, and flexible. Strong emphasis is placed on developing a good working alliance with the client to prevent premature dropout and as a vehicle for promoting therapeutic change (National Institute on Drug Abuse, 2011). The counselor attempts to work with and through rather than against a client's resistance to change. Aggressive confrontation of denial, the hallmark of traditional addiction counseling, is seen as counterproductive and antithetical to this approach. Group and individual counseling is delivered within the context of a structured yet flexible multistage outpatient treatment program that also includes psycho education (PE) for both the primary client and his or her family; supervised urine testing to encourage and verify abstinence; and, where indicated, pharmacotherapy for coexisting psychiatric disorders. Patient participation in self-help is encouraged but not mandated, and accepting the identity of addict or alcoholic is not required.

It is important, to be mindful of the fact that comorbid diagnosis are not all equal and do not influence treatment outcomes in the same way (Yu, Huang, & Newman, 2008). The relationship between learning disabilities and other co-occurring disorders does not indicate that treatment and outcomes will be effected by the learning disability. Other rationales were considered, to suggest some possible outcomes of the effects of learning disabilities on substance abuse treatment. Yu, Huang, and Newman (2008), indicated when considering treatment for an individual with a learning disability audiovisual aids or written material may be difficult to understand, group therapy which is also used in substance abuse treatment may be difficult as well because it may move to quickly for an individual with a learning disabilities, there was a research conducted to examine whether learning disabilities individuals with substance use have a leaser outcome than those who do not have a learning disability. This study also researches whether an individual had a prior admission for treatment, how long the treatment lasted and if the treatment was completed. This study was taken from the Harvard Teen Drug Study; it concluded 300 individuals between the ages of 15 and 19. Everyone that participated provided consent and if they were under the age of 18 then parental consent was provided. Of the individuals that participated in the study 69 were still receiving treatment at the time of the follow up, 17 had an IQ score less than 75, and 13 were excluded for not getting assessments; which left it to a total of 201 participants. The results showed that individuals with co-morbid learning disabilities had lower achievement scores, and often in a stereotyped as low socioeconomic status. On the other hand, individuals with learning disabilities and without IQ were almost the same; it was throughout different socio-demographics such as age sex, and race. This study also showed that those with learning disabilities are twice as likely to use substances at least once or over five times, more likely for more than one arrest, when compared to those without a learning disability.

#### CHAPTER 3

This research served as a deeper looked into the signs, symptoms, diagnosis and treatment for learning disabilities. Also explaining possible risk factors of individuals with learning disabilities that go untreated or unnoticed that can possibly lead to substance use. More importantly, it discussed the possible accommodations that are available for individuals with learning disabilities as well. Individuals with learning disabilities often consider substance use because of the stereotypical behavior from society. In addition this review was a basis of information regarding to properly diagnosing learning disabilities.

As far as counseling for learning disabilities you want to make sure that the individual being able to manage their time, especially if they are in school. Assisting with organization, possibly participating in social activities, so that they are able to more group setting and being more comfortable with themselves. If an individual have a learning disability counselors and employers have to understand that it may take longer for them to process or understand any material that is given. Also, one's place of employment an individual with a disability may take longer to perform assigned tasks effectively. If an individual with a learning disability do turn to substance abuse based off research it is important to understand why the individual engages in substance abuse. Another important concept that was mentioned was if someone is abusing substances that they should not be prescribed medication as to that could have been a reason why they started to abuse drugs in the first place. Misusing the prescribed medication could increase the frequency of the abuse. Learning disabilities and behavioral disorders also have huge potential to mess up the normal functioning of a family. While the personal costs of learning disabilities cannot compare to those related to substance abuse, they are important on the other hand. They can contribute to a child's isolation and unhappiness. In some families, parents may

turn away from their developmentally disabled child while focusing their love on their "normal" children (Califano, 2000). It has to be clear that there is a need for an individual with a learning disability to want to go to counseling. There is a paucity of research on individuals with a learning disability receiving counseling, but based off of personal experiences many individuals with learning disabilities do not prefer counseling because they do not feel that it is a problem to focus on but the disability is.

#### REFERENCES

- Attention deficit hyperactivity disorder (2012). Retrieved from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002518/
- Autism (2012). Retrieved from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002494/
- Bradley, R., Danielson, L., & Hallahan, D. P. (Eds.). (2002). Identification of learning disabilities: Research to Practice.
- Branstetter, S. A., Low, S., & Furman, W. (2011). The influence of parents and friends on adolescent substance use: a multidimensional approach. *Journal of Substance Use*, 16(2), 150-160. doi:10.3109/14659891.2010.519421
- Burkhardt, S., Obiakor, F. E., & Rotatori, A. F. (Eds.). (2004). Current perspectives on learning disabilities (Vol. 16).
- Califano, J. (2000). Substance abuse and learning disabilities: Peas in a pods or apples and oranges? *The National Center on Addiction and Substance Abuse at Columbia University*. Substance Abuse and Learning Disabilities: Peas in a Pod or Apples and Oranges?
- Chapman, S., & Wu, L. (2012). Substance abuse among individuals with intellectual disabilities. Research in developmental disabilities: *A Multidisciplinary Journal*, 33(4), 1147-1156.
- Cherry, K. (2012) Psychoactive drugs. *About..com*. Retrieved October 15, 2012 from http://psychology.about.com/od/psychoactivedrugs/tp/psychoactive-drugs.htm
- Dodgen, C. E., & Shea, W. M. (2000). Substance use disorders: Assessment and treatment. San Diego, California: Academic Press.
- Essential Learning Institue (2012) Learning disabilities statistics. Retrieved from http://www.ldhope/statistics.html

- Falvo, D. (2009). Medical and psychosocial aspects of chronic illness and disability. Detroit: Omnigraphics.
- Fletcher, J., Lyon, G.R., Fuchs, L.S., & Barnes, M. (2007). Learning disabilities. New York, NY: The Guilford Press.

*Florida State University Disability Program.* (n.d.) Retrieved from http://www.disabilitycenter.fsu.edu/fac\_guide.html

Gal, E., Schreur, N., & Engel-Yeger, B. (2010). Inclusion of children with disabilities: teachers' attitudes and requirements for environmental accommodations. International *Journal Of Special Education*, 25(2), 89-99.

G.Schladt, R. (1992). Alcohol use and abuse (First ed.). The Dushkin Publishing Group.

Glenn, M. K., Huber, M. J., Keferl, J., Wright-Bell, A., & Lane, T. Substance use disorders and vocational rehabilitation. Rehabilitation Research and Training Center on Substance Abuse, *Disability and Employment*.

Gregg, N. (2009). Adolescents and adults with learning disabilities and adhd.

Hollar, D., & Moore, D. (2004). Relationship of substance use by students with disabilities to long-term educational, employment, and social outcomes. *Substance Use & Misuse*, 39(6), 931-962. doi:10.1081/JA-120030894.

Hubbard, J. R., & Martin, P. R. Substance abuse in the mentally and physically disabled .

Individuals With Disabilities Education Act, 20 U.S.C. § 1400 (2004).

Jacqueline, R., Kim Van Naarden, B., Diana, S., & Marshalyn, Y. (n.d). Healthy behaviors and lifestyles in young adults with a history of developmental disabilities. *Research In Developmental Disabilities*, 27381-399. doi:10.1016/j.ridd.2005.01.003 Marcel Dekker.

- Job Accommodation Network (2011). Accommodation and compliance series: employees with learning disabilities. Retrieved from http://askjan.org/media/ld.html
- K.A. Kavale, S. F. (1996). Social skills deficits and learning disabilities. *Journal of Learning Disabilities*, 29, 226-237.

Kenyon, R. (2003). Facts and statistics on learning disabilities and literacy. Florida.

- Kemp, G., Smith, M., & Segal, J. (2012). Learning disabilities in children: types of learning disabilities and their signs. Retrieved from http://www.helpguide.org/mental/learning\_disabilities.htm
- Kitchen, S., & Dufalla, S. (2006) Accommodations and compliance series: employees with learning disabilities. Retreived October 24, 2012 from http://www.ldonline.org/article/12081/
- Learning Disabilities Association of America (n.d.) Accommodations, techniques and aids for learning. Retrieved October 24, 2012 from http://www.ldantl.org/aboutld/teachers/understand/accommodations.asp
- Maag, J. W., Irvin, D., Reid, R., & Vasa, S. F. (1994). Prevalence and predictors of substance use: A comparison between adolescents with and without learning disabilities. *Journal of Learning Disabilities*, 27 (4), 223-234.
- Marlatt, G.A., and Gordon, J.R. Relapse Prevention: Maintenance strategies in the treatment of addictive behaviors. New York: Guilford Press, 1985.
- Matthews, D. D. (Ed.). (2003). Learning disabilities sourcebook (Second ed.). Peter E. Ruffner.
- McCrystal, P., Percy, A., & Higgins, K. (2007). Substance use behaviors of young people with a moderate learning disability: a longitudinal analysis. *American Journal of Drug & Alcohol Abuse*, 33(1), 155-161. doi:10.1080/00952990601091143

- Morrison, G. M., & Cosden, M. A. (1997). Risk, resilience, and adjustment of individuals with learning disabilities. *Learning Disability Quarterly*, 20(1), 43-60.
- Murphy, R., (n.d). Physical factors that affect learning. E-How. Retrieved from\ http://www.ehow.com/info\_8210852\_physical-factors-affect-learning.html
- Mulvery, P. E., Schubert, C., Chassin, L. (2010). Substance use and delinquent behavior among Serious adolescent offenders. *Juvenile Justice Bulletin*, 1-16
- National Joint Committee on Learning Disabilities (2010). Comprehensive assessment and evaluation of students with learning disabilities.
- National Center for Learning Disabilities (2012). Information processing disorders. Retrieved fromhttp://www.ncld.org/types-learning-disabilities/adhd-related-issues/visual-processing-disorders/information-processing-disorders
- Pandit, D. (2006). Factors affecting learning disabilities in mathematics: a study of central region of Nepal. *Tribhuvan University Journal*, *24*(1), 1-12. doi:10.3126/tuj.v24i1.247
- Rotgers, F., Morgenstern, J., & Walters, S. T. (Eds.). (2006). Treating substance abuse: Theory and technique (Second ed.).
- Shessel, I., & Reliff, H.B. (1999). Experiences of adults with learning disabilities: Positive and negative impacts and outcomes. *Learning Disability Quarterly*, 22(4), 305-316.
- University of Washington (2012). Academic accommodations for students with learning disabilities. Retrieved

from http://www.washington.edu/doit/Brochures/Academics/accomm\_ld.html

U.S. Department of Health & Human Services: Substance abuse and disability. Washington: Health & Human Services, 2010.

- U.S. Department of Health & Human Services: NIDA study shows that methylphenidate (ritalin) causes neuronal changes in brain reward areas. Washington: Health & Human Services, 2009.
- Walls, R. T., Batiste, L. C., Moore, L. C., & Loy, B. (2009). Vocational rehabilitation and job accommodations for individuals with substance use disorders. *Journal of Rehabilitation*, 75 (4), 35-44.
- World Health Organization (2012). International Classification of Functioning, Health and Disability.
- Wu, L.-T., Ringwalt, C. L., & Williams, C. E. (2003, March). Use of substance abuse treatment services by persons with mental health and substance use problems. *Psychiatric Services*, 54. Retrieved October 2012, from http://psychoservices.pychiatryonline.org
- Yu, J., Huang, T., Newman, L. (2008). Substance abuse among young adults with disabilities. National Center for Special Education Research. Retrieved October 2012, from http://ies.ed.gov/ncser/pubs/20083009/

#### VITA

#### Graduate School Southern Illinois University

Marqueeta L. Harrington

MarqueetaH21@gmail.com

Southern Illinois University- Carbondale Bachelors of Arts, Administration of Justice, May 2009

Research Paper Title: Learning Disabilities and Substance Use

Major Professor: Dr. Carl Flowers