A Theoretical Analysis of Differential Diagnosis of Oppositional Defiance Disorder and Attention-Deficit and Hyperactivity Disorder by Race

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Children with mental health disorders characterized by externalizing behavior disorders are at risk for serious negative consequences to their long-term mental health, educational achievement, and participation in the community (Burke, Rowe, & Boylan, 2014; Cormier, 2008). Oppositional Defiant Disorder (ODD) and Attention-Deficit and Hyperactivity Disorder (ADHD) are disorders of early childhood characterized by externalizing behaviors associated with difficulties in structured environments and development of age-appropriate relationships with children and adults (American Psychiatric Association, 2013). The epidemiological literature suggests that prevalence of ODD and ADHD is similar across racial groups (Angold et al., 2002; Mak & Rosenblatt, 2002; Merikangas et al., 2010; Nguyen, Huang, Arganza, & Liao, 2007; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). However, examination of "real-world" diagnoses in large data sets suggest that children of color, particularly Black children, are more likely to be diagnosed with a disruptive behavior disorder than White children even when these groups demonstrate similar externalizing behaviors (Mak & Rosenblatt, 2002; Mandell, Ittenbach, Levy, & Pinto-Martin, 2007; Minsky et al., 2006; Nguyen et al., 2007). This possible racial disproportionality in "real world" diagnosis despite similar levels of behaviors across White and Black children is concerning, particularly since children of color are already at risk for worse mental health, educational, and community participation outcomes due racism and disproportionate poverty (Lu et al., 2010; Sellers, Copeland-Linder, Martin, & Lewis, 2006; Williams, Neighbors, & Jackson, 2003).

Differential diagnosis in ADHD and ODD by race is not definitive, with some studies finding similar rates across race even in "real world" diagnostic settings (Yeh, Hough, McCabe, Lau, & Garland, 2004). Despite these rare inconsistencies, racial disproportionalities should be examined to determine any mechanism by which children of color may be over-identified with

ODD, which has comparatively more serious outcomes that may result in more stigma than ADHD. To the knowledge of this author no theoretical analyses have been completed to examine the possible veracity of or underlying mechanism of the suspicion of racial disproportionality between these two mental health disorders of childhood. A theoretical analysis applying Critical Race theory may help determine the likelihood of the existence of such a phenomenon and underlying mechanisms that may cause it, leading the field to new research questions and, ultimately, to addressing racial disproportionality in diagnoses.

Disruptive Behavior Disorders

Oppositional Defiant Disorder

Oppositional Defiant Disorder (ODD) is categorized as a Disruptive, Impulse-Control and Conduct Disorder in the *DSM-V* and is marked by at least four symptoms occurring in three categories of behaviors: angry or irritable, argumentative or defiant, or being vindictive (APA, 2013). The *DSM-V* notes that in addition to demonstrating consistent behaviors in these domains, they must also be more severe than expected for the social position and age of the child and must have a negative impact on the child's functioning. The disorder can occur at three levels of severity, with mild occurring in only one setting, moderate occurring in two settings, and severe occurring in three or more settings.

The lifetime prevalence of ODD has been measured between 10.2% (Nock, Kazdin, Hiripi, & Kessler, 2007) and 12.6% (Merikangas et al., 2010). The prevalence among children is more difficult to determine due to prevalence studies often measure both Conduct Disorder (CD) and ODD simultaneously. However, studies show that approximately 3.5% of children, or about 1.9 million American children, have ODD or CD (Visser, Deubler, Bitsko, Holbrook, & Danielson, 2016).

The etiology of ODD continues to be explored and includes child, family, and environmental factors. Child factors include low birth weight (Burke, Loeber, & Birmaher, 2002), neurobiology and structural brain abnormalities (Loeber, Burke, & Pardini, 2009; Matthys, Vanderschuren, & Schutter, 2012), and difficult temperament (Burke et al., 2002; Loeber et al., 2009). Family factors relate primarily to poor parenting and family stress, including disorganized attachment (Burke, Pardini, & Loeber, 2008), family discord (Rijlaarsdam et al., 2016; Tolan, Dodge, & Rutter, 2013), harsh parenting (Burke et al., 2008) (Burke 2008), and lack of parental monitoring (Dishion & McMahon, 1998).

In the long-term, ODD is predictive for the development of both internalizing mental health conditions, including Anxiety and Depression, and externalizing mental health conditions, including Conduct Disorder (Loeber et al., 2009). Children diagnosed with ODD are at an increased risk for Anti-Social Personality Disorder, which significantly increases their risk for criminal behavior and incarceration (Capaldi & Eddy, 2005).

Attention-Deficit and Hyperactivity Disorder

Attention-Deficit and Hyperactivity Disorder (ADHD) is categorized as a Neurodevelopmental Disorder in the *DSM-V* (APA, 2013). The two primary categories of ADHD are inattention and hyperactivity/impulsivity. Children can demonstrate symptoms in one or both categories. They must demonstrate at least six symptoms in a given category at a level inconsistent with their developmental age and negatively impacting their life for at least six months in order to satisfy diagnostic requirements. These behaviors must begin before age 12 and occur in at least two settings. This diagnosis can be combined, predominantly inattentive, or primarily hyperactive. It can also be categorized at level of severity as related to level of

impairment in social or occupational functioning. ADHD is estimated to affect 8.8% of American children (Visser et al., 2016).

In contrast to ODD, ADHD has been found to be caused exclusively by biologically-related factors, particularly genetic differences in neurotransmitters, low birth weight, and traumatic brain injury which affects executive functioning (Cormier, 2008). Primarily due to its impact on impulse-control and executive brain function, children with ADHD are at increased risk for poor school outcomes, substance use, criminal activity, and motor vehicle accidents (Erskine et al., 2014). Additionally, early ADHD diagnosis is associated with increased risk of the development of mental health conditions, including ODD (Loeber et al., 2009). However, it seems that ODD is more predictive of adult mental health problems than ADHD, with children with co-morbid ADHD and ODD or children with ODD formerly diagnosed with ADHD at increased risk compared to children who are never diagnosed with ODD.

Co-Morbidities and Comparisons across Disorders

ODD and ADHD have many commonalities. Both present with behaviors that could be considered defiant and disruptive (APA, 2013). Both are associated with atypical brain structure in the frontal cortex and differences in neurotransmitters (Cormier, 2008; Matthys et al., 2012). Both can also be related to poor long-term consequences, including negative impact on relationships, on work and education, and long-term mental health, though arguably individuals with ODD are at increased risk for worse outcomes compared to those with ADHD alone (Erskine et al., 2014). In addition to commonalities in presentation and etiology, they are commonly co-morbid. Sixty-seven percent of children with ODD or Conduct Disorder have comorbid ADHD while 26% of children with ADHD have comorbid ODD or Conduct Disorder (Visser et al., 2016).

Epidemiological Versus "Real World" Findings

Despite some similarities in the disorders and frequent co-morbidity, there is evidence suggesting that certain children are at a differential risk for being diagnosed with each of these disorders. Researchers have used two primary ways to evaluate racial diagnostic differentials examining specifically ODD and ADHD: epidemiological studies using standardized measures to "diagnose" children (e.g. CBCL, DISC) and "real world" studies using records to analyze the diagnostic rates of community practitioners. Epidemiological studies find few racial differences in levels of externalizing behaviors (Mak & Rosenblatt, 2002; Nguyen et al., 2007) including one nationally representative study (Merikangas et al., 2010). One study that measured behavior in this way in a large sample of rural youth found White children to have a higher rate of ODD than Black children (Angold et al., 2002).

In contrast, studies that use "real world" samples where medical records of community diagnosticians are studied tend to find racial disproportionalities in diagnosis of ODD and ADHD. While no nationally representative studies exist to support this finding, a number of large samples were available and consistently found Black children to be more likely to be diagnosed with a Disruptive Behavior Disorder, such as ODD, than White youth (Mak & Rosenblatt, 2002; Mandell et al., 2007; Minsky et al., 2006; Nguyen et al., 2007). Additionally, White children are more likely to be diagnosed with ADHD alone than Black children (Baglivio, Wolff, Piquero, Greenwald, & Epps, 2016; Visser et al., 2016). Only one study measuring "real world" diagnostic practices found no racial differences (Yeh, 2004). However, unlike some of the other studies, this study only included one geographical area. The contrast in these two types of methodologies, standardized versus "real world" diagnostic practices, suggest that while child

behavior may be similar across races, diagnostic practices may differentiate by race for ODD and ADHD.

Racial differences in real world diagnostic behaviors may have serious consequences that disproportionately affect children of color who may be more likely to get diagnoses more closely related to serious long-term outcomes, including severe mental health problems and risk for involvement in the criminal justice system (Loeber et al., 2009) compared to White children who seem to be more likely to be diagnosed with ADHD alone (Visser et al., 2016). Though the data supporting this conclusion is mixed, the potential disproportionate consequences for children of color merits greater examination. Since current data based on individual-level studies are somewhat unclear, a macro-theoretical analysis may provide additional evidence to guide research to evaluate the legitimacy of the claim that children of color are disproportionally given diagnoses that are associated with worse long term outcomes, specifically ODD rather than ADHD.

Definitional and Measurement Challenges

Studies have a wide range of ways of accounting for behavioral disorders, problems, and difficulties in children that do not necessarily describe differences in ODD specifically. Only two studies (Angold et al., 2002; Teplin et al., 2002) specifically evaluated for ODD. Other studies look at "disruptive behavior disorders" disorders generally, which include both ODD and CD (Mak & Rosenblatt, 2002; Nguyen et al., 2007). Some look generally at externalizing disorders which are defined to include both ADHD and DBDs, likely including ODD (Minsky et al., 2006) while others look at all disorders (Fabrega, Ulrich, & Mezzich, 1993; Merikangas et al., 2010). The wide range of definitions and the limited attention to ODD specifically, makes drawing conclusions difficult and tempers confidence in those that are drawn. However, a fairly

clear delineation seems to exist between ADHD and DBDs, including ODD and CD, in most of the literature, legitimizing initial conclusions and theoretical analysis.

Theoretical Application of Critical Race Theory

Socially normative behaviors of children are defined largely by child compliance (Bornstein, 2015; Nybell, Shook, & Finn, 2009). In educational settings, school officials target therapeutic and punitive interventions toward children who do not comply with institutionally taught and reinforced sets of rules, while the needs of children who comply are minimized. Black children are disproportionately excluded from school settings as measured by disproportionate office referrals, suspensions, expulsions and ultimately juvenile justice involvement compared to their same-age White peers (Brubaker & Fox, 2010; Sullivan, Bennear, Honess, Sullivan, & Painter, 2012). When involved in other child-serving systems, such as child welfare or juvenile justice, the behavior of Black children is seen as more problematic and dangerous than White peers, leading to Black youth being disproportionately involved in these systems and housed in more restrictive environments therein (Brubaker & Fox, 2010; Marshall & Haight, 2014). From a mental health perspective, youth who participate in more active "abnormal" behavior may be viewed as more willfully involved in their behavior problems and merit themselves a diagnosis of ODD over ADHD, as ADHD is considered related solely to brain functioning (Matthys et al., 2012) not the behavioral upbringing or agency of the individual as are ODD.

There are strong theoretical explanations for why children who participate in defiant behavior are pathologized. Foucault explains the increasing role of internalized discipline facilitated by teachers, social workers, and other "helpers" at all levels of society, a trend that makes "undisciplined" behavior increasingly targeted and recognized earlier and earlier in the

lifespan (Foucault, 1995). Weber describes the role of the Puritanical concept of singular and disciplined vocation and hard work in the creation of American capitalism, which would disqualify people with unruly behaviors from the workplace resulting in discrimination against children who could not behave and prepare for work (Weber, 1905). Social exclusion theorists suggest that rigid boundaries are set between compliant, and often economically advantaged, children and noncompliant, and often economically disadvantaged children to exclude these children from an increasingly specialized labor market and monopolized set of resources (Kahn & Kamerman, 2002; Silver, 1994).

Though a thorough examination of these theoretical explanations is beyond the scope of this paper, this brief description demonstrates that none of these theories can explain racial disproportionality in behavioral diagnoses among children who display problematic, externalizing behaviors. Alone they seem to adequately explain why children who behave in undisciplined ways are pathologized, an important conclusion. However, in order to theorize why Black children would be disproportionately diagnosed with ODD compared to only ADHD in "real-world" diagnostic settings, when epidemiological studies suggest Black and White children participate in the same behaviors, a theory that specifically examines race must be used. Critical Race Theory provides such a tool.

Overview of Critical Race Theory

Critical Race Theory (CRT) works to recognize the role of race in inequality. CRT was invented in the 1970s by theorists examining structural oppression, including but not limited to Critical Legal Studies, French theorists including Foucault and Derrida, and Black theorists and radical leaders (Delgado, Stefancic, & Liendo, 2012). While the critical viewpoint of CRT incorporates the concepts of structural oppression and privilege, CRT directly critiques liberal

theory that champions colorblind policy, promoting equality rather than equity. CRT posits race as the fundamental oppressive force in American society, but also promotes an intersectional viewpoint that recognizes the unique lived experience of each individual based on their personal experience of their gender, class, ability level, and other axes of oppression (Crenshaw, 1991; Hill Collins, 1989). Scholars advocating for various populations who experience oppression have successfully applied CRT to explain the experience of oppression in a variety of groups including among Latinos (LatCrit), feminists (FemCrit), queer individuals (QueerCrit), people with disabilities (DisCrit), Asian Americans and others (Delgado et al., 2012). Derrick Bell, Kimberlé Crenshaw, and Richard Delgado were central to the development of CRT.

Key Tenets of Critical Race Theory

Throughout the wide application of CRT, theorists share a number of assertions about race. First, racism is endemic, thereby all Americans participate in racism to some extent but this participation is increasingly unconscious. This claim rejects the concept of the march toward civil rights as a linear progression. Rather, racism has been transformed rather than eradicated (Carbado, 2011; Dixson, Rousseau, & Donner, 2017). Second, it is socially constructed, and thereby dynamic. Across time the definition of race transformed from a general description of groups of people categorized by geographic location to the hierarchical cultural reality it is today, cemented by slaveholders's cultural work to legitimize their enslavement of Africans (Smedley & Smedley, 2005). The relatively new social construction of race has been supported by the problematic science of measuring cranial size, intellectual aptitude, and, more recently, genetic material despite "consensus among most scholars…that racial distinctions fail on three counts – that is, they are not genetically discrete, are not reliably measured, and are not scientifically meaningful" (Smedley & Smedley, 2005, p. 16). In policy, racial categorizations

have shifted across time, are frequently inaccurate compared to terms used for self-identification, and fail to recognize the ethnic and racial diversity of individuals and so-called racial groups (Omi, 2001). The social construction of racial identity is dependent on one's position in time and space and interacts with broader social discourse, affecting both one's own identity formation and the recognition of one's identity within society.

Third, under the current institution of white supremacy, civil rights are only achieved when either 1) the advancement also benefits White people or 2) the threat of continued oppression at a given level will threaten White interests (Delgado et al., 2012). Derrick Bell (1980) famously coined the term "interest convergence" to describe this phenomenon. He hypothesized that *Brown v. Board of Education* produced integrated schools in a windfall following years of court opposition not because White Americans had been convinced of the injustice to Black Americans but because continued oppression at this overt level was risking domestic revolution and limiting new international alliances with developing nations whose populations were primarily people of color. Later examination of government documents confirmed the verity of Bell's controversial theory (Delgado et al., 2012). A corollary of the concept of interest convergence is that White people gain significant benefits from their privileged status.

Fourth, CRT values the standpoint of people of color (Dudziak, 2004). People of color must survive in White culture while also seeking refuge and renewal in their own culture. This knowledge of both their own and the majority culture makes people of color more culturally aware generally and much more aware of the functioning of racism within and between both spheres than White people who only need to know the majority culture to survive (Hill Collins, 1989). This tenet of CRT has important methodological and advocacy implications for critical

race theorists. First, it supports the creation of "revisionist history" (Delgado, 2004, p. 24). American history currently functions from a privileged epistemology, providing knowledge from the interpretation of White historians and providing a significantly greater proportion of teaching time and textual space describing the experiences of White Americans over the diverse people of color living alongside them. Critical race theorists advocate re-telling history from the perspective of people of color and privileging alternative epistemologies, such as story-telling and poetry. Second, though related, critical race theorists employ counterstories as a critical methodology. Counterstories are first-hand accounts or composites of first-hand accounts and artifactual data that re-tell experiences from the unique standpoints of people experiencing oppression (Dixson et al., 2017). This methodology is beneficial in both its process and product, simultaneously asserting color consciousness over color blindness while producing a revisionist history.

Finally, as implied by these various assumptions, CRT views racism as a structural disadvantage to all people of color both psychologically and materially (Abrams & Moio, 2013). White persons experience psychological and material benefits due to their Whiteness. The knowledge and behavior of White people is valued and used to define the norm for all people. Materially, differential access to schooling, higher education, employment and wealth are well documented. Persons of color experience an accumulation of disadvantage, with differential limitations in access to education and employment, increased exposure to social exclusion through ghettoization and incarceration, and intergenerational scarcity in inheritance due to spillover from overt racism of generations past (Carbado, 2011 as cited by Dixson et al., 2017). The current structures transmitting racism are indeed less obvious than during the periods of Black enslavement, persecution under Jim Crow, and overtly discriminatory laws. However,

CRT rejects that progress since these periods has been linear, and that current racism only occurs in situations where institutions fail to follow equitable policies or when people of color fail to achieve in American "meritocracy." Rather, CRT views racism as continuing to be transmitted through unconscious behaviors, creating genuine and serious consequences in the lives of people of color. In short, racist structures differentially determine the opportunities of Black and White people (Delgado et al., 2012).

CRT Methodology

Individuals who implement CRT in their work are both theorists and activists (Delgado et al., 2012). In their activism, critical race theorists link the solutions to the conduits of oppression: psychological and material racism. Materialists advocate policies that would improve the economic and physical reality of persons of color. Such policies might include addressing unemployment, integrating neighborhoods, and improving workers' rights among Black Americans disproportionately working low-wage jobs. Idealist critical race theorists focus on psychological oppression, advocating increased cultural representation of people of color. Idealist solutions might include increased racial diversity in the media and in positions of power.

CRT and Differential Diagnosis

CRT posits that racism plays a part in all racial inequalities. According to CRT, the existence of racial inequalities may not be recognized by the majority culture but only by those who experience it. This critical lens is an appropriate tool to examine a suspected racial disproportionality in child behavior disorders. As presented earlier in this paper, the data supporting a differential diagnosis of Black children with ODD and White children with ADHD could be considered tenuous. Larger, epidemiological studies discredit claims of racial disproportionality by diagnosis, but the findings from these studies may be due to their use of

standardized diagnostic tools implemented consistently by research staff (Angold et al., 2002; Mak & Rosenblatt, 2002; Nguyen et al., 2007). Comparatively, smaller studies in "real-world" diagnostic settings that are less likely to use such tools and will have great variety in the individual diagnostic judgment of individual practitioners (Baglivio et al., 2016; Mandell et al., 2007; Minsky et al., 2006). While some claim that CRT overstates the role of race in social inequalities (Ladson-Billings & Tate, 1995), it may provide the necessary lens to uncover a social inequity that requires expanded research and discourse.

CRT proposes that racial discrimination is causing a disproportionality in diagnostic rates of "real-world" diagnosis of ODD over ADHD by race. Other theorists have examined the medicalization of child behaviors by race and have suggested that when viewed subjectively, rather than through the formalized measures used in epidemiological studies, Black children are likely to be viewed as both failing to meet mainstream expectations of children while also being potentially dangerous (Harwood & Julie, 2014). This racist, subjective viewpoint may lead diagnosticians to perceive the behavior of Black children as outwardly defiant rather than passive, as the willful choice of a dangerous child rather than the blameless brain defect of the innocent one. This racialized difference in perception would explain why real-world diagnosticians employing their own clinical judgment might be more likely to diagnose a Black child with ODD than ADHD. This logic has been used previously when White parents advocated for the diagnosis of Learning Disability to explain their "normal" – as defined by the White mainstream culture - children's failure to learn to read (Sleeter, 1987). While Black children's failure to learn to read was consistently blamed on environmental deprivation as it often is today (Gillborn, 2015; Harwood & Julie, 2014; Sleeter, 1987), White advocates

concluded that brain defects were an easier and more appropriate culprit among White children (Sleeter, 1987).

An underlying assumption of this analysis is the social construction of both psychological disorders and race. CRT directly supports the social construction of race as one of its central tenets. CRT applications by DisCrit theorists have applied a social constructionist perspective to the medicalization of disabilities and mental illnesses (e.g. Harwood & Julie, 2014). These theorists assert that like race, disability and behavioral diagnoses based on subjective interpretations of behaviors and norms of childhood are all socially constructed. Therefore, in a racially structured society such as ours, it is likely that diagnostic criteria are also racialized, particularly when they are related to symptoms that can be measured only subjectively. Per CRT, this will not be exclusive to Black children, and it will not be overt, as is the case with endemic, often unconscious racism. However, Black children who present with similar externalizing behaviors as White children will be more likely to have their behaviors constructed to be dangerous, caused by deficits in their social environment, and related to their individual selves while White children will be more likely to have their behaviors constructed to be outside of their control and unrelated to their environment. Though this dichotomy will not be exclusively true, as both Black and White children are diagnosed with both disorders, CRT would predict a disproportionality that disadvantages Black children and blames their racialized environment for their poor behavior.

Since ODD is linked to long-term trajectories that put youth with ODD at risk for exclusion from employment and community (Burke et al., 2014), it is possible that the social construction of the diagnosis is linked to pressures in the dominant community to further exclude Black people from the labor market. Analysis of the social construction of learning disabilities

suggests the plausibility of this claim. The analysis by Christine Sleeter (1987) links economic forces to the construction of learning disabilities. Using historical documents, she describes the Cold War pressures to compete with Soviet children by producing more academically talented American children. In the same period, the number of low-skilled manufacturing jobs had already begun to decline. This economic situation threatened the employment prospects of White children who were struggling academically, leading White parents to search for a medical reason for their children's failure; one they found in the diagnosis of learning disabilities. My use of this analysis here does not seek to question the existence of dyslexia or other learning disabilities, but only to highlight the extraordinary racial disproportionality in the use of learning disabilities as an explanation of academic failure. At a conference promoting federal recognition of learning disabilities as a legitimate reason for requiring additional academic resources, it was clearly noted that children facing economic disadvantage should be excluded because "it would mean that between 25 percent to 50 percent (or more) of urban center-city school children would qualify for learning disability programs when adequate funding and personnel are not available" (Myers and Hammill, 1973 as cited in Sleeter, 1987, p. 231).

Sleeter's analysis highlights how learning disabilities were created as a privileged excuse to funnel resources to White children rather than Black children, maintain a myth of racialized meritocracy, and continue ignoring structural causes for achievement gaps. As children of color continue to be underserved in most domains of special education other than under the category of Emotional and Behavioral Disorders (Gillborn, 2015), it seems that a parallel analysis to Sleeter's may reveal similar processes of exclusion and links between psychiatric diagnoses of children and economic sources. CRT suggests that such an analysis would be a fruitful endeavor to continue to explore the role of race in the social construction of ODD.

Observing this analysis, however, one might question the role of class, particularly as a potentially more powerful explanation of disproportionality in ODD and ADHD. Might the strong links between racial and class disadvantage mean that either are equally likely to explain the disproportionality? Might the class-based explanations of the other theories such as Weber or Foucault be better at explaining the problem, particularly given the broader disproportionality in child mental health problems across economic strata? Both current research and application of CRT would answer 'no,' recognizing race as the primary driver of the disproportionality simply complicated further by class, country of origin, disability/ ability level, gender or other oppressive forces.

Recent research suggests that Black children continue to be under-represented in special education, which funnels expensive resources and supports to children facing academic struggle (Morgan et al., 2015), particularly in non-EBD domains (Gillborn, 2015). Additionally, a comprehensive study in England of Black middle class families highlights the struggle that Black families have in convincing school officials to recognize their children's academic needs while school officials work to assign these children deficit-related diagnoses, such as behavioral disorders (Gillborn, 2015). This study is one of the few exclusively studying Black families with significant cultural and economic capital interacting with special education systems, and it suggests that class privilege does not erase racial disadvantage.

Though race may be the primary driver of the disproportionality between ODD and ADHD, an intersectional approach should be employed in all CRT analyses (Crenshaw, 1991; Delgado et al., 2012). Given the role of race in driving disadvantage, CRT would predict Black children at all levels of economic strata to be more likely to be diagnosed with a behavioral disorder than a neurodevelopmental disorder, though children in poverty of all races would be

more likely to experience this than those in higher economic strata. Additional intersectional analyses of disproportionality in ODD should be pursued to examine the particular experience of diagnosis, treatment, and outcomes at unique intersections of race, gender, and class.

Finally, CRT mandates that researchers amplify the voices of people of color. No studies to the author's knowledge share the voices of children diagnosed with ODD and ADHD to understand their experiences leading up to and following their diagnosis as well as their perception of discrimination through this process. The experiences of parents must also be examined by researchers. CRT posits that White researchers are likely to be unable to perceive racial discrimination in their regular work. Rather, we must build diverse teams that are capable of providing Black parents and children with comfortable opportunities to share their stories and explain whether and how discrimination plays a role in their experiences (e.g. Gillborn, 2015). Without such analyses, it is unsurprising that White researchers have not found racial disproportionality in diagnosis and may use epidemiological studies to confirm its nonexistence. However, given the suspicion that available data cast on rates in "real-world" diagnosing combined with the predictions of CRT, narrative analysis is necessary to examine the role of implicit racial discrimination on diagnostic practices.

Limitations

Available data must be improved in order to verify the conclusions drawn in this paper. First, current data commonly conflate Conduct Disorder and ODD, which may have different developmental mechanisms and seem to have varying long-term outcomes. Second, understanding of the diagnostic methods of "real-world' practitioners is limited. Though ADHD may commonly be diagnosed using standardized scales such as the Connors Scale, the diagnostic methodologies for ODD seem to be more subjective, which may affect the ultimate diagnoses of

youth. Until research specifically explores these diagnostic practices with an eye to possible racial bias, theoretical conclusions remain conjecture. Finally, the available data is complicated by the common co-morbidities of ADHD and ODD. To examine the role of possible racial bias, the diagnostic experiences and symptomatology of children who are diagnosed with a single disorder versus co-morbidities should be examined by racial group.

Conclusion

Current data points to a possible racial differential in diagnosis between ADHD and ODD, with Black children being at greater risk for ODD or co-morbid ADHD and ODD than ADHD-alone compared to White children (Baglivio et al., 2016; Mak & Rosenblatt, 2002; Mandell et al., 2007; Minsky et al., 2006). This is concerning given that epidemiological studies suggest that Black and White children have similar rates of externalizing behaviors and prevalence of these disorders (Mak & Rosenblatt, 2002; Merikangas et al., 2010; Nguyen et al., 2007), with some data, in fact, showing that White children more commonly demonstrate ODD than Black children (Angold et al., 2002). However, current data is inconsistent.

A theoretical analysis of this problem was completed to determine the likelihood of this claim. CRT was found to provide support for the claim that Black children are differentially diagnosed with ODD while White children are more likely to be diagnosed with ADHD and suggests that more research should be completed with the specific goal of parsing out possible racial bias in diagnostic practices. This is critical given that a diagnosis of ODD seems to be a stronger predictor of more serious long-term outcomes in comparison to ADHD (Cormier, 2008; Erskine et al., 2014; Loeber et al., 2009). This CRT analysis suggests that more work should be done to build a Black epistemology of differential diagnosis across race. Researchers have an

opportunity to elucidate racial discrimination in diagnostic criteria and procedures by amplifying and analyzing the voices of Black children diagnosed with ODD and their parents.

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