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Psychiatric Genetics in Child Custody Proceedings: Ethical, Legal, and Social Issues

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Abstract

This paper considers the ethical, legal, and social issues raised by the prospect of increasing use of psychiatric genetic data in child custody litigation. Although genetic tests cannot currently confirm a parent or child's psychiatric diagnosis, it is likely that as relevant findings emerge, they will be introduced in family courts to challenge parental capacity. Here, we draw on three projected, but plausible, scenarios for obtaining psychiatric data about parents -- imposed genetic testing, access to medical records, and genetic theft -- then consider the use of psychiatric genetic data of children, to highlight the issues that judges, child custody evaluators, and clinicians who may provide treatment for parents or children with mental health issues will need to consider. These include: genetic privacy, stigma, genetic surveillance, and judicial and health professionals' bias. We argue that the unchecked introduction of psychiatric genetic data may have a detrimental effect on the administration of justice. In particular, the article highlights the risk that the (mis)use of psychiatric genetic data in custody disputes would 1) exacerbate stigma and treatment-avoidance among parents and incentivize privacy violations to pressure parents to relinquish parental rights; 2) disproportionately affect poor parents and single mothers of color involved with Child Protective Services; and 3) detract attention from social and environmental factors impacting mental health to the detriment of the families involved. Awareness of these issues and an understanding of the meaning of genomic data by judges and custody evaluators will be pivotal in ensuring that justice is served.

Keywords

psychiatric genetics; genetic predisposition; custody disputes; privacy; stigma; child custody evaluator

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Compliance with Ethics Guidelines

Conflict of Interest

Human and Animal Rights and Informed Consent

This article does not contain any studies with human or animal subjects performed by any of the authors.

Introduction

Psychiatric genetics – a field of rapidly growing scientific inquiry – is slowly entering American courts. Unlike DNA sequencing for identification purposes, which has long been used in criminal and family proceedings, the emerging genetic data are used to shed light on litigants' mental health status in both criminal and civil cases. Studies have found that judges are receptive to genetic data [1], and some data have suggested that the “seductive allure” of genetic and other scientific data may make them particularly appealing to members of the general public [2]. Thus, the frequency with which evidence based on genetic tests is introduced will almost certainly continue to increase.

Child custody proceedings are likely to become a prime frontier for the introduction of psychiatric genetic data. These cases often include allegations of parental mental instability and efforts to demonstrate the superior ability of one of the parties to provide an optimal environment for the child. Significantly, the rates of custody loss for parents with psychiatric disorders are high (70–80%)[3–5]. The introduction of psychiatric genetic data to cast doubt on the parenting capacity of an adverse party may thus be particularly alluring for litigants, including parents and Child Protective Services (CPS). Emerging findings of gene-environment interactions that impact child development—for better and for worse—may further bolster this trend, and both judges, as the gatekeepers of scientific evidence [6], and custody evaluators –psychologists, psychiatrists, social workers, and other mental health professionals whose opinions influence judicial determinations—will be forced to confront the implications of genetic data.

This review considers the ethical, legal, and social issues raised by the prospect of increasing use of genetic findings in child custody litigation. After a brief survey of the landscape of psychiatric genetics, we consider three hypothetical scenarios for obtaining such data—imposed genetic testing, access to medical records, and genetic theft—to illuminate the likely challenges in child custody litigation in which the mental state of parents is central to the judicial determination (rather than, for example, cases involving overt neglect or abuse). Following that, we consider issues relating to the introduction of psychiatric genetic data of *children* involved in such proceedings.

Although current knowledge does not allow for a genetic testing to result in the diagnosis of a psychiatric disorder or even in an accurate estimate of a person's proclivity for such conditions, it is likely that, as diagnostic and predictive power increase, litigants will seize the opportunity to introduce test results in child custody proceedings. We argue that the unchecked introduction of psychiatric genetic data may have a detrimental effect on the administration of justice. The focus on genetic testing and psychiatric pathology risks reinforcing perceptions of persons with mental disorders—or with a predisposition for such conditions—as inherently inadequate and dangerous parents. Stigmatization and its well-known impact on treatment-avoidant behavior among parents are likely to increase and disrupt the restoration of family relations. The burdens of genetic disclosure and surveillance may particularly affect poor, single mothers of color involved with CPS and exacerbate their (and their families') marginalization. Moreover, the geneticization of family relations—which is especially likely when children's psychiatric genetic data are used—may divert attention

from societal factors that negatively impact mental health and compromise the interests of the families involved. In turn, awareness of these issues and an understanding of the valid implications that can be drawn from genomic data by judges, custody evaluators, and clinicians will be pivotal in ensuring that justice is served.

Psychiatric Genetic Data: Emerging Trends and Knowledge

It is well established that psychiatric disorders have a genetic component. Numerous family, twin and adoption studies have demonstrated the high heritability of such conditions, with genetic factors accounting for 40–70% of the variance [7]. Currently, however, research into biomarkers for psychiatric disorders has yielded few concrete results. Although early studies claimed to have identified genetic markers associated with depression, schizophrenia, bipolar disorder, and attention-deficit hyperactivity disorder (ADHD) [8–10], replicating these findings has been challenging.

In response, researchers began to focus their attention on gene-environment interactions (GxE). This shift reflected the recognition that psychopathology is the result of both genetic *and* environmental factors, and it was inspired by two groundbreaking studies by Caspi et al., based on data from an epidemiologic cohort in New Zealand. In the first study, the researchers reported an interaction associated with increased rates of antisocial behavior between childhood maltreatment and low-producing alleles of the monoamine oxidase-A (MAOA) gene, which codes for a mitochondrial enzyme that degrades neurotransmitters [11]. In the second study, they found an interaction between stressful life events and the short allele of the serotonin transporter (5-HTT) gene that led to increased rates of depression [12]. A substantial body of scholarship subsequently aimed to replicate these findings, with stronger support for the MAOA result than for the 5-HTT finding [13–16].

Meanwhile, genetic research into family relations and psychiatric disorders continued to emerge. Studies found, for instance, an association between parenting styles and the dopamine-receptor DRD4 7-repeat allele that affected children's externalizing behaviors such as ADHD, impulsivity, and sensation seeking [17–21]. Others raised the possibility that genetically-based environmental sensitivity may contribute to both positive and negative outcomes. As Boyce et al.'s [22] and Belsky's [23, 24] work suggested, individuals with heightened sensitivity to the environment may be likely both to benefit disproportionately from supportive environments and to be at greater risk under less supportive conditions (the so-called “differential susceptibility” or “phenotypic plasticity” hypothesis).

Although these findings are promising, difficulties of replication persist (see e.g., [25–27, 21, 28]). Moreover, skepticism about their accuracy began to emerge. In particular, a review of gene-environment research in psychiatry led Duncan et al. [29, 30] to charge that, to date, most studies were underpowered to detect true effects and that their reported findings were likely to be false positives. The researchers' analysis further suggested that, across the field of gene-environment research, “publication bias makes both novel reports and replication attempts of gene-environment interactions appear more credible than they actually are” (pg 255) [30].

Nonetheless, there is hope that further research and advances in technologies analyzing genomic data will provide a better understanding of the impact of genetics and environmental factors on individuals' mental health. Although genetic tests cannot currently confirm a psychiatric diagnosis (except in the case of rare genetic syndromes) [31], and the polygenic nature of most psychiatric disorders will likely limit the predictive power of genetic results, studies to identify other genetic links to psychiatric disorders and their interaction with genetic and environmental factors are underway [13, 32]. As it seems likely that psychiatric genetic data will continue to emerge and all but inevitable that such data will be introduced in family courts, it is important to consider their possible implications for child custody evaluators and judicial actors.

Psychiatry in Child Custody Proceedings

Psychiatric evidence often plays a central role in child custody disputes. Because the child's best interests and psychological adjustment are paramount in judicial determinations of custody, data about a parent's physical and mental health are considered relevant factors. Although the presence of psychiatric impairment no longer implies *per se* parental unfitness, courts' and mental health professionals' evaluations of the effects of a parent's disorder on the child draws them into a comparative assessment of the contesting parents' mental health or "emotional fitness" to raise a child [33, 34].

This process provides a fertile ground for psychiatric claims and forensic assessment in custody disputes. To gain leverage in custodial arrangements, parents often make assertions about the other parent's negative characteristics or the alleged presence of a psychiatric disorder [35]. Similarly, studies indicate that CPS often include claims about parental mental instability when asking courts to remove children from their homes [36]. And overall, one study of family court judges suggested that parental mental health is an issue in 50% of custody cases [37]. The introduction of psychiatric genetic data may thus appear to be a game-changer in child custody litigation. Rather than relying on inferences from clinical evaluations to assess parents' mental health and on data from school and medical records to evaluate a child's likely psychological adjustment, genetic data may seem to provide more clear-cut answers. We draw on three projected, but plausible, scenarios for obtaining such data about parents, then consider the use of psychiatric genetic data of children, to highlight the issues judges and mental health professionals will need to consider.

Imposed Genetic Testing

The most straightforward option for obtaining psychiatric genetic data would be for an adverse party (a parent or CPS) or for a custody evaluator to request that a parent undergo genetic testing. Although the parent might voluntarily consent to be tested, this is unlikely, given that the goal of most requests for genetic testing will be to demonstrate a party's lack of parental fitness. A court order may thus be required. But should a parent in a child custody dispute be forced to undergo genetic testing? And what should be the ramifications of a refusal to be tested?

On its face, the courts' power to order genetic testing for psychiatric disorders seems clear. Although well-established notions of individual autonomy require the informed consent of a

person undergoing genetic testing, exceptions to this rule exist. Indeed, a court order for genetic testing for identification purposes is common in contested paternity claims, and because the results could affect the child's financial and emotional future, refusal of putative fathers to be tested may serve as evidence against them [38]. Similarly, insofar as the results of a parent's psychiatric genetic tests could be viewed as indicative of his/her ability to care for a child, the justification for compelled testing and evidential repercussions for refusal might appear equally clear.

The comparison with the use of DNA tests to establish paternity, however, is problematic. First, genetic testing for health status reveals information that is significantly more personal and sensitive than one's paternity status. Parents may arguably have stronger privacy rights with regard to the former. Second, the strength of the conclusions that can be drawn from such testing is markedly different. Unlike paternity tests, which can confirm father-child genetic relationships with 99.99% probability, the results of psychiatric genetic testing are harder to interpret. The etiology of mental disorders is most commonly associated with multiple genes, each with a relatively small effect, and with other familial and environmental factors; a single gene variant may be associated with more than one psychiatric condition with significantly different manifestations [10]. A genetic test thus cannot establish or confirm an individual's psychiatric diagnosis—even when symptoms of a condition are present [31]. Importantly, even if genetic tests could confirm a diagnosis, this corroboration would be insufficient to establish parental unfitness: such a decision should be merits-based and grounded in impartial observation of risk for the child. Indeed, determining parental capabilities on the basis of a medical, especially genetic, diagnosis, would echo long-discredited eugenicist doctrines and reverse legal and social policies requiring that individuals' parenting capabilities be evaluated on the basis of their functioning as parents.

More problematic is if no psychiatric diagnosis or symptoms are present and the genetic test is being used to identify biomarkers indicating a *predisposition* for a psychiatric condition. Although judicial determinations of child custody are commonly prospective (e.g., *expected* parental fitness over the course of a child's development), prediction on the basis of a parent's psychiatric genetic make-up is particularly elusive. Because such disorders are highly heterogeneous, and psychiatric genetic tests provide a population-based estimate of risk that is not immediately applicable to individual cases, "predisposition" provides neither clarity about the actual risk of a parent to develop a psychiatric condition nor information about when the disorder will occur, its severity, and how it would impact parental functioning.

Whether judges and mental health professionals grasp these differences is unknown. Studies suggest that judges often lack scientific literacy and grapple with understanding relevant terminology, including in genetics [39–41]. Similarly, studies indicate that genetic knowledge among the general public and clinicians, including mental health professionals, is limited [42] and that genetic determinism with regard to health status is still prevalent [43, 44]. That is, many overestimate the influence of genetics on a mental condition and underestimate other biological, behavioral, psychosocial, and environmental factors. The possibility that psychiatric genetic testing will be imposed and interpreted in light of such misunderstandings is concerning.

These concerns are exacerbated because involuntary testing will likely disproportionately affect poor parents and people of color. This supposition is based on, first, the strong association among sex (custodial mothers), low socio-economic status and CPS involvement, and the factual over-representation of racial minorities, especially African Americans, in the foster care system [45, 35]; and second, research suggesting that courts often render decisions based on the opinions of professionals and CPS workers [46], and that the race/ethnicity of non-dominant groups may negatively influence the neutrality of CPS in assessing parental fitness [47]. Should psychiatric genetic data become available, it is plausible that testing will be requested disproportionately for poor parents of color. But the implications of such decisions may extend further. The greater availability of psychiatric genetic data regarding poor minority parents may create a perception of greater genetic predisposition for psychiatric disorders and associated poor parenting skills among such parents, revive misconceived beliefs about genetic differences among racial groups, and divert attention from socio-economic factors that are associated with improved parenting practices. As mounting criticism of genetic surveillance systems in the criminal justice context underscores, genetic burdens are not racially and economically neutral [48, 49], and the misinformed attribution of genetic variants for undesirable behaviors to the “usual suspects” has surpassing societal costs.

Disclosure of Medical Records and Genetic Privacy

Another scenario for obtaining a parent’s psychiatric genetic data would be for the adverse party contesting custody, whether the other parent or CPS, to request access to the parent’s existing medical records. Although today such records may not contain psychiatric genetic data, the possibility that they will include genetic test results will increase over time. As genetic knowledge continues to emerge, genomic testing will likely become more common in patients’ psychiatric and general healthcare (consider, for example, arguments now being made for sequencing the genomes of all newborns at birth [50]). Concurrently, the growing use of electronic health records and the linkage of records across systems makes it more likely that test results will be included should parents/patients’ medical records be disclosed in court proceedings. The question in this context is whether the benefits to custody adjudications outweigh the potential drawbacks of disclosure.

Although legal doctrine and medical practice long have protected the privacy of communication between patients and their mental health professionals, the confidentiality privilege in child custody disputes has been increasingly contested. Because a parent’s mental condition may compromise his/her ability to care for a child, some states have adopted statutory waivers of parental confidentiality in custody disputes or created exceptions to doctor/therapist-patient privilege laws; others authorized judicial release of such health records, despite a parent’s objections [51, 52]. The admission of psychiatric genetic data included in a parent’s medical or mental health record may appear consistent with these approaches: the data are available and their introduction comports with the goal of basing judicial custody decisions on *all* pertinent information.

However, such disclosure presents several reasons for concern. Because the genetic data were collected with the parent’s consent for medical reasons unrelated to the legal

proceedings, making them subject to disclosure in judicial proceedings may discourage the use of genetic testing by many people who could benefit from the data. Although concern about willingness to seek medical care arises for disclosure of any health records—and accounts for existing physician-patient testimonial privilege statutes in many states—arguably the issue is of even greater concern in the genetic context.

Increased stigma and its impact on parents *as* patients distinguish the disclosure of psychiatric genetic data from other medical and mental health records. Although stigma and desire for social distance have been demonstrated for mental disorders in general, there is reason to believe that they will be enhanced by being attributed to genetic causes. Studies indicate that the geneticization of psychiatric disorders—i.e., the attribution of these conditions to genetic causes—not only failed to reduce negative social consequences, but actually increased perceptions of dangerousness and recommendations for medication and psychiatric hospitalization, along with pessimism about recovery [53–56]. Such stigma, often based on essentialist views of genetics, may have profound implications for child custody disputes. Studies have found that patients' endorsement of such stigmatizing and essentialist views negatively impacts their self-esteem and deepens their sense of prognostic despair [57, 58]. The disclosure of a parent's psychiatric genetic data may thus exacerbate the person's sense of parental incapability and increase the likelihood of the parent caving in to pressure to surrender parental responsibilities even when they might be capable of rearing a child. Clearly, such consequences would be detrimental to both parents and children.

Moreover, stigma and genetic essentialism may bias each stage of child custody evaluation and determination. Although no study to date has explored this issue systematically, research in intersecting areas is suggestive of the likely effects here. For instance, studies found that a *history* of psychiatric hospitalization influences family judges' endorsement of one parent over the other [59], and that biogenetic explanations of psychiatric symptoms (compared with psychosocial information) evoke significantly less empathy for potential patients from clinicians, including mental health professionals [60]. Furthermore, although studies of judges and prospective jurors have found that psychiatric and behavioral genetic evidence has relatively limited impact on judicial determinations of punishment in *criminal* and other disciplinary cases, some evidence suggests that it reduces estimates of legal responsibility [61] and increases the level of apprehension and perception of need for treatment, including extended involuntary commitment [43, 61–64]. Taken together, it is plausible that judges and mental health professionals—the cardinal actors in child custody proceedings—will view a parent's genetic data demonstrating a predisposition to a psychiatric disorder with increased alarm, regardless of the actual risk to the child.

Finally, because genetic vulnerability to psychiatric disorders is heritable, disclosure of genetic data may also provide mental health information about a parent's family members. Although this may seem merely an incidental cost given the presumed interests of the child, such disclosure forces genetic knowledge on individuals who may not want to know of their risk and exposes them to associative stigma and desire for social distance, along with the other negative repercussions discussed above [65]. Moreover, it increases the risk that “familial DNA testing” as has developed in the criminal context—i.e., the use of biological relatedness as a justification for criminal investigation and genetic testing of a suspect's

relatives [49]—will extend to civil settings. In child custody disputes, the concern is that the disclosure of a parent's psychiatric genetic data will place other relatives with children under greater surveillance of the welfare authorities, even when they do not demonstrate any impairment in parenting or evidence of a psychiatric condition. Thus, even if one concedes that children's best interests outweigh parental rights to confidentiality of medical records, and that genetic data should be treated just the same as other information in medical records—both matters of debate [66, 67, 52]—special protection of genetic data may be justified in non-medical, including judicial, settings.

“Genetic Theft”¹

A third scenario for genetic data to make their way into court proceedings would be for a parent or CPS to obtain psychiatric genetic data about a litigant independently and submit them as evidence in court. With emerging powerful data analysis technologies that can provide DNA sequencing at reduced costs and the mushrooming of direct-to-consumer genetic testing companies, this option will likely increase. Indeed, it could come to resemble existing practices of law enforcement officers who obtain DNA samples from soft drink cans or cigarette butts used by suspects; of mothers or putative fathers seeking to prove or rebut allegations of paternity of their (alleged) children who collect samples from similar sources; and of persons seeking to capitalize on access to information about celebrities by scavenging through their trashcans to collect DNA samples as a business venture—all of which may be conducted without the targeted individual's knowledge [68].

When the victim of genetic theft is a parent in a custody dispute, the surreptitiously obtained samples may be inadmissible because the trail of accountability required for such evidence (“chain of custody”) is lacking [69]. Courts may also find that privacy concerns are paramount. Thus, several states in the US adopted laws that recognize non-consensual collection of genetic samples as privacy violations that incur civil liability, while other states (e.g., Oregon) and countries (e.g., the UK, Germany) characterize it as a criminal offense [70]. In reality, the anticipated gains from the disclosure of psychiatric genetic data may motivate litigants to obtain such samples. First, such data may bolster a request that the court order a parent to submit to genetic testing. Second, in the absence of clear guidelines, a parent could try to submit such data to the court or custody evaluators, who may use them in their assessment despite their questionable status. Indeed, studies indicate that judges and laypersons alike are generally unable to ignore inadmissible evidence, in the former case even when the judges themselves determined it to be inadmissible [71]. Third, as in other cases involving genetic evidence, and depending on the jurisdiction, a court could rule the data admissible if a licensed private investigator collected the sample (rather than the litigant him-/herself) and transferred it to a recognized laboratory for interpretation [72].² Yet again, such a ruling is concerning: it may incentivize genetic theft and exacerbate power

¹The term “genetic theft” was coined by Elizabeth E. Joh (2009). It refers to the collection of a person's genetic data without his/her consent and without a judicial order requiring an individual to undergo genetic testing. Mark A. Rothstein (2009) used “genetic stalking” to convey the same idea. We opted for “genetic theft” because the legal definition of stalking requires a recurring behavior, which is unnecessary in the present context.

²For example, in paternity cases, direct-to-consumer genetic testing companies often offer an option for paternity testing that can be admissible in court. Admissible paternity testing is handled by licensed experts who collect the data and recognized medical and laboratory facilities that interpret the results to ensure that the chain of custody required by judicial admissibility standards is met [73].

imbalances between poorer and wealthier litigants, especially CPS, which may be able to afford the associated costs to develop admissible evidence. Regulating this area is critical to ensure appropriate privacy protections and a just judicial process.

Psychiatric Genetic Data of Children

The introduction of psychiatric genetic data about *children* in child custody disputes is seemingly less objectionable than data about parents. Although the child's right not to know about his/her genetic makeup may be compromised, parents (as guardians) and other custodians, including CPS, are generally authorized to consent for the child's genetic testing. Furthermore, and recalling the thesis on phenotypic plasticity—i.e., that environmental factors can mitigate or exacerbate psychiatric genetic risks—consideration of the child's genetic data could arguably serve the child's best interests by indicating that a parent is a better—or worse—fit. In this regard, recent cases are suggestive. In one case, CPS claimed that the interests of a child born to parents with psychiatric disorders would be best protected by adoption because her “complicated” genes underscored the importance of providing her a stable environment [74]. In another, a father claimed that his experience with bipolar disorder would enable him to better support his child with this condition [37]. As genetic testing to diagnose or accurately estimate the risk for psychiatric conditions such as bipolar disorder does not currently exist, the arguments in both cases were made on the basis of psychiatric diagnoses (in the first case, of the parents; in the second case, of a parent and a child). However, it is easy to see how such arguments could be expanded if psychiatric genetic tests were to identify relevant biomarkers.

This prospect raises profound questions about the role of genetic data in child custody decisions. Should judges and mental health professionals determine parental fitness based on the genetic makeup of family members? How would the environmental factor be measured and the threshold for an optimal gene-environment “match” between a parent and his/her children be determined (and by whom)? And what would the outcome be for parents who do not provide the optimal environmental “match” (however defined) to their child's genetic proclivities?

One extreme option could be the removal of such children from their homes (assuming that foster and adoptive families could be found who would pass the matching test). Alternatively, it could be mandatory for parents to attend programs that would train them to tailor their parenting approach to the child's genetic risks. Consider, for example, the reported success of programs aimed at modifying insensitive parental behavior[75], measured by awareness of a baby's signals, accurate and appropriate interpretation of them, and promptness of response, and found to be associated with externalizing (oppositional, aggressive) behaviors in children who have a DRD4 7-repeat allele [17]. Conversely, this option would likely raise concerns over increased intrusion in family life, especially if parents' implementation of the learned skills would be monitored in an ongoing fashion. Another concern is that failure to master such programs—a determination that in itself may be biased if cultural differences are ignored [47]—will intensify the blame placed on parents, especially mothers (as was historically the case for autism and schizophrenia, attributed respectively to “refrigerator” and “schizophrenogenic” mothers). Such a development would

likely not only further strain family relationships, but also lead to discounting other social and environmental factors that are associated with psychiatric conditions—e.g., poverty, disparities in healthcare, poor housing and neighborhoods – that could be mitigated by optimizing public policies [76]. As we move further towards the geneticization of family relations, it is important that judicial actors, including clinicians involved in such proceedings, are mindful of these issues.

Conclusions

This discussion demonstrates the projected burdens associated with unconsented disclosure of parents' and children's psychiatric genetic data in child custody litigation. It also highlights the existing limitations and emerging responsibilities of judges and mental health professionals involved in such proceedings. Assuming continued progress in identifying genetic predispositions to psychiatric disorders, determining whether, when, and who may introduce psychiatric genetic data to support a claim of parental (un)fitness or a child's best interests—and the legitimate means for obtaining such data—will be unavoidable. The use of psychiatric genetic knowledge will have to be balanced against parents' and children's privacy interests, racial and economic disparities, negative societal consequences, and plausible implications for treatment. Judicial awareness of these issues and of the implications of genetic data on psychiatric disorders will be pivotal for ensuring that the geneticization of family relations does not redound to the detriment of the parents and children involved.

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