Six Adoptees Who Murdered: Neuropsychiatric Vulnerabilities and Characteristics of Biological and Adoptive Parents

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This article is the first to document the perinatal trauma and neuropsychiatric impairment of a sequential sample of male adoptees who committed murder. It also is the first to report objectively verifiable psychopathology and violence in their biological and adoptive parents. It explores the interaction of these variables in the genesis of violence. Subjects were six adopted murderers on whom data regarding biological and adoptive parents could be obtained. In all six cases, central nervous system (CNS) development was compromised *in utero* or perinatally. In adolescence and/or young adulthood, three met DSM-IV criteria for Bipolar Mood Disorder, one for Schizophrenia, and two for Schizoaffective Disorder. All subjects had at least one psychotic biological parent. In five cases, subjects were adopted into psychotic or violent households. There was no evidence of a specific "bad seed" for violence. Adoptees' intrinsic vulnerabilities to psychoses and to the impulsiveness and emotional lability often associated with early brain trauma, coupled with maltreatment, predisposed them to homicidal violence. As such, these subjects were similar to other extraordinarily violent, nonadopted, offenders. Conscious feelings regarding adoption did not contribute to the subjects' homicidal rages, so much as did conscious rage toward abusive, rejecting adoptive families.

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When adoptees commit murder, speculation about their histories and biological parentage abounds. One need look no further than the cases of David Berkowitz (Son of Sam) and Joel Rifkin (a notorious serial killer from New York State) to understand the curiosity such people evoke. Unfortunately, in most of these cases, data regarding adoptees' neuropsychiatric vulnerabilities, genetic backgrounds, and adoptive families are unobtainable. As a result, one is left wondering what went wrong. Was the adoptee a "bad seed"? Was his murderous deed a rageful response to having been abandoned by his birth mother? Did his adoptive family have a negative expectation that became a self-fulfilling prophecy? The purpose of this article is to report objective data on the genetic, perinatal, medical, and experiential characteristics contributing to the murderous acts of six male adoptees.

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The Literature

The secrecy and anonymity surrounding adoption in the United States is a subject of debate.[1,2] This secrecy is a relatively contemporary phenomenon. Historically, adoption was usually an open, informal agreement between adoptive and biological families

that permitted ongoing contact.[3] The first adoption law in the United States, passed in Massachusetts in 1851, introduced the practice of permanent anonymity, providing "legal and complete severance of the relationship between child and biological parents."[3] Adoption agencies downplayed or withheld negative background information to make the children of mentally ill or criminal parents more acceptable to prospective adoptive families.[4] As such, adoptive parents were deliberately kept ignorant of their children's vulnerabilities.

Some have ascribed the abnormally high prevalence of psychopathology found in adoptees[5,6] to the negative preconceptions of their adoptive parents regarding their children's hereditary endowments[7,8] (i.e., notions of "the bad seed"). Others have ascribed adoptees' social maladaptation to the psychological trauma of rejection by the birth mother. Feder,[9] Lifton,[10] and Kirschner and Nagel[11] have emphasized adoptees' sense of rage at their abandonment and powerlessness to know their origins. Evidence of such feelings, however, rested exclusively on clinical interpretation, and hence could not be tested.

Researchers who have considered the question of possible inherited vulnerabilities in criminal adoptees have focused primarily on alleged evidence of genetic predispositions to antisocial personality disorder.[11–14] In short, studies of the genetic parents of criminal adoptees have focused only on parental criminality and not on other potentially heritable severe mental illnesses. Similarly, descriptions of the adoptive parents of criminal adoptees have focused on psychodynamic responses to their adoptive children and not on their own possible severe psychopathology. Finally, studies of antisocial or violent adoptees have ignored the potential effects of perinatal difficulties and neurologic impairment that might compromise their adjustment.

Despite a wealth of data attesting to the interaction of intrinsic vulnerabilities and family stressors in the genesis of juvenile and adult violence,[15–19] investigations of these kinds of vulnerabilities in adoptees who have murdered have been ignored, perhaps in the interest of political correctness. We know, however, from newer studies of adoptees from the orphanages of Romania and elsewhere, that by the time certain children have been adopted, even into the best of homes, the neglect and traumas they have already endured have compromised their abilities to attach securely and function well.[20–22] Most adoptees, however, do not become murderers. What can we learn from those who do?

Over the past 20 years, in the course of our studies of violent individuals, we have had the opportunity to evaluate six male adoptees who committed murder. Because of the dearth of information on this unique population, we welcome the opportunity to share our data. To the best of our knowledge, ours is the only sample of homicidal adoptees on whom verifiable, objective information regarding their perinatal, medical, and psychiatric histories as well as data on the behaviors and mental health histories of biological and adoptive families have ever been gathered.

Materials and Methods

Sample

Our sample was gathered serendipitously. Because of her extensive work with violent individuals, one of the authors (D.O.L.), over a 20-year period, had the opportunity to evaluate eight male adoptees who committed murder. Inclusion in this study was contingent upon the authors' having access to objective data, not only on adoptive parents, but also on at least one biological parent. In two of the eight cases, the adoption records were sealed, and data regarding the biological parents could not be verified. Hence, they were eliminated from the study. Of the remaining six subjects, five were white and one was Hispanic. Their ages at the time of the homicides ranged from 14 to 32 years (mean, 20.8 years). Their ages at the time of adoption ranged from 2 months to 5 years (mean, 18.5 months).

Informed Consent

At the time of this study, data regarding these individuals were in the public domain. Hence, informed consent was not required.

Nature of the Murders

Subject 1, 18 years of age, during a manic episode, raced around in a stolen speed boat. He was stopped by two security guards whom he shot on the spur of the moment. Subject 2, 14 years of age, a boy with chronic psychosis and depression, fatally stabbed an older female neighbor and then raped and sodomized her with a metal pole. He had fantasized about killing her for months. Subject 3, a 21-year-old severely brain-damaged man with paranoid schizophrenia, shot and killed a transportation worker during an

altercation over a ticket. Subject 4, 18 years old, had a bipolar mood disorder. On separate occasions, while intoxicated, he raped, sodomized, and murdered two women. Subject 5, 22 years old, had a bipolar mood disorder. During a depressive episode, he suddenly stabbed to death an elderly woman who had come to collect a debt. Subject 6, 32 years of age, an adoptee with chronic psychosis, shot to death his adoptive parents while he was in a delusional state.

Data on Subjects

All six subjects underwent psychiatric evaluation by a board-certified psychiatrist (D.O.L.). Five were evaluated after committing murder and one (Subject 3), because of violent behavior in prison, was evaluated 2 years before the murder, while incarcerated for robbery. Four subjects (1, 2, 3, and 5) had neurologic examinations—one in early childhood and the other three subsequent to committing murder. The nature of the psychiatric and neurologic evaluations and the criteria for signs and symptoms have been described elsewhere.[14,15] Subject 4 had an alcohol-induced electroencephalogram (EEG) during adolescence, and Subject 6 had an EEG and neuropsychological testing in adulthood. Unfortunately, neither Subjects 4 nor 6 had records of standard neurologic evaluations.

Birth, adoption, medical, psychiatric, educational, social service, juvenile justice and adult police records were also reviewed.

Other Sources of Data

Biological Family Data

Table 1 presents the sources of data available on each subject. As can be seen, in five cases at least one biological relative was interviewed, and in the remaining case a social worker from the adoption agency provided information from the adoption record and from the biological mother's psychiatric hospitalization record. In four cases, additional records (i.e., school, social service, medical, psychiatric hospital, and court records) on the biological parents were reviewed.

Adoptive Family Data

In five cases, both adoptive parents were interviewed. (In the sixth, they were the victims.) Although the adoptive parents tended to be guarded in their responses to questions regarding mental illness and child-rearing practices, in all cases, relatives and/or family friends of the adoptive parents provided additional information.

Data Regarding Attitudes Toward Adoption

Interviews with adoptees and their families were reviewed for all data regarding the attitudes and feelings expressed by subjects and by adoptive families toward adoption.

Results

Neurologic Findings

As can be seen in Table 2, the central nervous system (CNS) development of five of the subjects was severely compromised *in utero* or in infancy, and the remaining subject was of low birth weight and was born with the cord around his neck. In addition, five subjects had head injuries severe enough to result in loss of consciousness or had a history of convulsions. Five had signs of CNS dysfunction evidenced on neurologic examination, EEG, and/or neuropsychological testing.

Psychiatric Findings

Of the six subjects, four (1, 2, 5, and 6) had been hospitalized for psychiatric reasons before committing murder. Subject 3 had been treated with antipsychotic medications, and Subject 4 had been committed to detention for a 90-day psychiatric evaluation. Thus, all six had been considered psychiatrically disturbed before the murders were committed.

Before committing murder, Subject 1 had received a diagnosis of Major Depression; Subject 2, Bipolar Mood Disorder; Subject 3, Conduct Disorder and Schizophrenia; Subject 4, Hyperactivity and Antisocial Personality Disorder; Subject 5, Behavior Disorder "rule out psychosis," Adjustment Reaction, and Battered Child Syndrome; and Subject 6, Major Depression, "Spoiled-Child Syndrome," and Schizophreniform Disorder. Five subjects had been treated before the murders with a variety of medications, including mood stabilizers, neuroleptics, and stimulants.

Psychiatric evaluations conducted subsequent to the murders revealed that Subjects 1, 4, and 5 met DSM-IV criteria for a diagnosis of Bipolar Mood Disorder and Subjects 2 and 6 met criteria for a diagnosis of Schizoaffective Disorder. Subject 3, as stated, was evaluated 2 years before the murder by

Table 1 Sources of Data on Six Adoptees Who Murdered

Subject	Interviews	Subject's Records/Reports (Childhood)	Subject's Records/Reports (Adolescence, Adult)	Relatives' Records/Reports
1	Subject	Birth and adoption	Psychiatric hospitalization	Biological mother: medical, school, divorce, social service
	Adoptive mother	Medical and neurologic	Psychiatric outpatient	
	Adoptive father	Psychiatric and psychological	Neurologic	Biological father: school
	Adoptive brother	School	School	
	Biological mother	Photographs	Police	
2	Subject	Birth and adoption	Psychiatric hospitalization	
	Adoptive mother and father	Medical and hospital	Psychiatric outpatient	
	Biological mother	Neurologic, psychiatric	Neurologic, neuropsychological	
	Biological grandmother	Psychological, school	Psychological, school	
	Teachers, friends		Juvenile justice and police	
3	Subject	Birth and adoption	Psychiatric outpatient	Biological mother: psychiatric hospitalization
	Adoptive mother and father	Medical, neurologic, EEG	Neuropsychological, psychological	
	Adoptive cousin	Psychiatric and psychological	School	
	Adoption Agency caseworker	School	Juvenile justice and police	
4	Subject	Birth and adoption	Psychiatric outpatient	Adoptive mother: psychiatric hospitalization
	Adoptive mother and father	Medical	School	
	Adoptive aunt	Psychological, school	Juvenile justice and police	
	Biological mother and father			
5	Subject	Birth and adoption	Neurologic, neuropsychological	Adoptive father: prison
	Adoptive mother and father	Medical	Psychological, school	Biological mother: social service
	Adoptive sister	Psychiatric hospitalization	Military	
	Biological mother and father	Psychological		
	Girlfriend	Transcripts of court proceedings re: early sex abuse		
6	Subject	Birth	Psychiatric hospital	Biological mother: psychiatric records
	Adoptive mother's relatives	Juvenile Court	Psychiatric outpatient	
	Biological half sister	School	Neuropsychological	
			Prison psychiatric	

one of the authors, and was diagnosed with Paranoid Schizophrenia.

Characteristics of the Biological Families

Table 3 shows the history of mental illness in the biological families of the six adoptees who murdered. The very length of Table 3 attests to the large numbers of first- and second-degree biological relatives who were psychiatrically impaired. Severe mental illness could be traced back at least two generations in the families of Subjects 1 and 4 and as far back as three generations in that of Subject 2. Most notable was the finding that all six subjects were born to severely psychiatrically ill mothers, five of whom were periodically hospitalized for psychiatric reasons.

Characteristics of Adoptive Parents

Although the adoptive mothers and fathers tended to present themselves as model, nonphysically punitive, concerned parents, in five cases information to the contrary emerged. For example, the adoptive father of Subject 1 totally denied beating his son. A younger adopted sibling later revealed that this father had punched subject 1 unconscious on at least two occasions. Subject 2 was beaten with a belt by his adoptive mother and had witnessed violence between

Table 2 Age of Adoption, Perinatal Insults, Childhood Head Trauma, and Abnormal Neurologic Findings

Subject	Age Adopted	Birth, Perinatal, and Infancy History	Accidents and Injuries During Childhood and Adolescence	Neurologic Signs and Symptoms
1	1 year	Born addicted to heroin Fetal alcohol effects (photos) Multiple hospitalizations in infancy for infections, failure to thrive, bruises, broken nose Fussy, irritable, tantrums, breath-holding episodes with LOC	Preschool: play refrigerator fell on head Age 15: car accident, head hit windshield Age 16: punched by father, LOC Age 16: fight, cerebral hematoma	Equivocal right Babinski sign Bilateral ankle clonus Bilateral Wartenberg sign Synkinesis in right hand Right/left confusion Choreiform movements Learning disabilities and inattention
2	8 months	Born addicted to heroin, required detoxification Jittery, irritable, screaming spells, tantrums Delayed developmental milestones	Childhood: fell on occiput from a tree (palpable bump), slammed head in van door Age 13: fall with LOC, sequelae included visual difficulties and headache	Right facial weakness Limited, impersistent upward gaze Mild choreiform movements Inattention, hyperactivity
3	2 years	Biological mother on neuroleptics and received ECT during pregnancy Excessive rocking, head banging Aversion to being held/touched Delayed speech and toileting skills Seizure disorder suspected at age 1 year	Age 3: "ran into wall," LOC, dislocated shoulder, broken leg Age 15: car accident with head injury (severity unknown)	Epileptiform EEG Blackouts/trances and desire to sleep Memory lapses, déjà vu Olfactory hallucinations Learning disabilities
4	2 months	Mother attempted to abort subject with quinine Mother kicked in abdomen while pregnant Fetal alcohol effects	Childhood: bicycle accident, head injury (severity unknown) Adolescence: several car accidents, head injuries (severity unknown) Age 17: motorcycle accident, LOC, convulsions Age 17: convulsions with alcohol intoxication	Alcohol-induced EEG with normal findings (no neurologic examination) Inattention, hyperactivity
5	5 years	Full term, low birth weight, possible anoxia from cord around neck at delivery Toe-walking until latency	Left hemiparesis and ataxia with fever Midchildhood: knocked dizzy by father	Abnormal EEG (age 4.5 y) Extreme hyperactivity, inattention Diagnosis: organic cortical brain dysfunction
6	Infancy	Failure to thrive	Age 4: nearly bled to death during tonsillectomy Age 20: knocked dizzy, disoriented for 2.5 hours	Normal EEG (no neurological exam) Neuropsychological testing: "no evidence of organic impairment." WAIS-F IQ = 78; abstraction severely impaired borderline defective problem solving; poor concentration and verbal memory associated with severe psychiatric disorder

LOC, loss of consciousness; ECT, electroconvulsive therapy.

his adoptive parents. The mother of Subject 3 admitted she hit him but said, "Never, to the best of my knowledge, did I injure him." Whether her behavior was abusive could not be determined. Both parents of Subject 4 were violent and deemed unfit to adopt a second child, and the mother was sexually abusive. The adoptive mother lost custody because of repeated psychiatric hospitalizations, and the adoptive father abandoned him when the child was 13 years old. The adoptive mother of Subject 5 had a bipolar mood disorder. His flamboyantly psychotic adoptive father had been in and out of juvenile correctional institutions and prisons since 16 years of age. He described teaching his son how to defend himself

Table 3 Mental Illness in the Biological Families of Six Adoptees Who Murdered

Subject	Psychiatric History in First-Degree Biological Relatives	Other Relatives
1	Biological mother: Bipolar mood disorder; psychiatric hospitalization; episodically violent; alcoholic and drug addicted Biological father: Manic symptoms (erratic, sexually promiscuous and dangerous behaviors); suicidal; alcoholic; violent; criminal history Biological brother: Institutionalized for a brain injury; episodic rampages Biological sister: Psychiatric hospitalization for a mood disorder	Maternal grandmother: Manic symptoms (episodic excessive gambling, sexual promiscuity), drug addicted Maternal grandfather: Bipolar mood disorder; psych hospitalized, in restraints after threatening others and putting a gun to his head Maternal uncle 1: Bipolar mood disorder; psychiatric hospitalization Maternal uncle 2: Attempted suicide by hanging; excessive gambling Maternal uncle 3: Attempted suicide by drinking Drano Maternal uncle 4: Reportedly tried to stab self in chest; smashed own hand with hammer; crawled around on floor fearing he was under siege Maternal uncle 5: Attempted suicide Maternal aunt 1: Attempted suicide; mood swings (suicidal depressions versus exuberant periods); two suicide attempts (drug overdoses) Maternal aunt 2: Bipolar mood disorder; two suicide attempts; medication Maternal aunt 3: Reportedly experienced auditory hallucinations and paranoid delusions; two suicide attempts (drug overdoses) Maternal cousin 1: Attempted suicide with car Maternal cousin 2: Committed suicide by hanging Maternal cousin 3: Attempted suicide; psychiatric hospitalization; drug abuse; shot own father
2	Biological mother: Bipolar mood disorder; multiple psychiatric hospitalizations; Rx: lithium carbonate, phenothiazine, antidepressants; Heroin addiction Biological father: No information Biological brother: Psychiatric hospitalization (reason unknown)	Maternal grandmother: Major depression Maternal aunt: Bipolar mood disorder Maternal uncle: Major depression Maternal great grandmother: Psychiatric hospitalization "nervous breakdown"; alcoholic Maternal great aunt: Psychiatric hospitalization "nervous breakdown"
3	Biological mother: Mental retardation; schizophrenia; psychiatric hospitalization age 14 years, received ECT while pregnant and at time of subject's birth Biological father: No information	Information on extended family not available
4	Biological mother: Major depression; psychiatric hospitalization, suicide attempts Biological father: Schizophrenia; psychiatric hospitalization for criminally insane Rx: phenothiazine, alcoholic and drug addicted Biological brother: Placed in psychiatric residential treatment center; suicidal Biological sister: Psychiatric hospitalization after assaulting relative	Maternal great uncle: Committed suicide Maternal uncle: Held his teacher at gunpoint; court-mandated psychiatric treatment; jailed for hate crimes against homosexuals
5	Biological mother: Brain injured at age 2.5 years; bipolar mood disorder; physically and sexually abusive; five offspring removed from her care Biological father: No information	Stepfather: Incarcerated for physically and sexually abusing subject and his siblings
6	Biological mother: "Mentally defective" and described as psychotic; current Dx: Alzheimers disease and atypical depression with psychotic features Biological half brother: Retarded, violent, unable to function without assistance Biological half brother: Discharged from Navy: "went berserk"	Three half nephews: Psychiatric hospitalizations and suicidal Two half nieces: Psychiatric hospitalizations

with weapons in anticipation of the time when U.S. citizens would have to rise up and take over the government. He also described using unorthodox forms of punishment (e.g., standing barefoot on chains), which he would try on himself first, to see how long he could tolerate them. The adoptive mother of Subject 6, a violent, extremely labile woman, beat her son and threatened her husband with a knife. He, in turn, menaced her with a gun and begged our subject to kill him.

Attitudes Toward Adoption

When we invited subjects to talk about their feelings regarding adoption, to our surprise, they professed a lack of interest in learning about their biological families. Subject 1 claimed to have no feelings about having been adopted and would not discuss it further. Subject 2 volunteered that his biological mother was "strung out on somethin'," and that, after birth, he was "in detox." That he felt different from his adoptive family might be inferred from his having asked his white, non-Hispanic, adoptive mother, "Mommy, am I Puerto Rican?" Subject 3 insisted he was "never curious" about his origins and, according to his adoptive parents, he "never talked about it." Subject 4 stated, "I never made an effort to find out [about his biological parents]." "I never thought it was necessary." However, an adoptive aunt reported that he frequently asked about his "real mother" (his adoptive parents abandoned him). Subject 5, who was severely physically and sexually abused before his adoption at 5 years of age, said to his adoptive mother, "Why did it take you so long to find me?" However, his mother periodically kicked him out of the house, saying, "I wish we never got you." Even Subject 6, who killed his adoptive parents, expressed only love for them, declaring they loved him so much they would not adopt another child. He never spoke of his biological parents. Thus, at least consciously, these subjects did not show the kind of curiosity about their origins one might have expected from adoptees. The extent to which they may have had unconscious anger toward their biological parents for abandonment could not be determined from the interviews.

Discussion

Were these six adoptees simply born bad? Although our data do not entitle us to dismiss this hypothesis out of hand, they do support a more scientifically rigorous, less judgmental alternative hypothesis: these individuals were born with vulnerabilities, with genetic predispositions to serious psychopathology. All had at least one psychotic biological parent. Furthermore, all had had significant insults to the CNS. These kinds of neuropsychiatric vulnerabilities are associated with impaired judgment, emotional lability, poor impulse control, and paranoid misperceptions.

But, one might argue, most mentally ill individuals are not violent and, similarly, most neurologically impaired individuals are not violent. However, raising such vulnerable children in violent, abusive households creates a recipe for violence. In this regard, our subjects were similar to other samples of extremely violent offenders.[15–19]

Were the murderous acts primarily manifestations of rage at abandonment by biological parents? Again, our data do not entitle us to dismiss this hypothesis totally; however, clinically it appeared that our subjects' strained relationships with their often-violent, rejecting adoptive families fueled their rages at the time of the murders. Four subjects openly expressed feelings of abandonment, not by their biological families, but rather by their adoptive families. The adoptive parents of Subject 1 had threatened to kick him out of the house if he did not start contributing to the family finances by getting a job. Subject 2, who was intensely jealous of his older, academically successful, also-adopted brother, felt rejected because of his parents' favoritism toward his sibling. Because Subject 3 refused to discuss his adoptive family, his feelings toward them could not be ascertained. Subject 4 was, quite literally, abandoned by both of his psychotic adoptive parents. Subject 5 had been severely reprimanded, belittled, and kicked out of his adoptive grandmother's home for having failed to pay back a loan. A derisive comment made by the murder victim reminded him of his adoptive mother's frequent denigration and triggered a murderous rage. Finally, Subject 6, who was psychotic at the time of the interviews, could only profess his undying love and admiration for the severely disturbed adoptive parents whom he murdered. If anything, physical and emotional abandonment by the adoptive parents seemed far more devastating to these adoptees than abandonment by their birth mothers. Certainly, these rejections could only have compounded any possible unconscious sense of abandonment by the biological parents.

A word must be said about adoption practices. Theoretically, the findings that six of six adopted children came from severely psychiatrically ill biological parents speaks to what some believe to be the benefits of open adoption.[10] Open adoption would allow potential adoptive parents either to refuse to adopt a vulnerable child or to be alerted to the child's possible special needs. It might also diminish the likelihood of litigation by adoptive parents who feel misled by adoption agencies. Similarly, adoption agencies could be especially selective when choosing adoptive homes for psychiatrically vulnerable children. Unfortunately, in our cases, the adoption agencies misjudged the adequacy of some of the adoptive homes.

This is a small study. The extent to which our findings are characteristic of other adopted children who murder remains to be explored further. However, it is, to date, the largest sample of its kind and, as such, sheds light on the neuropsychiatric and experiential characteristics of some adoptees who murder. The findings underscore the need for clinicians who evaluate homicidal adoptees for purposes of determining the presence or absence of mental disease or defect to make every effort to obtain data on the psychiatric condition of genetic and adoptive parents and on the medical histories and neurologic status of the defendants, if they wish to understand the genesis of their violent acts.

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