# Parent and Family Perceptions of ADHD Diagnosis in Ethnically Diverse Youth – A Review of Literature

Kia Felder Williams

EDSE 846: Assessment, Evaluation and Intervention in Special Education Research George Mason University

Spring 2022

32/40 points

Kia, The introduction and method to your paper had great information. The use of tables was good given the large number of articles, but more information should have been provided in text (see my comments throughout). The results and discussion section were presented as a qualitative analysis of article findings. Although findings are interesting and should be noted, this was not the purpose of the paper. Also, attend carefully to APA for citing quotes (e.g., examples of what children and parents say) from articles. The following should have been included in the systematic synthesis, back explicitly from the articles:

Results (this is the section that will vary according to your specific articles)

▪  Overall characteristics of the studies (number of articles, participant characteristics, disability areas,

▪  General descriptions of assessment/evaluation procedures

▪  Overall findings of the assessment/evaluation procedures related to the

research questions; and

▪  General quality of studies

Discussion – Summary and Conclusions

14/14 points Presentation – Peer Feedback:

Was the presentation informative and clearly organized? (1=not informative or organized; 5=extremely informative and organized)

|  |
| --- |
| 5 |
| 5 |
| 5 |
| 5 |

Did the presenter(s) use time effectively? (1=no; 2=somewhat; 3=yes)

|  |
| --- |
| 3 |
| 3 |
| 3 |
| 3 |

What was one takeaway you had from the presentation?

|  |
| --- |
| BIPOC population was not represented in the data pulled |
| Family dynamics play a key role in the outcomes from the conceptual framework presented |
| My key takeaway is how cultural norms (such as verve) may influence perceptions of typical/atypical behaviors as they relate to ADHD. |
| Limited research on BIPOC on this topic...alarming! |

What feedback do you have to the presenter?

|  |
| --- |
| The presentation was great! Very calm and cool delivery. Great job! |
| Excellent work! I'm excited to see what you will do with all this new knowledge! |
| The tables were incredible and really illustrated your points. The presentation was clear and well-organized. LOVED the inclusion of child quotes, this really illustrated and highlighted the fact that you are researching humans. This is such an important topic and I can't wait to read your future publications. |
| I just thought this was amazing - thank you for sharing!! |

# Abstract

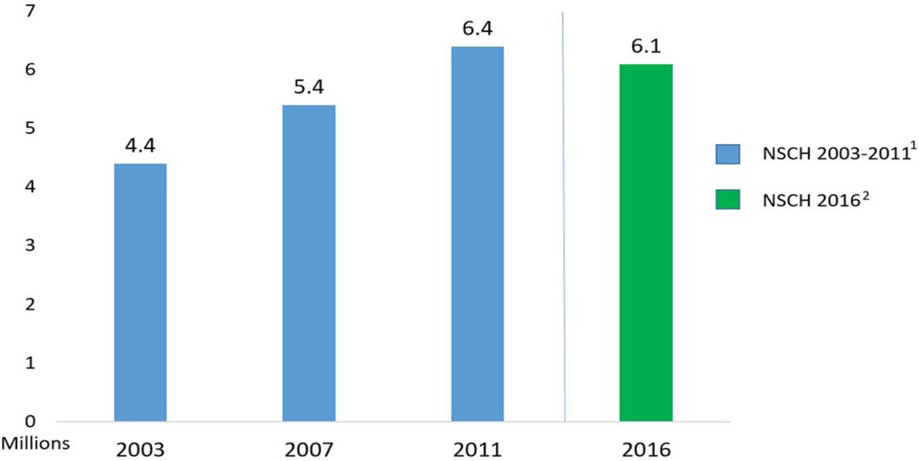
Attention deficit hyperactivity disorder (ADHD) is one of the most common neurodevelopmental disorders of childhood, characterized by developmentally inappropriate levels of inattention, distraction, hyperactivity and/or impulsivity that are pervasive and interfere with functioning. This disorder is caused by complex interactions between genes, negative environmental influences, and unexplained changes in brain development. Historical research suggests that major disparities exist in access, diagnoses, and treatment for ADHD across racially and ethnically diverse populations (Paidipati et al., 2017). The ways in which parents and families process identification, care, treatment, and acceptance of ADHD diagnoses are widely unknown. What is least known is how racially diverse families, children, and adults perceive the definition and characteristics of ADHD and, the factors that influence a family’s decision to intervene or treat perceived behavioral differences, accept diagnosis and intervention. This review of literature explores existing intervention studies related to those unknowns, examines parent and family processes related to the management of ADHD in racially and ethnically diverse children and provides recommendations for future studies.

# Purpose and Research Questions

The most recent *National Parent Survey* (Centers for Disease Control, 2016) determined that 388,000 children ages 2-5, 2.4 million children ages 6-11, and 3.3 million children ages 12- 17, have been diagnosed with the neurodevelopmental disorder ADHD (*Image 1*). Youth with ADHD are at high risk for marked difficulties that manifest as low academic achievement, poor peer-to-peer relationships, low self-esteem, and mental health comorbidities that may include

# Image 1

Estimated number of US children who ever had a diagnosis of ADHD



anxiety, depression and hyperactivity. When impulsivity emerges, these children are at greatest risk to suicide (Silvestri et al., 2018). Further, youth with undertreated or untreated ADHD are like to engage in substance use/abuse and be involved in the juvenile justice system during adolescence and into young adulthood (Young & Cocallis, 2019).

Despite the evidence that attention-deficit/hyperactivity disorder (ADHD) is not just a diagnosis of White children, ADHD often goes undiagnosed and is under-researched in the African-American population (Hervey-Jumper et al., 2006). In the African American and expanded minority (BIPOC) community, there are higher rates of delinquency, incarceration, teen pregnancy and sexually transmitted diseases associated with inadequate or delayed treatment of ADHD. Hervey-Jumper (2006) further states that minority populations generally respond well to treatments, but access to evaluation, medication and psychotherapy is limited or absent for many.

The purpose of this research is to evaluate the role families play in the lives of children with ADHD. Parents and caregivers are often the first to notice symptoms, seek care, and initiate treatment. Historical research suggests that major disparities exist in access, diagnoses, and treatment for ADHD across racially and ethnically diverse populations (Paidipati et al.,

2017). The ways in which parents and families process identification, care, treatment, and acceptance of ADHD diagnoses are widely unknown. Among the unknowns, what is least known is how racially diverse families, children, and adults perceive the definition and characteristics of ADHD, the factors that influence a family’s decision to intervene or treat perceived behavioral differences and family, children, and adults’ decisions to accept diagnosis and intervention.

This review of literature assesses how parents and families of ethnically diverse youth perceive and process ADHD diagnoses. The original searches were selected based on nineteen inclusion/exclusion criteria (*Table 1*) and resulted in eligible studies focusing on two primary research questions. The study will answer: **RQ1:** How do racially diverse families, children, and adults perceive the definition and characteristics of ADHD? And **RQ2:** What factors influence a family's decisions to intervene or treat perceived behavioral differences?

# Method

APA PsycArticles, APAPsycInfo, ERIC, Academic Search Complete, and Education Research Complete databases, rendered peer-reviewed intervention articles in the keyword query of BIPOC “racial/ethnic groups”, “perceptions”, “beliefs and attitudes”, and intervention including treatment and care. The initial query produced three eligible articles. To increase the return of articles, the date of publication was widened from 2015-2022 to 2001-2022, which ultimately yielded an acceptable return of 337 articles.

Upon applying the inclusion/exclusion criteria (*Table 1*), the query of 337 articles was reduced to 46 eligible articles. The articles were then sorted between the two research questions (*Table 2)*. After articles were sorted, each group of articles was coded by author and year, sample population characteristics, parameters, measures, methodology and major findings. The full coding protocols can be found in Appendix 1 (*RQ1*) and Appendix 2 (*RQ2*). A summary of Author, variables and measures are located in *Table 3* (*RQ1*) and *Table 4* (*RQ2*). Twenty-eight (28) articles were sorted for **RQ1:** How do racially diverse families, children, and adults perceive the definition and characteristics of ADHD?, and eighteen (18) articles were sorted to **RQ2:** What factors influence a family's decisions to intervene or treat perceived behavioral differences?

# Table 1

Inclusion/Exclusion Criteria

# Inclusion Criteria Exclusion Criteria

1. ADHD or ADD 1. Medial research (dosage, impact of drugs)
2. Original research – Qual/Quant/MM 2. Collapsed vs. disaggregated race data
3. Intervention study 3. Studies outside of the U.S./ territory
4. Social
5. Perception or Perceptions
6. Academic
7. Behavior or Behavioral
8. Parents, families
9. United States or U.S. or US territory
10. Overall study with White populations and specific to BIPOC students
11. English language learners with ADHD
12. Medical for identification, eligibility,

school-based, treatment related to medication at school

1. Attitudes or thoughts about ADHD medication
2. Teachers’ perceptions re: family engagement for BIPOC students with ADHD, barriers
3. Medical professionals (psych, nurse, etc.) weighing in on medication for BIPOC
4. Settings to include school, juvenile justice system, prisons, public perception, medical settings (psychiatric/residential/doctor’s office)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 2**  *Eligible Articles* |  | | | |
| **Question** | **#of Articles** | **#Qual.** | **#Quant.** | **#MM** |
| RQ1: Perception | 28 | 9 | 18 | 1 |
| RQ2: Intervention | 18\* | 8 | 9 | 1 |
|  |  |  |  |  |
| Total Articles | 46 | 17 | 27 | 2 |

# Measures

There were 10 measures that were used across 38 studies, more than 80% of all intervention studies. The most prominent measures used were semi-structured and structed? interviews (12), Diagnostic Interview Schedule for Children Pred. Scales (DPS) (7), ADHD-4

/ADHD-5 Rating Scales (4), observations (3), records review and progress notes (3), and DISC-4 (3). The measures were used to assess behavior, diagnosis including symptoms and comorbidities, treatment, and teacher and parent perceptions of behavior. There were six instances of adapted measures including shortening the original measure, translation for Latinx population, or utilizing selective questions. The measures were adapted from the ADHD Knowledge Perception Scale, Addiction Severity Scale, BSPA, and Hyperactivity Subscales. A full list of measures per study can be seen in Appendix 1 and Appendix 2 and a table of the most commonly used measures, in this review, by frequency can be seen in *Table 5*.

.

# Table 3

Dependent/Predictive Variables and Measures for *RQ1* Articles

**Article N Variable(s) Measures**

Araujo et al.(2017) 13  acculturation

* family dynamics
* language
  + [semi-structured] interviews;
  + CSI-4

Bussing, R. and Gary, F.A. (2007)

1,615  Parental ADHD knowledge

* + - Perceptions and cues to action
    - PV: Parent concern
    - PV: Child/Parent characteristics
  + ADHD Knowledge and Perceptions Survey (adapted measure from National Health Interview Survey)
  + Behavioral Questionnaire
  + Interview (detection, treatment)

Bussing et al. (2003) 381  gender

* + - cultural background

Bussing et al. (2012) 374  gender

* + - race
    - poverty (FARMS)
    - ADHD risk status
    - lifetime mental health service use

Coker et al.(2009) 5,147  Child sociodemographic covariates

* + - * study city
      * race/ethnicity
      * age at fifth grade survey
      * insurance status
      * household income
      * household composition
    - Parent sociodemographic covariates
      * highest household education level
      * English language proficiency
      * annual household income
  + Hollingsheard 4-factor index (SES scores)
  + DISC-4 (diagnosis)
  + CASA (treatment status)
  + CASA (4-questions) (receptivity to services)
  + interviews
  + Diagnostic Interview Schedule for Children Predictive Scales (DPS) (parent reported symptoms and comorbidities)

Coker et al.(2016) 4,297  Enrollment

* + - poverty
  + Unidentified adapted measure (racial discrimination)
  + Diagnostic Interview Schedule for Children Predictive Scales (DPS) (presence of disability and comorbidities)

Conduct Problems Prevention Research Group (2011)

Davison, J. C., & Ford, D. Y. (2001)

891  parent behavior-management

* child social cognitive skills
* reading
* home visiting
* mentoring
* classroom curriculum

25  race

* SES
  + Parent Interview versions of the NIMH Diagnostic Interview Schedule for Children (DISC)
  + Child Interview versions of the NIMH Diagnostic Interview Schedule for Children (DISC)
  + Semi-structured interviews
  + Structured interview

Dong Hun Lee et al.(2008) 956  gender

* + - race
    - ethnicity

DuPaul et al.(2020) 2,079  gender

* + - age
    - race
    - ethnicity

Epstein et al.(2005)  race

* + - ethnicity

Evans et al.(2013 875  gender

* + - race
    - factor (inattention)
  + Student Response Inventory (self-rating scale)
  + Parent Response Inventory
  + ADHD Rating Scale-5 Home Versions (ARS5)
  + ADHD Rating Scale-5 School Versions (ARS5)
  + Conners Teacher Rating Scale—Revised (CTRS–R)
  + Child Behavior Checklist—Teacher Report Form (CBCL–TRF)
  + Swanson, Nolan, and Pelham Rating Scale—IV (SNAP–IV)
  + Classroom observations
  + Disruptive Behavior Disorders (DBD) rating scale–teacher version
  + IRS–Teacher version

Flannagan et al. (2002) 34  race  Disruptive Behavior Disorders (DBD) Rating Scale

Golos et al. (2021) 40  Culture (religion)  Demographic and Adaptation of the

*Cog-Fun* for the Ultraorthodox Questionnaire

Havey et al. (2005) 28  etiology

* + - treatment

Hervey-Jumper et al.(2006) 52  Age at diagnosis

* + - treatment offered
    - perception of outcome
    - adherence
    - comorbid symptoms
    - frequency of follow-up

Hogue et al. (2021) 57  Perceived need for treatment

* + - Internalizing/externalizing symptoms
    - Sociopathy
    - Behavior regulation

Hosterman et al.(2008) 168  gender

* + - SES
    - age
  + ADHD Rating Scale–IV (School Version) (ARS-5)
  + Medical Progress notes (over time)
  + Mini International Neuropsychiatric Interview (MINI, Version 5.0)
  + Structured Clinical Interview for DSM Disorders (SCID)
  + Composite International Diagnostic Interview (CIDI)
  + Inattentive/Disorganized (I/D) subscale
  + Hyperactive/Impulsive (H/I) subscale
  + Addiction Severity Index (adapted measure)
  + The Child Behavior Checklist (CBCL) - caregiver report
  + Callous-Unemotional Traits (ICU) – parent report
  + Behavior Rating Inventory of Executive Function (BRIEF) - caregiver
  + Conner’s Teacher Rating Scale— Revised Long Version (CTRS-R:L)
  + ADHD-IV: School Version (ARS-4)
  + Behavioral Observation of Students in Schools code (BOSS)

Huskin et al. (2020) 746  gender

* + - ethnicity
    - age
  + Baseline Survey on Public Attitudes (BSPA) toward Persons with a Disability. (adapted, shortened)
  + Bogardus’ Social Distance Scale (SDSB)
    - race
    - cultural background
    - language
    - religion
    - education

Kang and Harvey (2019) 71  ADHD behavior

* + - ADHD likelihood
    - stigma
    - verve
    - racial attitudes
    - discrimination
    - income
    - education
    - age
  + Vanderbilt Assessment Scale
  + Child ADHD Stigma Questionnaire (CASQ)
  + Home Movement Expressive Questionnaire (HMEQ)
  + Racial Attitudes Scale (ATB)
  + Racial and Ethnic Microaggressions Scale (REMS)

Kendall et al.(2003) 39  perceptions

* + - meanings
    - experiences
  + Researcher-made questionnaire

Koro-Jungberg, et al., 2007 4  Cultural differences in illness

perception

* + - Cultural differences in treatment
  + Swanson-Nolan-and Pelham-IV (SNAP- IV)

Michailyszyn et al. (2008) 80  Conceptualization of ADHD

* + - treatment

Perry et al. (2005) 13  etiology

* + - use of treatments

Reid et al.(2001) 3,998  Rater ethnicity

* + - Behavior rating
  + Semi-structured telephone interview
  + Semi-structured conversational interviews
  + IOWA Conners Rating Scale

Schmitz, M. F., & Velez, M. (2003)

320  Acculturation

* perception of hyperactivity
  + Hyperactivity subscale of the Behavior Problems Index (adapted)
  + Hyperactivity subscale in the Behavior Problems Index (adapted)

Spencer et al. (2021) 41  parent perceptions of ADHD

characteristics

* + - parent engagement/seeking treatment
  + Semi-structured interviews

Thurston, I. B., Phares, V., et al. (2015)

251  problem recognition

* perception of need
* willingness to seek help
* beliefs about causes of mental illness.
  + Beliefs About Causes-Revised Scale
* Biopsychosocial
* sociological
* spiritual

# Table 4

Dependent/Predictive Variables and Measures for RQ1 Articles

Article **N Variable(s) Measures**

Berger-Jenkins et al. (2012) 70  DV: Use of services

* + knowledge
  + perceptions
  + self-administered survey

Coker et al. (2016) 4,297  Enrollment

* + - poverty
  + Unidentified adapted measure (racial discrimination)
  + Diagnostic Interview Schedule for Children Predictive Scales (DPS) (presence of disability and comorbidities)

Conduct Problems Prevention Research Group (2011)

891  parent behavior-management

* child social cognitive skills
* reading
* home visiting
* mentoring
* classroom curriculum
  + Parent Interview versions of the NIMH Diagnostic Interview Schedule for Children (DISC)
  + Child Interview versions of the NIMH Diagnostic Interview Schedule for Children (DISC)

Davison, J. C., & Ford, D. Y. (2022) 25  race

* + - SES

DeRamirez and Shapiro (2005) 129  Teacher ethnicity

* + - DV: teacher ratings of D/I/I behaviors
  + Semi-structured interviews
  + Structured interview
  + Conners Teacher Rating Scale-39
  + direct observations of off-task and fidgety behavior

60  Shared decision making  Semi-structured interviews

Fiks et al. (2011)

Hervey-Jumper et al.(2006) 52  Age at diagnosis

* treatment offered
* perception of outcome
* adherence
* comorbid symptoms
* frequency of follow-up
  + Medical Progress notes (over time)

Kang and Harvey (2019) 71  ADHD behavior

* + - ADHD likelihood
    - stigma
    - verve
    - racial attitudes
    - discrimination
    - income
    - education
    - age
  + Vanderbilt Assessment Scale
  + Child ADHD Stigma Questionnaire (CASQ)
  + Home Movement Expressive Questionnaire (HMEQ)
  + Racial Attitudes Scale (ATB)
  + Racial and Ethnic Microaggressions Scale (REMS)

Kendall et al.(2003) 39  perceptions

* + - meanings
    - experiences
  + Researcher-made questionnaire

Lawton et al. (2015) 24  Cultural differences in illness perception

* + - Cultural differences in treatment
  + Swanson-Nolan-and Pelham-IV (SNAP-IV)

Lee (2017) 2  Teacher perceptions

* + - Pedagogical practices
  + Observations
  + Teacher interviews
  + Artifacts

Leslie et al. (2007) 32  etiology

* + - use of treatments

Perry et al. (2005) 479  Parenting (Latinx), dealing with ADHD

diagnosis

* + - culture
  + Semi-structured open-ended interviews
  + Record reviews
  + Semi-structured open-ended interviews

Reinke et al. (2008) 678  Early behavior problems  Teacher Observation of Classroom

Adaptation-Revised (TOCA-R)

* + - DV: academic progress  The Aggressive/Disruptive Behavior subscale
* Comprehensive Test of Basic Skills (CTBS)

Spencer et al. (2021) 41  parent perceptions of ADHD

characteristics

* + - parent engagement/seeking treatment
  + Semi-structured interviews

Thurston, I. B., Phares, V., et al. (2015)

251  problem recognition

* perception of need
* willingness to seek help
* beliefs about causes of mental illness.
  + Beliefs About Causes-Revised Scale
* Biopsychosocial
* sociological
* spiritual

Thurston, I. B., Phares, V., et al. (2018)

51  help seeking  Beliefs About Causes-Revised Scale

* Biopsychosocial
* sociological
* spiritual

# Table 5

Utilized Measures by Frequency\*

*Measure Frequency*

Interviews (semi-structured/structured) 12

DISC-4 / DPS 7

ADHD-4 / ADHD-5 Rating Scales 4

Observations 3

Records Review / Progress Notes 3

CASA 2

SNAP-IV (Swanson-Nolan and Pelham-IV) 2

Conners TRS 2

Disruptive Behavior Disorders Rating Scales 2

BPI (Hyperactivity scale) 2

\**The remaining 38 measures were utilized 1 time.*

# Reliability and Validity

The measures utilized across this review demonstrated strong alpha reliability, construct validity and discriminant validity for the overall scale and subscales (Lawton et al, 2016) as stated in reference to PLOC and construct validity, given the measures ability to differentiate among five generational levels of Mexicans and Mexican Americans. Inventories such as DISC, SNAP-IV, Conners TRS showed strong test-retest reliability.

# Participants

The participants of these studies were diverse populations including African American, Latinx, Asian American. Studies that included indigenous populations, that fit the scope of this review were not available. The largest volume of research was on African American (43), a widely researched community. Studies on Asian Americans (1) were the smallest. Comparative studies contained White children that served as the point of comparison across several descriptors including but not limited to age, race, gender, socio-economic status, family income, and educational attainment.

Studies ranged from 2 participants to 5,147 participants. The age range was PK – adulthood, with the majority of studies on urban, public school age children. Of the studies, 23 studies included children already in treatment and should be understood as such when interpreting perspectives to treatment. The remainder of the studies were children with a diagnosis, but not currently in treatment.

# Results Discussion

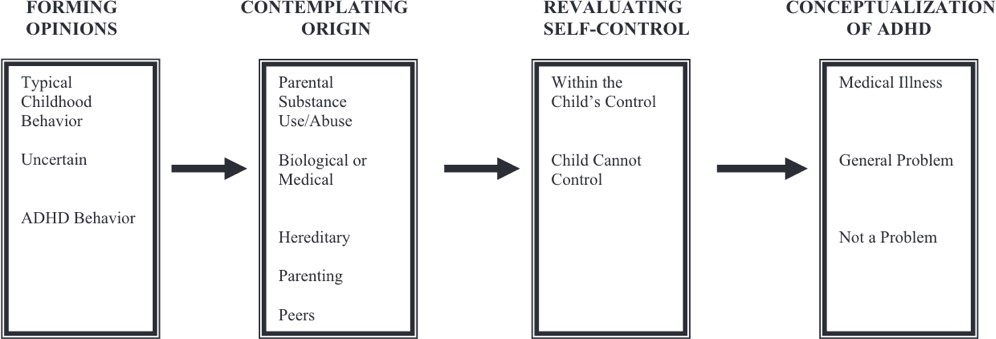
For many families, coming to grips with an ADHD diagnosis is the last step of an intense process. The first step is being able to recognize and define the characteristics of ADHD. The cognitive process is no different for racially diverse families, children and adults; however, Araujo (2017) posit that it is encumbered by acculturation, family dynamics and language in many Latinx families; Davis and Ford (2022) state that it is possible that what the medical community defines as either abnormal or as ADHD behaviors are perceived by African American parents as either normal or behaviors that the child will outgrow.

Results from *RQ1* and *RQ2* will be addressed around the conceptual model of Mychailyszyn et al. (2006) that details the process of *making sense* of the behaviors that parents ascribe to ADHD. This framework (*Image 2*) outlines the sense making around three distinct themes: forming opinions, contemplating the origin, and reevaluating self-control. Making sense surpasses simple descriptions of atypical behavior. In an effort to figure out what was actually happening, parents closely examined the nature and the significance of what they were observing.

*RQ1* asks how do racially diverse families perceive the definition and characteristics of ADHD? This begins in step 1, where families, in their uncertainty, begin to form opinions as to

whether the exhibited behaviors are typical childhood behavior or typical ADHD behavior and ultimately understand the extent of their child’s medical disorder in step 4.

# Image 2



**Perceptions of ADHD Definition and Characteristics**

*“For years I just thought he’s just being a little boy . . .*

*I just took it that ‘James’ was, you know, a little boy doing little boy things.”*

# *Forming Opinions*

Some parents maintained that nothing was ‘wrong’ with their child (Mychailyszyn et al. 2006; Kang and Harvey, 2009). These parents described how, before receiving a diagnosis, they thought their son or daughter was simply being a *typical* child. Some expressed the belief that the behavior being exhibited was just unique to that child. Parents made statements such as, “I’d always just thought that that was Johnny.” Another stated, “Well, I basically thought her behavior was normal behavior . . . so I just thought that it was just Mary.” Others attributed it to an inherent characteristic, saying things like, “I was just assuming that he was just a kid that was just bad,” or, “I figured he was just being rebellious.” Finally, other parents explained that the behavior seemed in line with what they expected for the child’s developmental level. One parent said, “When she was in kindergarten, I was just assuming, by her being young, it was just age

appropriate.” Another similarly noted, “For years I just thought he’s just being a little boy . . . I just took it that James was, you know, a little boy doing little boy things.”

# *Contemplating Origin*

Still others describe behaviors as culturally typical or vervistic behaviors. Cultural differences in valuing movement expressiveness may play a role in discrepant ratings of children’s ADHD behaviors. The Black culture has traditionally valued movement expressiveness, or verve (Kang and Harvey, 2009). Black children display more vervistic behaviors, with greater variability in movement compared to their White peers (Carter et al. 2008). These tendencies might reflect the child-rearing practices of Black parents in which greater movement expressiveness is encouraged (Boykin and Bailey 2000). African Americans’ cultural emphasis on verve may lead Black parents to perceive children’s ADHD behaviors as normal, and give lower ratings, compared to White teachers. On the other hand, White teachers may have different expectations of normal classroom behavior, and may be prone to perceiving these vervistic behaviors as defiance, hyperactivity, and/or impulsivity.

*Biological or Medical*

Caregivers’ (e.g., parents) perceptions of challenging behaviors drive the decision to seek help for perceived challenges in their child’s behavior. Seeking medical assistance varies based on the caregivers’ explanations about the causes and origins of the behavior. Parents who believed ADHD was a medical disorder actively sought a diagnosis, prescription medication, and treatment for their child’s challenging behavior. Caregivers who perceived ADHD through a behavioral model postponed medical treatment and pursued other modes of intervention.

Leslie et al. (2007) found that low-income, Spanish speaking families were reluctant to receive medical treatment for behavioral challenges. Cocker et al. (2016) applied the Diagnostic

Interview Schedule for Children Predictive Scales (DPS) to determine parent-reported symptoms of ADHD and other mental health conditions and comorbidities. Cocker et al. found that African American and Latinx children were less likely to receive a parent reporting of ever receiving an ADHD diagnosis or ADHD medication during the 12-month period which indicates a tolerance for behaviors or cultural differences and indicates that parent tolerance for behavior also influences their decision to access diagnosis and interventions.

Repeatedly, African American parents and those interacting with African American parents expressed a socially constructed view of ADHD and were less amenable to the diagnosis than White middle-class families in the same region who tend to embrace the biological determinist point of view (Davison & Ford, 2022).

Parents may need more information about ADHD and schools and social service agencies may also assist by providing treatment options that are alternatives to medication. There is also a need for clinicians to become more culturally sensitive and accepting of the varied views of ADHD. Cultural awareness may increase communication between families and clinicians.

# *Re-Evaluating Self Control*

Araujo et al. (2017) researched Latinx family views of ADHD behaviors. When discussing the discovery of child impairments related to ADHD, over half of the caregivers (53%) described negative experiences, such as feeling guilty, frustrated, impotent, sad, and negatively judged by others. Some parents (23%) acknowledged a difficulty accepting their child ́s ADHD status. The majority of parents (61%) described a perception that ADHD behaviors are caused by a lack of attention and strict discipline in home education. Even more caregivers (69%) acknowledged causes related to working conditions, specifically, working long

hours, which do not allow them to stay informed about their children’s school situation, understand their children’s concerns or problems, and spend time together as a family.

# *Conceptualization of ADHD*

At this stage, parents and children understand that they have a medical diagnosis and begin to accept medical intervention, treatment and individualized education. Perception of behavior plays a huge part in whether externalized behaviors are considered severe enough to warrant further observation and potential diagnosis. Observed racial differences in perceptions of Black boys are consistent with past studies that have documented discrepancies in ratings of Black children’s externalizing behaviors (DuPaul et al. 2016; Epstein et al. 2005; Harvey etal.

2013; Lau et al. 2004; Lawson et al. 2017). However, in the existing literature on informant discrepancies, children’s behavior has rarely been held constant, leaving open the possibility of actual discrepancies in how children behave across contexts. Results of the present study suggest that differences in adults’ ratings of Black boys are due at least in part to racial differences in perception rather than differences in how children may behave in different settings.

They way youth perceive their own ADHD behaviors is a rarely studied but eye-opening look into the disorder. Kendall et al. (2003) studied children’s accounts of ADHD and showed how several participants talked about problems with learning and cognition related to ADHD, particularly in relation to their “slower” rate of learning, feeling constantly distracted and confused about what was said to them or what they were supposed to do, and being bored.

Children often felt as if they were different from their peers because of these traits. As a 17-year- old boy stated,

**“Yes—I do believe I have ADHD, because I can tell that I am a slower learner and that’s what I think that is. I have a hard time reading and stuff. I think I’ll have it for the rest of my life. I’ll always be slower at learning and stuff. ADHD is just**

**about kids who are a bit slower in things. It’s harder for me to think I always feel**

**distracted but I don’t tell anybody about that.”**

Other youth talked about it in a self-deprecating manner. One16-year-old boy said that he thought he was mentally challenged stating

# “ I see my friends who are at the speed of everyone else and I’m not.”

Some children were ostracized and teased at school because of these problems. One 13-year-old girl stated,

# “Some people say I’m dumb because I’m slower. I just ignore it. I don’t let it get to me, because, you know, I don’t think those things are true.”

Sometimes, the participants talked about being confused and not understanding the circumstances around them, relating their struggles to poor metacognition and self-evaluative abilities. As stated by a 14-year-old girl,

# “Sometimes I think I’m doing really well at something and then it comes back really bad—but I thought I had done good. That’s really hard.”

Adding to this dimension was the commonly described experience of boredom and inability to sustain attention when subjects were not intrinsically interesting.

# “I get bored very easily and I have a hard time sitting down in the classroom because I get bored easily. when things are not interesting.”

The vast majority of these children were in special classes or had an Individual Educational Plan (IEP). Responses varied as to the usefulness of these classes and services. While one 17-year-old boy stated that he disliked his special math class so much that it motivated him to work harder and get reassigned to a regular classroom, another 16-yearold boy said he liked his transitional classes because it helped him learn and improved his attendance.

# “If I didn’t have a transitional class, I wouldn’t go to school. It helps my attendance. Smaller classes and more attention helps. When adults (teachers) are serious it makes it easier. A good teacher doesn’t take no crap from nobody

Racially diverse families perceive the definition and characteristics of ADHD in varied ways, vacillating between a range of emotions including distrust and relief, and, actions including acculturation, not seeing a problem outside of culturally acceptable and normative behavior, and accepting that they behaviors they are seeing are atypical and in need of treatment. Bussing (2007) and Koro-Jungberg (2007) note that parents and caregivers in these studies are performing the challenging task of sense-making of the behaviors they were witnessing and ultimately conceptualizing their child’s diagnosis.

# Factors that Influence Intervention or Treatment

Perceptions birthed themes that were consistent across the literature. Five themes emerged from the participants and can be categorized into the following social structures that explain a resistance to accept diagnosis and intervention: (a) distrust of the educational system (Davis and Ford, 2022); (b) perceived lack of cultural awareness of White educators (Davis and Ford, 2022; DuPaul et al., 2020; Epstein et al., 2005; Golos et al., 2021); (c) perceived social stigma of the ADHD label (Davis and Ford, 2001, Kang and Harvey, 2019 ); and (d) concern about drug addiction (Davis and Ford, 2001; Nguyen et al., 2017, Epstein et al., 2005).

*Distrust of the Educational System and Perceived Lack of Cultural Awareness*

In the African American community, there are indications of deep-seated resentment about suggestions of racial differences in intelligence and a disproportionately high percentage of African American children being identified with a disability. Capitalizing on that distrust are disparities between teacher and parent rating scales that are met with disbelief, due to a perceived lack of educator cultural sensitivity. Studies show that teacher tolerance is a primary indicator for

identification of behavior problems and teachers are less tolerant of behaviors that are inconsistent with their cultural expectations (Hosterman et al, 2008).

BIPOC participants of studies reported varying beliefs and values related to ADHD

as a social construct within the dominant U.S. culture versus a mental health disorder. Studies noted acculturation and cultural orientation to the dominant culture as a factor in accessing care and treatment (Araujo et al., 2017, Rostain et al., 2015).

Research has shown that the racial composition of students in public education continues to diversify; however the racial composition of educators does not. The composition of PK-12 educators remain White, monolingual and female. A White counselor offered an explanation during her interview as to why African American parents distrust the educational system:

# “The rating scales we use to determine ADHD are ethnocentric. They are made to the White woman system, which is what elementary school teachers basically are. There is also a problem with a minority student going over to schools with a White majority ... they don't fit into the norm there and are seen as having ADHD because they don't fit into how those teachers would define the norm.” (Davison & Ford, 2001)

A White nurse who has worked with the African American community stated:

# “I think there's a negative perception in the African American community. It's viewed as a control aspect. Physical expressiveness is more accepted in the African American culture and exuberance is a desired characteristic and not something to squelch. Moms tell me that all the time-that it's [the ADHD diagnosis and stimulant treatment] taking the soul out [of African American children].” (Davison & Ford, 2001).

Further, studies within minority groups demonstrated that African American parents report distrust about ADHD diagnoses and concern about medications, and that Hispanic parents prefer treatments that are nonpharmacologic primarily because they report medication is addictive and “dulls the mind (Berger-Jenkins et al., 2012).

*Skepticism and Perceived Social Stigma of the ADHD label*

Questioning and skepticism about ADHD as a “real” disorder and its treatment was

a common thread between studies. BIPOC groups expressed concerns about the use of stimulant medication due to concerns about side effects and drug abuse fears (Davison & Ford, 2001).

African American parents in Bussing et al. (2003) expressed more negative expectations about treatment outcomes.

African American parents resist the identification process because of a perceived social stigma in the African American community against one's child being labeled "*crazy*" and taking "*drugs*." The terms "*stigma*, "crazy," and "drugs" came up repeatedly during the interviews (Davison & Ford, 2001). When asked to clarify what was meant by "stigma," the participants' responses centered on issues of being stamped with a social mark of shame and a sign of disease. For example, an African American teacher stated:

# “The stigma comes in that your child needs something else to make them behave-not just the stigma that they're crazy. In some cases when you recommend that the child be evaluated, they say 'My child is not crazy because my child can . . . ' and they [parents] list all the responsible things that the child can do.”

Mychailyszyn et al. (2008) states diverse families sometimes fail to pursue intervention or treatment because they lack sufficient resources to access health care or do not access care due to the stigma of a mental health diagnosis. Practical barriers described above may be compounded by cultural barriers for Latino families, including real or perceived social stigma, experiences with discrimination/ racism, and limited linguistic and/or cultural competence on the part of the health care staff (Araujo et al., 2017). That author goes on to say, although many individuals across cultures experience stigma related to ADHD, Latinx families may be particularly vulnerable to this experience due to commonly held negative perceptions about

psychopathology in Latino culture. Asian American parents may have been less likely to report certain types of externalizing behavior problems due to culturally based perceptions of problem behavior and/or stigma inherent in reporting emotional or behavioral problems. Research suggests that ratings of child problem behavior are a function of both observer and child race and ethnicity. Cultural differences in symptom interpretation and problem identification, language barriers, stigma, and/or disparate access to service systems may also delay Asian American parents from seeking professional treatment for their children (Nguyen et al., 2004)

*Concern About Drug Addiction*

African American parents in Davison (2001) study were very concerned that using stimulant medication to treat their child's behavioral problems would encourage later drug use and possibly lead to abuse and addiction. This is also a concern that was echoed within other diverse groups (Araujo et al., 2017; Nguyen et al., 2004).

A White nurse who works extensively with this population noted:

# "African American parents always indicate a fear that using Ritalin will lead to drug abuse later on."

This is not to say that problems of drug abuse do not exist in the White middle-class community; it is to say that African American parents are more aware of the potential misuse of Ritalin. Further, a White medical practitioner noted,

# "It is a rare African American parent in this community who has not observed or heard of the abuse of drugs and/or Ritalin."

# Quality of Articles

The quality of articles was good and acceptable. The standard of ethics were met for each of the 46 studies. Other factors found acceptable were: **(1)** The research was clear in informing the reader of its aims. Terms were clearly defined and all but two articles identified the measures utilized; (2) The sample was adequate to provide trustworthy conclusions. The method of selection

(random, purposive, systematic) was acceptable in establishing group equivalence; (3) **articles established control of confounding variables in relevant studies. (4) research designs were suitable to answer the research questions; (4) criteria and criteria measures demonstrated reliability and validity for both independent and dependent variables; (5) appropriate statistical tests were applied for the data obtained. Post hoc tests, were applicable, were applied. Tables and figures were clearly labelled; (6) Studies with larger sample sizes allowed for generalization and limitations of the studies were clearly mentioned.**

# Summary Conclusions

Racially diverse families perceive the definition and characteristics of ADHD negatively and approach treatment apprehensively. This review determined that diverse families fear the crazy, lazy, stigma of this label. Overall, diverse families stated that cultural distinctions are not appreciated or valued in the testing and evaluation process.

African American families explain enthusiastic externalized behaviors, that may lend itself to a hyperactivity diagnosis, as verve. Common and acceptable behaviors that embody the spirit of their children. Asian-American families have explained anxiety, depression or loneliness, internalized behavioral indicators of the disorder, as culturally acceptable. Children are to be quiet, respectful of elders, not maintain eye contact, inward. While, Latinx families struggle with acculturation and trying to make behaviors conform to expectations.

Diverse families traverse an entire conceptual framework to understand, accept and ultimately treat the disorder. From forming opinions to conceptualizing ADHD, this conceptual framework is a web of cultural, historical, normative, able-bodied, and natural barriers that parents of children with ADHD must navigate. Perceptions were birthed from themes that were consistent across the literature. Four themes emerged from the participants and can be cataloged

into the following social structures. These themes explain a resistance to accepting diagnosis

and intervention: (a) distrust of the educational system; (b) perceived lack of cultural awareness of White educators; (c) perceived social stigma of the ADHD label; and (d) concern about drug addiction.

The limitations of many intervention studies with small sample sizes, perceptions about treatment from subjects already in treatment and a lack of representation from all of the diverse ethnicities that fall under the BIPOC label lend itself to future research. Research is also recommended on family engagement that looks at the independent variable of community engagement, as many BIPOC ethnicities have strong community ties, and community should be seen as an ally in the effort to provide care and treatment to undiagnosed or undiagnosed youth.



# Appendix 1

*RQ1* Sort/Coding

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RQ1: How do racially diverse families, children, and adults perceive the definition and characteristics of ADHD?** | | | | | |
| **Author(s) and**  **Year** | **Sample Population** | **Parameters** | **Measure(s)** | **Methodology** | **Major Findings** |
| **Araujo et al. (2017)** | 13 Latino caregivers of children with ADHD  symptoms | Explore emotional, social, and cultural experiences of  Latino youth with ADHD symptoms and their families. (p.3512) | · [semi-structured] interviews; CSI-4 | Qualitative | Overall, acculturation appears to play a major role in the lives of Latino children with ADHD symptoms and their families. Specifically, the  Latino caregivers participating in a school-based ADHD intervention described a strong connection between acculturation and their childrearing style and family customs, with language emerging as a particularly salient theme. Poor working conditions, stigma, and experiences of racism also were indicated as influential social-emotional factors. Furthermore, acculturation, family dynamics, and social conditions appear relevant to Latino caregivers’ conceptualization, management, and help seeking for their child’s impairments related to ADHD. (p.3519) |
| **Bussing, R., Gary,**  **F. A. et al. (2007)** | 1,615 parents; The mean age of the children was 7.6  years old (SD = 1.7, range 5 to 12), 53% (n = 863) were girls, and 41% (n = 662) were African- Americans. The average SES score was 36.7 (SD  =13.1, range 8 to 66) and varied by cultural background, the overall average SES for African- American households being 29.4 (SD =13.1) and for Caucasian 41.7 (SD =10.9). Nine percent of parents (n  = 146) reported that their child had a diagnosis of ADHD based on a professional evaluation, and for an additional 14% (n = 222) of children, ADHD was suspected. Furthermore, more than one fourth of the parents (28%, n = 454) had concerns that their child had an emotional or behavioral problem and 49% (n = 793) had no concerns. Most (86%, n = 1,383) did not receive any special education services, 8% (n = 134) received services for learning disabilities or emotional | The current study uses an adaptation of the health belief  model to (a) investigate cultural variations in ADHD knowledge, awareness of relevant school services, perceptions, and cues to action and (b) explore cultural variations in relevant ADHD information sources. | · ADHD Knowledge and Perceptions Survey  (adapted measure from National Health Interview Survey); Behavioral Questionnaire; Interview | Quantitative | Most parents (87%, n = 1,404) indicated that they had heard about  ADHD before. Of those who had previously heard about it, more than one fourth (27%, n = 376) had heard or read about ADHD within the past days, one fourth within the past weeks (23%, n = 330), one third within the past months (32%, n = 455), and the remainder had heard or read about it more than a year ago. Parental self-rated knowledge about ADHD varied considerably: nearly one third (31%, n = 437) said they knew a lot, 35% (n = 496) said they knew some, 30% (n = 414) said they knew a little, and 3% (n = 48) indicated they knew nothing about ADHD. Significant differences emerged in levels and recency of self-reported ADHD knowledge by ethnicity, SES, parental concern level, and special education status, but not by child gender.; African American parents reported less ADHD awareness and lower self-rated knowledge. They experienced fewer cues to action, such as receiving ADHD information from teachers or reading media accounts.  Furthermore, they made more etiological attributions to sugar intake and expected less benefit from treatment. African American and disadvantaged parents were less likely than their Caucasian and more advantaged counterparts respectively to endorse that ADHD can be treated with medications. |
| **Bussing, R., Zima,**  **B. T., Gary, F. A. et al. (2003)** | 381 children, 70% (n = 266) participated in follow-up  home interviews that included diagnostic and service use assessments. Thirty-four percent (n = 91) of these children met DSM-IV criteria for ADHD and had not received ADHD treatment in the past 12 months. Boys (N= 202, 52%) and girls (N= 187, 48%), and of Caucasian (N= 188, 48%) and African American (N=201, 52%) children. The average child age was 7.8 years (SD = 1.8) and the mean SES score was 32.7 (SD = 13.8). | The study's first goal is to describe the rates of 4 help-  seeking steps; namely, recognizing  a child problem, seeking an evaluation, obtaining a professional diagnosis, and securing ADHD treatment. The second objective is to examine whether these help-seeking steps vary by child gender  or ethnicity, after controlling for socio-economic status (SES) and enabling and need variables. Third,  this study seeks to describe barriers to service use from the perspective of parents whose children meet  DSM-IV criteria for ADHD and have not utilized any mental health services in the prior 12 months | Hollingsheard 4-factor index, DISC-4, CASA | Quantitative | Diagnosis rates varied most strongly by gender, race, and the source of routine pediatric care, but all predictor variables except for teacher-  reported behavior problem severity were significantly related.; The lowest treatment rates were reported for children without a routine source of pediatric care (5%), compared to 27% for children with a private source and 18% for those with other sources  (P < .05) and for girls (9%), compared to 35% among boys (P < .001).; The independent relationships between help-seeking steps and sociodemographic characteristics, services received in primary care and special education, and behavior problem severity; While gender and race did not independently affect recognition rates, both variables had consistent and large  effects on subsequent help-seeking steps; Fifty-six percent of the unserved children with ADHD (N= 91) were boys, 50% were African American, and 70% received subsidized school lunch. The 3 most commonly endorsed items were being unsure where to go for help (N= 35; 39%), the problem got better by itself (iV= 33; 36%), and the child got well enough that s/he did not need treat  ment anymore (N= 31; 34%). The most common barrier category was no perceived need (N= 60; 66%), followed by system barriers (N = 48; 53%) and negative expectations (N = 41; 45%). Similar proportions of parents reported stigma-related (N= 36; 39%) or financial barriers (N= 34; 38%). African American parents had higher rates of negative treatment expectations than did Caucasians. This may be a reflection on the established racial disparities in quality of care, including mental health treatment. African American parents who have concerns about their child's behavior may not seek treatment because they do not perceive professionals as trustworthy allies. African American  families embody certain beliefs and practices about behavioral and mental disorders that influence their help-seeking behaviors, their responses to the available services, and methods of coping. These factors are not clearly understood. |
|  | - |  |  |  |
| **Bussing, R., Zima,** | 374 adolescents, 56% (n = 209; 79% participation rate) | This study describes parent and adolescent knowledge, | Interview (detection, treatment) | Quantitative | Despite relatively high self-rated ADHD familiarity, misperceptions among parents and adolescents were common, including a sugar etiology |
| **B. T., Mason, D.** | from the high-risk and 44% (n = 165; 69% | perceptions, and information sources and explores how |  |  | (25% and 27%, respectively) and medication overuse (85% and 67%, respectively). African American respondents expressed less ADHD |
| **M., Meyer, J. M., et** | participation rate) from the low-risk group. Of the | these vary by sociodemographic characteristics, ADHD |  |  | awareness and greater belief in sugar etiology than Caucasians. Parents used a wide range of ADHD information sources, whereas adolescents |
| **al. (2012)** | sample, 57% were female (n 213), 36% (n = 136) | risk, and past child mental health service use. |  |  | relied on social network members and teachers/school. However, parents and adolescents expressed similar strong preferences for the Internet |
| were from African American backgrounds, and 53% (n |  |  |  | (49% and 51%, respectively) and doctor (40% and 27%, respectively) as ADHD information sources. |
|  | = 197) qualified for free or reduced lunch status. Their |  |  |  |  |
|  | average age was 15.4 (SD = 1.8) years. More than one |  |  |  |  |
|  | half (56%, n = 210) had received mental health |  |  |  |  |
|  | services in the past. |  |  |  |  |
| **Coker et al.(2009)** | Participants. 5147 fifth-grade students and their parents  from public schools in 3 US metropolitan areas. (See Table 1). Black 1738 (29) Hispanic 1792 (44) White  1224 (22) Other 393 (6) | Summary. Examination of the prevalence and mental  health correlates of perceived racial/ethnic discrimination among Black, Hispanic, White, and other fifth-grade students. We also examined the relationship between perceived racial/ethnic discrimination and symptoms of 4 mental health disorders for each race/ethnicity; this analysis was based on a conceptual model for child development that incorporates the effect of racial/ethnic discrimination for children in minority status racial/ ethnic groups. | Diagnostic Interview Schedule for Children Predictive Scales (**DPS**) (parent reported symptoms and comorbidities) | Qualitative | Findings. Fifteen percent of children reported perceived racial/ethnic discrimination, with 80% reporting that discrimination occurred at school.  A greater percentage of Black (20%), Hispanic (15%), and other (16%) children reported perceived racial/ethnic discrimination compared with White (7%) children. Children who reported perceived racial/ethnic discrimination were more likely to have symptoms of each of the 4 mental health conditions included in the analysis: depression, attention deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder. An association between perceived racial/ ethnic discrimination and depressive symptoms was found for Black, Hispanic, and other children but not for White children. Conclusions. Perceived racial/ethnic discrimination is not an uncommon experience among fifth-grade students and may be associated with a variety of mental health disorders. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Coker et al.(2016)** | population-based, multisite sample of 4297 children  and parents surveyed over 3 waves (fifth, seventh, and 10th grades). Multivariate logistic regression examined disparities in parent-reported ADHD diagnosis and medication use in the following analyses: (1) using the total sample; (2) limited to children with an ADHD diagnosis or symptoms; and (3) limited to children without a diagnosis or symptoms. | Summary: Across all waves, African-American and  Latino children, compared with white children, had lower odds of having an ADHD diagnosis and of taking ADHD medication, controlling for sociodemographic, ADHD symptoms, and other potential comorbid mental health symptoms. Among children with an ADHD diagnosis or symptoms, African-American children had lower odds of medication use at fifth, seventh, and 10th grades, and Latino children had lower odds at fifth and 10th grades. Among children who had neither ADHD symptoms nor ADHD diagnosis by fifth grade (and thus would not likely meet ADHD diagnostic criteria at any age), medication use did not vary by race/ethnicity in | Unidentified adapted measure. | Quantitative | Findings: Racial/ethnic disparities in parent-reported medication use for ADHD are robust, persisting from fifth grade to 10th grade. These  findings suggest that disparities may be more likely related to underdiagnosis and undertreatment of African-American and Latino children as opposed to overdiagnosis or overtreatment of white children. |
| **Conduct Problems**  **Prevention Research Group (2011)** | Participants. N=891 children (445 for intervention and  446 for control). The mean age of participants was 6.5 years (SD = 0.48); the sample primarily comprised African American and White participants (51% African American, 47% European American, and 2% Other ethnicity, e.g., Pacific Islander and Hispanic) and gender mixed (69% boys). The sample was skewed toward socioeconomic disadvantage: Fifty-eight percent were from single-parent families, 29% of parents were high school dropouts, and 40% of the families were in the lowest socioeconomic class (representing unskilled workers) as scored by Hollingshead (1975). Only 32% of the sample was within the middle-class range. | Summary. The impact of the Fast Track intervention on  externalizing disorders across childhood was examined. Eight hundred-ninety-one early-starting children (69% male; 51% African American) were randomly assigned by matched sets of schools to intervention or control conditions. The 10-year intervention addressed parent behavior-management, child social cognitive skills, reading, home visiting, mentoring, and classroom curricula. Outcomes included psychiatric diagnoses after grades 3, 6, 9, and 12 for conduct disorder, oppositional defiant disorder, attention deficit hyperactivity disorder, and any externalizing disorder. | Parent Interview/Child Interview versions of the  NIMH Diagnostic Interview Schedule for Children (EDISC) | Quantitative | Findings. Significant interaction effects between intervention and initial risk level indicated that intervention prevented the lifetime prevalence of  all diagnoses, but only among those at highest initial risk, suggesting that targeted intervention can prevent externalizing disorders to promote the raising of healthy children. |
| **Davison, J. C., &**  **Ford, D. Y. (2001)** | 25 participants in this study, 18 were elementary school  personnel, and 7 were associated with the medical community. The elementary school personnel group included 10 teachers, 6 school administrators, and 3 school counselors/social workers.; ethnicity; 5 of the 10 teachers were African American and the other 5 were White. All 6 school administrators were African American, 1 social worker was African American and 2 were White. Finally, 9 of the 10 medical personnel were White. | understand the perceptions and attitudes of African  American parents, which ultimately affects whether they choose to seek information or medical attention for ADHD. If parents do not believe ADHD to be a physical disability or health problem, then they are not likely to seek information and assistance | Semi-structured interviews; structured interviews | Qualitative | The findings in this inquiry are consistent with a socially constructed view of ADHD. Repeatedly, African American parents and those  interacting with African American parents expressed a socially constructed view of ADHD and were less amenable to the diagnosis than White middle-class families in the same region who tend to embrace the biological determinist point of view; Five themes emerged from the participants and can be categorized into the following social structures: (a) distrust of the educational system; (b) perceived lack of cultural awareness of White educators; (c) perceived social stigma of the ADHD label; (d) concern about drug addiction; and (e) pressure from political forces |
| **Dong Hun Lee et al**  **(2008)** | Participants. College freshmen (n = 956) and their  parents (n = 956). Among college freshmen, 495 (52%) were male, and 461 were female; 848 (89%) were Caucasian and 108 were African American. This study excluded data from Hispanic and Asian students and students from other racial or ethnic groups due to low sample sizes. Ages ranged from 17 to 22 (M = 19, SD = 0.7). In the study sample, 47 students (4.9%) were diagnosed previously with ADHD, and another 37 (3.9%) were diagnosed previously with LD | Summary. Group differences and prevalence rates for  ADHD symptoms in a matched sample of college freshmen (n = 956) and their parents (n = 956) were investigated for gender and race (African American and Caucasian) effects using current self-report and retrospective parent-report ratings. On self-report,  compared to female students, male students displayed higher mean scores on subscales and lower rates for reporting symptom totals beyond DSM–IV thresholds for the three subtypes of ADHD. Mean differences in ADHD symptoms were not apparent for race. However, African American students displayed higher rates for reporting symptom totals beyond DSM–IV thresholds for all subtypes. On retrospective parent report, male students and Caucasian students displayed higher mean scores on all scales and higher rates for reporting symptom totals beyond DSM–IV thresholds for all subtypes. Prevalence rates varied by gender and race on self-report and parent report. Prevalence was examined based on combined data of self-report and parent report and using age-adjusted cutoff criteria. Findings and implications are discussed. | Student Response Inventory; Parent Response  Inventory | Quantitative | Findings. Gender comparisons. Mean scores of self-reported current symptoms (see Table 1) were higher for male students than for female  students on the Inattentive scale (0.41 vs. 0.32) and the Combined scale (0.46 vs. 0.42) and did not differ on the Hyperactive–Impulsive scale (0.52 vs. 0.52). Effect sizes were small for the inattentive (η2 = .04) and the combined (η2 = .03) scales. Race comparisons. Mean scores of self-reported current symptoms did not differ for African American and Caucasian students on all three scales (see Table 2)—the Inattentive scale (0.38 vs. 0.36, η2 = .00), the Hyperactive–Impulsive scale (0.55 vs. 0.52, η2 = .00), and the Combined scale (0.46 vs. 0.44, η2 = .00). In contrast, the rates for reporting symptom totals beyond DSM–IV thresholds indicated that more African American students than Caucasian students tended to be identified as having the inattentive type (2.8% for African American vs. 0.4% for Caucasian students; see Table 3), the hyperactive–impulsive type (2.8% vs. 1.8%, respectively), and the combined type (2.8% vs. 0.1%, respectively). Student report of current  symptoms (SRI). Mean comparisons in self-report data between African American and Caucasian students were not significant on any of the three scales. However, the rates of African American students who reported symptom totals beyond DSM–IV thresholds exceed that for Caucasian students on all three subtypes of ADHD. |
| **DuPaul, et al**  **(2020)** | N=2079 parents (White, 64%) (1037 m, 1042 f); age 5-  17; (m=10.68, SD=3.75) Racial composition: White77.8%; Black 7.9%; Asian 4.3%; Other multiracial 10.1% | Parent and teacher ratings of the two attention-  deficit/hyperactivity disorder (ADHD) symptom dimensions (i.e., inattention, hyperactivity-impulsivity) differed across child gender, age, race, and ethnicity. Group differences could be due to actual variation in symptomatic behaviors but also could be due to measurement items functioning differently based on child characteristics. | ADHD Rating Scale-5 (Home and School Version); | Quantitative | All but six ADHD symptom items showed differences across child age, gender, race, and ethnicity. More items showed difference for age  rather than for gender, race, or ethnicity. Differences in parent rating scales over teacher rating scales. Teacher rating scales differed for teachers more than parents. Minimal items for difference based on ethnicity. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Epstein et al**  **(2005)** | Participants. 579 participants were recruited across  seven diverse geographic locations throughout the United States (n = 530) and Canada (n = 49). All MTA study participants were between 7 and 9.9 years of age (M = 8.40, SD = 0.84) and were in Grade 1 (n = 68), Grade 2 (n = 187), Grade 3 (n = 125), or Grade 4 (n = 53). All met DSM–IV criteria for ADHD, combined type, with the parent-report Diagnostic Interview Schedule for Children (DISC; Version 3.0), supplemented with up to two symptoms identified by children’s teachers for cases falling just below DISC diagnostic threshold. Of the P, n=528 (425 boys and 103 girls) were observed in their classroom settings. Scheduling difficulties precluded classroom observations for most of the 51 children without classroom observations. Of the 528 children, 333 children (63.1%) were Caucasian (265 boys and 68 girls) and 100 children (18.9%) were AA (80 boys and 20 girls). The C. group consisted of 37 Caucasian and 3 AA children and did not differ from the rest of the MTA sample on any of the measures used in the current study (all ps [1] .05). No other remaining ethnic category (e.g., Hispanic, Asian, etc.) composed more than 6% of this subsample. | Summary. Significant ethnic differences have been  consistently documented on attention- deficit/hyperactivity disorder (ADHD) teacher rating scales. Whether these ethnic differences result from a teacher rating bias or reflect actual classroom behavior patterns is unknown. Ethnic differences between Caucasian and African American (AA) elementary schoolchildren on teacher ratings and codings of observed classroom behavior were examined with latent variables | Conners Teacher Rating Scale (CTRS-R); Child  Behavior Checklist (CBCL-TRF); Swanson, Nolan, Pelham Rating Scale - IV (SNAP-IV); Classroom observations. | Quantitative | Findings. In structural equation models, correlations between teacher ratings and observed classroom behavior suggested nonbiased teacher  ratings of AA schoolchildren with diagnosed ADHD. Ethnic differences were documented for both teacher ratings of ADHD and classroom behavior. Differences in classroom behavior were attenuated when the behavior of an average child in the classroom was taken into account. |
| **Evans et al.(2013)** | Participants. Students (N= 875; 51.7% female) were  selected by teachers following a precise set of selection procedures provided by investigators. 37.4% Caucasian, 40.0% African American, 9.8% Hispanic, 0.8% Asian, and 3.2% ‘‘Other.’’ Students were distributed across grade levels with a trend of declining numbers with higher grades (30% 9th, 27.5% 10th, 20.1% 11th, and 17.9% 12th). | Summary. (n=875) The results of high school teachers’  ratings of symptoms of ADHD and oppositional defiant disorder, as well as school related impairment of 875 adolescents. One hundred forty-three teachers at 19 high schools across 4 states each rated 6 students from their first-period classes according to selection criteria that led to ratings for 3 male and 3 female students. Factor analyses were conducted on the symptom measure to test hypotheses pertaining to the divergence of impulsivity and hyperactivity dimensions. Normative values for the Disruptive Behavior Disorder–Teacher Rating Scale and Impairment Rating Scale are reported, as well as important differences related to age, race, and gender. Gender and age contrasts revealed that boys were rated as more symptomatic and impaired than girls and younger adolescents were rated as having more problems than older adolescents in most areas. African American adolescents were rated higher on measures of symptoms and impairment than their Caucasian peers. Large differences in normative levels of hyperactivity=impulsivity and inattention are reported that are consistent with a reduced likelihood of a diagnosis of ADHD-C as children get older. | Disruptive Behavior Disorders (DBD) rating scale -  teacher version; IRS - Teacher version | Quantitative | Findings. The two-factor model was the best for fit of ADHD symptoms and that ODD symptoms remain a separate factor from ADHD  symptoms. Divergence between hyperactivity and impulsivity was not evident in our data. Important effects of gender, race, and grade that have not been found in previous studies due to sample characteristics or size. There were also substantial differences between the normative levels of the two symptom factors. Gender. The higher ADHD symptom scores for boys than girls are consistent with the literature, but the difference appears to diminish with age. There is a significant gender difference for freshman and sophomores on both ADHD symptom factors, only a significant difference on the inattention factor with juniors, and no significant difference on either factor for seniors. Race. Mean scores for African American students were approximately double those for ratings of Caucasian students for symptoms and impairment.  Although these differences were less than 1 standard deviation, they were statistically significant and most remained so even after controlling  for community. Factor. Higher mean scores for the inattention factor than the hyperactivity-impulsivity factor. |
| **Flannagan et al.**  **(2002)** | 40 mothers and their children with ADHD who were  participating in a larger study investigating attitudes, attributions, and communications about ADHD. The children ranged in age from 8 to 11 years (14 girls, 26 boys; M = 9.63 years, SD = 1.14). Nineteen children were Mexican American and 21 were non-Hispanic White. A physician or a psychologist had diagnosed all children with ADHD during the past 6 years (mean time since original diagnosis = 2.32 years, SD = 1.64), and all participating children were receiving stimulant medication as an intervention (Ritalin [n = 25], mean dosage per day = 33.58 mg; Adderall [n = 15], mean dosage per day = 19.38 mg). None of the children had received a formal diagnosis of ODD from a professional. Of the mothers, 38 had completed high school and 2 had completed college. | The purpose of this study was to provide information  about the perceptions of mothers and their children with combined type ADHD about the children’s problem behaviors and the role that stimulant medication plays in controlling them. | Disruptive Behavior Disorders (DBD) rating scale | Quantitative | Analyses of maternal responses revealed a significant difference in the type of descriptor offered, F(2, 78) = 4.35, p < .05, ES (effect size) =  .10. Within-subjects contrasts revealed that mothers offered significantly more descriptors about their children’s HI behaviors (M = 2.05, SD = 1.47) than about their children’s IN behaviors (M = 1.18, SD = 1.50), and the number of ODD descriptors (M = 1.70, SD = 1.22) was not significantly different from those of the other categories. mothers from the two ethnic groups reported communicating similar levels of  information related to HI, ODD, biological causes, and functional outcomes associated with their child’s disorder. In addition, both groups of mothers reported communicating less information about ODD symptoms than about IN or HI symptoms. The results of this study reveal more similarities than differences regarding the information that Mexican American and non-Hispanic White mothers reported receiving from professionals and communicating to their children about the disorder and the stimulant medication used to manage it. Mexican American mothers did report receiving more information from professionals than did non-Hispanic White mothers, and non-Hispanic White mothers communicated more information about their children’s IN symptoms when informing their children about the disorder than did Mexican American mothers. However, the reported levels were very low; thus, it is difficult to determine whether this difference has any practical significance. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Golos et al. (2021)** | This study employed a convenience sampling of 28  OTs. The inclusion criteria for participation in the study are (a) certified to use the Cog-Fun intervention protocol for children (ages 5-10) and (b) experienced using the protocol with children from the UO  community. All the participants were female, with over half (53.6%, n =15) identifying themselves as UO, while the rest reported to be either observant (25%, n  =7) or secular/traditional (17.9%, n =5). Further description of the study population is detailed in the quantitative results of the study (see Results). | Culture is a core context within occupational therapy,  with a recent literature emphasizing the importance of cultural competence, as well as culturally sensitive assessment and intervention. The recent literature has indicated the efficacy of the CognitiveFunctional intervention (Cog-Fun) for children with ADHD among the general Israeli population, yet no studies to date have examined the necessity of cultural adaptations for minority groups. The current study examines the necessity of adapting the intervention protocol and process to the Ultraorthodox (UO) population, as perceived by occupational therapists. The study included 28 occupational therapists certified to use the Cog-Fun intervention, who reported using this approach with UO children. Participants responded to an online questionnaire developed for this study, regarding characteristics of the UO population and necessary adaptions to the Cog-Fun intervention process and protocol. Findings were analyzed using descriptive statistics and qualitative content analysis. Results of the study point to the necessity of addressing various | Demographic and Adaptation of the Cog-Fun for the  Ultraorthodox Questionnaire. | Mixed Methods.  A mixed-method one-group study design was employed using both quantitative descriptive methods and qualitative content analysis of data. | Attitudes and Awareness of UO Families regarding ADHD Diagnosis and Intervention. The majority of the participants (67.8%, n =19)  reported that the UO population may have a moderate to high level of knowledge and awareness of the ADHD diagnosis and its effects on daily functioning, as well as moderate to high rates of compliance with pharmaceutical interventions (75%, n =21). Regarding the sources from which UO families gained knowledge about ADHD |
| **Havey et al.(2005)** | Participants. Fifty-two regular K–6 classroom teachers  were randomly selected from eight different rural Midwestern elementary and middle schools/junior high schools. Forty-six of the teachers were female and six were male. Twenty-five percent of teachers reported they had 0–5 years of experience, 23% had 6–10 years of experience, 11% had 11–15 years of experience, 6% had 16–20 years of experience, and 35% had over 20 years of experience. | Summary. Attention deficit hyperactivity disorder  (ADHD) continues to be a common diagnosis of school children, and according to the Diagnostic and Statistical Manual of Mental Disorders (4th ed. [DSM–IV], American Psychiatric Association, 1994), it affects approximately 3%–5% of the population. Teachers are often the primary source of information regarding ADHD diagnoses in school children. A previous study by Glass and Wegar (2000) found that teachers were overidentifying children with ADHD and that medication was preferred as the primary treatment for these students. This study further examined teacher perceptions on the causes, incidence, and appropriate treatment methods of ADHD. In addition, this study also examined the prevalence of ADHD as determined by ADHD Rating Scale–IV (School Version; DuPaul et al., 1998) and examined differential identification rates by gender and ethnicity. | ADHD Rating Scale-IV (School Version) **ARS-5**; | Quantitative | Findings. Results showed that teachers were likely to identify children as having ADHD at rates higher than the expected prevalence rates  specified in DSM–IV. Out of 121 rating scales analyzed, 23.97% of students were identified by teachers as meeting criteria for 1 of the 3 types of ADHD. Males had significantly higher scores than females and Whites had significantly higher scores than Hispanics. Class size was also associated with the likelihood that teachers would identify more than 5% of their students as having ADHD. Results suggest that, despite increasing evidence of a connection between biological factors and ADHD, environmental factors (i.e., class size and culture) may still influence teachers’ perceptions about what stud |
| **Hervey-Jumper et**  **al (2006)** | Participants. The sample consisted of 29 Caucasian and  28 African-American males. The average age in years at the time of selection was 10.86 for the African- American group and 10.66 for the Caucasian group. The Department of Child and Adolescent Psychiatry provided 75% of the African-American charts and 90% of the Caucasian charts reviewed, and neurology 25% and 10%, respectively. | Summary. Despite the evidence that attention-  deficit/hyperactivity disorder (ADHD) is not just a diagnosis of whites, it often goes undiagnosed and is under-researched in the African-American population. There are higher rates of delinquency, incarceration, teen pregnancy and sexually transmitted diseases associated with inadequate or delayed treatment of ADHD. African Americans generally respond well to treatments, but access to evaluation, medication and psychotherapy is limited or absent for many. The purpose of this research is to compare descriptive characteristics of African- American children with ADHD to age matched Caucasian children with the same diagnosis. | Medical Progress notes | Qualitative | Findings. There was no significant DIF in the mean age of diagnosis (African Americans: 7.36 years; Caucasians: 7.25 years) or the mean age  of symptom onset (African Americans: 4.0 years; Caucasians: 4.4 years). The comorbidities reported were similar for both groups. There were fewer African American parents (n=4) who could identify a relative with ADHD than Caucasian parents (n= 12; 2=5.31, p<0.03). No DIF between the two groups for pharmacological treatments recommended, outcomes or compliance. The average number of days between visits for African-American patients (74.02) was significantly longer than that for Caucasians (50.23) (SD 26, p<0.05). |
| **Hogue et al. (2014)** | Participants (N = 168) included youth ages 12-18  (54% male, 98% ethnic minority) and their caregivers who each completed diagnostic interviews of ADHD symptoms and assessments of perceived need for ADHD treatment and correlated behavior problems. | This study investigated adolescent and caregiver reports  of ADHD symptoms in a sample of clinically referred inner-city adolescents. | Mini International Neuropsychiatric Interview (MINI,  Version 5.0; Structured Clinical Interview for DSM Disorders (SCID); Composite International Diagnostic Interview (CIDI); Inattentive/Disorganized (I/D) subscale; Hyperactive/Impulsie (H/) subscale; Addiction Seerity Index (adapted measure); The Child Behavior Checklist (CBCL) - caregiver report' Callous- Unemotional Traits (ICU) - parent report; Behavior Rating Inventory of Executive Function (BRIEF) - caregiver | Quantitative | Informants showed poor agreement on DSM-IV diagnostic categories and also dimensional scales, Inattention/Disorganization (I/D) and  Hyperactivity/Impulsivity (H/I). Both caregiver and adolescent reports of I/D symptoms, but not H/I symptoms, were related to perceived need for ADHD treatment. Caregiver reports were linked to behavioral correlates typically associated with ADHD: I/D symptoms correlated with planning/organization and socioemotional deficits, and H/I symptoms correlated with externalizing and behavior regulation deficits. In contrast, adolescent reports of I/D were related to internalizing and externalizing problems, and their reports of H/I correlated with externalizing only.  Few gender effects were found. Study results underscore the developmental salience of I/D symptoms and have implications for ADHD diagnosis and treatment planning for adolescents. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hosterman et al**  **(2008)** | Participants. N=172. Caucasian (n 112) and ethnic  minority (n 60) groups. The ethnic minority group consisted of 17 (28.3%) African American, 38 (63.3%) Hispanic, and 5 (8.3%) students of both African American and Hispanic descent. The Caucasian group was 75% (n 85) male and the ethnic minority Group 90% male (n 54). At enrollment, 21% of participants were taking psychotropic medication (primarily psychostimulants). Based on results of the DISC-IV (Shaffer et al., 1998), 17.7% of participants met criteria for ADHD: Inattentive subtype, 6.9% for ADHD Hyperactive-Impulsive subtype, 46% for the combined subtype, and the remainder were control students. | Summary. Disproportionate placement of African  American and Hispanic students into disability and special education categories may result from true behavioral and cognitive differences, bias in assessment and referral, or some combination of the two. Studies of commonly used ADHD rating scales suggest teacher bias may contribute to placement discrepancies. This investigation compared teacher ratings of ADHD symptoms on the Conner’s Teacher Rating Scale— Revised Long Version (CTRS-R:L; Conners, 1997) and the ADHD-IV: School Version (DuPaul, Power, Anastopoulous, & Reid, 1998), with objective classroom observations from the Behavioral Observation of Students in Schools code (BOSS; Shapiro, 2003). Participants were first through fourth grade students (N = 172; 120 male) classified as Caucasian (n = 112) or ethnic minority (17 African American, 38 Hispanic, 5 African American and Hispanic). | Conner's Teacher Rating Scale - Revised Long  Version (CTRS-R:L); ADHD-IV: School Version (ARS-4); Behavioral Observation of Students in Schools (BOSS) | Quantitative | Findings. Contrary to hypothesis, results showed teacher ratings of ethnic minority students were more consistent with direct observation data  than were ratings of Caucasian students. Findings suggest teacher ratings of ethnic minority students may more accurately reflect true behavioral levels. Teacher ratings on the ADHD-IV Hyperactive-Impulsive Index were significantly higher for students in the ethnic minority group in both reading, t(155) =-2.368, p = .019, and math, t(153) = -2.177, p = .031. No significant differences between groups were uncovered on the three remaining teacher indicators in either reading or math. Several statistically significant associations between direct observations in reading and teacher ratings of ADHD symptoms. For the Caucasian group, off-task motor behavior accounted for 7.6% of variance on the CTRS-R:L DSM–IV: Hyperactive-Impulsive index (r = .276, p = .006) and 12.7% of variance on the ADHD-IV Hyperactive- Impulsive index (r = .356, p = .001). The same correlations were also significant in the ethnic minority group, with off-task motor behavior accounting for 19.2% of variance in CTRS-R:L DSM–IV: Hyperactive-Impulsive ratings (r = .438, p = .004) and 18.8% of variance in ratings on the ADHD-IV Hyperactive-Impulsive index (r = .434, p = .005). |
| **Huskin et al. (2020)** | 746 undergraduate students ranging in age from 18 to  35 years with a mean age of 22.15 years (SD = 2.73). 54% (n = 402) were female and 46% (n = 344) were male. In describing their race, 60% (n = 430) indicated they were White, 7% (n = 50) were Black, 1.4% (n = 10) were Asian American, 1.5% (n = 11) were American Indian, 1.9% (n = 14) were multiracial, and a large number of respondents (27.4%, n = 197) self- identified as “Other” racial groups. Of the 197 respondents who checked “Other” for their racial identification, 189 respondents (95.9%) indicated that they were Hispanic/Latino. The majority of participants in the present study self-identified as Hispanic (72.5%, n = 528); 18 participants did not respond to ethnic identification. | Compared differences in attitudes toward persons with  disability between Hispanic and non-Hispanic young adults in rural south Texas public university | Baseline Survey on Public Attitudes (BSPA) toward  Persons with a Disability (adapted; shortened); Bogardus' Social Distance Scale (SDSB) | Quantitative | The vast majority of respondents indicated that they conceive sensory impairment (95.0%, n = 679), mental illness (92.9%,n = 650), physical  impairment (91.7%, n =653), autism (91.1%, n = 635), intellectual disability (86.8%, n = 586), and visceral disability (82.8%, n = 554) to be a disability, as well as chronic illness (63.6%, n = 429) and ADD/ADHD (59.0%, n = 393).; Note that multivariate logistic regression analyses revealed that these ethnic differences failed to reach statistical significance whereas the bilingual and White racial groups were more likely to consider physical impairment and autism to be a disability, respectively (results not shown). Overall, with the exceptions of ADD/ADHD and intellectual disability, Hispanic young adults were less likely to consider given disability types to be a disability than non-Hispanic young adults. a substantial number of both Hispanic and non-Hispanic respondents indicated that ADD/ADHD (H = 29.66%; N-H = 35.48%) and learning disability (H = 24.40%; N-H = 29.03%) will not lead to incapacity and increased dependence on others even if they do not receive any treatment. |
| **Kang and Harvey**  **(2019)** | Participants. N=71 parents who identified as African  American/Black (female n = 65; male n = 6), 60 elementary school teachers who identified as European American/White (female n =41;malen = 19) currently employed in the United States, and 65 parents who identified as European American/ White (female n = 49; male n = 16). All participants had at least a high school diploma or GED (see Table 1). Most participants (n = 159) reported being married or cohabiting. All participants were currently living in the United States and there was good regional representation with participants residing in 42 states. | Summary. Previous research suggests there may be  racial differences in how adults rate children’s ADHD behavior. Differences in perceptions of Black parents and White teachers could have implications for ADHD diagnosis of Black children. This study compared ADHD ratings of Black parents to White teachers, and examined factors that may explain racial differences. Participants included 71 Black parents (65 women, 6 men; Mage = 33.92) and 60 White teachers (41 women, 19 men; Mage = 33.60), as well as a comparison group of 65 White parents (49 women, 16 men; Mage = 36.83). Participants watched video clips of children in classrooms and rated ADHD behaviors and ADHD likelihood. They then completed questionnaires regarding beliefs about ADHD stigma, verve  (movement expressiveness), experiences with racial discrimination, and racial attitudes. | Vanderbilt Assessment Scale; Child ADHD Stigma  Questionnaire (CASQ); Home Movement Expressive Questionnaire (HMEQ); Racial Attitudes Scale (ATB); Racial and Ethnic Microaggressions Scale (REMS) | Quantitative | Findings. White teachers rated Black boys’ ADHD behaviors and their likelihood of having ADHD higher than Black parents. White teachers  with more negative racial attitudes toward African Americans gave higher ADHD behavior and likelihood ratings to Black boys than did teachers with less negative racial attitudes. Across all participants, ADHD stigma beliefs and verve were not related to ratings of Black boys. Black parents with more experiences with racial discrimination gave higher ratings to Black boys’ ADHD behaviors. Research is necessary to further explain the mechanisms by which discrepancies in ratings of Black boys’ ADHD behaviors exist between Black and White adults to inform culturally sensitive assessment and diagnosis of ADHD in Black children. There were differences between male and female participants on ratings of ADHD stigma beliefs, verve, and racial attitudes. Partial correlations, with adult gender as a covariate, were used to examine whether the four hypothesized factors that may explain these discrepancies (ADHD stigma beliefs, verve, experiences with racial discrimination, racial attitudes) are related to ratings of ADHD behavior and likelihood; Ratings of ADHD Behavior: There were no significant main effects of adult status for ratings of White boys, F(2, 193) = 0.57, p = .565, White girls, F(2, 193) = 0.55, p = .577, or Black girls, F(2, 193) = 0.15, p = .861. However, there were significant differences in adults’ ratings of Black boys, F(2, 193) = 3.36, p = .037. A planned contrast indicated that White teachers (M =0.11,SD = 0.98) rated Black boys’ ADHD behaviors higher compared to Black parents (M =  −0.24, SD = 1.16; see Fig. 1), t(193) = 1.97, p = .051, Cohen’s d =.33. White parents’ (M =0.17, SD = 0.77) ratings of Black boys’ ADHD behaviors were not significantly different from teachers’, t(193) = −0.39, p = .700, Cohen’s d =.08.; Likelihood of Having ADHD: There were no significant differences between Black parents’,White teachers’, and White parents’ ADHD stigma beliefs, F(2, 191) = 0.03, p = .969, or verve, F(2, 192) = 1.28, p = .280. There were also no significant differences across groups in income, but White teachers were significantly more educated than both Black parents (p < .001) and White parents (p < .001). ADHD Stigma Beliefs no significant difference between Black and White participants’ ADHD stigma beliefs, F(1, 192) = .06, p = .809. Verve no significant difference between Black and White participants’ verve, F(1,193) = 2.10, p = .149. Partial correlations indicated that across the whole sample, participants who endorsed greater verve gave higher ratings of children’s ADHD behaviors (r =.22,p = .002), but verve was not related to ratings of ADHD likelihood (r = −.02, p = .833). Experiences with Racial Discrimination Black parents’ reports of experiences with racial discrimination were positively correlated with their ratings of Black boys’ (r = .28, p = .029), Black girls' (r =.25, p = .051), White boys' (r =.33, p = .008), and White girls’ (r =.34, p =  .006) ADHD behaviors. Their reports of past experiences with racial discrimination was positively correlated with their likelihood ratings of White girls’ (r =.26,p = .039), but not of Black boys (r = −.10, p = .459), Black girls (r =.08,p =.531), or White boys (r =.12,p = .335; |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Kendall et al**  **(2003)** | Participants. Larger study: (n=39) 157 families with  children with ADHD. 50 white, 50 African American, and 57 Hispanic/Latinx. The purposive sample of this research study include n=39 children and adolescents with a diagnosis of ADHD. The sample consisted of 26 boys and 13 girls. Fifteen self-identified as African American (11 boys and 4 girls), 13 as Hispanic, of mostly Mexican descent (11 boys and 2 girls), 9 as Caucasian (4 boys and 5 girls), and 2 as biracial (Hawaiian/Caucasian girl and Samoan/Hispanic boy). The mean age was 11.2 years (range from 6 to 17 years). Seventeen families were single-parent families (16 single mothers and 1 single father) and 21 were 2- parent families. One family had 2 children with ADHD. Twelve families had an annual family income below $10 000, 6 families from $10 000 to $29 000,  16 families from $30 000 to $75 000, and 4 families over $75 000. All but 2 families, both Hispanic Mexican, indicated that they received some health insurance benefits. The mothers in 31 families had at least some post–high school education, with 10 receiving college degrees and 1 with a master’s degree. | Summary. As a postmodern illness, attention-  deficit/hyperactivity disorder (ADHD) is embedded in controversy, reflective of the cultural times in which we live. Within this debate, 2 perspectives, ADHD as myth and ADHD as behavioral disorder, are most frequently voiced. This article describes these 2 differing perspectives and reports qualitative data from 39 children and adolescents with a diagnosis of ADHD regarding their perceptions, meanings, and experiences of living with this disorder. None of the participants in this study denied that they had difficulties and many of the difficulties they described corresponded to DSM-IV- R criteria and the scientific literature. Given these discoveries, the continual debate about the authenticity of ADHD only further victimizes families who are in desperate need of services. | Researcher-made questionnaire | Qualitative | Findings. Most troubling of these data were the meanings and the overidentification these children placed on having ADHD, as if they had an  ADHD identity. Although some of these responses seemed to overlap and border on the problems associated with having ADHD, what was distinct in these data was the significance of what ADHD meant to them. These children often talked about ADHD in terms of who they were, rather than the symptoms they experienced. ADHD seemed to define much of who they were. For others, particularly the Hispanic children, ADHD meant repeatedly “getting into trouble” both at school and at home. “ADHD gets me in trouble...just not being able to sit still and stuff...I’m really fidgety.” African American children used the word “bad” much more frequently than did the Hispanic or Caucasian children when describing themselves in relation to ADHD. Hispanic children more frequently discussed the meaning of ADHD in terms of “trouble” and “getting into trouble”. Caucasian children similarly reported that ADHD got them into trouble, but several also noted that it made them feel “weird...’cos sometimes you can’t answer some of the questions in math and some stuff like that and it kind of makes me upset.” |
| **Koro-Jungberg, et**  **al., 2007** | Participants. (N=4). 71 adolescents’ ADHD treatment  status and distinguished teens who had not had any ADHD treatment (n = 22) from those who had received treatment consistently (3 or more time points during 4 points of previous data collection; n = 25). We then contacted eligible families and enrolled them systematically, balancing race (AA/C), gender (male  (M)/female (F)), and ADHD treatment status  (untreated (U)/treated (T)), until we had one representative for each of the eight possible combinations (AA/M/T; AA/ M/U etc.). Out of the total eight ESM participants, only data from the four AfricanAmerican teenagers are analyzed in this paper because the authors’ focused on African-American teenagers’ story telling and their perceptions. All teenagers attended public schools and were cared by biological parents or a close relative (grandmother). Additionally, all participants except one were living with 2–4 siblings | Summary. Cultural differences in illness perceptions and  treatment access of teens with attention deficit/hyperactivity disorder (ADHD) are evident yet under studied. The purpose of this qualitative paper is to explore how African-American teenagers describe and narrate stories about their lives with ADHD. Data were gathered from four African-American teens in the Southern United States through a qualitative experience sampling method, and stories were analyzed using narrative analysis framed within the context of African- American rhetorical traditions. | Swanson-Nolan-and Pelham-(V (SNAP-IV) | Qualitative | Findings. The study of teen-constructed narratives and culturally-situated talk are tools that can improve communication between healthcare  providers and teens by illuminating the ways teens construct their personalized realities of ADHD. (1) This study puts forward important insights into the multiplicity of the narrated life experiences of teenagers with ADHD behaviors and how these stories then might translate into different communication styles when seeking help. For example, this study found very limited overlap between African American teens’ culturally situated narratives of their daily life experiences and medical discourse characterizing ADHD. Davison and Ford (2001) proposed that it is possible that African-American cultural traditions might consider ADHD symptoms as normal child behavior or something that children will outgrow. (2) African-American teenagers can be useful informants about their ADHD symptoms and they are capable of producing reliable self-reports when their self-reports are ‘translated’ and accurately interpreted by culturally sensitized providers. (3) Providers need to take the time to discover culturally relevant meanings and experiences through the close examination of narratives (see also Bull and Whelan 2006). For example, Davison and Ford (2001) argued that differing methods of communication, such as language and meanings created within talk, may be at the heart of misunderstandings between teachers, medical professionals, and African-American parents of students affected by ADHD, and that therefore it is important to consider linguistic traditions in the health and education context. |
| **Michailyszyn et al.**  **(2008)** | n=80 newly diagnosed (within 1 month) children (6-18  years old) with ADHD | Summary: Despite the extensive research on childhood  Attention-Deficit/Hyperactivity Disorder (ADHD), there is still much to learn about the association between the meanings parents ascribe to an ADHD diagnosis and their use of outpatient mental health services for their children. This study examined primarily African American mothers’ experiences with their child’s ADHD in order to develop a theory that links conceptualization of ADHD with implications for clinical outpatient mental health services. Semi- structured interviews with 34 parents of children 6 to 18 years old and recently diagnosed with ADHD probed for understanding of their child’s behaviors and their treatment expectations. Using a grounded theory approach, a theoretical model emerged describing a process of how parents making sense of ADHD, either as a medical illness, a general problem, or a behavior that was not a problem. Making sense involved forming opinions, contemplating the origin, and reevaluating selfcontrol. | Semi-structured interviews | Qualitative | **Theoretical model of the process of “making sense” that relates to parents’ conceptualization of their child’s diagnosis.** This study  reports findings from qualitative interviews that sought to explore the process of making sense and its relationship to the meaning that parents ascribed to an ADHD diagnosis, that is, a medical illness, a general problem, or not an illness. That most individuals in this sample viewed ADHD as some type of problem is likely due to the fact that these families were selected from those who sought a medical evaluation. It is notable that a small proportion, despite seeking consultation from a medical professional, did not view their children’s problem as an illness. Moreover, this work adds to the meager literature on inner-city, minority families’ understanding of ADHD. Prior studies have shown that African Americans, particularly those living in urban communities, are skeptical of the diagnosis (Olaniyan et al., 2007) and are hesitant to use stimulant medication (dosReis et al., 2006; dosReis et al., 2003). Understanding parents’ conceptualization of ADHD is important from a clinical perspective. Identifying these subgroups early on can help clinicians establish treatment plans that may promote engagement and adherence in treatment. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Perry et al.(2005)** | Participants. (n=13) The data presented in this article  are from a larger study that included 479 participants from 159 families. Thirty-six percent (n = 55) of families self-identified as Hispanic/ Latino. Parents from a convenience subsample of 24 Latino families who were willing to take the extra time for a qualitative interview participated in the project. The majority of the sample (n = 13, 54%) were born in Mexico. They had lived in the United States for an average of 14 years (range = 0.5 to 33.0). All families had a child between 6 and 19 years (mean = 11) diagnosed by a health professional as having ADHD, and the biological parent or guardian lived in the home. Of the 24 families analyzed, 20 mothers, 6 fathers, and 1 grandmother participated. | Summary. Although researchers have conducted a vast  amount of research about attention deficit hyperactivity disorder (ADHD), few have addressed how Latino  families experience ADHD. The purpose of this qualitative study was to explore how Latino parents managed their child’s ADHD within the sociocultural context of their everyday lives. This article presents a grounded theory of how Latino parents (N = 24  families) managed their child’s ADHD. The following five themes emerged from the data analysis: (a) finding out about ADHD, (b) taking on a biomedical meaning,  (c) living between two cultures, (d) caring for a child with ADHD, and (e) looking toward the future with ADHD. Although some of the circumstances encountered by Latino parents resemble those typically found in the literature about ADHD and families, their experience is rendered inordinately complex by multiple overlapping sociocultural, linguistic, and parental circumstances. This report, in contrast, focuses on the data collected with a subsample of Latino | Semi-structured conversational interviews | Qualitative | Findings. In caring for Latino children with ADHD, their behavior must be understood within the context of their values and beliefs, their  cultural environments, and its related expectations. In this study, parents clearly expressed their guilt and concern about the stigma of having a child with ADHD. Although many families in the United States experience stigma when they have a member with a mental illness, Latino  families with ADHD children reported that their stigma was exacerbated by their culture, which clearly emphasizes the significance of good behavior (“manners matter”), and they worried about being perceived as poor parents because of their child’s behavior. |
| **Reid et al.(2001)** | Participants. N=3,998; elementary school children  (2,124 African American and 1,874 European American) ages 5 to 11 years in an urban school district | Findings. An exploratory Principal Axis factor analysis  was performed to determine the appropriateness of the 2- factor model. Structural equation modeling was used to estimate the degree of fit for the 2-factor model. Both African American boys and girls received significantly higher scores than their European American counterpoints. There was a 2.48 to 3.51 greater likelihood for African American boys and a 3.60 to 5.27 greater likelihood of African American girls to be rated  > 2 SD above the mean for inattention/overactivity, aggression, or IOWA Conners Rating Scale scores. A rater ethnicity by student ethnicity (European American vs. African American) interaction was also found.  Confirmatory factor analysis indicated that the same 2- factor model was appropriate for the African American and European American groups. The results suggest that although there is construct equivalence across the African American and European American groups, there is still a question as to normative equivalence. | IOWA Conners Rating Scale | Quantitative | Findings. An exploratory Principal Axis factor analysis was performed to determine the appropriateness of the 2-factor model. Structural  equation modeling was used to estimate the degree of fit for the 2-factor model. Both African American boys and girls received significantly higher scores than their European American counterpoints. There was a 2.48 to 3.51 greater likelihood for African American boys and a 3.60 to 5.27 greater likelihood of African American girls to be rated > 2 SD above the mean for inattention/overactivity, aggression, or IOWA Conners Rating Scale scores. A rater ethnicity by student ethnicity (European American vs. African American) interaction was also found.  Confirmatory factor analysis indicated that the same 2-factor model was appropriate for the African American and European American groups. The results suggest that although there is construct equivalence across the African American and European American groups, there is still a question as to normative equivalence. |
| **Schmitz, M. F., &**  **Velez, M. (2003)** | Data from the child assessments of the National  longitudinal Surveys of Youth; Mothers’ self-identified ethnicity was used as an indicator of culture: Mexican (n = 81), Mexican American or Chicano (n = 179), and Puerto Rican (n = 60). | This study examined differences in parental evaluations  of ADHD-related child behaviors in the following three Latino ethnic populations: Mexican (n = 81), Mexican American (n = 179), and Puerto Rican (n = 60). | Hyperactivity subscale of the Behavior Problems ndex  (adapted):Hyperactivity sbscale in the Behavior Problems Index (adapted) | Quantitative | Results indicate an important role for acculturation in mothers’perceptions of ADHD-related behaviors but only in the measures of  hyperactivity and not in the attention deficit aspects of the disorder. Mothers from different Latino cultures and at different levels of acculturation differentially assess specific symptoms of ADHD, indicating the need for careful reassessment of the validity of the disorder for Latino families. |
| **Spencer et al.**  **(2021)** | N=41 parents of youth age 3-17 with ADHD. Of 130  potential participants screened, 26 were ineligible, 63 declined or could not be reached for their study visit, and 41 consented and completed interviews in English (n = 31; 75.6%), Spanish (n =9; 21.9%), and Haitian Creole (n =1; 2.4%). Parents were 92.7% female and had a mean age of 40.8 years (SD = 7.6). English was the primary language spoken at home for most participants (75%), but 41.8% were born outside the mainland United States, including in Puerto Rico (23.5%), Mexico (17.7%), and 7 other countries.  Approximately half of the parents (51.8%) had received some postsecondary education, and the median income was $20 000 | We conducted in-depth semistructured qualitative  interviews with 41 parents of diverse youth aged 3 to 17 years old in treatment of ADHD at an urban safety net hospital. Parents were asked about their journey through diagnosis and treatment, community attitudes about ADHD, and other factors influencing treatment access and decision-making. Transcripts were analyzed by using thematic analysis. | Semi-structured interviews | Qualitative | Of children with ADHD, 69.2% were male, 57.7% were Black or African American, and 38.5% were of Hispanic, Latino, or Spanish origin.  Parents were 92.7% female, were 75.6% English speaking, and had a median income of $20 000. Parents described 6 stages to the process of engaging in care for their child’s ADHD, which unfolded like a developmental process: (1) normalization and hesitation, (2) fear and  stigmatization, (3) action and advocacy, (4) communication and navigation, (5) care and validation, and (6) preparation and transition. Barriers often occurred at points of stage mismatch between parents and providers and/or systems. Difficulty resolving an earlier stage interfered with the progression through subsequent stages. **Six Stages of Engagement** |
| **Thurston, I. B.,**  **Phares, V., et al. (2015)** | 251 parents (49% Black,  51% White; 49% fathers, 51% mothers); Parents ranged in age from 20 to 66 years old with at least one child between ages 2 and 21. | The current study used vignettes, an empirically  supported method (Bussing et al., 2012; Martin, Pescosolido, Olafsdottir, & McLeod, 2007; Raviv et al., 2009), to explore the relationship between parents’ endorsement of youth mental health problems (i.e., internalizing, externalizing) in a vignette and parents’ decisions to seek help. | Beliefs About Causes-Revised Scale | Quantitative | Results revealed that parents were more likely to report intentions to seek help when they recognized a problem (odds ratio [OR] 41.35,  p<.001), 95% confidence interval (CI) [14.81, 115.49]; when it was an externalizing problem (OR 1.85, p<.05), 95% CI [1.14, 3.02]; and when parents were older (OR 1.04, p<.05), 95% CI [1.01, 1.08]. Predictors of parental problem recognition included perceived need, prior experience with mental illness, and belief in trauma as a cause of mental illness.The relationship between parental problem recognition and help- seeking intentions is striking given that almost half of the parents in this study did not recognize the internalizing problem vignette and more than one third did not correctly identify the externalizing vignette, despite clinician endorsement that treatment was needed for each of these vignettes. This finding is consistent with previous research documenting that almost half of the parents who have a child with a mental health problem do not recognize these symptoms in their child (Sayal, 2006). Our finding that parents were better able to recognize and more willing to seek help for an externalizing problem over an internalizing problem is also notable. This study did not find significant race differences in problem recognition or help-seeking intentions when vignettes were used. This finding may be due to the strong influence of problem recognition and perception of need above all else when parents are making decisions about help-seeking for children. This lack of racial differences in problem-recognition and willingness to seek help implicates the primary role that structural and access barriers may have in the disparity in service underutilization among Black parents. |

Appendix 2

*RQ1* Sort/Coding

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RQ2- What factors influence families’ decision to intervene or treat (perceived) behavioral differences?** | | | | | |
| **Author(s) and Year** | **Sample Population** | **Parameters** | **Measure(s)** | **Methodology** | **Major Findings** |
| **Berger-Jenkins et al. (2012)** | N=70 | Summary: Using a longitudinal cohort design, parents of children with untreated ADHD were surveyed regarding their knowledge and perceptions of ADHD and then followed for 3 to 6 months to determine whether they used services. Results. Seventy parents of 5- to 18-year-old children with untreated ADHD were enrolled. | 20-minute self-administered survey assessing possible predictors of ADHD service utilization | Quantitative | Of the 70 children, 33 (47.1%) had not attended any mental health appointments and 51 (72.9%) had not used any treatments by 3- to 6-month follow-up. Logistic regression indicated that increasing age and medication concerns were associated with less follow-up at mental health appointments (P < .05) and less utilization of treatments (P < .05). Conclusions. The results of this study highlight the importance of addressing medication concerns, when referring minority children to mental health services or offering treatments. |
| **Coker et al.(2016)** | Participants. 4297 children and parents surveyed over 3 waves (fifth, seventh, and 10th grades). | Summary. We examined racial/ethnic disparities in attention-deficit/hyperactivity disorder (ADHD) diagnosis and medication use and determined whether medication disparities were more likely due to underdiagnosis or undertreatment of African-American and Latino children, or overdiagnosis or overtreatment of white children | Unidentified adapted measure; Diagnostic Interview Schedule for Chilren Predictive Scales (DPS) | Quantitative | Findings. Across all waves, African-American and Latino children, compared with white children, had lower odds of having an ADHD diagnosis and of taking ADHD medication, controlling for sociodemographics, ADHD symptoms, and other potential comorbid mental health symptoms. Among children with an ADHD diagnosis or symptoms, African-American children had lower odds of medication use at fifth, seventh, and 10th grades, and Latino children had lower odds at fifth and 10th grades. Among children who had neither ADHD symptoms nor ADHD diagnosis by fifth grade (and thus would not likely meet ADHD diagnostic criteria at any age), medication use did not vary by race/ethnicity in adjusted analysis. Racial/ethnic disparities in parent-reported medication use for ADHD are robust, persisting from fifth grade to 10th grade. These findings suggest that disparities may be more likely related to underdiagnosis and undertreatment of African-American and Latino children as opposed to overdiagnosis or overtreatment of white children. |
| **Conduct Problems Prevention Research Group (2011)** | Participants. N=891 children (445 for intervention and 446 for control). The mean age of participants was 6.5 years (SD = 0.48); the sample primarily comprised African American and White participants (51% African American, 47% European American, and 2% Other ethnicity, e.g., Pacific Islander and Hispanic) and gender mixed (69% boys). The sample was skewed toward socioeconomic disadvantage: Fifty-eight percent were from single-parent families, 29% of parents were high school dropouts, and 40% of the families were in the lowest socioeconomic class (representing unskilled workers) as scored by Hollingshead (1975). Only 32% of the sample was within the middle-class range. | Summary. The impact of the Fast Track intervention on externalizing disorders across childhood was examined. Eight hundred-ninety- one early-starting children (69% male; 51% African American) were randomly assigned by matched sets of schools to intervention or control conditions. The 10-year intervention addressed parent behavior-management, child social cognitive skills, reading, home visiting, mentoring, and classroom curricula. Outcomes included psychiatric diagnoses after grades 3, 6, 9, and 12 for conduct disorder, oppositional defiant disorder, attention deficit hyperactivity disorder, and any externalizing disorder. | · •Parent Interview versions of the NIMH Diagnostic Interview Schedule for Children (DISC)   * Child Interview versions of the NIMH Diagnostic Interview Schedule for Children (DISC) | Quantitative | Findings. Significant interaction effects between intervention and initial risk level indicated that intervention prevented the lifetime prevalence of all diagnoses, but only among those at highest initial risk, suggesting that targeted intervention can prevent externalizing disorders to promote the raising of healthy children. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Davison, J. & Ford, D. (2022)** | 25 participants in this study, 18 were elementary school personnel, and 7 were associated with the medical community. The elementary school personnel group included 10 teachers, 6 school administrators, and 3 school counselors/social workers. The participants associated with the medical community included 2 physicians, 2 private practice nurses, 5 school nurses, and 1 pharmacist. Looking at the participants by ethnicity; 5 of the 10 teachers were African American and the other 5 were White. All 6 school administrators were African American, 1 social worker was African American and 2 were White. Finally, 9 of the 10 medical personnel were White. Participants were experienced in their professions with all but 2 participants having at least 15 years of work experience. It is worth noting that 2 of the teachers and the pharmacist spoke from dual roles as professionals and as parents of a child diagnosed as ADHD. | The incidence of students being identified with Attention Deficit Hyperactivity Disorder (ADHD) is on the rise, yet few studies have examined the perceptions held by families of this special needs population. More specifically, what views do the parents and educators hold about the causes and treatment of ADHD? This ethnographic study took place in an urban school district. Forty-five hours of semi-structured interviews were conducted with 25 participants associated with four urban schools. The participants were African American parents and educators, and members of the medical community who work with African American parents and their children. Results of the interviews suggest that these participants have a socially constructed view of ADHD and are less likely to diagnose and use stimulant medication for the treatment of ADHD. | * Semi-structured interviews * Structured interview | Qualitative | Findings: The findings in this inquiry are consistent with a socially constructed view of ADHD. Repeatedly, African American parents and those interacting with African American parents expressed a socially constructed view of ADHD and were less amenable to the diagnosis than White middle-class families in the same region who tend to embrace the biological determinist point of view (see Davison, 2001; McGuinness,1989). This is an example of Hacking's (2000) contention that "disability as a category can only be understood within a framework which suggests that it is culturally produced and socially structured" (pp. 38-39). Five themes emerged from the participants and can be categorized into the following social structures: (a) distrust of the educational system; (b) perceived lack of cultural awareness of White educators; (c) perceived social stigma of the ADHD label; (d) concern about drug addiction; and (e) pressure from political forces. The following sections provide sample quotes from the participants that illustrate typical responses that offered evidence for the socially constructed view of ADHD and resistance to the diagnosis.\*\*\*(a) distrust of the educational system; (b) perceived lack of cultural awareness of White educators; (c) perceived social stigma of the ADHD label; (d) concern about drug addiction; and (e) pressure from political forces. T |
| **De Ramirez & Shapiro (2005)** | Participants. 129 teachers (59%) were Hispanic and 89 were White (41%). They were largely female (81%). Fifty-four percent of the participants reported having children of their own, 80% reported having worked with hyperactive children, and 88% reported being familiar with the concept of ADHD. | Summary. The present study examined whether teacher ratings of student disruptive, impulsive, and inattentive behaviors vary according to teacher- student ethnic differences. A total of 129 Hispanic and 89 White teachers observed standardized videotapes of a Hispanic and a White child and assessed each child for hyperactive-inattentive  beh | * Conners Teacher Rating Scale-39 * direct observations of off-task and fidgety behavior | Quantitative | Findings. Based on analyses of subscales, this study revealed significant differences in ratings of attention-deficit/hyperactivity disorder (ADHD) behaviors among Hispanic and White teachers with Hispanic teachers reporting higher mean scores on the Hyperactivity Impulsivity Scale. This was true on the ratings of the Hispanic student but not on the White student. Further analyses suggested that when acculturation was covaried, no significant group differences remained, suggesting that teacher perception of deviance may be partially mediated by cultural values more than ethnicity. The need to consider the rater's ethnicity and ethno-cultural variables is discussed, and findings are explained in terms of the adult distress threshold model. |
| **Fiks et al. (2011)** | N=60; 60 parents of children 6 to 12 years of age with ADHD (50% black and 43% college educated) and 30 primary care clinicians with varying experience. | The goal was to compare how parents and clinicians understand shared decision-making (SDM) in attention-deficit/hyperactivity disorder (ADHD), a prototype for SDM in pediatrics. | Semi-structured interviews | Qualitative | Parents and clinicians both viewed SDM favorably. However, parents described SDM as a partnership between equals, with physicians providing medical expertise and the family contributing in-depth knowledge of the child. In contrast, clinicians understood SDM as a means to encourage families to accept clinicians’ preferred treatment. These findings affected care because parents mistrusted clinicians whose presentation they perceived as biased. Both groups discussed how real-world barriers limit the consideration of evidence-based options, and they emphasized the importance of engaging professionals, family members, and/or friends in SDM. Although primary themes did not differ according to race, white parents more commonly received support from medical professionals in their social networks. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hervey-Jumper et al.(2006)** | Participants. The sample consisted of 29 Caucasian and 28 African-American males. The average age in years at the time of selection was  10.86 for the African-American group and  10.66 for the Caucasian group. The Department of Child and Adolescent Psychiatry provided 75% of the African-American charts and 90% of the Caucasian charts reviewed, and neurology 25% and 10%, respectively. | Summary. Despite the evidence that attention- deficit/hyperactivity disorder (ADHD) is not just a diagnosis of whites, it often goes undiagnosed and is under-researched in the African-American population. There are higher rates of delinquency, incarceration, teen pregnancy and sexually transmitted diseases associated with inadequate or delayed treatment of ADHD. African Americans generally respond well to treatments, but access to evaluation, medication and psychotherapy is limited or absent for many. The purpose of this research is to compare descriptive characteristics of African-American children with ADHD to age matched Caucasian children with the same diagnosis. | Medical Progress notes (over-time) | Qualitative | Findings. There was no significant DIF in the mean age of diagnosis (African Americans: 7.36 years; Caucasians: 7.25 years) or the mean age of symptom onset (African Americans: 4.0 years; Caucasians: 4.4 years). The comorbidities reported were similar for both groups. There were fewer African American parents (n=4) who could identify a relative with ADHD than Caucasian parents (n= 12; 2=5.31, p<0.03). No DIF between the two groups for pharmacological treatments recommended, outcomes or compliance. The average number of days between visits for African- American patients (74.02) was significantly longer than that for Caucasians (50.23) (SD 26, p<0.05). |
| **Kang and Harvey (2019)** | Participants. N=71 parents who identified as African American/Black (female n = 65; male n  = 6), 60 elementary school teachers who identified as European American/White (female n =41;malen = 19) currently employed in the United States, and 65 parents who identified as European American/ White (female n = 49; male n = 16). All participants had at least a high school diploma or GED (see Table 1). Most participants (n = 159) reported being married or cohabiting. All participants were currently living in the United States and there was good regional representation with participants residing in 42 states. | Summary. Previous research suggests there may be racial differences in how adults rate children’s ADHD behavior. Differences in perceptions of Black parents and White teachers could have implications for ADHD diagnosis of Black children. This study compared ADHD ratings of Black parents to White teachers, and examined factors that may explain racial differences.  Participants included 71 Black parents (65  women, 6 men; Mage = 33.92) and 60 White  teachers (41 women, 19 men; Mage = 33.60), as well as a comparison group of 65 White parents (49 women, 16 men; Mage = 36.83). Participants watched video clips of children in classrooms and rated ADHD behaviors and ADHD likelihood. They then completed questionnaires regarding beliefs about ADHD stigma, verve (movement expressiveness), experiences with racial discrimination, and racial attitudes. | Vanderbilt Assessment Scale, Child ADHD Stigma Questionnaire (CASQ); Home Movement Expressive Questionnaire (HMEQ); Racial Attitudes Scale (ATB); Racial ansd Ethnic Microaggressions Scale (REMS) | Quantitative | Findings. White teachers rated Black boys’ ADHD behaviors and their likelihood of having ADHD higher than Black parents. White teachers with more negative racial attitudes toward African Americans gave higher ADHD behavior and likelihood ratings to Black boys than did teachers with less negative racial attitudes. Across all participants, ADHD stigma beliefs and verve were not related to ratings of Black boys. Black parents with more experiences with racial discrimination gave higher ratings to Black boys’ ADHD behaviors. Research is necessary to further explain the mechanisms by which discrepancies in ratings of Black boys’ ADHD behaviors exist between Black and White adults to inform culturally sensitive assessment and diagnosis of ADHD in Black children. There were differences between male and female participants on ratings of ADHD stigma beliefs, verve, and racial attitudes. Partial correlations, with adult gender as a covariate, were used to examine whether the four hypothesized factors that may explain these discrepancies (ADHD stigma beliefs, verve, experiences with racial discrimination, racial attitudes) are related to ratings of ADHD behavior and likelihood; Ratings of ADHD Behavior: There were no significant main effects of adult status for ratings of White boys, F(2, 193) = 0.57, p = .565, White girls, F(2, 193) = 0.55, p  = .577, or Black girls, F(2, 193) = 0.15, p = .861. However, there were  significant differences in adults’ ratings of Black boys, F(2, 193) = 3.36, p  = .037. A planned contrast indicated that White teachers (M =0.11,SD = 0.98) rated Black boys’ ADHD behaviors higher compared to Black parents (M = −0.24, SD = 1.16; see Fig. 1), t(193) = 1.97, p = .051,  Cohen’s d =.33. White parents’ (M =0.17, SD = 0.77) ratings of Black |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Kendall et al.(2003)** | Participants. Larger study: (n=39) 157 families with children with ADHD. 50 white, 50 African American, and 57 Hispanic/Latinx. The purposive sample of this research study include n=39 children and adolescents with a diagnosis of ADHD. The sample consisted of 26 boys and 13 girls. Fifteen self-identified as African American (11 boys and 4 girls), 13 as Hispanic, of mostly Mexican descent (11 boys and 2 girls), 9 as Caucasian (4 boys and 5 girls), and 2 as biracial (Hawaiian/Caucasian girl and Samoan/Hispanic boy). The mean age was 11.2 years (range from 6 to 17 years). Seventeen families were single-parent families (16 single mothers and 1 single father) and 21 were 2- parent families. One family had 2 children with ADHD. Twelve families had an annual family income below $10 000, 6 families from $10 000 to $29 000, 16 families from $30 000 to $75 000, and 4 families over $75 000. All but 2 families, both Hispanic Mexican, indicated that they received some health insurance benefits.  The mothers in 31 families had at least some post–high school education, 10 college degrees and 1 master’s | Summary. As a postmodern illness, attention- deficit/hyperactivity disorder (ADHD) is embedded in controversy, reflective of the cultural times in which we live. Within this debate, 2 perspectives, ADHD as myth and ADHD as behavioral disorder, are most frequently voiced. This article describes these 2 differing perspectives and reports qualitative data from 39 children and adolescents with a diagnosis of ADHD regarding their perceptions, meanings, and experiences of living with this disorder. None of the participants in this study denied that they had difficulties and many of the difficulties they described corresponded to DSM-IV-R criteria and the scientific literature. Given these discoveries, the continual debate about the authenticity of ADHD only further victimizes families who are in desperate need of services. | Researcher-made questionnaire | Qualitative | Findings. Most troubling of these data were the meanings and the overidentification these children placed on having ADHD, as if they had an ADHD identity. Although some of these responses seemed to overlap and border on the problems associated with having ADHD, what was distinct in these data was the significance of what ADHD meant to them. These children often talked about ADHD in terms of who they were, rather than the symptoms they experienced. ADHD seemed to define much of who they were. For others, particularly the Hispanic children, ADHD meant repeatedly “getting into trouble” both at school and at home. “ADHD gets me in trouble...just not being able to sit still and stuff...I’m really fidgety.” African American children used the word “bad” much more frequently than did the Hispanic or Caucasian children when describing themselves in relation to ADHD. Hispanic children more frequently discussed the meaning of ADHD in terms of “trouble” and “getting into trouble”.  Caucasian children similarly reported that ADHD got them into trouble, but several also noted that it made them feel “weird...’cos sometimes you can’t answer some of the questions in math and some stuff like that and it kind of makes me upset.” |
| **Lawton et al. (2015)** | N=24; Seventy-four primarily Spanishspeaking, Latino parents of school-age children completed measures to assess their help-seeking intentions, PLOC, and cultural orientation. | To address the disparities that exist in utilization of mental health services for ADHD among Latino families and to further our understanding of factors that influence parents’ decisions to seek treatment for ADHD, the goal of the current study was to examine parental locus of control (PLOC) in a community sample of Latino parents.  Specifically, the current study investigated cultural influences on PLOC, as well as the influence of PLOC on help-seeking. | Swanson-Nolan-and Pelham-IV (SNAP-IV) | Quantitative | Results: Results indicated that U.S. mainstream orientation was associated with increased feelings of parental control and decreased beliefs in fate/chance and several Latino cultural values were associated with increased beliefs in fate/chance, and decreased feelings of parental efficacy and parental control. In addition, 2 PLOC domains (e.g., parental efficacy and fate/chance) were associated with beliefs that the behaviors of a child with ADHD would go away on their own. Conclusions: Results highlight the need for interventions aimed at modifying parenting behavior to take parents’ cultural beliefs and values into account in order to accommodate and engage Latino families more effectively. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Lee (2017)** | N=2 | Summary. The study investigated how early childhood teachers’ perspectives of and practices for the behavior and bodies of children considered at risk of being identified with ADHD later in schooling were related to the increasing concern over school readiness under SBA reform. | Observation; Teacher interviews; Artifacts | Qualitative | Results: The focal children’s teachers appropriated the authoritative discourses of ADHD and readiness for school to perceive the children’s bodies as uncontrollable and unready for school. The teachers taught the children a variety of bodily techniques to enculturate them in public school and to develop docile student bodies. Keeping their authoritative practices intact, the teachers hardly incorporated the children’s areas of strengths into the curriculum and instruction. School was introduced to the children as a carnivalesqueless place, and both SBA reform and ADHD contributed to disembodiment in the public early childhood education settings.  Conclusions: This study suggests the need for reframing the notion of school readiness; bringing teachers’ folk theories about children’s behavior and bodies to their critical awareness; and intentionally balancing serious, rigid parts of the daily classroom routine with relaxed, pleasurable moments. |
| **Leslie et al. (2007)** | N=32 | Policymakers, federal agencies, and researchers have called for more in-depth investigation of contextual mechanisms that may explain differences in medication use among youths with attentiondeficit/hyperactivity disorder (ADHD). Method: We conducted qualitative interviews with 28 families from varied socioeconomic and racial/ethnic and linguistic backgrounds regarding diagnostic and treatment trajectories for their children with symptoms consistent with ADHD, with a particular focus on whether and how medication use became a part of the trajectory. | Semi-structured open-ended interviews; Record reviews | Qualitative | Results: Four longitudinal patterns of help-seeking trajectories emerged: (1) a pattern characterized by delay to diagnosis, common among youths with complicated clinical and/or environmental pictures or primarily inattentive ADHD symptoms; (2) an initial nonmedication treatment pattern in which parents at first chose to use other modalities of treatment; (3) a reluctant receipt of an ADHD diagnosis and/or treatment pattern, mainly seen among the low-income, Spanish-speaking families; and (4) a rapid engagement in medication use pattern, characterized by directed movement to and maintenance of medication use. These patterns resulted from a dynamic interplay of explanatory models regarding the cause, course, and cure of a child’s problems; the influence of extended social networks; and factors previously examined in medical utilization models. Additional themes included (1) parents’ need for more information about ADHD, (2) families’ desire for additional mental health and school services making medications less necessary, and (3) the importance of cultural sensitivity and a longitudinal relationship between the caregiver and clinician to enhance communication between families and clinicians. Conclusions: These findings deserve further study in a larger, more diverse sample. |
| **Perry et al. (2005)** | N=479 | Summary. Although researchers have conducted a vast amount of research about attention deficit hyperactivity disorder (ADHD), few have addressed how Latino families experience ADHD. The purpose of this qualitative study was to explore how Latino parents managed their child’s ADHD within the sociocultural context of their everyday lives. This article presents a grounded theory of how Latino parents (N = 24 families) managed their child’s ADHD. The following five themes emerged from the data analysis: (a) finding out about ADHD, (b) taking on a biomedical meaning, (c) living between two cultures, (d) caring for a child with ADHD, and (e) looking toward the future with ADHD. Although some of the circumstances encountered by Latino parents resemble those typically found in the literature about ADHD and families, their experience is rendered inordinately complex by multiple overlapping sociocultural, linguistic, and parental circumstances. | Semi-structured open-ended interviews | Qualitative | Findings. In caring for Latino children with ADHD, their behavior must be understood within the context of their values and beliefs, their cultural environments, and its related expectations. In this study, parents clearly expressed their guilt and concern about the stigma of having a child with ADHD. Although many families in the United States experience stigma when they have a member with a mental illness, Latino families with ADHD children reported that their stigma was exacerbated by their culture, which clearly emphasizes the significance of good behavior (“manners matter”), and they worried about being perceived as poor parents because of their child’s behavior. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Reinke (2008)** | Participants. N=678; low-income SES; African American students entering the first grade.  From Baltimore, MD (Baltimore City), public elementary school. 53% male, 86% African American, 14% White.69% FARMS | Summary. The purpose of this study was to identify classes of children at enry into first grade with different patterns of academic and behavior problems. | Teacher Observation of Classroom  Adaptation-Revised (TOCA-R)  The Aggressive/Disruptive Behavior subscale  Comprehensive Test of Basic Skills (CTBS) | Quantitative | Findings. Results identified multiple subclasses of children, including a class with co-occurring academic and behavior problems. Gender differences were found in relation to the number of identified classes and the characteristics of academic and behavior problems for children. Several of the identified classes, particularly the co-occurring academic and behavior problems subclass for both genders, predicted negative long-term outcomes in sixth grade, including academic failure, receipt of special education services, affiliation with deviant peers, suspension from school, and elevated risk for conduct problems. \*Negative long-term outcomes validates the importance of the identified classes and the need to target interventions for children presenting with the associated class characteristics. |
| **Spencer et al. (2021)** | N=41 parents of youth age 3-17 with ADHD. Of 130 potential participants screened, 26 were ineligible, 63 declined or could not be reached for their study visit, and 41 consented and completed interviews in English (n = 31; 75.6%), Spanish (n =9; 21.9%), and Haitian  Creole (n =1; 2.4%). Parents were 92.7% female and had a mean age of 40.8 years (SD = 7.6). English was the primary language spoken at home for most participants (75%), but 41.8% were born outside the mainland United States, including in Puerto Rico (23.5%), Mexico (17.7%), and 7 other countries. Approximately half of the parents (51.8%) had received some | We conducted in-depth semistructured qualitative interviews with 41 parents of diverse youth aged 3 to 17 years old in treatment of ADHD at an urban safety net hospital. Parents were asked about their journey through diagnosis and treatment, community attitudes about ADHD, and other factors influencing treatment access and decision- making. Transcripts were analyzed by using thematic analysis. | Interviews | Qualitative | Of children with ADHD, 69.2% were male, 57.7% were Black or African American, and 38.5% were of Hispanic, Latino, or Spanish origin. Parents were 92.7% female, were 75.6% English speaking, and had a median income of $20 000. Parents described 6 stages to the process of engaging in care for their child’s ADHD, which unfolded like a developmental process: (1) normalization and hesitation, (2) fear and stigmatization, (3) action and advocacy, (4) communication and navigation, (5) care and validation, and (6) preparation and transition. Barriers often occurred at points of stage mismatch between parents and providers and/or systems. Difficulty resolving an earlier stage interfered with the progression through subsequent stages. **Six Stages of Engagement** |
| **Thurston, I. B., Hardin, R., et al. (2018)** | 51 parents (mothers: 51%, N = 128; fathers: 49%, N = 123) aged 20–66 years (mean [M] = 40, standard deviation [SD] = 8.15). A total of 51% of participants selfidentified as White and 49% self-identified as Black. Parents had an average of 2.45 children (SD = 1.22), with an average of 1.87 children living in the home (SD  = .96). Majority of participants were married (78%, N = 196), while 11% were divorced, and 6% were single. The mean parental education was 15.90 years (SD = 2.27), which represented post-high school education. The average household income ranged from  $50,001–$65,000 per year, which represents primarily middle class families. | Understanding social and environmental factors that contribute to parental help-seeking intentions is an important step in addressing service underutilization for children in need of treatment.  This study examined factors that contribute to parents’ intentions to seek formal and informal help for  child psychopathology (anxiety and attention- deficit/hyperactivity disorder [ADHD]). | Beliefs About Causes-Revised Scale  Biopsychosocial  sociological  spiritual | Quantitative | Overall, pediatricians were most often the first help source that both White (46%) and Black (36%) parents intended to approach for child externalizing symptoms. With respect to seeking help for internalizing symptoms, White parents most frequently reported intentions to seek help first from pediatricians (32%), while Black parents were split between pediatricians (26%) and teachers (26%) as a first help source. When examining parents’ willingness to seek help from each source at any time, relatively high frequencies were found. Mothers were more likely than fathers to seek help from pediatricians, psychologists, teachers, and religious leaders for child anxiety and pediatricians, religious leaders, and self-help resources for child ADHD. Black parents were more likely to seek help from religious leaders and White parents were more likely to use self-help resources. Problem recognition was associated with greater intentions to seek help from almost all formal and informal sources (except from friends/family. Across all parents, recognizing that the child was experiencing a problem was associated with increased intent to seek help from pediatricians and psychologists for both internalizing and externalizing symptoms, religious leaders and teachers for externalizing symptoms, and selfhelp resources for internalizing symptoms. This highlights the importance of parents’ ability to recognize significant struggles in children, as this serves as the gateway to help seeking, irrespective of the source of help sought. Such findings underscore the need for parents’ to be aware of typical child development as well as realize the signs of derailment from normative behavior. These findings are consistent with previous research showing the high importance of problem recognition in the help-seeking pathway (Shanley et al., 2008). |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Thurston, I. B., Phares, V., et al. (2015)** | 251 parents (49% Black,  51% White; 49% fathers, 51% mothers); Parents ranged in age from 20 to 66 years old with at least one child between ages 2 and 21. | The current study used vignettes, an empirically supported method (Bussing et al., 2012; Martin, Pescosolido, Olafsdottir, & McLeod, 2007; Raviv et al., 2009), to explore the relationship between parents’ endorsement of youth mental health problems (i.e., internalizing, externalizing) in a vignette and parents’ decisions to seek help. |  | Quantitative | Results revealed that parents were more likely to report intentions to seek help when they recognized a problem (odds ratio [OR] 41.35, p<.001), 95% confidence interval (CI) [14.81, 115.49]; when it was an externalizing problem (OR 1.85, p<.05), 95% CI [1.14, 3.02]; and when parents were  older (OR 1.04, p<.05), 95% CI [1.01, 1.08]. Predictors of parental problem recognition included perceived need, prior experience with mental illness, and belief in trauma as a cause of mental illness.The relationship between parental problem recognition and help-seeking intentions is striking given that almost half of the parents in this study did not recognize the internalizing problem vignette and more than one third did not correctly identify the externalizing vignette, despite clinician endorsement that treatment was needed for each of these vignettes. This finding is consistent with previous research documenting that almost half of the parents who have a child with a mental health problem do not recognize these symptoms in their child (Sayal, 2006). Our finding that parents were better able to recognize and more willing to seek help for an externalizing problem over an internalizing problem is also notable. This study did not find significant race differences in problem recognition or help-seeking intentions when vignettes were used. This finding may be due to the strong influence of problem recognition and perception of need above all else when parents are making decisions about help-seeking for children. This lack of racial differences in problem-recognition and willingness to seek help implicates the primary role that structural and access barriers may have in the disparity in service underutilization among Black parents. |

# References

\**Articles independent of review of literature.*

Alvarado, C., & Modesto-Lowe, V. (2017). Improving Treatment in Minority Children With Attention Deficit/Hyperactivity Disorder. *Clinical Pediatrics*, *56*(2), 171–176. https://doi-

org.mutex.gmu.edu/10.1177/0009922816645517

Bailey, R. K. (2005). Diagnosis and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) in African-American and Hispanic Patients. *Journal of the National Medical Association*, *97*(10,Suppl), 3S–4S.

Berger-Jenkins, E., McKay, M., Newcorn, J., Bannon, W., & Laraque, D. (2012). Parent Medication Concerns Predict Underutilization of Mental Health Services for Minority Children With ADHD. *Clinical Pediatrics*, *51*(1), 65–76. https://doi-

org.mutex.gmu.edu/10.1177/0009922811417286

\*Brinkman, W. B., & Epstein, J. N. (2011). Treatment planning for children with attention- deficit/hyperactivity disorder: treatment utilization and family preferences. *Patient Preference and Adherence,* 5*,* 45. https://doi-org.mutex.gmu.edu/10.2147/PPA.S10647

\*Carter, N. P., Hawkins, T. N., & Natesan, P. (2008). The relationship between verve and the academic achievement of African American students in reading and mathematics in an urban middle school. Educational Foundations, 22(1/2), 29–46.

Coker, T. R., Elliott, M. N., Toomey, S. L., Schwebel, D. C., Cuccaro, P., Emery, S. T., Davies,

S. L., Visser, S. N., & Schuster, M. A. (2016). Racial and Ethnic Disparities in ADHD Diagnosis and Treatment. *Pediatrics*, *138*(3), 1–9. https://doi-

org.mutex.gmu.edu/10.1542/peds.2016-0407

Davison, J. C., & Ford, D. Y. (2001). Perceptions of Attention Deficit Hyperactivity Disorder in one African American community. *Journal of Negro Education*, *70*(4), 264–274. https://doi-org.mutex.gmu.edu/10.2307/3211279

Fallucco, E. M., Blackmore, E. R., Bejarano, C. M., Kozikowski, C. B., Cuffe, S., Landy, R., & Glowinski, A. (2017). “Collaborative care: A pilot study of a child psychiatry outpatient consultation model for primary care providers”: Erratum. *The Journal of Behavioral Health Services & Research*, *44*(3), 515. https://doi-org.mutex.gmu.edu/10.1007/s11414-

016-9518-7

Fiks, A. G., Hughes, C. C., Gafen, A., Guevara, J. P., & Barg, F. K. (2011). Contrasting parents’ and pediatricians’ perspectives on shared decision-making in ADHD. *Pediatrics*, *127*(1), e188–e196. https://doi-org.mutex.gmu.edu/10.1542/peds.2010-1510

Golos, A., Mor, R., Fisher, O., & Finkelstein, A. (2021). Clinicians’ Views on the Need for Cultural Adaptation of Intervention for Children with ADHD from the Ultraorthodox Community. *Occupational Therapy International*, 1–13. https://doi-

org.mutex.gmu.edu/10.1155/2021/5564364

Hervey-Jumper, H., Douyon, K., & Franco, K. N. (2006). Deficits in Diagnosis, Treatment and Continuity of Care in African-American Children and Adolescents with ADHD. *Journal of the National Medical Association*, *98*(2), 233–238.

Hinojosa, M. S., Hinojosa, R., & Nguyen, J. (2020). Shared decision making and treatment for minority children with ADHD. *Journal of Transcultural Nursing*, *31*(2), 135–143. https://doi-org.mutex.gmu.edu/10.1177/1043659619853021

Hogue, A., Dauber, S., Lichvar, E., & Spiewak, G. (2014). Adolescent and caregiver reports of ADHD symptoms among inner-city youth: Agreement, perceived need for treatment, and

behavioral correlates. *Journal of Attention Disorders*, *18*(3), 212–225. https://doi-

org.mutex.gmu.edu/10.1177/1087054712443160

Kang, S., & Harvey, E. A. (2020). Racial Differences Between Black Parents’ and White Teachers’ Perceptions of Attention-Deficit/Hyperactivity Disorder Behavior. *Journal of Abnormal Child Psychology*, *48*(5), 661–672. https://doi-

org.mutex.gmu.edu/10.1007/s10802-019-00600-y

Lawton, K. E., Kapke, T. L., & Gerdes, A. C. (2016). Understanding parental locus of control in Latino parents: Examination of cultural influences and help-seeking intentions for childhood ADHD. *Cultural Diversity and Ethnic Minority Psychology*, *22*(2), 288–298. https://doi-org.mutex.gmu.edu/10.1037/cdp0000022

Marx, I., Pieper, J., Berger, C., Häßler, F., & Herpertz, S. C. (2011). Contextual influence of highly valued rewards and penalties on delay decisions in children with ADHD. *Journal of Behavior Therapy & Experimental Psychiatry*, *42*(4), 488–496. https://doi-

org.mutex.gmu.edu/10.1016/j.jbtep.2011.05.005

Mychailyszyn, M. P., dosReis, S., & Myers, M. (2008). African American caretakers’ views of ADHD and use of outpatient mental health care services for children. *Families, Systems, & Health*, *26*(4), 447–458. https://doi-org.mutex.gmu.edu/10.1037/1091-7527.26.4.447

\*Nguyen, L., Arganza, G. F., Huang, L. N., Liao, Q., Nguyen, H. T., & Santiago, R. (2004).

Psychiatric diagnoses and clinical characteristics of Asian American youth in children's services. *Journal of Child and Family Studies*, *13*(4), 483-495. https://doi.org/10.1023/B:JCFS.0000044729.93879.c2

\*Paidipati, C. P., Brawner, B., Eiraldi, R., & Deatrick, J. A. (2017). Parent and family processes related to ADHD management in ethnically diverse youth. Journal of the American

Psychiatric Nurses Association, 23(2), 90-112. https://doi.org/10.1177/1078390316687023

Pham, A. V., Carlson, J. S., & Kosciulek, J. F. (2010). Ethnic Differences in Parental Beliefs of Attention-Deficit/Hyperactivity Disorder and Treatment. *Journal of Attention Disorders*, *13*(6), 584–591. https://doi.org/10.1177/1087054709332391

Sabin, J. A., & Greenwald, A. G. (2012). The Influence of Implicit Bias on Treatment Recommendations for 4 Common Pediatric Conditions: Pain, Urinary Tract Infection, Attention Deficit Hyperactivity Disorder, and Asthma. *American Journal of Public Health*, *102*(5), 988–995. https://doi-org.mutex.gmu.edu/10.2105/AJPH.2011.300621

\*Silvestri, P. R., Baglioni, V., Cardona, F., & Cavanna, A. E. (2018). Self-concept and self- esteem in patients with chronic tic disorders: a systematic literature review. *European Journal of Paediatric Neurology*, *22*(5), 749-756. https://doi.org/10.1016/j.ejpn.2018.05.008

Spencer, A. E., Sikov, J., Loubeau, J. K., Zolli, N., Baul, T., Rabin, M., Hasan, S., Rosen, K., Buonocore, O., Lejeune, J., Dayal, R., Fortuna, L., Borba, C., & Silverstein, M. (2021).

Six stages of engagement in ADHD treatment described by diverse, urban

parents. *Pediatrics*, *148*(4). https://doi-org.mutex.gmu.edu/10.1542/peds.2021-051261

Thurston, I. B., Phares, V., Coates, E. E., & Bogart, L. M. (2015). Child Problem Recognition and Help-Seeking Intentions Among Black and White Parents. *Journal of Clinical Child & Adolescent Psychology*, *44*(4), 604–615. https://doi-

org.mutex.gmu.edu/10.1080/15374416.2014.883929

Waite, R., & Ramsay, J. R. (2010). Cultural proficiency: A Hispanic woman with ADHD—A case example. *Journal of Attention Disorders*, *13*(4), 424–432. https://doi-

org.mutex.gmu.edu/10.1177/1087054709332393

Wood, J. C., Heiskell, K. D., Delay, D. M., Jongeling, J. A. S., & Perry, D. (2009). Teachers’ preferences for interventions for ethnically diverse learners with attention-deficit hyperactivity disorder. *Adolescence*, *44*(174), 273–288.

Xing Tan, T., Wang, Y., Hao, S.-W., & Li, Y. (2021). Female adopted Chinese-American youth’s sense of exclusion and short-and long-term adjustment. *American Journal of Orthopsychiatry*, *91*(5), 671–681. https://doi-org.mutex.gmu.edu/10.1037/ort0000568

Young, S., & Cocallis, K. M. (2019). Attention Deficit Hyperactivity Disorder (ADHD) in the prison system. *Current Psychiatry Reports, 21*(6), 1-9. https://doi.org/10.1007/s11920-

019-1022-3