

Impact of adhd on learning



Abstract

This research paper is to state the impact ADHD has on the learning of people with ADHD. ADHD is a disorder that has been around for decades, and has been doubling as time goes on. There hasn't been a treatment that cure this disorder, there is only medication to control this order to make it easier on their everyday life. To be able to find what affects people with ADHD I research six articles and peer reviewed articles. These articles covered everything from statistics, different disorder that are developed while having ADHD, response of treatment with people with ADHD, the effects of medication of people with ADHD, children with ADHD with abusing parents, and children with ADHD living in poverty. These articles concluded that ADHD is something that affects people at different ages, and will suffer from the disorder at a greater extend without the proper loving conditions, and support from their loved ones.

Introduction

For this research project I started to research how learning becomes affected when ADHD is detected and came up with the following to start my paper: To understand why learning is negatively impacted by ADHD, we must understand that attention is the first step in learning. To learn anything, we must pay as much attention and avoid perceptions to make sure we are getting most of the information given to us. It's important for us to pay attentions, to do assignments, our jobs, and to function on a daily correctly. Learning becomes negatively impacted when ADHD is diagnosed, as it makes difficult for someone with ADHD to hold a job, succeed in school, have

stable relationships, and have a family. ADHD is a major attention disorder that affects learning. ADHD stands for Attention Deficit Hyperactivity Disorder. ADHD is linked to other disabilities as well, which make it harder for children with ADHD to concentrate and succeed in their daily duties. Everyone responds differently to medication, ADHD is something that can be controlled with medication, but it's not something that will disappear in the future. Medication for children with ADHD will control a student, but it won't necessarily improve their learning ability. There are different factors that determine whether a person with ADHD succeeds and one of them, is the environment they are living in at home, schools, and whether they have the funds to support their disability and get all the resources they need to succeed. It's important for children with ADHD to get support emotionally and financially in order to get all the help they need in order to succeed in life and be considered as a "normal person."

ADHD affects more than 3 million people in the United States, this is about half the number of people with ADHD in the world. ADHD is defined as a brain disorder that has an ongoing pattern of inattention and hyperactivity that interferes with development and functioning. Inattention caused by ADHD can be disliking or avoiding any activities that require any mental work on there end. Losing any things that are necessary for them to complete tasks or activities. Not listening when they are being spoken to. Not following through with there chores/ finishing homework assignments. Missing or overlooking details. Or having problems organizing any tasks. All these problems are things that people with ADHD will have to deal with forever, as ADHD can be controlled to an extend but it cannot be cured.

There are a few different medications that is given to people with ADHD that helps them function and concentrate. These medications are administered at different dosages and have different effects on every individual. ADHD is at a rise in the United States and worldwide, and have a number of factors that are causing the rise of this disorder, that is affecting children in the United States at a small age.

Statistics of Children with ADHD

ADHD is something that has been on the rise for the past years, but the big shocker is that it's at a greater rise on girls, adult women, and women that are moms to be. This is crazy. From the years 2003 and 2011, ADHD rose at about 43%. This numbers brought the number of children with ADHD to about 6 million. These numbers state that out of all the children in the United States, and 11% of them have ADHD.

It is stated that boys are three times more likely to develop ADHD than girls. There was a total of about 18% of children with ADHD that were not receiving any treatment to control their ADHD. The study also shows how, out of a classroom of 30 students, there is 1 to 3 students with ADHD. The average onset for children with severe ADHD is at the age of 5. Children that reach their adolescent age with ADHD are less likely to get treated at an older age rather than at a younger age. 75% of boys with ADHD are hyperactive, for girls this rate is at 60%. It is known that a child with ADHD has the possibility of 40% to have a parent with ADHD. Lastly, parents of a child with ADHD are three times more likely to get a divorce than those of children without ADHD.

Sensory Modulation Dysfunction in children with ADHD

The article summary that I examined this week was is on how ADHD is tied into Sensory Modulation Dysfunction. ADHD and SMD have some similarities to begin with, like; hyperactivity and impulsive behavior. This experiment tested a total of 26 children that have ADHD. First the article goes over ADHD, and the meaning as; developmentally inappropriately impulse, hyperactivity, inattention, which can create difficulty learning on a daily basis. It also states that children with ADHD usually have another psychological or behavioral disorder. It also goes over Sensory Modulation and defines it as the capacity to regulate and organize the degree, nature, and intensity of responses to sensory input in a graded and adaptive manner. It ends the introduction with relating the both and the similarities they both have. They both include hyperactivity and impulsive behaviors.

The thesis of this research experiment is listed as the following: “ ADHD and SMD include hyperactivity and impulsive behaviors. Second, a high percentage of children with attention dis- orders also have sensory processing disorders (Cermak 1991, Parush, et al. 1997, Miller et al. 2001). Children diagnosed with ADHD are reported to have been overly sensitive to sensory stimuli, and easily upset by environmental changes in infancy (Kaplan et al. 1994). Moreover, children with ADHD show behavioral evidence of difficulty modulating sensory responses and demonstrate over responsivity significantly more frequently than typically developing children (Dunn 1999). To study the potential dysfunction of sensory processing in ADHD we examined physiological reactions to sensory stimulation in children with ADHD.” (Page 2 of article)

For the method used, a total of 26 children were tested. They're was 18 boys and 8 girls. They were all clinically diagnosed with ADHD. There was also 30 typically developing controlled kids that participated. These being 21 boys and 9 girls. The controlled group was recruited by flyers and the uncontrolled group was recruited by clinics. All medication was discontinued for any children taking medication for their ADHD, this was discontinued 24-28 hours before the experiment begun. To make sure the controlled group was tested accurately, they were given a test to make sure they didn't have any disabilities. They also made sure they didn't have any birth abnormalities.

There procedure was as follows: the study was done in a laboratory. This laboratory was built to like a spaceship. Then the children were told that during there right they were going to experience a number of things which included sight, smell, feeling, and hearing funny things. The experiments which didn't know what child belonged to what group administered each stimulus. This was done for several ten times for 3 seconds. Following the next 15 to 19 seconds apart from each other. A data analyst that was blinded to the group checked for electrodermal record for any movement artifact and eliminated questionable response, by using a written computer program. This was tested at peak from when the skin conductance increased and when conductance began to fall. Only peaks that we're greater than 0.05 micromhos (Dawson et al. 1990) and beginning between 0.8- and 5-seconds post- stimulus were considered valid.

The results showed that the group of children that have ADHD have greater reactivity to sensory stimuli than the group of children without ADHD. Out of 26 children with ADHD, twenty of them has scored at least one standard

deviation below the mean of the SSP. Most of them displayed abnormal sensory responses, showing some degree of difficulty. It was determined that children that suffer with ADHD also displayed significant greater difficulty with sensory processing than a child without ADHD.

Response of Children with ADHD to Methylphenidate

This research experiment examined differences in methylphenidate (MPH) between groups of children with ADHD who exhibited varying degrees of internal symptoms. In their method there was a total of 40 kids examined. They were divided into three groups, based on how advanced their internal symptoms were. Different dosages of the drug MPH were administered to them. These dosages were; 5mg, 10mg, and 15 mg. This was examined in a double-blind and placebo-controlled environment where they used outcome measures across clinics, home and school.

The results of the experiment showed the following: Children that have ADHD and comorbid internal symptoms weren't likely to respond in a positive way to MPH. Children with ADHD and without internal symptoms were likely to respond in a positive way to MPH. According to teachers experience and what they observed during the research task. It was concluded that children that have comorbid symptoms of ADHD accompanied by an internal disorder will be less likely to respond to the drug MPH while doing academic tasks in a classroom setting. The minority of kids with comorbid conditions are at a higher risk to respond to medicine relative to patients that have ADHD and are no exhibiting internal symptoms.

Effect of Parental Drug Abuse on Children with ADHD

Children with ADHD who have parents who abuse drugs or alcohol are usually the forgotten victims. Inadequate parental care, unpredictable behaviors and no structural attachment to the home life are often the consequences of parental substance abuse. For the sibling, this can be painful, scary and translates to numerous problems later in life of these children with ADHD (Alcohol Rehab, 2016). A good number of these siblings are exposed to abuse, violence at home, and financial problems in addition to poor feeding habits leading to malnourishment at their tender age in life. All these are results of parents being addicted to alcohol or drugs.

Children are also exposed to homelessness, divorce, separation and even abandonment are more likely to develop ADHD. They may be orphans as a result of their parents dying or being incarcerated due to their habit of substance abuse alongside with its problems and effects. The concerns here can have a very long-lasting adverse effect on the development of the child and his future choices in life, which make it difficult for them to control their ADHD. The children may also turn to drug abuse or drinking of alcohol as the way to cope with what the parents have made them go through. Others may have the feeling that they are all destined to substance abuse as a way of life and will start to the same pattern of life.

Children with ADHD living in this situation, are not given the necessary parental guidelines, such as, how to brush teeth properly, table manners, grooming appropriately and even how to keep friends plus making new ones. They, instead, will find themselves learning how to hoard food when it is not enough, these children find themselves in constant violation of the law, and they distrust the authorities since they have never appreciated the role of

leadership in their lives. The elder siblings may find themselves taking the responsibilities of their parents in guarding and parenting the younger ones, something that affects the growth and development.

Effects of poverty on children with ADHD

Poor children experience behavioral and emotional problems more frequently compared to their counterparts from rich families. According to Engle and Black (2011), poor children are 1.3 times more likely to have ADHD. The severity of the learning disabilities depends on the duration a child has been exposed to poverty. Engle and Black (2011) group emotional outcomes of being poor into two groups: internalizing behaviors and externalizing behaviors. Internalizing behaviors include depression, social withdrawal symptoms, depression, and anxiety on top of having to deal with their ADHD disorder. On the other hand, externalizing behaviors entails aggression, acting out, and fighting. Data concerning the emotional outcomes of children come from teachers and parents' reports. The effect of poverty on the psychological outcomes of children with ADHD differs depending on the duration one's parents have been poor. According to Engle and Black (2011), short-term poverty entails a child being raised by poor parents for at least one in every four years. On the other hand, persistent poverty involves children lacking necessities for a period of between four and eight months (Engle & Black, 2011).

For this research study, a federal survey was given three times between the years of 2003 and 2012. What was reviewed during this research was the rates of ADHD. The research found that ADHD rose at a rate of 18% during

these years. When the researchers factored poverty into their research, they found that income levels had a huge impact on a child's illness.

The results showed that the rates of children with ADHD were much lower for families that were at or above 400 percent of the federal poverty level. This showed that having a financially stable living condition, will decrease the possibility of a child developing ADHD. Children living in poverty are more likely to first develop ADHD and then develop Autism, as it is rare that they will get treatment for ADHD, that will then cause it to turn into Autism.

Treatment Programs for Students with ADHD

This research experiment focuses on the experimental evidence of treatment and intervention programs for any deficits in attention, behavioral, and social skills in children and teenagers with ADHD. There was meta-analysis that was done to research whether children and teenagers with ADHD have deficits in social skills and paying attention. They concluded this research based on 17 research experiments that were done between the years 2000 through 2013. All articles were an investigated report. A coding structure & operational definition had to be made to record quantitative information from each of the 17 studies that were researched.

The areas were employed for coding purposes, in this study the research was designed as experimental and quasi-experimental. The kind of design was recorded into the following: The research treatments were either content area preparation, or they were self-regulated. The direct training treatments were led by teachers and a systematic training. The behavioral treatments were based on positive reinforcers to patients with ADHD after they

completed an assignment. Practical treatments were done were a child had to reiterate performance of something that the student already knew how to do. Textbook modification was done to alternate the level of difficult of the material in the original textbook. Combination treatments was just more than one treatment combined. Play treatment was an aerobic or yoga activity. Pharmaceutical treatments were medications used for children with ADHD. The last category was anything that didn't fit in the other categories.

The results of these articles showed the following; There was a difference between the mean scores of the control groups and experimental groups. The means of this experiment ranged anywhere from 0. 79% and 95%. The ADHD symptoms decreased in children in a experiment setting instead of a controlled group. This research found that interventions can reduce ADHD symptoms in children and teenagers. There was a total of 75% of the children that performed better in an experimental setting, rather than a controlled one.

The conclusion for this experiment used cognitive behavior treatments, combinational treatments, pharmaceutical treatments to show that children that received any treatment in different therapy programs have a higher potential of being better in society and showing an improvement in social skills and academic learning. It is recommended for these treatments to be used at a higher rate in order to encourage success in helping children and teenagers with ADHD.

Conclusion

After completion an extensive research of ADHD, I have concluded that ADHD is something that affects more children than I thought. There is a total of 1 to 3 children with ADHD in a classroom, and this is only counting the number of children that are diagnosed. I have also concluded how ADHD is linked to several different disorders like Sensory Modulation Dysfunction, which is like ADHD. Also, I learned that the medication given to patients with ADHD doesn't always help them. This medication is used to control their hyperactivity but won't necessarily impact or help their learning. I was in awe with this as the medication seems pointless at times. The last two articles I researched, went over the impact poverty and child abuse have on children with ADHD. These articles described how living in these circumstances increases the possibilities of children developing ADHD. It also, makes it harder for these kids to get help and get better. When people with ADHD are not in a stable household it's harder for them to get treatment. Lastly, the last article went over how schools can help support children with ADHD. It's important for teachers to be on board with the symptoms of children with ADHD. Being aware and knowledgeable of how to help children with ADHD, will improve their learning and get better results. Overall, all these articles went over how learning and treatment can affect the overall success of a person with ADHD. ADHD, is a disorder that is on the rise. The biggest issue with this disorder is the hyperactivity that people with ADHD experience. Without proper medication and treatment, people with ADHD will only worsen their condition. It's important for people with ADHD to get treatment and support in order to have success in school and their everyday life. As this disorder has been on the rise, there has been more and more experiments that have helped, professionals treat their patients. As

time progresses, I hope that there will be treatment available that can eventually cure ADHD, as right now there is only medication to treat it. Without medication people with ADHD won't be able to function and will struggle to have a normal life. ADHD is something that affects more people than we think, and it's important for us to become aware to be able to help with the success of people with ADHD.

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