

Adolescents in the Foster Care System: The Correlation Between Mental Disorders and
Substance Use

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Table of Contents

Cover Page.....	Page 1
Table of Contents.....	Page 2
Abstract.....	Page 3
Introduction.....	Pages 4-9
Literature Review.....	Pages 9-13
Methodology.....	Pages 13-19
Results.....	Pages 19-21
Discussion.....	Pages 21-23
Bibliography.....	Page 24

ABSTRACT

There has been an identified concern between diagnosed mental disorders and substance use amongst adolescents ages 12-18 in the United States foster care system. Previous studies have shown that over 50% of adolescents have tried substances, and that there seems to be an increase of usage amongst adolescents diagnosed with Post Traumatic Stress Disorder (Vaughn, 2007). This study aims to analyze and evaluate the correlation between diagnosed mental disorders and substance use. Fifty adolescents's Diagnostic Assessment Forms were randomly selected from a one year calendar enrollment report on National Youth Advocate Program's database. All fifty cases selected had a diagnosed mental disorder for either Post Traumatic Stress Disorder, Unspecified Trauma and Stressor Related Disorder, Other Specified Trauma and Stressor Related Disorder, Persistent Depressive Disorder, Generalized Anxiety Disorder, or Social Anxiety Disorder. From there, each case is searched for identified substance use, substances used, and length of use. The findings suggest that the correlation between adolescents in foster care's diagnosed mental disorders and substance use is somewhat correlated. While 38% of subjects had listed substance use, there was an especially strong correlation between those diagnosed with Post Traumatic Stress Disorder or Persistent Depressive Disorder and substance use. There was also a higher rate of usage amongst adolescents ages 16 and up. The findings point out some unspecified disparity in mental health treatment, trauma informed care, and substance use education/prevention. Despite the lack of significant strength in correlation, the data and conclusions call for further research to be done on how to meet this disparity in America's foster care system.

INTRODUCTION

Statement of the Problem

As of 2019, there are roughly 423,997 children in the United States foster care system. Of all the recorded children in the United States foster care system, 144,159 children qualify as adolescents falling in between ages twelve through eighteen (The AFCARS Report, 2019). It's estimated that 80% of all children in the United States foster care system have significant mental health issues (McCann, n.d.). Furthermore, there is a substantial population of adolescents in the foster care system that have tried substances or have a substance use disorder diagnosis. It is likely that there is a correlation between the two, and this study will explore the severity of that correlation.

Scope of the Problem

Research on depression and other mental disorders in foster care adolescents report that “As a result of the abuse or neglect they may have endured while in their families of origin, as well as the frequent transitions they experience while in foster care, these adolescents often have significant social/emotional and behavioral problems (Edmond, Auslander, Elze, McMillen, & Thompson, 2002; Farruggia, Greenberger, Chen, & Heckhausen, 2006; Shin, 2005)” (Stevens, p.3). It's likely that mental disorders within foster care adolescents can be traced back to previous trauma. Oftentimes, this trauma or mental disturbance is not adequately treated as the main priority is to place the child into a safe environment. Once placed into foster care, these adolescents have to deal with the chaos of adjusting to a new home, collaborating with a

multitude of social service workers, searching for their belongings, and comprehend the sequence of events that lead them to their placement. The lack of emotional support and social resources can lead to deficiencies in cognitive development. Furthermore, the impact of their mental state is far reaching and often put on hold while they attempt to survive in their new environment. Suppressing the impact of adolescents' mental health could be a predictor of future socio/emotional negative behaviors.

An additional concern amongst adolescents in foster care is substance use. A study conducted in 2007 to test the rates of addictive behavior in foster care found that over half of the subjects had tried a substance at least once in their lifetime, and 35% of adolescents had diagnosed substance use disorders. The most frequently used substance was marijuana with alcohol falling closely behind. Simultaneously, it was found that adolescents in foster care with diagnosed Post Traumatic Stress Disorder and Conduct Disorder had much higher rates of trying a substance at least once in their lifetime than adolescents of the same age in traditional households (Vaughn, p.1). In addition, a study conducted on effective substance use treatments stated "In particular, substance use problems are among the most frequently noted mental health issues for foster care-involved youth (Keller et al., 2010), with prevalence rates for alcohol abuse, drug abuse, and drug dependency at two to five times higher than their peers with no histories of foster care involvement (Pilowsky & Wu, 2006)" (Kim, p.1) . While it is believed there is a correlation between mental disorders and substance abuse, there has been little to no studies conducted that would strongly correlate the two entities. It's alarming that adolescents in

foster care are dabbling with substance use without known preventative measures or attention to other factors affecting their mental health.

Implications for Social Work

Social workers are a key component to the foster care system. They are responsible for working with children, families, the legal system, health care, interprofessional care teams, policy makers, and a multitude of additional collaterals that compile into the works of the foster care system. A part of a social worker's role is to identify deficiencies within the system and problem solve in order to fix the disparity. As previously mentioned, a large majority of adolescents in foster care have significant mental health issues. There is also a large population of adolescents trying substances, many of which have diagnose substance use disorders. With a possible correlation between the two issues, there is enough concern for a social worker to identify a disparity in the system. A primary value stated in the NASW's Code of Ethics is social justice and the need for social workers to "to ensure access to needed information, services, and resources; equality of opportunity; and meaningful participation in decision making for all people" (National Association of Social Workers, 2017). In adherence to this value, a social worker should use the findings from this study to implement interventions directed at adolescents who suffer from mental disorders and diagnosed substance use disorders or those who are at risk for a substance use disorder. Advocating on behalf of this identified vulnerable population can allow for more attention to under-recognized mental disorders and in return lower the rates of substance use.

Underlying Assumptions

My assumption of the problem is that mental disorders positively correlate to substance use amongst adolescents in the United States foster care system. Due to previous trauma an adolescent faces in their family of origin and the instability that comes with entering a foster home, it is likely they have under-recognized mental health concerns. There is not enough attention given to their mental health which in time can exacerbate the presence of their mental disorder. Without this attention or education of effective coping mechanisms, substance use seems like an easy solution to relieve their mental stress. It's possible they could rely on substances to alleviate ignored surrounding stressors, and with time, their use can develop into a diagnosed substance use disorder. However, I do recognize that it is possible that an adolescent may only use substances because of peer pressure, experimentation, parental influence, or to feel grown up. On the other hand, an adolescent may be receiving adequate care and attention to their mental disorders and still decide to use substances. While I believe the correlation between the two is positive and undeniable, it is possible that mental disorders and substance use amongst adolescents in foster care are unrelated or not as strongly linked as I hypothesize.

Purpose of the Research

The purpose of this research is to identify the correlation between diagnosed mental disorders and substance use amongst adolescents in the United States foster care system. The research will take quantitative results to draw a conclusion on the correlation between the two factors.

Definition of Terms

Mental Disorder- “A behavioral or psychological syndrome or pattern that occurs in an individual that reflects an underlying psychobiological dysfunction” (American Psychiatric Association, 2013). For the purposes of this research, the following mental disorders will be focused on the most; generalized anxiety disorder, social anxiety disorder, post traumatic stress disorder, unspecified trauma and stressor related disorder, other trauma and stressor related disorder, and persistent depressive disorder.

Generalized Anxiety Disorder (GAD)- “The presence of excessive anxiety and worry about a variety of topics, events, or activities. Worry occurs more often than not for at least six months and is clearly excessive” (American Psychiatric Association, 2013).

Social Anxiety Disorder (SAD)- “Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others” (American Psychiatric Association, 2013).

Post Traumatic Stress Disorder (PTSD)- “A psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, or rape or who have been threatened with death, sexual violence or serious injury” (American Psychiatric Association, 2013).

Unspecified Trauma and Stressor Related Disorder (UTSRD)- “A trauma and stressor related disorder that causes clinically significant distress or impairment in social, occupational, or other important areas of functioning predominant but do not meet the full criteria for any of the disorders in the trauma and stressor related disorders diagnostic class” (American Psychiatric

Association, 2013). While the trauma is present, there is insufficient information provided by the client to identify the exact trauma that occurred.

Other Trauma and Stressor Related Disorder (OTSRD)- “A trauma and stressor related disorder that causes clinically significant distress or impairment in social, occupational, or other important areas of functioning predominant but do not meet the full criteria for any of the disorders in the trauma and stressor related disorders diagnostic class” (American Psychiatric Association, 2013).

Persistent Depressive Disorder (PDD)- A chronic, less severe depression that lasts for at least 2 years or more (American Psychiatric Association, 2013).

Substance Use Disorder- “A problematic pattern of using alcohol or another substance that results in impairment in daily life or noticeable distress”(American Psychiatric Association, 2013).

Adolescent- For purposes of the research, an adolescent is a young person ranging from ages twelve to eighteen years old.

LITERATURE REVIEW

Scope of the Problem

As previously stated, mental health disorders are very prevalent amongst the foster care population in America. The National Conference of State Legislatures reports that “Up to 80 percent of children in foster care have significant mental health issues, compared to approximately 18-22 percent of the general population” (McCann, n.d.). In addition, research

has been conducted to quantify the prevalence of mental disorders in foster youth, and as of 2002, there were “...rates of depression in adolescents between 15% and 20% (Kessler, Avenevoli, & Merikangas, 2001; Lewinsohn & Essau, 2002)” (Stevens, 2011). Additionally, anxiety disorders were displayed in 3-5% of adolescents. While this data is years outdated and numerically widely spread, it’s safe to assume that these rates have either remained consistent or they’ve escalated. With the escalation of children in foster care, these numbers have most likely increased. Adolescents in foster care have to cope with inconsistency in placements, previous complex trauma, broken family relationships, and unmet health needs. There seems to be a correlation between this disparity, diagnose mental disorders, and eventual substance use.

Mental Disorders

Adolescents in foster care are a particularly vulnerable population for experiencing psychological/socio-emotional behavior disruptions. One of the primary reasons for this is constant transitions between homes. As of 2012, children in foster care had an average of 3 placements in their time of in-out of home foster care. Many children also faced “spells” of care which includes the time they were placed into foster care, returned to their family of origin, and then placed back into foster care. Stevens research on mental health disorders in foster care youth reported that “Cooper, Peterson, and Meier (1987) examined variables associated with disrupted placement in foster children and found that as the level of behavioral problems increased, the number of placements also increased” (Stevens, 2011). While behavioral problems do not automatically insinuate the presence of a mental disorder, it is common that a behavior problem was due to previous trauma or disturbances in the child’s life. Therefore, Stevens' commentary

on increased behavioral problems and number of placements is still valuable to the conversation on mental disorders caused by foster home transitions.

An additional contributor to existing mental disorders is child abuse and neglect. Family of origin is often the instigator of abuse, neglect, and trauma. Children and adolescents are raised in unsafe home conditions and then taken away from the home without enough attention to how that will affect the child's mental state. When diagnosed with a mental disorder, they are often not given adequate resources or attention to their shift in psychological functioning. A study conducted in Canada found that "individuals who had experienced physical abuse in childhood reported higher rates of anxiety disorders, alcohol and substance abuse, and major depression than those who did not report abuse" (Stevens, 2011). While the study was conducted in Canada, it's safe to say that the same applies to the American foster care system. Just in 2019, according to the AFCARS Report, the top five reasons for child removal into a foster home were neglect (63%), parental drug abuse (34%), caretaker inability to cope (14%), physical abuse (13%), and housing (10%) (AFCARS Report, 2019). Children exposed to traumatic events such as these have much higher risks of developing a mental disorder than those without the exposure (Stevens, 2011). Whether it be exposure to physical abuse, emotional abuse, sexual abuse, violent crimes, substance abuse, domestic violence, or whatever else, these children are too young to be exposed to such trauma and therefore are more vulnerable to occurring mental disorders.

Treatments, though many times are hard to reach or are not effective for the child, involve the use of psychotropic medication. Psychotropic medications are used to treat

behavioral/mental concerns and they are generally anti-anxiety medications, mood stabilizers, or anti-psychotics. The use of psychotropic medications has increased significantly in the past decade. Foster care children use psychotropic medications at 13-52% whereas the general population stabilizes at 4% (McCann, n.d.). Whether the medication is over-prescribed or not, it goes to show the magnitude of mental health impact on adolescents in the United States foster care system.

Substance Use

Amongst the harmful behaviors adolescents in foster care are at risk for, substance use is one of the most concerning. Adolescents in foster care have 2 to 5 times the rates of substance use than the general population. Data collected by H.K. Kim reports that “One study on 15–18-year-old youth in foster care from a Midwestern area found that 40% of them reported alcohol use, 36% reported marijuana use, and 25% reported use of both substances in the past 6 months (Thompson & Auslander, 2007)” (Kim, 2017). Furthermore, many youth report beginning their use around ages 11-12. Although there have been studies conducted that report high rates of substance use amongst adolescents in the general population, foster youth are much more at risk due to mental health concern and previous trauma. Kim additionally states that “substance use problems during adolescence often lead to cascades of negative outcomes, such as risky sexual behaviors (e.g., having multiple partners, having sex while intoxicated, and failure to use protection), early pregnancy, and poor educational attainment (e.g., [Keller et al., 2010](#))” (Kim, 2017). If an adolescent’s substance use is not addressed and treated early on, they

run the risk of health problems, hindrances to cognitive development, interruptions in their environmental factors, and more.

METHODOLOGY

Research Design

The research will be concentrated on adolescents ages twelve through eighteen. NYAP offers a variety of therapeutic, nursing, foster care, psychiatric, and behavioral services for clients in southern Ohio. To keep the population more concentrated, data will be strictly collected from NYAP's foster care program enrollment from 3/19/2020 through 3/29/2021. The study samples from a year of foster care enrollment as it should mirror an accurate representation of the hypothesis put into question. Through the selected enrollment dates, there were around 300 children in their foster care system and 200-230 adolescents that are ages twelve through eighteen. NYAP has a database that allows for filtering to find certain populations and further viewing of the client's cases. To collect information on mental disorders and substance use, each case's DAF, Diagnostic Assessment Form, will be viewed to provide the appropriate data being collected. The research will use simple random sampling to choose 50 subjects with diagnosed mental disorders out of the concentrated population. After selecting a case, demographics including gender, age, and race will be recorded. Following demographics, the next collected data will be their diagnosis and if that case has listed substance use history or not. If not, that will be recorded, and if there is substance use history, their substance of choice will be recorded. DAFs collect information from client's on how long they have been using, and what substance they use. This data will also be collected if the case shows recorded substance use. After data

collection from all 50 cases, the findings will be combined into graphs and quantitative displays of results.

Type of Study

This study is a quantitative study. All data can be analyzed from a numerical standpoint. The research being collected involves “yes or no” type questions as far as if a case has a recorded mental disorder diagnosis and further substance use history. There will be no surveys, discussions, or any type of outreach to directly speak with the 50 adolescents whose cases have been selected. All results will be directly concluded from information provided from 50 DAFs.

Research Questions

What is the correlation between mental disorders and substance use amongst adolescents in the United States foster care system?

Variables of Interest

In this research study, the independent variable is the adolescent’s mental disorder and the dependent variable is their substance use or lack thereof. It’s important to emphasize that an adolescent’s substance use is dependent on if there is a diagnosed mental disorder first, because if there is not, the case will be returned. These variables will be measured through data collected from 50 different foster care adolescents's Diagnostic Assessment Form.

Measurement Instruments

The measurement instruments will be recorded data from an adolescent's Diagnostic Assessment Form. This information is gathered through NYAP's online database called Evolv.

Validity and Reliability of Instruments

If an adolescent has a mental disorder, it will be recorded on their Diagnostic Assessment Form as the disorder, the DSM V code, and the severity of the disorder. If an adolescent has ever used substances, this will also be recorded along with how long they have been using, and how often they use, and when the last time they used was. There is room for human error if the subject lies on their form, refuses to disclose, or gives other false information. If this is the case, it would hinder the reliability and validity of the data as data is being directly collected from Diagnostic Assessment Forms.

Hypothesis

Adolescents in the foster care system ages 12-18 with diagnosed mental disorders are highly likely to also have a recorded history of substance use.

The Setting

The 50 subjects used will be adolescents ages twelve through eighteen enrolled in NYAP's foster care program. NYAP is an agency out of Columbus, OH providing services in foster care, intensive in home services, outpatient mental health, therapy, psychiatry, post-foster care independency, educational classes, and nursing. Their largest program is the foster care

program. The subjects drawn from the database will all be in the southern Ohio area and they are all enrolled in the foster care program as of 3/19/2020 through 3/19/2021.

Sampling Method

Of the cases regarding adolescents ages 12-18 in the foster care program, 50 cases will be chosen through simple random sampling. All 50 cases must also have a diagnosed mental disorder as this factor is the independent variable. If a subject does not, it will be returned and a new one will be randomly selected.

The Protection of Human Subjects

Confidentiality and maintaining the privacy of these client's is of the utmost importance for conducting the research. All adolescent names and identifying variables will be kept private. NYAP has a research board that is responsible for overseeing ethical research conducted in the company. This study has been submitted and approved by the board to conduct. They will continuously be checking for active implementations of ethical practice.

Human Diversity Issues

While the subjects come from a variety of different backgrounds, they are all enrolled in NYAP's foster care program meaning they all live in southern Ohio. Additionally, their diagnosis is often given by NYAP's psychiatrist, so there is not much diversity in who is conducting the Diagnostic Assessment. Furthermore, the subjects being utilized have all been exposed to

different life experiences of varying severity, so it's difficult to assume the one conclusion applies to all adolescents in foster care.

Data Collection Procedures

All data collected from Diagnostic Assessment Forms will be entered into an excel sheet. Each subject will have their age, race, and gender listed. Their mental disorder will be listed as they must have a diagnosis to qualify for the study. From there, the spreadsheet will list if they have used substance or not, and if they have, more data including how long they have been using, and when the last time they used will be recorded. Some client's also have on their form why they use substances, and this will be taken into account too. After recording all subjects, the data will be inputted into several pie graphs displaying the percentage of subjects who have used substances and who have not, the distribution of mental disorders, and the rate of users for each mental disorder category.

Data Collection Schedule

All data will be collected by the end of March, 2021. From there, all data will be inputted into graphs within two weeks of finishing data collection. Once data is input into graphs, conclusions, discussion, and an answer to the hypothesis will be recorded in the final research project. This timeline is subject to change as Dr.Dick sees fit.

Data Analysis Plan

The research question is asking the correlation between an adolescent in foster care with a mental disorder and substance use. Therefore, the correlation can be drawn once a percentage can be given for those who use substances and those who do not use. This correlation can also be drawn by examining the age of the subject, their sex, their frequency of use, and their substance of choice. With these variables, an appropriate conclusion and further discussion can be given to the research question at hand.

Limitations of the Study

There are a few limitations of the study to note. The first limitation is that the data is being collected from only foster care adolescents in southern Ohio. The demographics in southern Ohio do not mirror the rest of the country, so it may be a bit of an overgeneralization to imply that the conclusions apply to all foster care adolescents in America. A second limitation is the age range of a study. Adolescents who are 12 years old had no involvement with substance use compared to subjects who are 18. This could allow for a skew of data that doesn't give an entirely accurate conclusion for all adolescents ranging from ages 12-18. In addition, the research focuses on the past year of foster care enrollment which, although unlikely, can skew that data to look a little different than if the data had been collected over several years of enrollment. Another limitation to note is that it is common for individuals to lie or not tell the total truth when completing their diagnostic assessment. It's not unheard of for an individual to report they have no history of substance use because they don't want to face potential consequences. This can interrupt data validity and in return cause under representation of the amount of cases with recorded substance use. Lastly, because only 50 cases were selected, this

cannot allow for conclusions to be widely accepted as true for all of America's foster care adolescents.

RESULTS

The methodology was able to be carried out for 50 adolescents in NYAP's foster care system for one calendar year. The demographics measured were gender, age, and race. 38% of subjects were male while 62% were female. The ages of subjects were evenly distributed throughout the 50 cases selected with each age class ranging from about 14-16% of the subjects. Age 18 however only represented 6% of the cases randomly selected. The representing majority race was African American/Black individuals at 42% followed by Caucasian individuals at 30%, unidentified individuals at 18%, and Biracial individuals at 10%.

The leading diagnosed mental disorder recorded amongst all 50 subjects was PTSD at 42%. Falling numerically behind in order, PTSD was followed by UTSRD at 24%, OSTSRD at 14%, a tie between GAD and PDD at 8%, and SAD at 4%. When just looking at cases with recorded trauma, an alarming 80% of individuals meet the criteria to be diagnosed with some sort of trauma related disorder.

An additional important data piece to note is that while all 50 cases have a recorded mental disorder, 19 individuals or 38% of cases also have reported substance use. Some individuals use more than one substance, but the first substance listed is their primarily used/chosen substance. The primary substance listed for these subjects is marijuana at an astounding 63%. However, more than 63% of individuals have tried or are currently using

marijuana. Still ranking at the top, marijuana is listed for 78% of individuals with alcohol up next at 36%, nicotine at 11%, cocaine at 11%, and hallucinogens, opioids, and methamphetamine at 5%. Lastly, the range of length of use for substances is between 1 month and 5 years with 2 years being the mode.

A few interesting themes emerged in looking at the data. One of the most notable points is that nearly half of subjects diagnosed with PTSD have recorded substance use. This is the same for subjects with diagnosed PDD. When looking at the specific cases diagnosed with either PDD or PTSD with recorded substance use, they include the specific individuals who are using harder drugs. For example, one subject with PDD is using methamphetamine. In addition, the two cases with recorded cocaine use are both diagnosed with PTSD. One of those specific cases is the only subject with hallucinogenic and opioid use. However, because it is just three subjects with harder drug use, it is likely an overgeneralization to say that a PTSD or PDD diagnosis is the complete reason for substance use.

An additional theme that emerged is the amount of individuals using as the age range increases. There were no subjects with recorded substance use at 12 years old. However, 25% of 13 year olds have used substances and the same goes for 28% of 14 year olds, 50% of 15 year olds, 62% of 16 year olds, 50% of 17 year olds, and 66% of 18 year olds. Aside from the 17 year old age group being an outlier, the percentages of individuals using increase with the age range. However, there is no consistent length of usage with any age group. Some of the 13 year old subjects have been using for 1-3 years. The same goes for the 18 year olds, except their length of

usage is ranging from 1 month- 4 years. No major conclusions can be drawn about an age range in accordance to their length of usage because the numbers are not consistent with any one trend.

DISCUSSION

Implication for Social Work

Based on the results of the data, it's difficult to conclude the strength of the correlation between diagnosed mental disorders and substance use. Realistically, only 38% of the subjects had recorded substance use, and while it is still a significant percentage, there is still a substantial amount of cases with no recorded substance use. The data closely mimics Vaughn's 2007 study of foster care adolescent substance use. The study found that 35% of adolescents had diagnosed substance use disorders and leading marijuana and alcohol usages. This research echoes Vaughn's findings, in addition to the conclusion stating "Particularly at risk for both high rates of use and disorder are youth with a diagnosis of Post Traumatic Stress Disorder" (Vaughn, 2007). Subjects with PTSD, UTSRD, OSTSRD, and PDD according to the data seem to have the highest rates of substance use. Therefore, despite only 38% of cases reporting substance use, of the 19 recorded cases, there is a high linkage between trauma disorders and depressive disorders with substance use.

In addition, there is an obvious connection between rising usage amongst adolescents of increasing age. Despite there only being three 18 year old subjects, they had the highest percentage of substance users with 16 year olds falling closely behind. This is likely due to their increased length of being in a foster home, extended time in the system, more years of trauma

exposure, and just general exposure to the “drug world” as they get older. If more preventative measures as well as intense attention to trauma informed care were taken, it’s possible that the rising usage amongst age classes could increase at a slower rate, flat line, or even decrease. However, it is possible that this action happens once adolescents emancipate from the system and enter adulthood.

The correlation between a trauma related or depressive disorder diagnosis and substance use is an alarming concept when thinking about America’s foster care adolescents. Data such as this points to some sort of disparity in America’s mental health treatment for adolescents in foster care. If 38% of subjects are using substances at an arguably young age, that should be enough implication for change in mental health care and trauma treatment. It’s also important that substance use education and measures are taken in order to protect and inform adolescents. Kim’s 2017 study of substance use prevention amongst adolescents in foster care puts a heavy emphasis in putting adolescents in prevention programs in order to decrease rates of substance use in the future. While it was not 100% effective, it showed a strong decrease in substance use amongst adolescents who did take the programs compared to those who did not (Kim, 2017). A closer look at mental health treatment, trauma informed care, and implementation of substance use education/programming can unlock the floodgates to decreased substance use amongst adolescents in the United State’s foster care system.

Furthering the Study

The results of this research are not statistically significant, but they provide a foundation for further exploration on the disparity of mental health treatment, trauma informed care, and substance use prevention in America's foster care system.

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